



Municipal Expertise. Community Commitment.

Dana Ludwig, PE, CFM, CPESC
Direct Line: (815) 412-2702
Email: dludwig@reltd.com

May 28, 2021

Project 16-R0770.CHN

Illinois Environmental Protection Agency
Water Pollution Control
Compliance Assurance Section #19
P.O. Box 19276
Springfield, IL 62794-9276

RE: Village of Channahon
NPDES Permit MS4 Annual Report
Reporting Cycle 2020-2021
Permit No. ILR40 - 0623

Dear Sir/Madam:

Enclosed please find the following items regarding the NPDES Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4) for the Village of Channahon:

- MS4 Annual Facility Inspection Report for 2020-2021
- Various Attachments supporting Minimum Control Measures

The Village did not fund any construction projects over one acre during the reporting cycle.

This year, the Village has worked with other entities to satisfy permit obligations. Support documentation from Lower Des Plaines Watershed Group (LDWG) and Lower DuPage River Watershed Coalition (LDRWC) are also enclosed with this letter.

This documentation has been emailed to epa.ms4annualinsp@illinois.gov. If you have any questions, please call me at (815) 412-2702.

Very truly yours,

ROBINSON ENGINEERING, LTD.

A handwritten signature in black ink that reads "Dana E. Ludwig". The signature is written in a cursive, flowing style.

Dana E. Ludwig, PE, CFM, CPESC
Senior Project Manager

Encl.

xc: Don Kinzler, Engineering Project Manager – Village of Channahon
Jay Patel – IEPA-Des Plaines office
Al Gonzalez – IEPA-DWPC



Illinois Environmental Protection Agency

Bureau of Water • 1021 N. Grand Avenue E. • P.O. Box 19276 • Springfield • Illinois • 62794-9276

Division of Water Pollution Control ANNUAL FACILITY INSPECTION REPORT

for NPDES Permit for Storm Water Discharges from Separate Storm Sewer Systems (MS4)

This fillable form may be completed online, a copy saved locally, printed and signed before it is submitted to the Compliance Assurance Section at the above address. Complete each section of this report.

Report Period: From March, 2020 To March, 2021

Permit No. ILR40 0623

MS4 OPERATOR INFORMATION: (As it appears on the current permit)

Name: Village of Channahon Mailing Address 1: 24555 S. Navajo Drive

Mailing Address 2: _____ County: Will

City: Channahon State: IL Zip: 60410 Telephone: 815-467-6644

Contact Person: Donald R. Kinzler, PE, CFM Email Address: dkinzler@channahon.org
(Person responsible for Annual Report)

Name(s) of governmental entity(ies) in which MS4 is located: (As it appears on the current permit)

Will County
Grundy County

THE FOLLOWING ITEMS MUST BE ADDRESSED.

A. Changes to best management practices (check appropriate BMP change(s) and attach information regarding change(s) to BMP and measurable goals.)

- | | | | |
|--|-------------------------------------|---|-------------------------------------|
| 1. Public Education and Outreach | <input type="checkbox"/> | 4. Construction Site Runoff Control | <input checked="" type="checkbox"/> |
| 2. Public Participation/Involvement | <input checked="" type="checkbox"/> | 5. Post-Construction Runoff Control | <input type="checkbox"/> |
| 3. Illicit Discharge Detection & Elimination | <input checked="" type="checkbox"/> | 6. Pollution Prevention/Good Housekeeping | <input checked="" type="checkbox"/> |

B. Attach the status of compliance with permit conditions, an assessment of the appropriateness of your identified best management practices and progress towards achieving the statutory goal of reducing the discharge of pollutants to the MEP, and your identified measurable goals for each of the minimum control measures.

C. Attach results of information collected and analyzed, including monitoring data, if any during the reporting period.

D. Attach a summary of the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule.)

E. Attach notice that you are relying on another government entity to satisfy some of your permit obligations (if applicable).

F. Attach a list of construction projects that your entity has paid for during the reporting period.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Owner Signature:

Donald R. Kinzler, PE, CFM

Printed Name:

05-21-21

Date:

Engineering Project Manager

Title:

EMAIL COMPLETED FORM TO: epa.ms4annualinsp@illinois.gov

or Mail to: ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
WATER POLLUTION CONTROL
COMPLIANCE ASSURANCE SECTION #19
1021 NORTH GRAND AVENUE EAST
POST OFFICE BOX 19276
SPRINGFIELD, ILLINOIS 62794-9276

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42) and may also prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.



EPA 841-F-03-003

Protecting Water Quality from URBAN RUNOFF

Clean Water Is Everybody's Business

In urban and suburban areas, much of the land surface is covered by buildings and pavement, which do not allow rain and snowmelt to soak into the ground. Instead, most developed areas rely on storm drains to carry large amounts of runoff from roofs and paved areas to nearby waterways. The stormwater runoff carries pollutants such as oil, dirt, chemicals, and lawn fertilizers directly to streams and rivers, where they seriously harm water quality. To protect surface water quality and groundwater resources, development should be designed and built to minimize increases in runoff.

How Urbanized Areas Affect Water Quality Increased Runoff

The porous and varied terrain of natural landscapes like forests, wetlands, and grasslands traps rainwater and snowmelt and allows them to filter slowly into the ground. In contrast, impervious (nonporous) surfaces like roads, parking lots, and rooftops prevent rain and snowmelt from infiltrating, or soaking, into the ground. Most of the rainfall

The most recent National Water Quality Inventory reports that runoff from urbanized areas is the leading source of water quality impairments to surveyed estuaries and the third-largest source of impairments to surveyed lakes.

Did you know that because of impervious surfaces like pavement and rooftops, a typical city block generates more than 5 times more runoff than a woodland area of the same size?

and snowmelt remains above the surface, where it runs off rapidly in unnaturally large amounts.

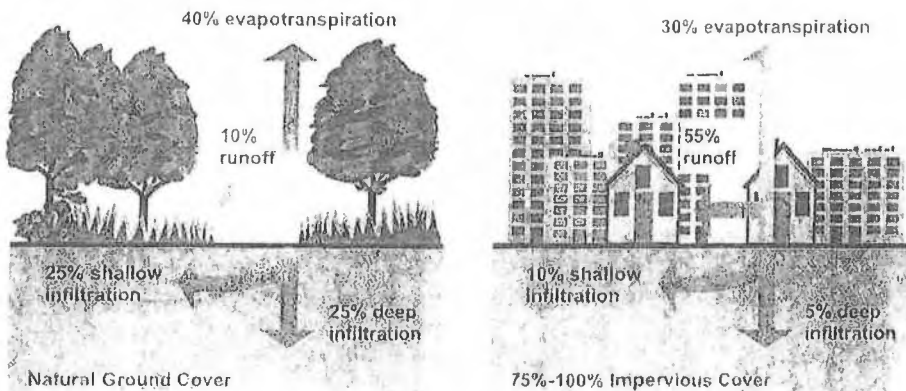
Storm sewer systems concentrate runoff into smooth, straight conduits. This runoff gathers speed and erosional power as it travels underground. When this runoff leaves the storm drains and empties into a stream, its excessive volume and power blast out streambanks, damaging streamside vegetation and wiping out aquatic habitat. These increased storm flows carry sediment loads from construction sites and other denuded surfaces and eroded streambanks. They often carry higher water temperatures from streets, roof tops, and parking lots, which are harmful to the health and reproduction of aquatic life.

The loss of infiltration from urbanization may also cause profound groundwater changes. Although urbanization leads to great increases in flooding during and immediately after wet weather, in many instances it results in lower stream flows during dry weather. Many native fish and other aquatic life cannot survive when these conditions prevail.

Increased Pollutant Loads

Urbanization increases the variety and amount of pollutants carried into streams, rivers, and lakes. The pollutants include:

- Sediment
- Oil, grease, and toxic chemicals from motor vehicles
- Pesticides and nutrients from lawns and gardens
- Viruses, bacteria, and nutrients from pet waste and failing septic systems
- Road salts
- Heavy metals from roof shingles, motor vehicles, and other sources
- Thermal pollution from dark impervious surfaces such as streets and rooftops



Relationship between impervious cover and surface runoff. Impervious cover in a watershed results in increased surface runoff. As little as 10 percent impervious cover in a watershed can result in stream degradation.

These pollutants harm wildlife populations, vegetation, and water supplies, and create unsafe and

350 NR
Since 4/01/20.

But lobby was closed so we only handed out about 50.

Managing Urban Runoff

What Homeowners Can Do

To decrease polluted runoff from paved surfaces, households can develop alternatives to areas traditionally covered by impervious surfaces. Porous pavement materials are available for driveways and sidewalks, and native vegetation and mulch can replace high maintenance grass lawns. Homeowners can use fertilizers sparingly and sweep driveways, sidewalks, and roads instead of using a hose. Instead of disposing of yard waste, they can use the materials to start a compost pile. And homeowners can learn to use Integrated Pest Management (IPM) to reduce dependence on harmful pesticides.

In addition, households can prevent polluted runoff by picking up after pets and using, storing, and disposing of chemicals properly. Drivers should check their cars for leaks and recycle their motor oil and antifreeze when these fluids are changed. Drivers can also avoid impacts from car wash runoff (e.g., detergents, grime, etc.) by using car wash facilities that do not generate runoff. Households served by septic systems should have them professionally inspected

and pumped every 3 to 5 years. They should also practice water conservation measures to extend the life of their septic systems.

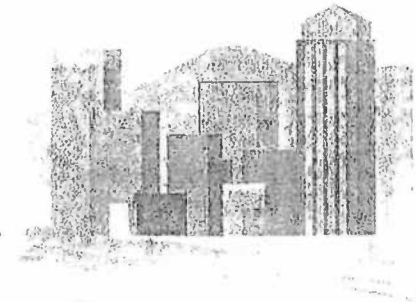
Controlling Impacts from New Development

Developers and city planners should attempt to control the volume of runoff from new development by using low impact development, structural controls, and pollution prevention strategies. Low impact development includes measures that conserve natural areas (particularly sensitive hydrologic areas like riparian buffers and infiltrable soils); reduce development impacts; and reduce site runoff rates by maximizing surface roughness, infiltration opportunities, and flow paths.

Controlling Impacts from Existing Development

Controlling runoff from existing urban areas is often more costly than controlling runoff from new developments. Economic efficiencies are often realized through approaches that target "hot spots" of runoff pollution or have multiple benefits, such as high-efficiency street sweeping (which addresses aesthetics, road safety,

and water quality). Urban planners and others responsible for managing urban and suburban areas can first identify and implement pollution prevention strategies and examine source control opportunities. They should seek out priority pollutant reduction opportunities, then protect natural areas that help control runoff, and finally begin ecological restoration and retrofit activities to clean up degraded water bodies. Local governments are encouraged to take lead roles in public education efforts through public signage, storm drain marking, pollution prevention outreach campaigns, and partnerships with citizen groups and businesses. Citizens can help prioritize the clean-up strategies, volunteer to become involved in restoration efforts, and mark storm drains with approved "don't dump" messages.



Related Publications

Turn Your Home into a Stormwater Pollution Solution!
www.epa.gov/nps

This web site links to an EPA homeowner's guide to healthy habits for clean water that provides tips for better vehicle and garage care, lawn and garden techniques, home improvement, pet care, and more.

National Management Measures to Control Nonpoint Source Pollution from Urban Areas
www.epa.gov/owow/nps/urbanmm

This technical guidance and reference document is useful to local, state, and tribal managers in implementing management programs for polluted runoff. Contains information on the best available, economically achievable means of reducing pollution of surface waters and groundwater from urban areas.

Onsite Wastewater Treatment System Resources
www.epa.gov/owm/onsite

This web site contains the latest brochures and other resources from EPA for managing onsite wastewater treatment systems (OWTS) such as conventional septic systems and alternative decentralized systems. These resources provide basic information to help individual homeowners, as well as detailed, up-to-date technical guidance of interest to local and state health departments.

Low Impact Development Center
www.lowimpactdevelopment.org

This center provides information on protecting the environment and water resources through integrated site design techniques that are intended to replicate preexisting hydrologic site conditions.

Stormwater Manager's Resource Center (SMRC)
www.stormwatercenter.net

Created and maintained by the Center for Watershed Protection, this resource center is designed specifically for stormwater practitioners, local government officials, and others that need technical assistance on stormwater management issues.

Strategies: Community Responses to Runoff Pollution
www.nrdc.org/water/pollution/storm/stoinx.asp

The Natural Resources Defense Council developed this interactive web document to explore some of the most effective strategies that communities are using around the nation to control urban runoff pollution. The document is also available in print form and as an interactive CD-ROM.

For More Information

U.S. Environmental Protection Agency
 Nonpoint Source Control Branch (4503T)
 1200 Pennsylvania Avenue, NW
 Washington, DC 20460
www.epa.gov/nps

prairieriversnetwork

Rain Gardens for Illinois



WHAT IS A RAIN GARDEN?

Do you have a wet basement, water that pools on your property, or a winter skating rink that results from downspout water rushing down your driveway? With a little effort, you can put that water to work and create a very attractive landscape feature! A rain garden is a vegetated depression specially designed to capture and use rain and snowmelt, collectively known as storm water.

Rain gardens receive storm water runoff from upstream drainage areas such as roofs, driveways, and lawns. Water that pools in rain gardens nourishes the plants and filters into the soil. Rain gardens imitate natural filtering systems such as wetlands.

You don't have to be an engineer to make a rain garden, and the numerous economic and environmental benefits will last for years!

RAIN GARDEN BENEFITS

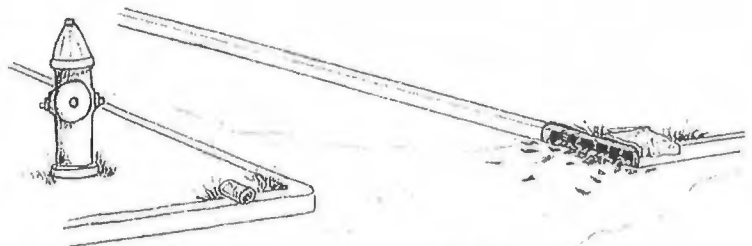
Rain gardens provide a number of benefits:

- offer a unique, beautiful landscape feature
- provide habitat for plants and wildlife such as hummingbirds and butterflies
- reduce flooding and water damage
- absorb more water than traditional lawns
- recharge ground water
- remove pollutants from storm water

WHY WORRY ABOUT STORM WATER?

Precipitation that is unable to filter into the ground moves into basements and streets, sometimes causing flood damage. As storm water flows downhill across lawns and impermeable surfaces, it picks up debris, soil, and chemical contaminants. This polluted water runs into storm drains and empties into rivers and lakes, often without treatment.

The influx of storm water into Illinois waterways not only makes our water resources less clean, but also causes the destabilization of banks and increases downstream flooding. Waterways need to be protected from the negative impacts of storm water because they are a source of drinking water, recreation, and wildlife habitat.



BASIC STEPS FOR CREATING A RAIN GARDEN

1. Choose a location
2. Determine rain garden size
3. Call JULIE (dial 811)
4. Dig the depression
5. Install inflow and outflow conveyances
6. Mulch the rain garden
7. Plant the rain garden
8. Water and weed regularly

Please refer to the text in this brochure for more details on each step.

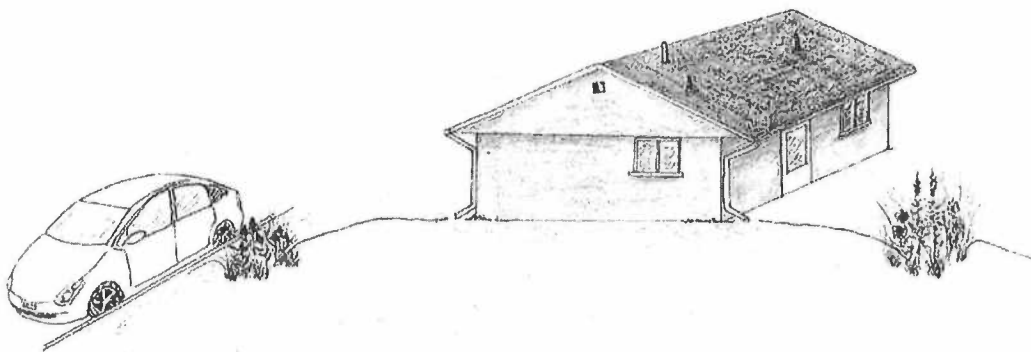
SELECTING A LOCATION FOR THE RAIN GARDEN

Rain gardens are a great way to reduce storm water runoff and beautify the landscape in residential, commercial, and industrial settings. The first step of installing a rain garden is deciding where to put it! Suitable locations include courtyards, lawns, and next to buildings, roads, driveways, or sidewalks. Avoid spots that are unlikely to receive storm water runoff from surrounding areas.

The most efficient way to determine the location of your rain garden is to observe your property during and after a rainfall. Note both where the water comes from and the area it travels to and pools. An ideal place for a rain garden is an existing low spot where water collects but also drains over time. Or, create your own depression close to an existing downspout. You can also be neighborly and intercept water that flows off your property.

A few more factors to consider when deciding on the location of your rain garden include:

- place rain garden at least 10 feet from building foundations
- avoid underground utility lines, septic fields, and tree roots
- the water table should be greater than 2 feet deep
- a location with partial or full sunlight will dry out faster and allow the use of native prairie plants



SOIL TESTING

If you need help determining the properties of your soil, you can submit a sample for particle size analysis at a soil testing laboratory. The University of Illinois Extension maintains a list of laboratories located in Illinois and neighboring states.

When you have a location in mind, dig a small hole approximately 6 inches deep and determine the soil type and water permeability. Sandy soils are gritty, whereas clay soils are sticky when wet. Fill the hole with water and observe how long it takes to drain. The soil is suitably permeable if the water disappears in 24 hours. Sandy, permeable soils are ideal because rain gardens should drain within a few days. When clay soil is present or permeability is low, you can:

- relocate the rain garden to more permeable soil
- amend the soil with sand and organic matter
- create a water garden

DIGGING THE RAIN GARDEN

Before digging the rain garden, determine the surface area, depth, and shape that are appropriate for your site and drainage conditions. A shape that works well is a bean-shape, with the long side facing upslope in order to catch as much storm water runoff as possible. Your rain garden should be approximately 10-30% of the drainage areas providing runoff. The depth of the rain garden should generally be 3-12 inches. If clay soils are present, the rate of water percolation into the ground will be low and therefore the rain garden should be relatively shallow and large in area. If the soil has good permeability (≥ 1 inch/hour), the rain garden can be on the deeper and smaller side of the suggested ranges.

It is best to dig your rain garden in the spring or early summer. The sides should be gently sloped, so that the rain garden resembles a saucer instead of a bowl. Use soil you have excavated to level out the bottom. The excess soil can also be used to create a berm on the downslope side of the rain garden. When working on the berm, you can install a rock-lined overflow spillway or a drain pipe so that you have more control of the rate of water loss. This extra step is only recommended if you are concerned about the rain garden overflowing or the soil is high in clay. Direct storm water to the rain garden with a downspout extension or shallow channel. Water can also come from sump pump outlets. Add decorative rock to soften the impact of incoming water.

PLANTING THE RAIN GARDEN

- Use native species because they are adapted to local conditions, benefit wildlife, have deep root systems, and are often perennial
- Avoid species that are aggressive or exotic
- Choose plants with different bloom times so the rain garden remains colorful during the growing season
- Remove existing vegetation to reduce plant competition (non-toxic techniques include sod cutters and layers of black plastic or newspaper)
- Place species according to moisture tolerance, light requirements, and plant height (ex. wettest spot in rain garden should have the more moisture-tolerant species)
- Consider clumping species for visual effect
- Add 2-4 inches of mulch to help remove pollutants, maintain moisture, and prevent erosion and weeds



NATIVE PLANTS



River Oats



Gray Sedge



New England Aster



Swamp Milkweed



Golden Alexander



Virginia Bluebells



Great Blue Lobelia



Cardinal Flower

PLANTS FOR SUN AND SHADE

SUNNY GARDEN

Common Name	Height	Color	Bloom Time
Blue Flag Iris	2-3'	Blue	May-Jun
Golden Alexander	1-2'	Yellow	May-Jun
Great Blue Lobelia	2-4'	Blue	Aug-Sep
Joe-Pye Weed	3-6'	Pink	Jul-Sep
Mountain Mint	2-4'	White	Jul-Sep
New England Aster	1-5'	Purple	Aug-Oct
Palm Sedge	1-3'	Green	Apr-Jun
River Oats	2-3'	Green	Jul-Oct
Swamp Milkweed	2-4'	Pink	Jul-Aug

SHADY GARDEN

Common Name	Height	Color	Bloom Time
American Bellflower	2-6'	Violet	Jun-Oct
Bottlebrush Grass	2-5'	Green	Jun-Aug
Cardinal Flower	2-4'	Red	Jul-Sep
Cinnamon Fern	2-4'	Green	No flower
Dutchman's Breeches	1'	White	Apr-May
Gray Sedge	1-3'	Green	May-Sep
Jack-In-The-Pulpit	1-2'	Green	Apr-Jul
Orange Jewelweed	2-5'	Orange	Jun-Sep
Virginia Bluebells	1-3'	Blue	Apr-May

For more plant ideas, visit:

Illinois Wildflowers - www.illinoiswildflowers.info

Blue Thumb Plant Selector - www.bluethumb.org/plants

This rain garden brochure is a product of Prairie Rivers Network. To learn more, call us to schedule a rain garden presentation. If you build a rain garden, please send your stories and pictures to info@prairierivers.org.



1902 Fox Drive, Suite G
Champaign, IL 61820
217-344-2371
www.prairierivers.org

Illustrations by Karie Neukomm and photographs by Michael Jeffords and John Hilty.

MAINTAINING THE RAIN GARDEN

The care needed to maintain a functioning rain garden does not differ greatly from a regular flower garden. Fertilizers are not needed, but compost can be blended into the soil to increase nutrients. Consider fencing the rain garden initially to keep your plants safe from hungry herbivores!

During the first year, the rain garden will need regular watering (~1 inch/week) and weeding. Over time, the plants will grow larger and develop deep root systems. Simultaneously, the need for weeding and watering will decrease.

Each spring, remove the dead material from the previous growing season. Also replenish the mulch and make sure the inflow and outflow conveyances are clear of debris.

MOSQUITOES

Mosquitoes will not breed successfully in well-drained rain gardens. It takes 10-14 days for a mosquito to fully develop from egg to adult. Rain gardens should filter water completely within a few days.

OTHER RESOURCES

More details about rain gardens are available from:

Prairie Rivers Network
www.prairierivers.org/raingardens

Wisconsin Department of
Natural Resources
dnr.wi.gov/runoff/rg

Businesses that will take Used Appliances

Call to get business hours and verify that they will take your used appliance. A cost may be involved, be sure to confirm it when calling.

Channahon Township/Assessor's Office

25461 S. Fryer St., 815-467-2569
Residents will need to take item to the office. Call to verify hours.

Fairway Recycling

1124 E. Washington St., Morris 815-941-4550
Drop off only

Cardinal Recycling

2600 Beyer Rd., Morris (1 mile west of Menards)
815-416-1449 www.cardinalrecycling.com

ComEd Fridge/Freezer Program

888-806-2273 FREE (working condition only)
www.comed.com/sites/homesavings/pages/appliancerecycling.aspx

Environmental Field Services

800-480-4337
www.efsnational.com Charge is \$32.00

Hierz Scrap

4345 S Verona Rd., Verona 815-287-2445
Call for charges

Berlinsky Scrap Yard

212 Page Ave., Joliet 815-726-4334
www.berlinksyscrap.com
Residents will need to take items to the yard. They only take water heaters, washer & dryers at no charge.

Oil Recycling Locations

Auto Zone

525 W Rt. 6
Minooka 815-467-1263
(limit 5 gal. per day, also accept used auto batteries)

Andy's Auto Services

201 N. Division St.
Morris 815-942-0100

Jiffy Lube

2021 S Rt. 59
Plainfield 815-609-7328

Compact Fluorescent Light Bulbs

Home Depot

621 Brook Forest Ave.
Shorewood 815-725-6301

Will County Forest Preserve

17540 W Laraway Rd.
Joliet 815-727-9700

Ace Hardware

855 S Ridge Rd.
Minooka 815-467-7300

Tire Recycling & Disposal

McCoy's

Rt. 6 & Tryon
Channahon 815-467-2258
Call for charge

Lucenta Tire

24059 S Municipal Dr
Channahon 815-467-1275
Call for charge

Tire Tracks

18612 NW Frontage Rd
Shorewood 815-439-9999
Call for charge

For more information on local recycling centers visit: www.willcountygreen.com or <http://www.grundyco.org/planzone/pdfs/GreenGuide.pdf>

Don Kinzler

Subject: FW: NPDES MS4 Permit Annual Report Data**From:** Sydney Thompson <sthompson@channahon.org>**Sent:** Monday, March 22, 2021 3:39 PM**To:** Don Kinzler <dkinzler@channahon.org>**Subject:** Re: NPDES MS4 Permit Annual Report Data

Don,

Please see below for what I was able to gather from the website and social media pages.

Thanks,
Sydney

Search Term	Website	Facebook (people reached)	Twitter (people reached)	Instagram (people reached)
Yard Waste Begins	7,209	15,571	315	22
Leaf Pickup	483	N/A	N/A	N/A
Water Quality Report	2,135	1,058	325	N/A
Newsletter downloads (January & February 2020)	266	841	241	6
Downloads of VOC Annual Facility Inspection Report - 2018	191	N/A	N/A	N/A



VILLAGE OF CHANNAHON

24555 S. NAVAJO DRIVE • CHANNAHON, ILLINOIS 60410
(815) 467-6644 • FAX (815) 467-9774 • www.channahon.org

ENVIRONMENTAL JUSTICE AREA

Name of Person filling out form: Donald Kinzler, P.E., CFM, Village of Channahon

Position: Engineering Project Manager

Date: 05-26-21

Evaluation: *Municipality vs. State of Illinois*

The following information was taken from U.S. Census Bureau website:

<https://www.census.gov/quickfacts/fact/table/IL,channahonvillageillinois/PST045219>

Date of Census: July 1, 2019

	Illinois	Channahon
Minority Population		
Black or African American alone (%)	14.6	1.2
American Indian and Alaska Native alone (%)	0.6	0.2
Asian alone (%)	5.9	0.3
Native Hawaiian and Other Pacific Islander alone (%)	0.1	0.0
Two or More Races (%)	2.1	0.8
Hispanic or Latino (%)	17.5	10.6
Population Characteristics		
Foreign born persons (%) 2014-2018	14.1	3.0
Income & Poverty		
Median Household Income (in 2018 dollars), 2014-2018	\$65,886	\$91,897
Persons in poverty (%)	11.5	4.2

Create an Account - Increase your productivity, customize your experience, and engage in information you care about.

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GOVERNMENT

SERVICES

RESIDENTS

BUSINESS

HOW DO I...



Forms & Documents

Municipal Separate Storm Sewer System (MS4)

Ongoing Construction & Projects

[Home](#) > [Government](#) > [Departments](#) > [Public Works](#) > Municipal Separate Storm Sewer System (MS4)

Municipal Separate Storm Sewer System (MS4)

Documents

- [MS4 Stormwater Plan \(PDF\)](#)
- [Village of Channahon MS4 Notice of Intent \(PDF\)](#)
- [Environmental Justice Area Evaluation \(PDF\)](#)

Annual Facility Inspection Report

- [Most recent Inspection Report \(PDF\)](#)
- [2020 NPDES MS4 Annual Report \(PDF\)](#)
- [View all archived Inspection Reports](#)

Village Newsletter August 2020

MAINTAIN YOUR LAWN TO PROTECT RIVERS & STREAMS

Lawn fertilizer contains nutrients, such as nitrogen and phosphorous, that encourage turfgrass to grow quickly. However, the fertilizer we put on our lawns also affects the health of our local rivers and streams. When it rains, stormwater picks up excess fertilizer on your lawn and sidewalk and brings it down storm drains that lead directly to local waterways. The same nutrients in fertilizers that encourage grass to grow cause algae in bodies of water to grow too. Algae harms water quality and fish, detracts from our waterway's natural beauty, and can even impact recreational opportunities like fishing and kayaking. If using fertilizer on your lawn, be sure to follow the product instructions and sweep excess fertilizer off hard surfaces like sidewalks.

ONLINE PAYMENT INFORMATION

The Village of Channahon continues to meet the needs of its residents in an ever-changing technological world. The Village provides a 24-hour payment option for utility bills, building permits or Administrative Compliance Tickets (ACT tickets) through the online payment portal found at www.channahon.org. Please have your utility bill, permit or citation (ACT ticket) available when processing your transaction online. Debit or credit card payments are accepted online in the following forms: Mastercard, Visa, Discover or American Express. Please allow up to 3 days for the payment to be processed. If a utility payment is being made to avoid termination of water services, please contact the Finance Department at 815-467-6644 to alert Village staff of the payment. A convenience fee is charged with each transaction by the credit card processing vendor. The Village of Channahon does not collect or benefit from the convenience fee and the fee is not able to be waived.

BANKING PAYMENTS MADE ONLINE

Many residents choose to pay utility bills from their online checking accounts (otherwise known as issuing a bank check). This payment involves a resident requesting the banking institution to create and mail a paper check to a vendor for a specific amount, on a requested date. Though the banking institution allows the choice of a payment date, please be advised that the banking institution cannot control the length of time in which it takes the paper check to be processed, mailed and received by the vendor.

Paying a time-sensitive bill with a bank check includes a risk of the payment being received late and assessed a late fee and penalty. A common misconception is that when payments are made through online banking, the funds are sent directly to the intended vendor on the date requested. Many people do not realize that when a payment request is made through online banking, a paper check is produced and mailed by the bank to the Village. Bank checks do not contain a United States Post Office postmark date on the envelope in which it is mailed. Therefore, there is no way for Village staff to determine if the bank check was sent in a timely manner. If the Village of Channahon receives the bank check after the due date, a late fee will be assessed. If issuing a bank check is a resident's preferred payment method, the Village of Channahon recommends doing so 7-10 days before the due date to ensure timely receipt of the payment. The Village offers several alternate payment methods to avoid potential late fees: automatic utility bill payment (ACH withdrawal), credit card payments or the drop box located in the Village Hall parking lot at 24555 S. Navajo Drive.



UPCOMING COMMITTEE OF THE WHOLE & VILLAGE BOARD MEETINGS

Monday, August 3, 2020
6:00 p.m.

Monday, August 17, 2020
6:00 p.m.

Tuesday, September 8, 2020
6:00 p.m.

Monday, September 21, 2020
6:00 p.m.

CONTACT US

Village of Channahon
24555 S. Navajo Drive
Channahon, IL 60410

Phone: (815) 467-6644

Fax: (815) 467-9774



2021 VILLAGE JOB SHADOW DAY GOES VIRTUAL

The Village of Channahon hosted its annual Job Shadow Day on Monday, February 1 with members of the Channahon Junior High School Student Council. While we weren't able to meet in person this year like we normally do, the students joined Village staff for a virtual event to learn about how municipal government operates, as well as various roles and positions within the Village. The students even got a surprise guest visit by K9 Officer Hutch and Sgt. Carlson!

A special thanks goes to Ms. Patula and Ms. Halliday, the sponsors of the CJHS Student Council, for helping us coordinate a fun event for the students this year.



2021 Pet Tags Still Available!

Attention all pet owners: Have you gotten your pet's 2021 Channahon Annual License? Village ordinance requires pet owners to license all dogs and cats. There is no longer a charge for tags, but we ask that you still obtain them. Please provide proof of rabies when registering your pet. Registration can be done online at www.channahon.org, or in person at Village Hall (24555 S. Navajo Drive). For questions or more information, please call 815-467-6644.

Business License Registration Now Available Online

Do you want to open a new storefront in Channahon, are you starting a home occupation, or do you have an existing business and need to renew your license? The Village of Channahon's Business Registration License Application and Home Occupation Registration are now available online! Visit www.channahon.org/FormCenter to view and access the forms today.

FOLLOW US



COMED IMPOSTER SCAM WARNING

With people spending more time at home because of the COVID-19 pandemic, imposters are taking advantage of residents who may be alone to rob them of their possessions and financial information. These imposters can show up at small businesses as well as homes.

In this latest scam, an individual may pose as an employee from ComEd, another utility or tree service company. They will lure the resident or small-business owner outside to discuss work that they claim needs to be completed. While the individual is outside, an accomplice will enter the home or business to steal valuables and documents containing the individual's personal or financial information.

ComEd has also received reports of scammers posing as utility representatives who contact customers experiencing difficulty paying their bills. These imposters prey on these customers' financial situation by falsely threatening to shut off service to obtain money or a customer's personal, business or financial information.

Another common scheme involves scammers using technology to make their phone calls appear to come from a ComEd phone number and threatening to turn off a customer's service unless they make a direct payment with a prepaid cash card. Sometimes they ask victims to call back at a different phone number and provide personal information. In other attempts, scammers send emails to businesses and request that they send ComEd payments to bogus payment web sites.

Here are some tips to help identify scams:

- ComEd will never come to a customer's home or business to:
 - Demand a payment
 - Ask for immediate payment with a prepaid cash card
 - Ask for their ComEd account number or other personal information, such as a driver's license number
- ComEd will never call a customer to:
 - Ask for their account number
 - Ask for personal information such as their Social Security number or bank information
 - Ask them to make a direct payment with a prepaid cash card
- To identify an actual ComEd employee, remember:
 - All ComEd field employees wear a uniform, including shirt and safety vest, with the ComEd logo
 - ComEd employees visibly display a company ID badge with the ComEd logo and employee's name

Any customer who is unsure whether a visitor or caller is a ComEd employee or believes he or she has been a target or victim of a scam should call **1-800-EDISON-1** (1-800-334-7661) immediately. To learn more, visit ComEd.com/ScamAlert.

2021 Village Wide Garage Sales

At this time, we do not know if we will be having our annual garage sales due to the pandemic. If we do, the 2021 Village Wide Garage Sale dates will be as follows:

- Spring - April 29, 30 and May 1
- Fall - September 9, 10 and 11

While the Village Wide Garage Sales are undecided, residents may still host their own individual garage sales. We encourage residents to take the following precautions for themselves and potential customers should you choose to host your own garage sale:

- Display posters to remind customers about social distancing
- Tables and chairs should be at least 6 feet apart
- Use tape to direct visitors through the sale
- Disinfect merchandise before putting it out for sale
- Clean tables and chairs throughout the day
- Supply hand sanitizer on tables and elsewhere for customers
- Wear masks and disposable gloves

2021 State of the Village Address

Due to the ongoing COVID-19 situation, this year's State of the Village Address will take place virtually. Sign up for alerts on our website - www.channahon.org - to receive updates on this year's address.

Never miss an update!
Sign up for Village of Channahon alerts by visiting www.channahon.org and clicking "Alerts" on the home page.

CITIZEN & BIZ. OF THE YEAR NOMINATIONS OPEN

Nominations for the 2021 Amos Moose Hayes Citizen of the Year and Fred Rittorf/George Sparagis Business of the Year are now open!

Know of a Channahon business and/or resident that you feels deserves recognition for their contributions to the Channahon community? Visit www.channahon.org/FormCenter to fill out a nomination form.

Nominations will close on March 31, 2021 at 11:59 p.m. Winners will be revealed during our virtual State of the Village Address, which will be released in April.

For questions about the nomination forms or awards, please contact Village Hall at 815-467-6644.

Refuse Vendor Transition: Frequently Asked Questions

Q Is my refuse pickup day going to change when Environmental takes over?

Village Newsletter
March 2020

A While a portion of Village collection will remain on Monday, Environmental has also added refuse pickup days on Tuesday, Wednesday and Thursday. When your new refuse carts are delivered by Environmental in April, you will receive a notice advising which day is your new refuse pickup day. See the adjacent map as well.

Q What should I do with my Waste Management carts?

A After Waste Management's last day of service on April 27, they will retrieve their carts from your home. The Village and Waste Management are developing a transition plan outlining the timing for cart removal that will be shared with residents as soon as it is available. Please visit our website and/or social media pages for updates. Sign up to receive alerts via email at www.channahon.org.

Q What cart sizes does Environmental Recycling & Disposal offer? Are there different prices for different cart sizes?

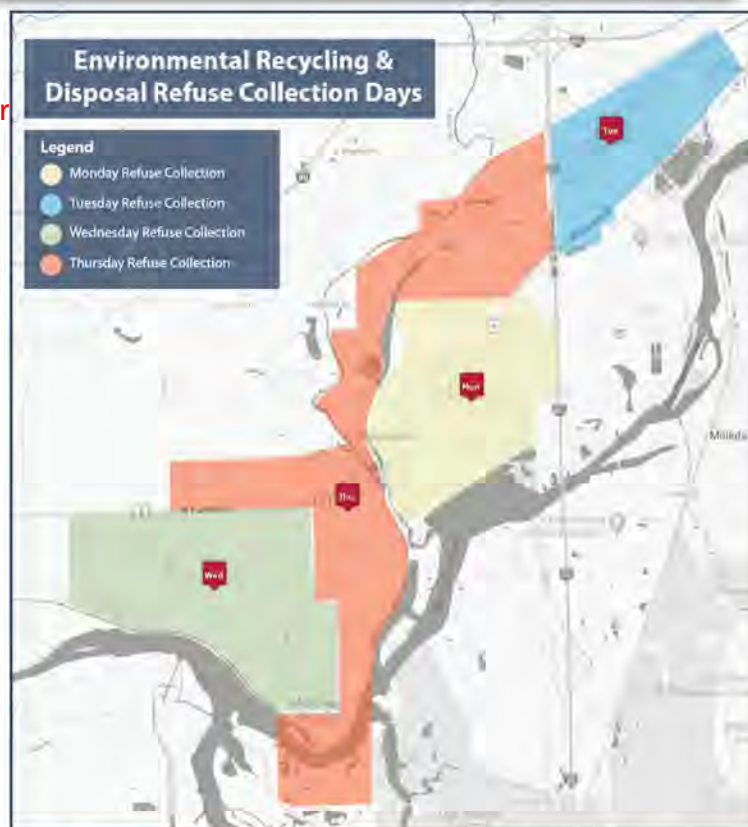
A Refuse cart sizes are 95-, 65- and 35-gallon. Recyclables cart sizes are 95- and 65- gallon. Yard waste carts are only available in the 95-gallon size. There are not different prices for different cart sizes. The first year rate for all refuse services is \$20.64. Please contact Melissa Timm with the Village's Finance Department at (815) 467-6644 with any billing questions.

Q How does the new yard waste program work with Environmental?

A A 95-gallon cart for yard waste pickup is included in Environmental's services to all Village residents. Yard waste pickup will occur annually from the week of March 15 through the week of December 15. During the months in which yard waste pickup does not occur, residents may use the yard waste cart as an extra refuse cart at no additional charge. Yard waste may also be disposed of in biodegradable paper bags. NO STICKERS ARE REQUIRED.

Q Can I still use yard waste stickers that I have left over from last year?

A You may use the Waste Management yard waste stickers purchased last year through April 30, 2020. From May 1-May 31, 2020, the Village will issue an account credit to residents that bring their unused yard waste stickers to Village Hall at the rate of \$1.75 per sticker.



Q Are there any discounts available for senior citizens or disabled US military veterans?

A Residents over 65 or 100% disabled US military veterans can receive a \$2.00 per month discount on refuse services. Please contact the Village's Finance Department to see if you qualify for the discounted rate at (815) 467-6644.

Q What color are the new carts from Environmental?

A Environmental's carts are green, with lids colored to indicate their designated purpose: **dark green for refuse**, **tan for recycling** and **light green for yard waste**.

Q Will I be billed by Environmental Recycling & Disposal or the Village of Channahon for refuse?

A Refuse service billing will still go through the Village of Channahon. For questions related to your billing, please contact the Village's Finance Department at (815) 467-6644.

Q Who do I contact for questions about my refuse service?

A You can call Environmental Recycling & Disposal at (815) 725-4555, or you can email channahon@envrd.com. You can also visit them online at www.envrd.com.

Village Newsletter October 2020

FALL LEAF COLLECTION

Fall means falling leaves! As the next season "falls" upon us, please remember that the monthly fees for the Village's current refuse disposal service includes weekly yard waste pickup. Place leaves at the curbside in your yard waste cart or in biodegradable bags on your designated refuse service day. **Please note that plastic bags or rigid containers are not acceptable receptacles for yard waste.**

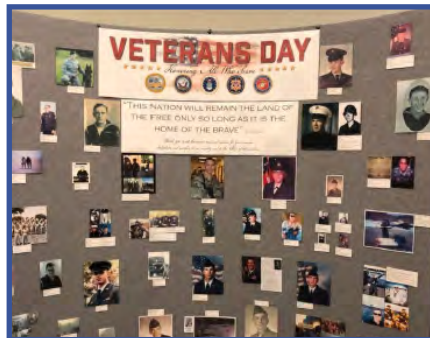
Yard waste service will continue through the months of October and November and will end the week of December 14th. As a reminder, yard waste carts can be utilized for extra refuse from December 21st through April 1st.

If you do not have a yard waste cart and would like one, or if you have any service-related questions, please contact Environmental directly at (815) 725-4555.



HONOR YOUR VETERAN

In honor of Veterans Day, the Village of Channahon would like to pay tribute to those who have selflessly served our country by displaying their photos in the lobby of the Village Hall throughout the month of November. We ask that you please help us pay tribute to these men and women by sending us or dropping off photos of the veteran(s) you wish to honor. Please include the veteran's name, their home town, branch of service and when/where they served.



Photos can be dropped off or mailed to Channahon Village Hall at 24555 S. Navajo Drive, Channahon, IL 60410.

WHAT IS THE PLANNING & ZONING COMMISSION?

The Planning & Zoning Commission (PZC) of the Village of Channahon are a group of seven appointed residents that serve to provide recommendations to the Village Board regarding issues of land use and structures. Common items brought before the Planning & Zoning Commission include commercial site plans, subdivision plans, zoning amendments, and requests for variations. The Planning & Zoning Commission is also tasked with conducting public hearings, to be able to provide a comprehensive recommendation to the Village Board. The term of a commissioner is five years, and commissioners may be appointed for multiple terms. If you have interest in serving on this commission, please contact Mike Petrick, Director of Community Development & I.S. at mpetrick@channahon.org.

Local Business SPOTLIGHT

Business Name: Romar Cabinet & Top Co Inc.

Business Address: 23949 S. Northern Illinois Drive

Owner/Manager: Anthony DeAngelis - President

Founded/Established: 1976

Product/Service Offered: Custom cabinets and tops

Slogan/Motto: From dream kitchens to libraries, Romar gives our clients the cabinetry solutions that fit their lifestyle.

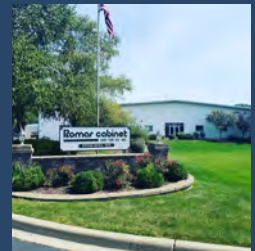
What makes your business unique to the Channahon area? We are a custom shop, we take customer's ideas and make them a reality.

What do you enjoy most about doing business in Channahon? The residents, whether they are old or new, have pride in their homes. We are proud to be a part of helping them make their houses a home with our custom cabinets.

When you're not working, where in Channahon do you like to spend your time? Enjoy supporting local businesses, the meat market, bars and restaurants. Take advantage of the great trails in town, and the Park District.

Fun Fact: Romar has been in business for 40+ years, and we have been in Channahon for 23 years.

Know of a Channahon business that should be featured in an upcoming spotlight? Email sthompson@channahon.org



Did you know.....

Nearly 70% of the pollution in our streams and lakes comes from storm water. Properly designed rain gardens can remove up to 99% of common pollutants in rainfall runoff. Information is available at Village Hall.



Yard waste such as leaves, branches and twigs makes up over 25% of our waste stream.

Landscape Waste

There are many landscape waste disposal options:

- Leave grass clippings and leaves on the lawn as a nutrient.
- Mulch grass clippings, leaves, and wood chips for lawn and garden application.
- Take landscape waste to a permitted compost facility.
- Participate in community landscape waste collections.
- Construct an on-site, well maintained, household compost bin. Use the compost as a soil amendment.

Did you know that landscape waste has been banned from landfills since July 1, 1990.

10 THINGS YOU CAN DO TO PREVENT STORM WATER RUNOFF POLLUTION

- Use fertilizers sparingly & sweep up driveways, sidewalks & gutters
- Never dump anything down storm drains or in streams
- Vegetate bare spots in your yard
- Compost your yard waste
- Use least toxic pesticides follow labels & learn how to prevent pest problems
- Direct downspouts away from paved surfaces; consider starting a rain garden
- Take your car to the car wash instead of using your driveway
- Check your car for leaks and recycle your motor oil
- Pick up after your pet
- Have your septic tank pumped & system inspected regularly

EPA UNITED STATES ENVIRONMENTAL PROTECTION AGENCY





Included Services

- Your choice of a 95-, 65- or 35-gallon cart for refuse pick-up. There is no difference in pricing.
- Your choice of a 95- or 65-gallon cart for recycling pick-up. There is no difference in pricing.
- No more yard waste stickers.** Simply place your yard waste curbside in biodegradable bags or yard waste cart.
- One bulk item pick-up per week and one appliance pick-up per week.
- Discounted rates for seniors and 100% disabled veterans.
- Quarterly E-Waste pick-up (\$35/item).
- Additional cart rentals (\$6/month).
- Questions? [Click](#) or call [\(877\) 323-2222](tel:877-323-2222).



**VILLAGE OF CHANNAHON
2021 VIRTUAL JOB SHADOWING
MONDAY, FEBRUARY 1, 2021**

**VILLAGE OF CHANNAHON
24555 S. Navajo Drive, Channahon
2:15 p.m. – 4:00 p.m.**

- Introduction

- Power Point Presentation
 - Structure and Organization
 - Approval of a Business coming into the Village
 - Virtual Tour of the Village and Police Department

- Student Question and Answer

- Adjourn

Stormwater Outfall Inspection Data Form

Section 1: Background Data

Subwatershed: <u>Instachem</u>	Outfall ID: <u>80 59</u>								
Date: <u>8/7/2020</u>	Time (Military): <u>1315</u>								
Temperature: <u>81°F</u>	Inspector(s): <u>Goedon</u>								
Previous 48 Hours Precipitation: <u>0</u>	Photo's Taken (Y/N) _____ If yes, Photo Numbers: _____								
Land Use in Drainage Area (Check all that apply): <table style="width: 100%; margin-top: 5px;"> <tr> <td><input checked="" type="checkbox"/> Industrial</td> <td><input type="checkbox"/> Open Space</td> </tr> <tr> <td><input type="checkbox"/> Residential</td> <td><input type="checkbox"/> Institutional</td> </tr> <tr> <td><input type="checkbox"/> Commercial</td> <td>Other: _____</td> </tr> <tr> <td></td> <td>Known Industries: _____</td> </tr> </table>		<input checked="" type="checkbox"/> Industrial	<input type="checkbox"/> Open Space	<input type="checkbox"/> Residential	<input type="checkbox"/> Institutional	<input type="checkbox"/> Commercial	Other: _____		Known Industries: _____
<input checked="" type="checkbox"/> Industrial	<input type="checkbox"/> Open Space								
<input type="checkbox"/> Residential	<input type="checkbox"/> Institutional								
<input type="checkbox"/> Commercial	Other: _____								
	Known Industries: _____								

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
Storm Sewer (Closed Pipe)	<input checked="" type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Clay / draintile <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>12"</u>	In Water: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
Open drainage (swale/ditch)	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: Top Width: Bottom Width:		

Section 3: Physical Indicators

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other: _____	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other: _____	
Pipe algae/growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other: _____	
Do physical indicators suggest an illicit discharge is present (Y/N): <u>(N)</u>			

Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If No, Skip to Section 7 and Close Illicit Discharge Investigation
Flow Description	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial	

Section 4: Physical Indicators (Flowing Outfalls Only)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odobr	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Laundry <input type="checkbox"/> Other:	<input type="checkbox"/> 1-Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color (color chart)	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange/Red <input type="checkbox"/> Multi-Color <input type="checkbox"/> Other:	<input type="checkbox"/> 1-Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1-Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Grease <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Suds and Foam <input type="checkbox"/> Other:	<input type="checkbox"/> 1-Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin	<input type="checkbox"/> 3 - Some; origin clear

Do physical indicators (flowing) suggest an illicit discharge is present (Y/N): N

Section 5: On-Site Sampling / Testing (Flowing Outfalls Only)

PARAMETER	RESULT	ACCEPTABLE RANGE	WITHIN RANGE (Y/N)	EQUIPMENT
Temperature		NA	NA	Thermometer
pH		6 - 9		5-in-1 Test Strip
Ammonia		<3 mg/L April - Oct < 8 mg/L Nov - March		Test Strip
Free Chlorine		NA	NA	5-in-1 Test Strip
Total Chlorine		< 0.05 mg/L		5-in-1 Test Strip
Phenols		< 0.1mg/L		Test Kit
Detergents as Surfactants		> 0.25 mg/L residential > 5 mg/L non-residential		Test Kit
Copper		<0.025 mg/L		Test Strip
Alkalinity		NA	NA	5-in-1 Test Strip
Hardness		NA	NA	5-in-1 Test Strip
Sample Location				

(Note NA values used for future tracing procedures)

Section 6: Data Collection for Lab Testing (see flow chart)

1. Sample for the lab? Yes No
 2. If yes, collected from: Flow Pool

PARAMETER	RESULT (from lab)	ACCEPTABLE RANGE	WITHIN RANGE (Y/N)
Fecal Coliform		400 per 100 mL	
Flouride		0.6 mg/l	
Potassium		Ammonium/Potassium ratio or > 20mg/l	

*note label sample with outfall number

Section 7: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

- NONE -

Stormwater Outfall Inspection Data Form

Section 1: Background Data

Subwatershed: <u>RIVERSIDE</u>	Outfall ID: <u>80</u>
Date: <u>8/7/2020</u>	Time (Military): <u>1104</u>
Temperature: <u>83°F</u>	Inspector(s): <u>Gordon</u>
Previous 48 Hours Precipitation: <u>0</u>	Photo's Taken (Y/N) <u>(Y)</u> If yes, Photo Numbers:
Land Use in Drainage Area (Check all that apply): <input checked="" type="checkbox"/> Industrial <input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: _____ Known Industries: _____	

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
Storm Sewer (Closed Pipe)	<input checked="" type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Clay / drain tile <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____ Diameter/Dimensions: <u>18"</u>	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
Open drainage (swale/ditch)	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: Top Width: Bottom Width:	

Section 3: Physical Indicators

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe algae/growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	
Do physical indicators suggest an illicit discharge is present (Y/N): <u>(N)</u>			

Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If No, Skip to Section 7 and Close Illicit Discharge Investigation
Flow Description	<input checked="" type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial	

Section 4: Physical Indicators (Flowing Outfalls Only)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Laundry <input type="checkbox"/> Other:	<input type="checkbox"/> 1-Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color (color chart)	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange/Red <input type="checkbox"/> Multi-Color <input type="checkbox"/> Other:	<input type="checkbox"/> 1-Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1-Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Grease <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Suds and Foam <input type="checkbox"/> Other:	<input type="checkbox"/> 1-Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin	<input type="checkbox"/> 3 - Some; origin clear
Do physical indicators (flowing) suggest an illicit discharge is present (Y/N): <i>N</i>					

Section 5: On-Site Sampling / Testing (Flowing Outfalls Only)

PARAMETER	RESULT	ACCEPTABLE RANGE	WITHIN RANGE (Y/N)	EQUIPMENT
Temperature		NA	NA	Thermometer
pH		6 - 9		5-in-1 Test Strip
Ammonia		<3 mg/L April - Oct < 8 mg/L Nov - March		Test Strip
Free Chlorine		NA	NA	5-in-1 Test Strip
Total Chlorine		< 0.05 mg/L		5-in-1 Test Strip
Phenols		< 0.1mg/L		Test Kit
Detergents as Surfactants		> 0.25 mg/L residential > 5 mg/L non-residential		Test Kit
Copper		<0.025 mg/L		Test Strip
Alkalinity		NA	NA	5-in-1 Test Strip
Hardness		NA	NA	5-in-1 Test Strip
Sample Location				

(Note NA values used for future tracing procedures)

Section 6: Data Collection for Lab Testing (see flow chart)

1. Sample for the lab? Yes No
 2. If yes, collected from: Flow Pool

PARAMETER	RESULT (from lab)	ACCEPTABLE RANGE	WITHIN RANGE (Y/N)
Fecal Coliform		400 per 100 mL	
Flouride		0.6 mg/l	
Potassium		Ammonium/Potassium ratio or > 20mg/l	

*note label sample with outfall number

Section 7: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

- NONE -

Stormwater Outfall Inspection Data Form

Section 1: Background Data

Subwatershed: <u>Indian trails South</u>	Outfall ID: <u>63</u>
Date: <u>8/7/2020</u>	Time (Military): <u>1020</u>
Temperature: <u>77°F</u>	Inspector(s): <u>Gordon</u>
Previous 48 Hours Precipitation: <u>0</u>	Photo's Taken (Y/N) <u>(N)</u> If yes, Photo Numbers: _____
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: _____ Known Industries: _____	

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
Storm Sewer (Closed Pipe)	<input checked="" type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Clay / draintile <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>21"</u>	In Water: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: Top Width: Bottom Width:		

Section 3: Physical Indicators

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other: _____	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other: _____	
Pipe algae/growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other: _____	
Do physical indicators suggest an illicit discharge is present (Y/N):			

Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If No, Skip to Section 7 and Close Illicit Discharge Investigation
Flow Description	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial	

Section 4: Physical Indicators (Flowing Outfalls Only)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Laundry <input type="checkbox"/> Other:	<input type="checkbox"/> 1-Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color (color chart)	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange/Red <input type="checkbox"/> Multi-Color <input type="checkbox"/> Other:	<input type="checkbox"/> 1-Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1-Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Grease <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Suds and Foam <input type="checkbox"/> Other:	<input type="checkbox"/> 1-Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin	<input type="checkbox"/> 3 - Some; origin clear

Do physical indicators (flowing) suggest an illicit discharge is present (Y/N):

Section 5: On-Site Sampling / Testing (Flowing Outfalls Only)

PARAMETER	RESULT	ACCEPTABLE RANGE	WITHIN RANGE (Y/N)	EQUIPMENT
Temperature		NA	NA	Thermometer
pH		6 - 9		5-in-1 Test Strip
Ammonia		<3 mg/L April - Oct < 8 mg/L Nov - March		Test Strip
Free Chlorine		NA	NA	5-in-1 Test Strip
Total Chlorine		< 0.05 mg/L		5-in-1 Test Strip
Phenols		< 0.1mg/L		Test Kit
Detergents as Surfactants		> 0.25 mg/L residential > 5 mg/L non-residential		Test Kit
Copper		<0.025 mg/L		Test Strip
Alkalinity		NA	NA	5-in-1 Test Strip
Hardness		NA	NA	5-in-1 Test Strip
Sample Location				

(Note NA values used for future tracing procedures)

Section 6: Data Collection for Lab Testing (see flow chart)

1. Sample for the lab? Yes No

2. If yes, collected from: Flow Pool

PARAMETER	RESULT (from lab)	ACCEPTABLE RANGE	WITHIN RANGE (Y/N)
Fecal Coliform		400 per 100 mL	
Flouride		0.6 mg/l	
Potassium		Ammonium/Potassium ratio or > 20mg/l	

*note label sample with outfall number

Section 7: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

- NONE -



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Melanie Arnold

From: Don Kinzler
Sent: Wednesday, March 3, 2021 1:51 PM
To: 'Dan Fellows'; 'Steve VanDeveer'
Subject: RE: [External] Love's Erosion and Sediment issues

Dan,

The mess has to be cleaned up asap or the Village will start sending fines. We aren't waiting a month.

Regards,


Don

From: Dan Fellows <Dan.Fellows@buffaloconstruction.com>
Sent: Wednesday, March 3, 2021 1:16 PM
To: Steve VanDeveer <stephenv@thomas-engineering.com>
Cc: DKinzler@channahon.org
Subject: Re: [External] Love's Erosion and Sediment issues

The landscaper will be on site the first of April to complete work and start irrigation. I'm trying to see if my schedule can get me out there a few days as well.

Sent from my iPhone



DAN FELLOWS | PROJECT SUPERINTENDENT
Buffalo Construction, Inc.
 12700 Otto Knop Drive, Louisville, KY 40299
 O: (502) 327-4686 • C: (318) 422-6453 • F: (855) 865-6566


On Mar 3, 2021, at 2:04 PM, Steve VanDeveer <stephenv@thomas-engineering.com> wrote:

Thanks for you quick response Dan. Please keep me in the loop on your schedule.

Sent from my Verizon, Samsung Galaxy smartphone

----- Original message -----

From: Dan Fellows <Dan.Fellows@buffaloconstruction.com>
 Date: 3/3/21 1:03 PM (GMT-06:00)
 To: Steve VanDeveer <stephenv@thomas-engineering.com>
 Cc: "'DKinzler@channahon.org'" <DKinzler@channahon.org>
 Subject: Re: Love's Erosion and Sediment issues

Will forward to Russ and PM. Will contact landscaper on his arrival to site. Great hearing from you.

Get [Outlook for iOS](#)



DAN FELLOWS | PROJECT SUPERINTENDENT

Buffalo Construction, Inc.

12700 Otto Knop Drive, Louisville, KY 40299

O: (502) 327-4686 • C: (318) 422-6453 • F: (855) 865-6566



From: Steve VanDeveer <stephenv@thomas-engineering.com>

Sent: Wednesday, March 3, 2021 1:56:17 PM

To: Dan Fellows <Dan.Fellows@buffaloconstruction.com>

Cc: 'DKinzler@channahon.org' <DKinzler@channahon.org>

Subject: [External] Love's Erosion and Sediment issues

Dan,

I know you aren't on site anymore, but can you please help with mitigating these issues. Soil/sediment/debris is migrating from the exposed parkway areas into the curb and gutter, and in some cases into storm inlets. At minimum the Village will need you to sweep the street and gutter to remove all debris. It may also be a good idea to ensure all inlet protection is clean and in working order. Furthermore, do you have a schedule for final restoration on site? The weather is looking favorable for that work now, and it would be in your best interest to get seed and blanket down before the spring rain hits.

Photos attached for reference.

Regards,

Stephen

Sent from my Verizon, Samsung Galaxy smartphone

PRECONSTRUCTION CONFERENCE AGENDA – PRIVATE DEVELOPMENT*

*does not include construction of improvements managed by Village Building Department

DATE: July 28, 2020

DEVELOPMENT: Ozinga, Casey's Watermain Extension

DEVELOPER CONTACT: _____

DEVELOPER ENGINEER CONTACT: _____

CONTRACTOR 24 HR CONTACT: _____

ONSITE PROJECT MANAGER CONTACT: _____

TRAFFIC CONTROL MANAGER 24 HR CONTACT: _____

NPDES PERMIT INSPECTOR 24 HR CONTACT: _____

VILLAGE OF CHANNAHON ENGINEER CONTACT: Donald Kinzler, Of: 815-467-6644; Gabe Zavala, Of: 815-467-6644; Cell 815-214-4732

VILLAGE OF CHANNAHON INSPECTOR CONTACT: Steve VanDeveer, Thomas Engineering, 217-273-5396, Brian Witkowski, Thomas Engineering (material submittals) brianw@thomas-engineering.com

VILLAGE MATERIAL TESTING CONSULTANT: N/A

START DATE: _____

COMPLETION DATE: _____

I. Introductions:

- A. Village of Channahon Representative; Developer; Developer Engineer; General Contractor; Onsite Foreman; Subcontractors.
- B. List of subcontractors and material suppliers with contact information and description of work performed by each. See attached sheet

II. Engineering and Permitting:

- A. Only work associated with watermain construction is allowed.
- B. This meeting, approvals, etc. are not associated with building permitting. Building Permitting for buildings construction are issued through Steve Kuczkowski, Village of Channahon.
- C. General Contractor and all Subcontractors must be registered with the Village of Channahon before they can begin work.
- D. Necessary Shop Drawings. Provide utilities cut-sheets to Brian Witkowski, Thomas Engineering (brianw@thomas-engineering.com) with Engineer and Inspectors copied.
- E. Oversize/Overweight permits are required for all loads in excess of 80,000 lbs. Contact the Village of Channahon to obtain permits.

III. Communication Procedures:

- A. Engineering Plans and Specifications take precedence over discussions in meetings and any other communication except as requested in writing by Developer and approved in writing by the Engineer.
- B. Written correspondence to Village shall be directed to the Engineer with copies to the Inspector and applicable Subcontractors and Village Consultants. The Engineer and Inspector should also be copied on all correspondence between Developer, General Contractor and Subcontractors which may be relevant to the Village of Channahon.
- C. Proposed field changes, plan changes, substitution requests, etc. shall be brought to attention of the Inspector with a written follow-up. Written approval from the Inspector or Engineer shall be obtained prior to construction of said changes.
- D. The Engineer considers email an acceptable form of written communication, but time of notification starts when the next time the Engineer is present in his Village office, not when it was sent. An initial phone call is recommended.

- E. Both the Engineer and Inspector shall be notified by 4 p.m., 48 business day hours prior to initial start of site work and after extended periods when work has been idle.
- F. The Inspector or Engineer shall be immediately notified when existing drain tiles are discovered, regardless of condition; Engineer or Inspector must approve reconnection design.
- G. Scheduling Village Testing, Inspections, Observations, etc.:
 - a. General Contractor, Onsite Foreman or Subcontractor shall provide requests for observation, inspection and testing work to the Inspector by 4 p.m., 48 business day hours in advance of need.
 - b. General Contractor, Onsite Foreman or Subcontractor shall notify separately by phone and email the Inspector and Village Consultants of work cancellations for scheduled inspection, observation, or testing. Such notification must be made by 4 p.m. and a minimum of 24 business day hours in advance of scheduled services. The Developer shall be responsible for all fees incurred by the Village or Village Consultants as a result of late or non-notification of cancellation of scheduled services.
 - c. The Village and Village Consultants are not responsible for costs associated with unauthorized scheduling requests by the General Contractor, Onsite Foreman or Subcontractor.
 - d. The General Contractor should keep records of all communication/correspondence with Village and Village Consultants regarding scheduling and cancellation notifications.
- H. Record keeping of all plan changes, field changes, draintile locations and connections, etc. shall be responsibility of the General Contractor.

IV. Use of Site:

- A. Working hours are Monday through Friday, 7 a.m. to 7 p.m, including equipment startup. No work shall be performed on Saturday's, Sundays or Village observed Holidays without the written approval of the Engineer.
- B. Property Limits, Easements, ROW.
- C. Material and Equipment Storage Areas shall be located within construction site boundaries. Materials shall not be stored in ROW.
- D. Construction traffic route – US Route 6
- E. Portable toilets are recommended.
- F. General Contractor is responsible for keeping offsite private and public properties clean of dirt and debris. Cleanup work shall take place daily and as requested by Inspector or other Village Staff.
- G. Developer is responsible for repairing or replacing Village, other public, or private utilities and landscaping damaged during construction. Methods of repair/replace shall be approved by the Engineer or Inspector prior to such work taking place.
 - a. It is the Developers responsibility to seek compensation from others who may be responsible for said damage.

V. Construction Practices:

- A. General Contractor is responsible for JULIE notification and utility conflicts/relocations/resolutions. Engineer must be notified immediately when utility conflicts are discovered.
- B. Erosion & Sediment Control Inspection and Maintenance per approved engineering plans
 - a. Maintenance of E&SC will be STRICLTY enforced.
- C. Sequence of Construction:
 - a. Disruption to existing roads/traffic shall be kept to a minimum. No road closures are allowed.
- D. Grading and Restoration
 - a. Proper grading is critical to the Village, especially as pertains to overland flood routes and nuisance drainage problems. Asbuilt grading will be carefully evaluated and inspected.
- E. Dewatering

- a. Dewatering issues caused a major delay at the Channahon Corporate Center development in 2016. It is recommended that the Contractor provide a dewatering plan at their earliest opportunity to help avoid similar delays to construction milestone dates.
- F. Utilities:
- a. Materials must be protected from contamination while stored onsite.
 - b. No open manholes; open excavations must be protected and be of minimum duration.
 - c. All aggregate backfill shall be IDOT approved CA-7 at 95% compaction.
 - d. Aggregate bedding - 6" bedding on all utilities; haunching required.
 - e. Aggregate cover - 6" cover on DIP
 - f. Trench Backfill (CA-7) to top of subgrade; 2 ft past pavements.
 - g. All castings shall be per approved plans.
 - h. Water
 - i. Only VOC can operate water valves.
 - ii. All DIP shall be bagged to outside of structures, including FH main and other service piping, taped or tied at joints/ends.
 - iii. Where watermain or service lines cannot meet separation requirements – pressure class pipe, encasement or rubber booting storm sewer required.
 - iv. Curb stops and corp stops shall have compression fittings.
 - v. FH paint shall be Channahon approved yellow from the factory per Village ordinance. Red hydrants painted over yellow will require replacement with correct hydrants. Repainting of deficient hydrants WILL NOT be accepted.
 - vi. Services must be measured and shown accurately on Record Drawings.
- G. Inspections/Observation
- a. All Village required inspection/observation are paid for by Developer.
 - b. Inspector shall be notified immediately of all deliveries of water materials.
 - c. Village Inspector shall be on site for all:
 - i. Water
 - 1. All pressure or other connections to existing water supply.
 - 2. 100% of pipe and structure placement.
 - ii. Under no circumstances shall any Utilities work be backfilled prior to Village inspection. Any work backfilled w/o Village approval will require complete re-excavation for inspection.
 - d. Village plumbing inspector must be on site at all times during domestic water service tap and installation. Contact Steve Kuczkowski, Village of Channahon to schedule this work.
- H. Testing
- a. All Village required testing are paid for by Developer.
 - b. Village Inspector shall be on site for all:
 - i. Watermain
 - 1. Pressure testing.
 - 2. Disinfection with Chloride Gas – two consecutive day samples from each sampling point; water services will be individually inspected. Village recommends using Neecorp for chlorination.
- I. Traffic Control Practices:

- a. TRAFFIC CONTROL AND PROTECTION – At the preconstruction meeting, the General Contractor shall furnish the name and telephone number of the individual and their company who is to be responsible, 24 hours-a-day, for the installation and maintenance of traffic control for the project.
 - b. Traffic control per applicable IDOT Highway Standards.
 - c. Road closure is not allowed without a written request and Village approval.
- J. Water Usage:
- a. THE USE OF FIRE HYDRANTS for any reason IS STRICTLY PROHIBITED.
 - b. Bulk Water Permits available from Village; metered; paid for by Developer.
 - i. Protected hook up locations at Jessup Street and Tallgrass Trail.
 - ii. The General Contractor shall provide the water truck and driver required to obtain and transport this water. The Village reserves the right to restrict or refuse the use of Village water.
 - iii. General Contractor shall notify the Village prior to each day's use at each hook-up location and again when usage is complete for the day.

LIST OF MATERIAL SUPPLIER and SUBCONTRACTOR CONTACTS

Material Suppliers:

- Aggregate

- PCC

- HMA

Subcontractors:

- Earthwork

- Underground (Water, Sanitary, Storm)



VILLAGE OF CHANNAHON

24555 S. NAVAJO DRIVE • CHANNAHON, ILLINOIS 60410 •
(815) 467-6644 • FAX (815) 467-9774 • www.channahon.org

TO: Alex Hasan, Yazour Group Systems, LLC; Mike Rogina, Rogina Engineers & Surveyors, LLC

FROM: Karen A. James, Planner

CC: Michael C. Petrick, Director of Community Development & Information Systems; Ed Dolezal, Director of Public Works; Donald Kinzler, Engineering Project Manager; Gabe Zavala, Engineering Technician

DATE: August 27, 2020

SUBJECT: Alliance Transportation & Logistic Services - Final Engineering Review 1

The Village of Channahon has received the following:

- *Improvement Plans* prepared by Rogina Engineers & Surveyors, LLC dated June 16, 2020
- *Architectural Plans* prepared by Thomas Draus Architect dated July 16, 2020

Please provide a written response to these comments (including VOC comments), (2) two full-size hard copies and electronic copies of all plans as well as all other materials submitted for review with an identical submittal to Tony Spinelli, P.E. at Strand Associates, Inc. **Electronic submittals should include all plans, documents, correspondence and response letter.**

Based upon village review of the submitted materials, we offer the following comments:

General

- 1.1 Provide an Engineer's Opinion of Construction Cost for the Private Site Infrastructure Improvements.
- 1.2 Provide stormwater management calculations. The proposed site is subject to the stormwater management requirements in Chapter 53.01 of the Village Ordinance.
- 1.3 Provide storm sewer calculations and a drainage area tributary map.
- 1.4 Provide a Geotechnical Soil Report.
- 1.5 Provide a photometric plan and lighting specifications.
- 1.6 Update site benchmarks and plan elevations to NAVD 88 Datum.
- 1.7 Provide to the Village the proposed septic system plans and details approved by the Will County Health Department.
- 1.8 PIN consolidation will be a requirement of site plan approval.
- 1.9 Parking semi tractors and trailers outside of marked spaces on the site plan will not be permitted. The following condition will be included in any Special Use Permit ordinance: The parking of semi-trucks, trailers or chassis is limited to the number of parking spaces available for such vehicles, as indicated on an approved site plan.
- 1.10 Based on the location of the building on Lot 13, the assigned address will be 24261 S. Northern Illinois Drive.
- 1.11 If a monument sign is desired at this time, the location, size and setbacks shall be included on the site plan and the required surrounding landscape shall be included on the landscape plan.

- 1.12 Provide a plat of easement to provide an MDE for the stormwater detention area including the subsurface storage limits.
- 1.13 Submit application for Final Site Plan and Special Use Permit for a Cartage Facility including fees. Application can be found on the forms page of the village website (www.channahon.org) under Paper Forms - Community Development.

Improvement Plans

2. Title Sheet – Plan Sheet 1

- 2.1 Provide a contact phone number for the Client.
- 2.2 Provide contact information for the owner, developer, local utilities, and Village of Channahon.
- 2.3 Provide a Reference Benchmark and a second Site Benchmark. All benchmarks shall be on the NAVD 88 vertical datum. Establish site benchmarks on items that will not be displaced during construction. The use of fire hydrants, if available, for site benchmarks is recommended.

3. Specifications, Special Provisions & General Notes – Plan Sheets 2-5

- 3.1 Revise Special Provisions Note #1.f.7 to indicate, “THE VILLAGE OF CHANNAHON SHALL BE NOTIFIED IMMEDIATELY WHEN EXISTING DRAINAGE TILES ARE FOUND REGARDLESS OF CONDITION OR FUNCTIONALITY. THE VILLAGE SHALL HAVE FINAL APPROVAL OF ANY REPAIR, CONNECTION, ABANDONMENT OR OTHER METHODS FOR MITIGATING EXISTING DRAINAGE TILES DISCOVERED ONSITE.”
- 3.2 Village Ordinance Chapter 154 requires polyvinyl encasement for all ductile iron water main pipe. Remove “PLACED IN CORROSIVE SOILS, UNLESS D.I.P.R.A. STATES OTHERWISE” from Underground Improvements Note #3.a.4.
- 3.3 Revise Underground Improvements Note #3.a.7 to require initial backfill to twelve (12) inches above the crown of the pipe.
- 3.4 Revise Underground Improvements Note #3.b.1 to require ASTM C-76 for reinforced concrete pipe.
- 3.5 Relocate Contact Information listed on plan sheet #3 to the Title Sheet.
- 3.6 Add a standard trench detail for the storm sewer installation.
- 3.7 Add the Village of Channahon Curb & Gutter standard detail.
- 3.8 Remove the EJIW standard details (7210Z2, 7210M3, 7180Z, 7180M1) from the drawings. These EJIW castings are not specified for use within the submitted plan set.

4. Stormwater Pollution Prevention Plan – Plan Sheet 6

- 4.1 Show the temporary stockpile location on the drawing.
- 4.2 Provide inlet protection for the Restrictor Manhole and Inlet #10.
- 4.3 Remove the inlet protection symbol shown in the east curb line southeast of catch basin #2.
- 4.4 Remove or relocate parking lot text (120' DIA. TRUCK TURNAROUND) that obscures SWPPP symbols.

5. Stormwater Pollution Prevention Specifications & Details – Plan Sheet 7

- 5.1 The Owner Certification, Contractor Certification, and NPDES Permit Inspector Certification must be signed and provided to the Village prior to commencement of any construction activities
- 5.2 Update the estimated construction schedule listed in Soil Erosion Control Specification Note 16.iii.
- 5.3 Revise the entrance width shown in the Stabilized Construction Entrance detail to conform to the width listed in Soil Erosion Control Specification Note #11.

- 5.4 Relocate the “COPYRIGHT 2019 ROGINA ENGINEERS & SURVEYORS LLC ALL RIGHTS RESERVED” text that is obscuring the filter basket descriptive text.

6. Existing Conditions Plan – Plan Sheet 8

- 6.1 Remove the benchmark data and Legend from this plan sheet.
- 6.2 Provide topographic survey data within the wetland limits on lots 12 and 13.
- 6.3 Provide offsite topographic survey data to a minimum of 100 ft beyond subject property boundary.
- 6.4 Label existing easements shown on the drawing.
- 6.5 Show the full limits of the subject property boundary on the drawing. Rotation of the drawing viewport is preferred over reducing the drawing scale to accomplish this request.

7. Dimension & Paving Plan – Plan Sheet 9

- 7.1 Provide dimensions between the back of curb and the property line along the Lot 12/13 and Lot 13/14 property lines.
- 7.2 Provide dimensions between the back of curb and the wetland limits at multiple locations.
- 7.3 Provide dimensions between the retaining walls and the wetland limits.
- 7.4 Provide dimensions for the drive aisle adjacent to west building wall.
- 7.5 Provide dimensions for the curb radii.
- 7.6 Provide curb radii for the protruding 90-degree curb corners located northeast of the building.
- 7.7 Add a note to restrict encroachment and disturbance into the wetland limits.
- 7.8 Increase the sidewalk width to 6-feet to maintain a minimum 4-foot walking path while accounting for vehicle overhang.
- 7.9 Turnoff proposed contours located across the entrance and west of the entrance.
- 7.10 The width of the north parking stall located east of the building appears to be less than the required 10-ft. The full length of the 10 stalls does not appear to be 120’.
- 7.11 The width of the north tractor parking stall appears to be less than 12.5’. Recheck all dimensions/widths of all parking stalls.
- 7.12 The length of the Accessible parking stall is incorrectly labeled 16-ft.
- 7.13 Revise the SAWCUT EX CURB FOR DEPRESSED GUTTER note to indicate SAWCUT EX CURB BACK FOR DEPRESSED CURB.
- 7.14 Provide a construction detail for the connection of the proposed curb to the existing curb.
- 7.15 Increase the width of the area between the north curb and the property line to 15-ft to reduce the potential of damage occurring to the existing offsite fence by the trailer parking.
- 7.16 Provide dimensions for the sub-surface sub-base detention limits.
- 7.17 Show the full limits of the disturbance area on the drawing. Rotation of the drawing viewport is preferred over reducing the drawing scale to accomplish this request.
- 7.18 The architectural elevations indicate a door on the south wall between the loading dock and the curbed landscape area. The pavement should be marked /signed to prohibit parking or bollards should be introduced to secure door from being blocked.
- 7.19 Trash receptacles and the fence enclosure shall be illustrated on the site/dimension plan.
- 7.20 Add details and specifications regarding the protection of the raised fuel tanks.

8. Grading Plan – Plan Sheet 10

- 8.1 Turnoff proposed parking stall text.
- 8.2 Provide spot elevations at all corners of the accessible parking stall including the loading stall.
- 8.3 Provide the rim elevation for the Restrictor Structure and catch basin #1.1.
- 8.4 The proposed contours along the west property line appear to be incorrect and incomplete.
- 8.5 The proposed 535.00 P spot elevation located in the parking lot near the southwest corner of the detention basin appears incorrect.
- 8.6 Add FG and TW to the legend.
- 8.7 Provide a cross section drawing for the detention basin.
- 8.8 Show the overland flood routes.
- 8.9 Show the location of the emergency overflow weir in the detention basin retaining wall. Provide a construction detail and calculations for the emergency overflow weir.
- 8.10 The proposed rim elevations for all parking lot catch basins are 0.5-ft below the detention basin design HWL. Stormwater detention volume storage above grade within the parking lot is not permitted.
- 8.11 With the exception of the emergency overflow weir, 1-ft of freeboard above the design HWL must be located fully within the detention basin area and below grade, i.e. cannot extend to parking or driveway.
- 8.12 Provide offsite topographic survey data to a minimum of 100 ft beyond subject property boundary.
- 8.13 Show the full limits of the disturbance area on the drawing. Rotation of the drawing viewport is preferred over reducing the drawing scale to accomplish this request.
- 8.14 The area included within the “tree line” must have a tree survey to identify species, size and condition of trees to be removed. Per Section 158.37 Tree Preservation of the Landscape Ordinance, removal of preservation tree species shall require replacement or cash in lieu donated for planting of trees within the village.
- 8.15 Provide a sloped access into the bottom of the detention basin for maintenance.
- 8.16 It appears there is an error in the labeling of the contours within the detention pond. Update all sheets as necessary.

9. Utility Plan – Plan Sheet 11

- 9.1 Remove the Legend from this plan sheet
- 9.2 Revise Utility Plan Note #3 to indicate, “THE VILLAGE OF CHANNAHON SHALL BE NOTIFIED IMMEDIATELY WHEN EXISTING DRAINAGE TILES ARE FOUND REGARDLESS OF CONDITION OR FUNCTIONALITY. THE VILLAGE SHALL HAVE FINAL APPROVAL OF ANY REPAIR, CONNECTION, ABANDONMENT OR OTHER METHODS FOR MITIGATING EXISTING DRAINAGE TILES DISCOVERED ONSITE.”
- 9.3 Relocate the water service label to be visible.
- 9.4 Show the proposed b-box location within the utility easement and add a callout label to identify the location.
- 9.5 Relocate the sump pump discharge pipe information to be visible.
- 9.6 Label the sub-surface sub-base detention limits.
- 9.7 Label the storm pipes within the sub-surface sub-base detention limits.
- 9.8 The Ty.1 frame and lid callout for the Drywell catch basins conflicts with the drywell construction detail. The EJIW1020 frame listed in the construction detail has a 6” height and the Ty.1 frame has a 9” height.
- 9.9 Revise catch basins #1.1, #1.2, and #2 to be standard catch basin structures. Drywell catch basins are permitted to be used only within the limits of the sub-surface sub-base detention area.

Architectural (Landscape) Plan

10. Sheet T1-L

- 10.1 The landscape plan is lacking in detail and omits the required front, side, and rear yard plant unit calculations and planting details of the yards, foundation, and detention areas. To reduce clutter and potential for errors and omissions, the landscape plan shall be separate from the architectural site plan and shall include the location, species, and counts of all landscaping required and provided for the development.
- 10.2 To reduce potential errors or omissions, the details of the architectural site plan should be included on the civil engineering plans and removed from the landscape plan. The landscape plan should use the civil site plan as the base plan.
- 10.3 Lighting details and notes of foot-candle requirements should be moved to the photometric plan and utility plan.
- 10.4 Tree t4 is missing from the enlargement.
- 10.5 Plant species and quantities must adhere to the species diversity requirements included in the Landscape Ordinance-156.36(I).
- 10.6 The architectural site plan differs from the civil site plan. Resolve discrepancies and update plans accordingly.
- 10.7 Provide details regarding the fuel tanks. Confirmation of separation from the building, and permissibility of enclosure and colocation of trash receptacles is requested in order to determine effect on the site plan.
- 10.7 The architectural plan incorrectly references ICC 2006. Channahon has adopted ICC 2015 and NEC 2014 with local amendments.
- 10.8 It is recommended that contact be made with Chief Building Official Steve Kuczkowski to discuss adopted codes and local amendments as well as expectations of plan design and review.

11. Sheet A2

- 11.1 Provide color elevation views.
- 11.2 The total height dimension (6'+14'4") indicated at the right on the north face does not match the height (21'4") for the same corner indicated on the left of the east side view. Please clarify and revise dimensions as necessary on all views.



VILLAGE OF CHANNAHON

24555 S. NAVAJO DRIVE • CHANNAHON, ILLINOIS 60410 •
(815) 467-6644 • FAX (815) 467-9774 • www.channahon.org

TO: Mark Adair, GDP; Brian Hertz, PE, MG2A
FROM: Karen A. James, Planner
CC: Michael C. Petrick, Director of Community Development & Information Systems; Ed Dolezal, Director of Public Works; Donald Kinzler, Engineering Project Manager; Gabe Zavala, Engineering Technician
DATE: April 9, 2020
SUBJECT: Town Center Units 2A & 3 Resubdivision - Preliminary Plat and Final Plat Review 3 and Site Improvement Plans Final Engineering Review 1

The Village of Channahon has received the following:

- *Preliminary Plat* prepared by M Gingerich Gereaux & Associates, dated 2/19/2020
- *Site Improvement Plans with Final Plat* prepared by M Gingerich Gereaux & Associates, dated 2/17/2020

Please provide a written response to these comments (including VOC comments), (2) two full-size hard copies and electronic copies of all site plans as well as all other materials submitted for review with an identical submittal to Tony Spinelli, P.E. at Strand Associates, Inc. **Electronic submittals should include all plans, documents, correspondence and response letter.**

Based upon village review of the submitted materials, we offer the following comments:

General

- 1.11 No building permits beyond the model home permit on lots B26 and B27 will be issued for proposed Lots B28-B37 prior to approval of final engineering and recording of the final plat of resubdivision. This comment is for communication purposes only.
- 1.12 With the next submittal, provide copies of the Final Plat as a standalone document. The Final Plat can remain part of the Site Improvement Plans for reference.
- 1.13 Provide a copy of the IEPA Notice of Intent (NOI) ILR10 Permit Application, including IHPA and Endangered Species determinations. The executed ILR10 permit is required prior to any construction activities.
- 1.14 Provide an Engineer's Opinion of Probable Construction Cost for the public infrastructure improvements, earthwork, erosion & sediment controls, etc.
- 1.15 Provide a parkway tree plan in accordance with Municipal Code 158.36(E).

Preliminary Plat

2. Sheet 1

No further comments at this time.

3. Sheet 2

3.17 Partially Compliant. *Upon further consideration, the Village will not allow multiple individual sump discharge connections to the existing storm sewer pipe as this would require multiple open cuts to the alley. Provide sump main piping with service stubs extending both east and west from the proposed storm structure near Alley 5. The piping must be located in the PU&DE and as close to the north easement boundary as possible; stubs can extend onto private property. If all proposed lots sump connections cannot be served from the proposed MH, alternatives can be discussed during final engineering review.*

Engineer: We will discuss options at a later time.

VOC: The Village is open to further discussion, but NOTE A determines a default condition. Therefore, revise NOTE A as follows: "...IF PREVIOUSLY PROPOSED SUMP SERVICES ARE FOUND THEY MAY BE UTILIZED. UNDER NO CIRCUMSTANCES SHALL CUTTING OF ALLEY 5 PAVEMENT, OR EXCAVATION WITHIN 3 FT OF ALLEY 5 PAVEMENT, BE ALLOWED."

3.18 Provide a 10-ft Public Utility & Drainage Easement in the rear yards of B26-B37 along Alley 5 to accommodate the proposed sump pump collector storm sewer. The 10-ft PU&DE should overlap the existing 6-ft PU&DE.

3.19 Revise the Typical Pavement Cross Section to indicate the following,

- HMA Surface Course, IL-9.5, Mix D, N50
- HMA Binder Course, IL-19.0, N50
- Aggregate Base Course, Type B, CA-6

3.20 Extend Alley 5 curb returns through the 6 ft easements and provide depressed curb for a sidewalk crossing.

3.21 Call out relocation of existing streetlight wiring, currently located between existing Lots 16/17, as TBD. Include other such wiring as may be necessary.

3.22 Relocate the proposed storm MH in the driveway of Lot B33 to be constructed over the existing 18" RCP, or moved completely out of the driveway.

Final Plat

4. Sheet 1

4.8 Provide a 10-ft Public Utility & Drainage Easement in the rear yards of B26-B37 along Alley 5 to accommodate the proposed sump pump collector storm sewer. The 10-ft PU&DE should overlap the existing 6-ft PU&DE.

5. Sheet 2

5.1 Repeat Comment. *Add the attached "AUTHORIZATION TO RECORD" certificate.*

Engineer: *The certificate is added.*

VOC: *Authorization Record Certificate – Change "AUTHORIZATION RECORD CERTIFICATE" to "AUTHORIZATION TO RECORD CERTIFICATE". Use the Village's certificate:*

Engineer: *Signature certificate is revised as noted.*

VOC: *Change the title "AUTHORIZATION RECORD CERTIFICATE" to "AUTHORIZATION TO RECORD".*

5.3 Partially Compliant. *Please make the following changes:*

- *Engineering Approval Certificate - Change “(LIST IMPROVEMENTS)” to “(NO IMPROVEMENTS INCLUDED)”.*

Engineer: Both certificates are revised.

VOC: Site improvement plans for the subdivision have been submitted to the Village. Update the Engineering Approval Certificate and Guarantee of Improvements Certificate by replacing “(NO IMPROVEMENTS INCLUDED)” with “CHANNAHON TOWN CENTER UNITS 2A & 3 RESUB NO.1”.

- 5.4 Insert “WILL” County into all certificates for Village of Channahon signature.
- 5.5 Change all proposed PU&DE to PUDE; Add PUDE – PUBLIC UTILITY AND DRAINAGE EASEMENT to legend.

Improvement Plans

6. Title Sheet – Sheet C1

- 6.1 Site improvement plans submitted to the Village for review require a signature by a Professional Engineer licensed in the State of Illinois.
- 6.2 The Drainage Certificate provided has missing information and requires a signature by a Professional Engineer licensed in the State of Illinois.
- 6.3 Provide a street address for the Reference Benchmark and provide a second Site Benchmarks.
- 6.4 Provide contact information for Owner, Developer, Village of Channahon, and Public Utility Companies.
- 6.5 Provide Section/Township/Range information for the JULIE One Call system.
- 6.6 Revise Existing Field Tiles Note #1 to indicate, “THE VILLAGE OF CHANNAHON SHALL BE NOTIFIED IMMEDIATELY WHEN EXISTING DRAINAGE TILES ARE FOUND REGARDLESS OF CONDITION OR FUNCTIONALITY. THE VILLAGE SHALL HAVE FINAL APPROVAL OF ANY REPAIR, CONNECTION, ABANDONMENT OR OTHER METHODS FOR MITIGATING EXISTING DRAINAGE TILES DISCOVERED ONSITE.”
- 6.7 Revise Existing Field Tiles Note #6 to include the Village of Channahon for resolution of utility conflicts.
- 6.8 Revise Sanitary Sewer Note #2 to require a minimum bedding of 6” per Village ordinance.
- 6.9 Remove the following items (602301-04, 602306-03, 602401-03, 604001-04, and 606001-07) from the list of Illinois DOT Standards.
- 6.10 Revise easements per plat comments.

7. Existing Topography & Demolition Plan – Sheet C4

- 7.1 Provide storm sewer and sanitary sewer structure data for surveyed structures.
- 7.2 Add curb depressions on the east side of St. James Street, and on both sides of Alley 5, for the continuation of the crosswalk.
- 7.3 Provide existing centerline and edge of pavement elevations for Alley 5 and the temporary HMA street between Town Center Circle and Alley 5.

- 7.4 Call out removal of existing streetlight wiring currently located between existing Lots 16/17. Include other such wiring as may be necessary.

8. Site Paving & Geometry Plan – Sheet C5

- 8.1 Add a sidewalk stub (approx. 10') on the east side of St. James Street along St. Elizabeth Drive for the continuation of the crosswalk.
- 8.2 Terminate the St. James Street curb & gutter at Sta. 1+80. The additional 5-ft (+/-) of C&G will allow for removal of the tapered end without impacting the alley radius when the C&G is extended in the future.
- 8.3 Eliminate the depressed curb shown on the east side of St. James Street across from the alley.
- 8.4 Revise the Typical Pavement Cross Section to indicate the following,
- HMA Surface Course, IL-9.5, Mix D, N50
 - HMA Binder Course, IL-19.0, N50
 - Aggregate Base Course, Type B, CA-6
- 8.5 Per the approved Preliminary Plat (2016), the pavement design must be per Village Standards using IBR and Class III calculations. Provide pavement design using the BDE 5401 Pavement Design Template. An IBR of 20 can be assumed based on other Town Center development submittals.

9. Utility & Grading Plan – Sheet C6

- 9.1 Provide numbering for proposed and existing sewer structures.
- 9.2 The pipe slopes listed for the proposed 18" RCP sewer between the connection to the existing structure in the alley and the proposed manhole at the rear corner of Lot B33-B34 conflict with the invert data.
- 9.3 The pipe slope listed for the proposed 18" RCP sewer between the proposed manhole at the front corner of Lot B33-B34 and the connection to the existing structure in St. Elizabeth Drive conflicts with the invert data.
- 9.4 Adjust the pipe invert of the 12" sump collector storm sewer entering the proposed manhole in the driveway of Lot B33. Storm sewer invert elevations at storm structures shall be adjusted to match the 0.8 depth of different diameter sewer pipes.
- 9.5 Provide existing centerline and edge of pavement elevations for Alley 5 and the temporary HMA street between Town Center Circle and Alley 5.
- 9.6 Provide existing and proposed centerline and top of curb elevations for the proposed improvements on St. James Drive.
- 9.7 Relocate the proposed storm MH in the driveway of Lot B33 to be constructed over the existing 18" RCP, or moved completely out of the driveway.
- 9.8 Show existing utility pedestals on either side of all streets adjacent to this project.
- 9.9 Show and call out new location of streetlight wiring currently located between existing Lots 16/17 as well as splicing specifications. Include other such wiring as may be necessary.
- 9.10 Add a streetlight in the easement at the property line of Lots 96/97. Verify that power and control for the streetlight can be provided Controller 1 of T.C. Unit 2A.
- 9.11 Revise NOTE A as follows: "...IF PREVIOUSLY PROPOSED SUMP SERVICES ARE FOUND THEY MAY BE UTILIZED. UNDER NO CIRCUMSTANCES SHALL CUTTING OF ALLEY 5 PAVEMENT, OR EXCAVATION WITHIN 3 FT OF ALLEY 5 PAVEMENT, BE ALLOWED."

9.12 Though not constructed with Unit 2A, a high point for St James St between St Elizabeth St and Town Center Circle (537.50) was shown at approximately STA 1+30 of submitted plans; whereas submitted plans have the high point at STA 0+86.62 (538.04). Several sheets of those engineering plans also indicate that a grading design was established for St James St, Alley 5, Town Center Circle, and the traffic circle intersection. It is assumed applicable portions of that design were then used for U-2A improvements, including St James St.

As the engineer for Town Center Unit 2A improvements, please verify proposed grading will work with future traffic circle improvements based on previous engineering. Provide a separate exhibit showing proposed St James St and existing Town Center Circle will tie into the preliminary traffic circle design. This document will not be included with Village final engineering plan approval, but will be utilized to determine if proposed work is likely to meld with a future traffic circle or other intersection.

10. St. James Plan & Profile – Sheet C7

- 10.1 Revise the “TAPER CURB” callout to indicate TYPICAL for all exposed curb ends.
- 10.2 Terminate the St. James Street curb & gutter at Sta. 1+80.
- 10.3 Revise this sheet as necessary based on previous comments, i.e. additional existing and proposed pavement elevations, extending C&G on Alley 5 and St. James, etc.

11. Stormwater Pollution Prevention Plan – Sheet C8

- 11.1 Provide inlet protection to all open grate storm sewer structures, existing and proposed, that are within the influence of construction activities.
- 11.2 Show probable location and size of temporary stockpiles with associated erosion control.
- 11.3 Provide a Temporary Concrete Washout Facility.
- 11.4 Provide a Stabilized Construction Entrance.
- 11.5 Add Inlet Protection and Stabilized Construction Entrance to the legend.
- 11.6 Remove the VILLAGE OF HOMER GLEN reference from Temporary Erosion Control Note #1.
- 11.7 Add the following note, “Debris tracked onto roadways shall be removed immediately.”

12. Stormwater Pollution Prevention Plan – Sheet C8

- 12.1 Update the Trench Backfill Detail to indicate CA-7 as the permitted backfill material.
- 12.2 Revise the Typical Pavement Patch Section detail to specify the HMA Binder thickness at “4-in minimum or match existing, whichever is greater.”



RECEIVED
AUG 07 2020
BY: _____

D.4

[Signature]

SITE DEVELOPMENT PERMIT APPLICATION

FEE: \$ waived

(Please print)

1. APPLICANT, ENGINEER, AND ALL CONTRACTOR'S CONTACT NAMES, ADDRESSES AND PHONE NUMBERS (provide additional contact information on a separate sheet as needed):

OWNER BRANDOLINO FIORE Telephone 815-735-1848

Street No. 26118 W. WOODLAND CT. City, St., Zip 60410

ENGINEER _____ Telephone _____

Street No. _____ City, St., Zip _____

CONTRACTOR FIORE BRANDOLINO Telephone _____

Street No. 26118 W. WOODLAND CT City, St., Zip CHANNAHON 60410

2. LOCATION OF PROPOSED CONSTRUCTION:

This site is: Residential () Commercial () Industrial

PIN (Property Identification No.) 641030303035⁰⁰⁰⁰ Size of Parcel in Acres: 46704 SQ.FT.

Name of Subdivision: HIGHLANDS UNIT 2 Lot No. 7

3. PROPOSED CONSTRUCTION (Complete A thru F)

A. Are you moving in, out, or combined, over 100 cubic yards of soil? (write yes or no) YES

B. Are you disturbing over 5,000 square feet of land area? (write yes or no) YES

C. Are you altering an established waterway or drainage course? (write yes or no) NO

D. Are you disturbing over 1 acre (43,560 square feet) of land area? (write yes or no) NO

If yes to D, see item 5.

E. Describe the proposed work including any addition/removal/changes of/to buildings: _____

FILL TERRACE AND GRADE SLOPE

F. Dates of Construction: Start Date 8-6-2030; End Date 9-30-2030

4. ATTACH THREE COPIES OF THE ENGINEERING PLAN (if applicable); OR PLAT OF SURVEY WITH EXISTING BUILDINGS AND PROPOSED DEVELOPMENT SHOWN.

NOTE: Engineering plans must be signed and sealed by a licensed professional engineer. Plats of Survey must be signed and sealed by a professional licensed surveyor.

5. IF DISTURBANCE OF LAND IS GREATER THAN 1 ACRE:

A. Provide a copy of IEPA NOI (Notice of Intent) application with Stormwater Pollution Prevention Plan and Historic Preservation and Endangered Species compliance letters.

B. Provide a copy of IEPA executed NPDES permit.

NOTE: When an NPDES permit is required, no construction is allowed prior to receipt of the permit.

6. PLEASE READ THE FOLLOWING AND SIGN BELOW:

- A. I/We agree that all work performed under said permit will be in accordance with the site engineering plan(s) and/or other exhibits, as required, which accompany this application.
- B. I/We agree that all work will conform with all applicable Village ordinances; most notably Ordinance 157 Soil Erosion Regulations.
- C. I/We understand that the flood hazard boundary maps and other flood data used by the Village in evaluating flood hazards to proposed developments are considered reasonable and accurate for regulatory purposes and are based on the best available scientific and engineering data. On rare occasions greater floods can and will occur and flood heights may be increased by man-made or natural causes. Issuance of a site development permit does not imply that developments outside the identified areas of special flood hazard will be free from flooding or flood damage. Issuance of a site development permit shall not create liability on the part of the Village of Channahon in the event flooding or flood damage does occur.
- D. I/We understand that the Army Corps of Engineers has jurisdiction over wetlands and it is the responsibility of the owner/developer to secure from the Army Corps of Engineers the necessary permits for work affecting any wetland.
- E. I/We agree that any existing field tile on the property shall be protected from damage and that existing drainage through the property shall be maintained. If an existing field tile is encountered, the Village of Channahon will be notified immediately for concurrence regarding how it shall be repaired and/or rerouted to its original route and function.
- F. I/We agree to be responsible for verifying that all contractors and/or subcontractors are registered with the Village of Channahon.
- G. I/We agree to call J.U.L.I.E. 48 hours before work begins at 1-800-892-0123.
- H. I/We agree to start work within six months of Start Date, and complete work within the time span specified on the permit.
- I. I/We agree to notify the Village of Channahon upon completion of proposed work.
- J. I/We agree to provide an Improvement Completion Guarantee as may be required.
- K. If I am representing the homeowner, I agree to provide the homeowner copies of all paperwork submitted to, or received from, the Village of Channahon and at the time of submittal/receipt.

PRINT NAME: EDRE BRANDOLINO

SIGNATURE: *Edre Brandolino* DATE 8-6-2020

Village of Channahon:

Engineering/Design Approved (date) NA

Improvement Completion Guarantee Received (date) NA

APPROVED BY: *[Signature]* DATE 08-15-20

PLAT OF SURVEY

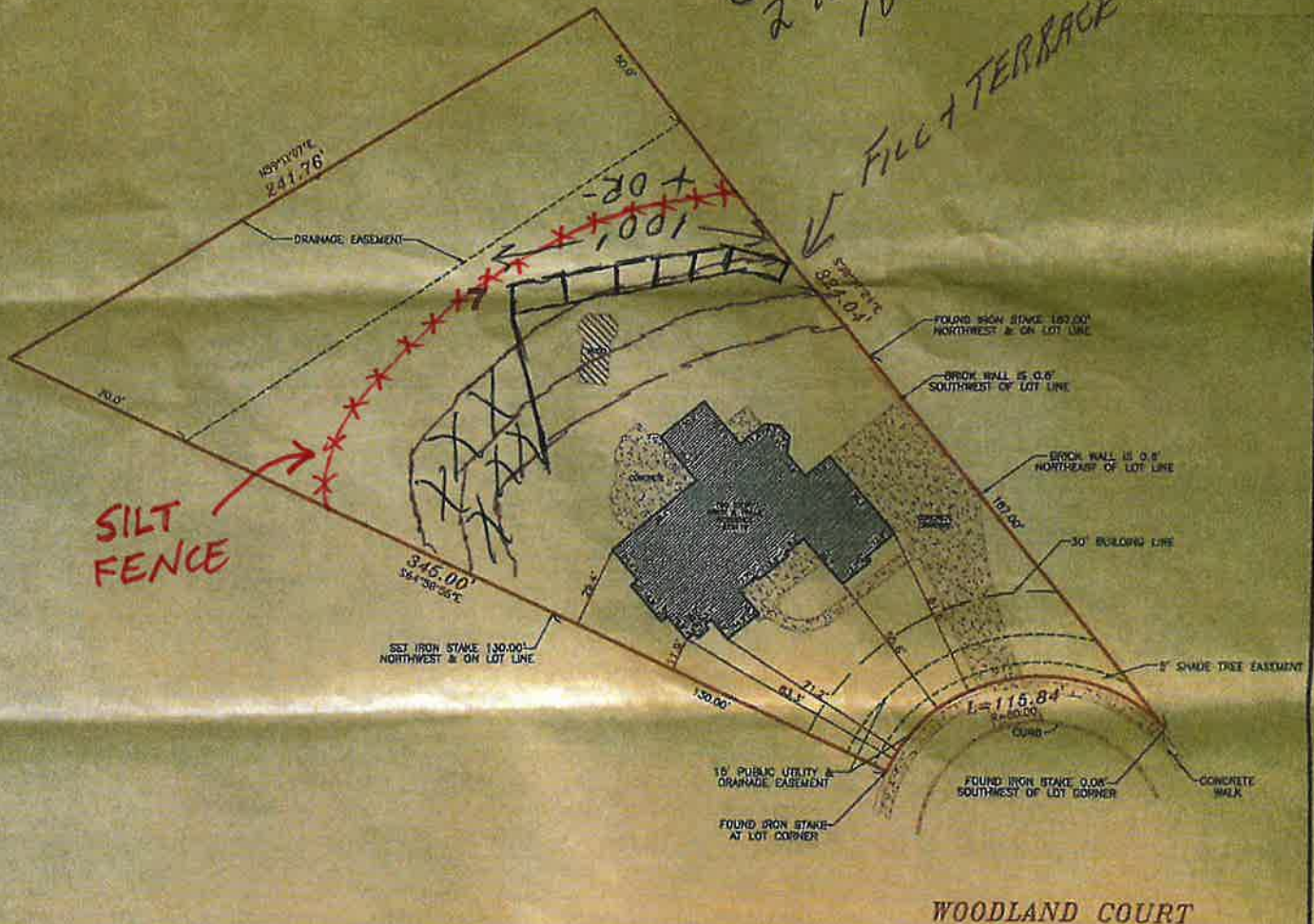
OF

RECEIVED
D4
AUG 13 2020
By: _____

LOT 7 IN THE HIGHLANDS UNIT ONE, A SUBDIVISION OF PART OF THE SOUTHWEST 1/4 OF SECTION 30, TOWNSHIP 34 NORTH, RANGE 9, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED APRIL 14, 1993, AS DOCUMENT NO. 923-27799, IN WILL COUNTY, ILLINOIS.

COULON ADDRESS: 28116 WEST WOODLAND COURT

GABION BASKETS
2 HIGH = 6'
100' LONG + OR -
FILL + TERRACE SLOPE



WOODLAND COURT

CLIENT: JOHN KLUNK



15935 S. BELL ROAD (708) 645-1130
HOMER GLEN S. 60491 Fax (708) 645-1138

No improvements should be made on the basis of this plat alone. Field measurements of critical points should be established prior to commencement of any and all construction. For building line and other restrictions not shown herein refer to your local, district, city, county, state and local building and zoning ordinances.



PROFESSIONAL DESIGN FIRM
LAND SURVEYOR CORPORATION
LICENSE NO. 184001480
THIS PROFESSIONAL SERVICE
CONFORMS TO THE CURRENT
ILLINOIS BOARD STANDARDS
FOR A PROFESSIONAL SURVEY.
LICENSE GRANT 11/20/14

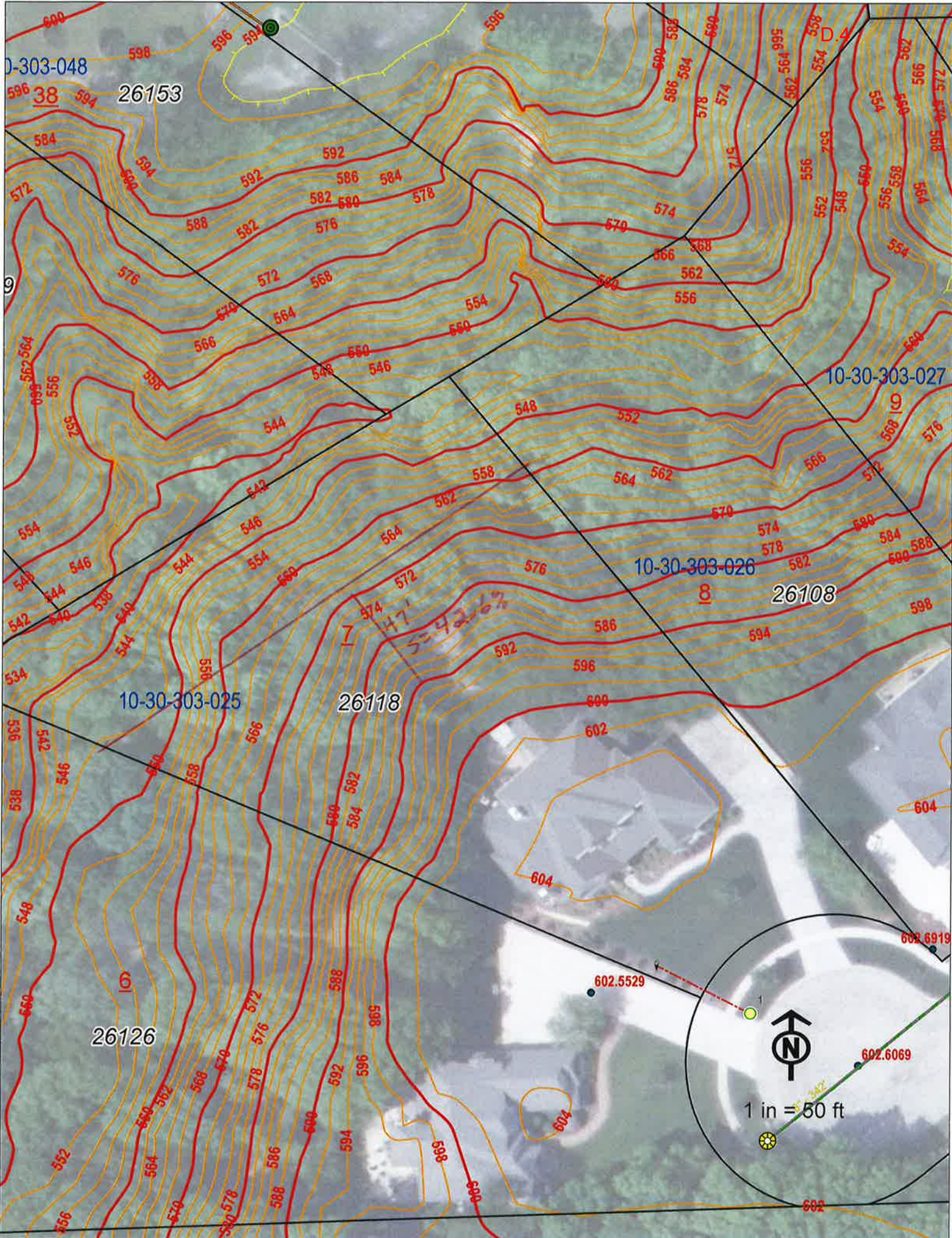
AREA OF SURVEY= 48,704.60 FT.



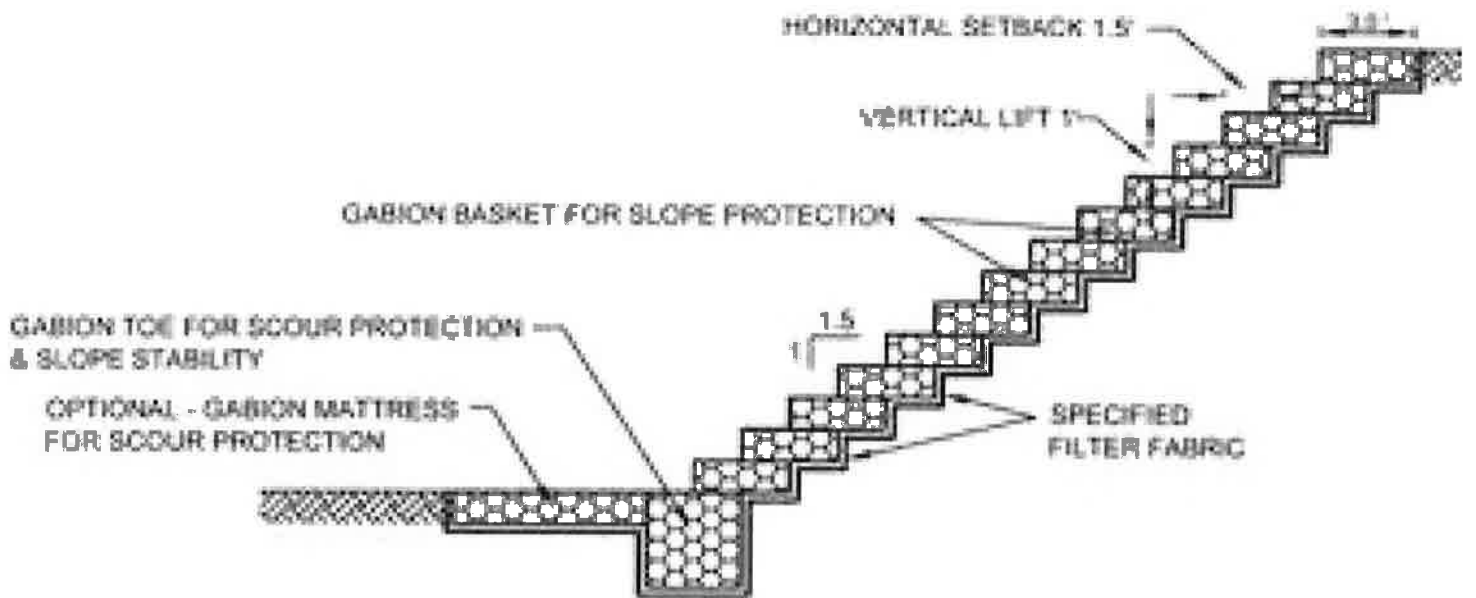
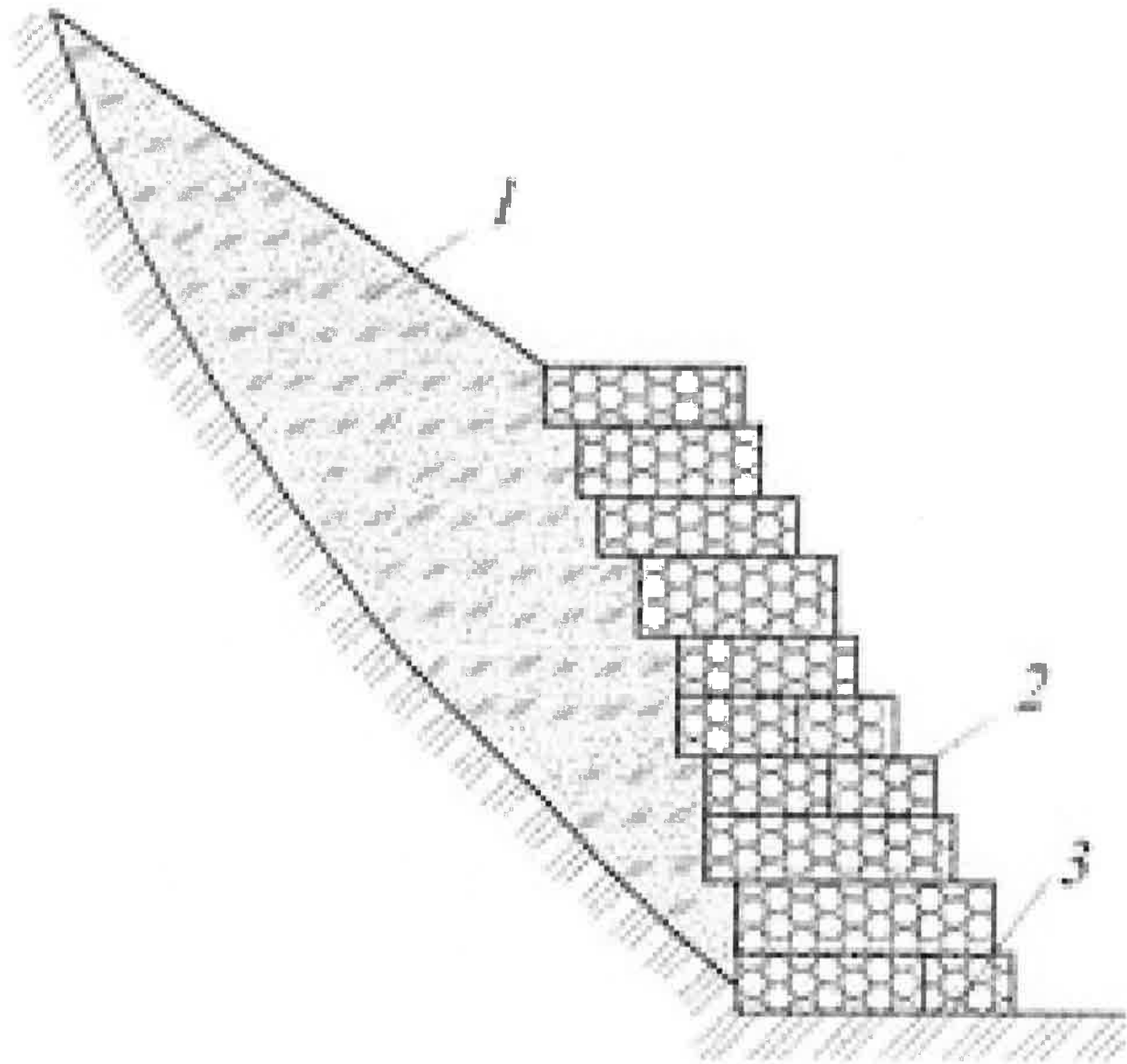
STATE OF ILLINOIS } S. S.
COUNTY OF WILL }
JNT LAND SURVEYING SERVICES INCORPORATED HEREBY
CERTIFIES THAT IT HAS SURVEYED THE TRACT OF LAND
ABOVE DESCRIBED, AND THAT THE HEREON DRAWN PLAT
IS A CORRECT REPRESENTATION THEREOF.

Dated this 27th Day of MARCH 2013

PLS No. 3354









SITE DEVELOPMENT PERMIT APPLICATION

Waived
FEE: \$ 150.00

(Please print)

1. APPLICANT, ENGINEER, AND ALL CONTRACTOR'S CONTACT NAMES, ADDRESSES AND PHONE NUMBERS (provide additional contact information on a separate sheet as needed):

OWNER Celtic Landscaping Telephone 815-967-9800
Street No. 24530 W. BLUFF Rd City, St., Zip Channahon, IL 60410

ENGINEER _____ Telephone _____
Street No. _____ City, St., Zip _____

CONTRACTOR OWNER Telephone _____
Street No. _____ City, St., Zip _____

2. LOCATION OF PROPOSED CONSTRUCTION:

This site is: () Residential Commercial () Industrial A-2
PIN (Property Identification No.) 04-10-09-303-024-0000 Size of Parcel in Acres: 13.81
Name of Subdivision: NA Lot No. NA

3. PROPOSED CONSTRUCTION (Complete A thru F)

- A. Are you moving in, out, or combined, over 100 cubic yards of soil? (write yes or no) YES
- B. Are you disturbing over 5,000 square feet of land area? (write yes or no) NO
- C. Are you altering an established waterway or drainage course? (write yes or no) NO
- D. Are you disturbing over 1 acre (43,560 square feet) of land area? (write yes or no) NO

If yes to D, see item 5.

E. Describe the proposed work including any addition/removal/changes of/to buildings: _____

MOVE SOIL INTO 4,825 S.F. adjacent area, 714 cu. yds and
then grade and seed the area

F. Dates of Construction: Start Date 7-24-2020 ; End Date 11-1-2021

4. ATTACH THREE COPIES OF THE ENGINEERING PLAN (if applicable); OR PLAT OF SURVEY WITH EXISTING BUILDINGS AND PROPOSED DEVELOPMENT SHOWN.

NOTE: Engineering plans must be signed and sealed by a licensed professional engineer. Plats of Survey must be signed and sealed by a professional licensed surveyor.

5. IF DISTURBANCE OF LAND IS GREATER THAN 1 ACRE:

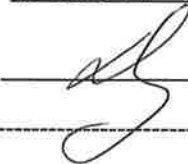
- A. Provide a copy of IEPA NOI (Notice of Intent) application with Stormwater Pollution Prevention Plan and Historic Preservation and Endangered Species compliance letters.
- B. Provide a copy of IEPA executed NPDES permit.

NOTE: When an NPDES permit is required, no construction is allowed prior to receipt of the permit.

6. PLEASE READ THE FOLLOWING AND SIGN BELOW:

- A. I/We agree that all work performed under said permit will be in accordance with the site engineering plan(s) and/or other exhibits, as required, which accompany this application.
- B. I/We agree that all work will conform with all applicable Village ordinances; most notably Ordinance 157 Soil Erosion Regulations.
- C. I/We understand that the flood hazard boundary maps and other flood data used by the Village in evaluating flood hazards to proposed developments are considered reasonable and accurate for regulatory purposes and are based on the best available scientific and engineering data. On rare occasions greater floods can and will occur and flood heights may be increased by man-made or natural causes. Issuance of a site development permit does not imply that developments outside the identified areas of special flood hazard will be free from flooding or flood damage. Issuance of a site development permit shall not create liability on the part of the Village of Channahon in the event flooding or flood damage does occur.
- D. I/We understand that the Army Corps of Engineers has jurisdiction over wetlands and it is the responsibility of the owner/developer to secure from the Army Corps of Engineers the necessary permits for work affecting any wetland.
- E. I/We agree that any existing field tile on the property shall be protected from damage and that existing drainage through the property shall be maintained. If an existing field tile is encountered, the Village of Channahon will be notified immediately for concurrence regarding how it shall be repaired and/or rerouted to its original route and function.
- F. I/We agree to be responsible for verifying that all contractors and/or subcontractors are registered with the Village of Channahon.
- G. I/We agree to call J.U.L.I.E. 48 hours before work begins at 1-800-892-0123.
- H. I/We agree to start work within six months of Start Date, and complete work within the time span specified on the permit.
- I. I/We agree to notify the Village of Channahon upon completion of proposed work.
- J. I/We agree to provide an Improvement Completion Guarantee as may be required.
- K. If I am representing the homeowner, I agree to provide the homeowner copies of all paperwork submitted to, or received from, the Village of Channahon and at the time of submittal/receipt.


PRINT NAME: DAVID EBERLUB

SIGNATURE:  DATE 7-23-20

Village of Channahon:

Engineering/Design Approved (date) NA

Improvement Completion Guarantee Received (date) NA

APPROVED BY:  DATE 07-23-20

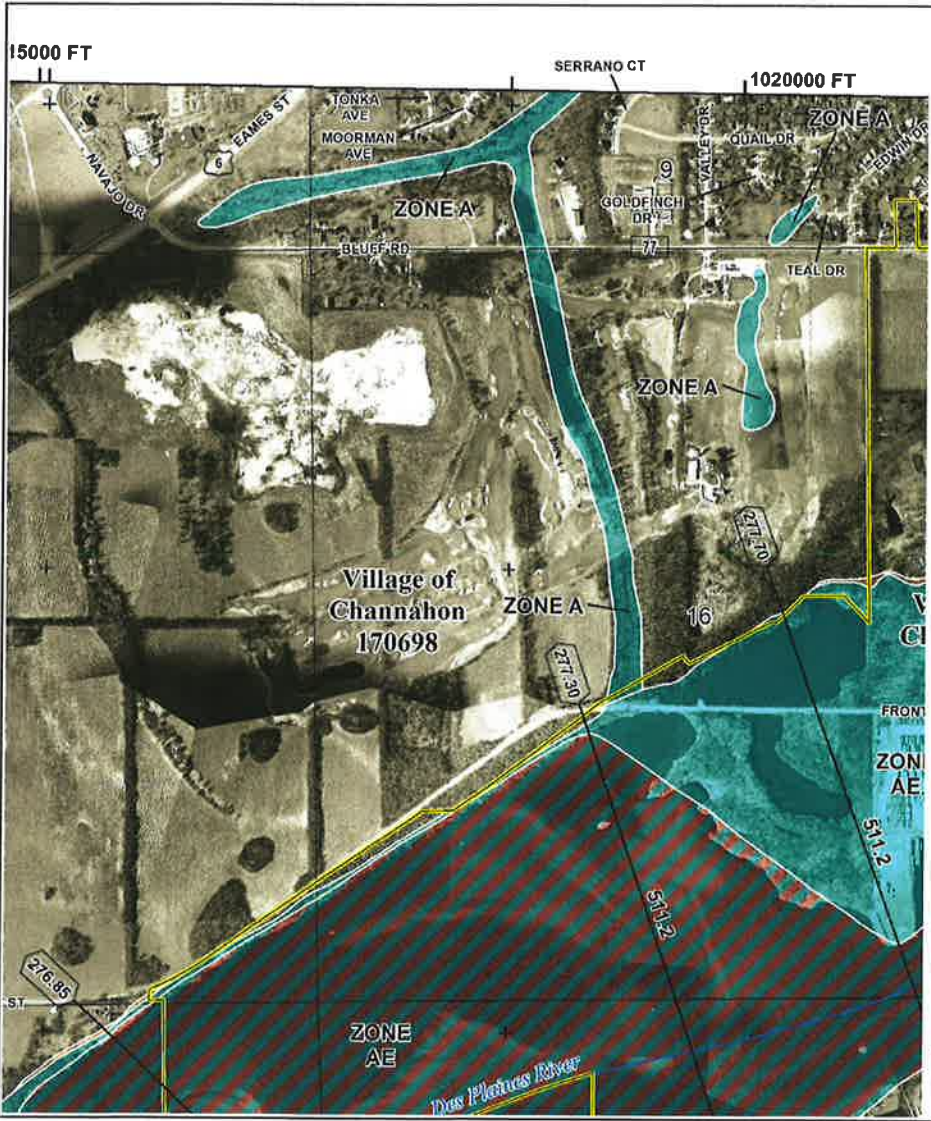


Celtic Landscaping

MOVE SOIL TO 4,825 sq ft area.

Volume = ~ Avg. Depth Y1

= 19,300 Cu. Ft. = 714 Cu. Yds



**NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP**

WILL COUNTY, ILLINOIS
and Incorporated Areas



National Flood Insurance Program

WILL COUNTY, ILLINOIS
and Incorporated Areas



PANEL 265 OF 585

Panel Contains:

COMMUNITY	NUMBER	PANEL SUFFIX
CHANNAHON, VILLAGE OF	170698	0265 G
ELWOOD, VILLAGE OF	170849	0265 G
MINOOKA, VILLAGE OF	171019	0265 G
WILL COUNTY	170695	0265 G
WILMINGTON, CITY OF	170715	0265 G

VERSION NUMBER
2.3.3.3

MAP NUMBER
17197C0265G

MAP REVISED
FEBRUARY 15, 2019

This is an official copy of a portion of the above referenced flood map. It was extracted using FIRette - Desktop version 3.0. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. Further information about National Flood Insurance Program flood hazard maps is available at <http://www.msc.fema.gov/>.

National Flood Hazard Layer FIRMette



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, AE9
With BFE or Depth Zone AE, A0, AH, VE, AR
Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

- 0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile (Zone D)
- 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

OTHER AREAS GENERAL STRUCTURES

- NO SCREEN Area of Minimal Flood Hazard Zone X
- Effective LOMRS
- Area of Undetermined Flood Hazard Zone D
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

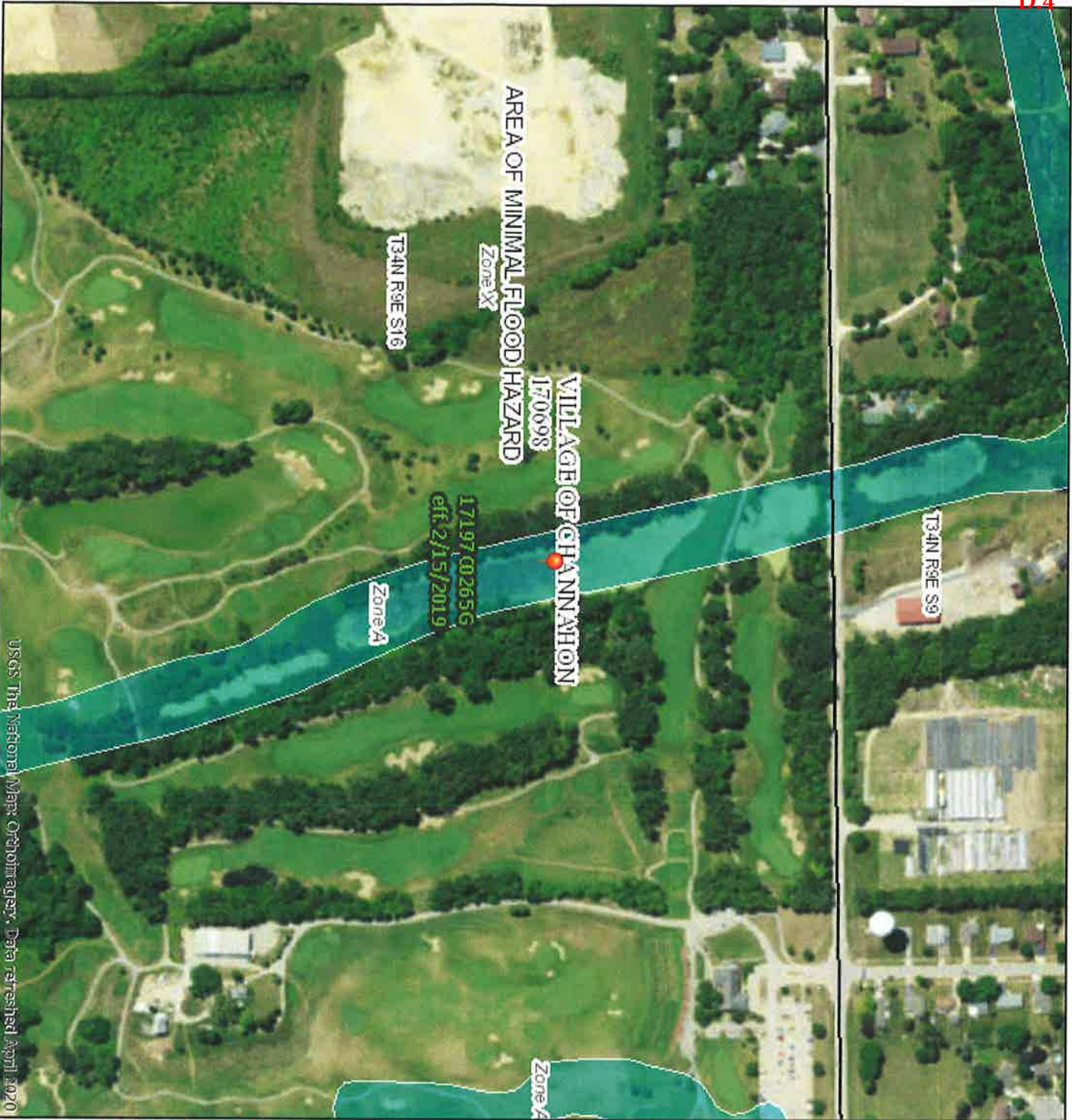
OTHER FEATURES

- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.



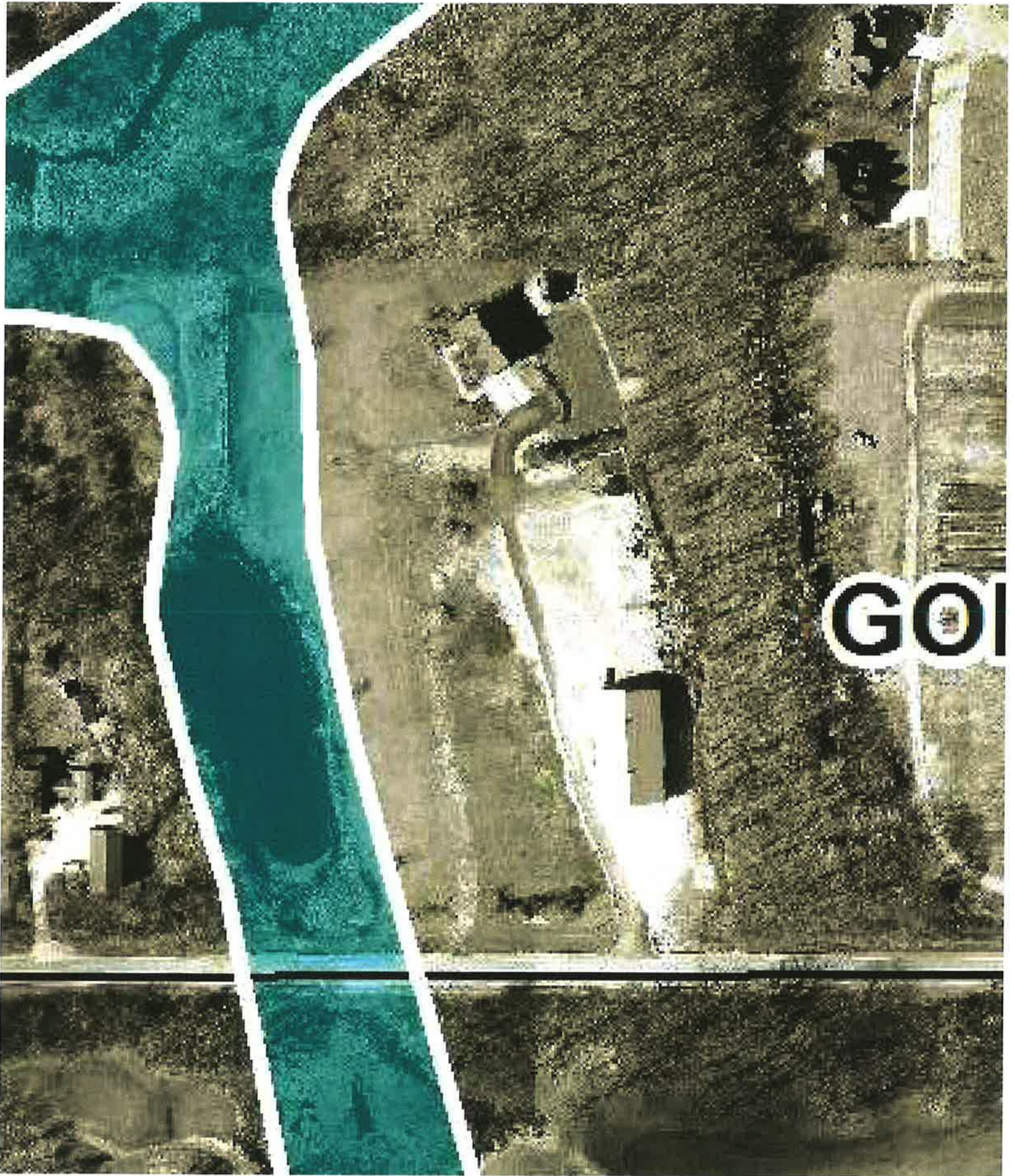
0 250 500 1,000 1,500 2,000 Feet 1:6,000

88°12'9"W 41°26'10"N

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **7/17/2020 at 11:58 AM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.





D.4

Paul OK 5-20

SITE DEVELOPMENT PERMIT APPLICATION

FEE: \$ 150.00

(Please print)

1. APPLICANT, ENGINEER, AND ALL CONTRACTOR'S CONTACT NAMES, ADDRESSES AND PHONE NUMBERS (provide additional contact information on a separate sheet as needed):

OWNER MPLD Crossroads 55 III, LLC Telephone 826-822-8777

Street No. 9500 Bryn Mawr, STE 340 City, St., Zip Rosemont, IL 60018

ENGINEER Jacob and Hefner Associates, Inc. Telephone 630-652-4639

Street No. 1333 Butterfield Road City, St., Zip Downers Grove, IL, 60515

CONTRACTOR Clayco Construction Telephone 314.422.4246

Street No. 35 E. Upper Wacker Drive, #1300 City, St., Zip Chicago, IL 60601

2. LOCATION OF PROPOSED CONSTRUCTION:

This site is: () Residential () Commercial () Industrial

PIN (Property Identification No.) 0410101000080000 Size of Parcel in Acres: 75.62

Name of Subdivision: N/A Lot No. N/A

3. PROPOSED CONSTRUCTION (Complete A thru F)

A. Are you moving in, out, or combined, over 100 cubic yards of soil? (write yes or no) Yes

B. Are you disturbing over 5,000 square feet of land area? (write yes or no) Yes

C. Are you altering an established waterway or drainage course? (write yes or no) No

D. Are you disturbing over 1 acre (43,560 square feet) of land area? (write yes or no) Yes

If yes to D, see item 5.

E. Describe the proposed work including any addition/removal/changes of/to buildings: Stockpile of

excess soil from Project Tarpon w/ EC Measures Excess soil will be used for construction

of Exchange Blvd. and mass grading of Pad B during summer 2020. The limits of the

of construction activities has been updated to NPDES ILR10AY12 with IEPA

F. Dates of Construction: Start Date 6/25/2020; End Date 12/1/2020

4. ATTACH THREE COPIES OF THE ENGINEERING PLAN (if applicable); OR PLAT OF SURVEY WITH EXISTING BUILDINGS AND PROPOSED DEVELOPMENT SHOWN.

NOTE: Engineering plans must be signed and sealed by a licensed professional engineer. Plats of Survey must be signed and sealed by a professional licensed surveyor.

5. IF DISTURBANCE OF LAND IS GREATER THAN 1 ACRE:

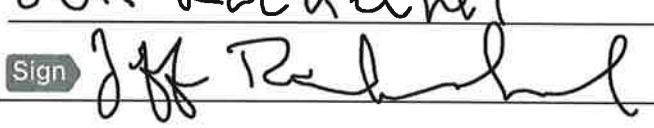
A. Provide a copy of IEPA NOI (Notice of Intent) application with Stormwater Pollution Prevention Plan and Historic Preservation and Endangered Species compliance letters.

B. Provide a copy of IEPA executed NPDES permit.

NOTE: When an NPDES permit is required, no construction is allowed prior to receipt of the permit.

6. PLEASE READ THE FOLLOWING AND SIGN BELOW:

- A. I/We agree that all work performed under said permit will be in accordance with the site engineering plan(s) and/or other exhibits, as required, which accompany this application.
- B. I/We agree that all work will conform with all applicable Village ordinances; most notably Ordinance 157 Soil Erosion Regulations.
- C. I/We understand that the flood hazard boundary maps and other flood data used by the Village in evaluating flood hazards to proposed developments are considered reasonable and accurate for regulatory purposes and are based on the best available scientific and engineering data. On rare occasions greater floods can and will occur and flood heights may be increased by man-made or natural causes. Issuance of a site development permit does not imply that developments outside the identified areas of special flood hazard will be free from flooding or flood damage. Issuance of a site development permit shall not create liability on the part of the Village of Channahon in the event flooding or flood damage does occur.
- D. I/We understand that the Army Corps of Engineers has jurisdiction over wetlands and it is the responsibility of the owner/developer to secure from the Army Corps of Engineers the necessary permits for work affecting any wetland.
- E. I/We agree that any existing field tile on the property shall be protected from damage and that existing drainage through the property shall be maintained. If an existing field tile is encountered, the Village of Channahon will be notified immediately for concurrence regarding how it shall be repaired and/or rerouted to its original route and function.
- F. I/We agree to be responsible for verifying that all contractors and/or subcontractors are registered with the Village of Channahon.
- G. I/We agree to call J.U.L.I.E. 48 hours before work begins at 1-800-892-0123.
- H. I/We agree to start work within six months of Start Date, and complete work within the time span specified on the permit.
- I. I/We agree to notify the Village of Channahon upon completion of proposed work.
- J. I/We agree to provide an Improvement Completion Guarantee as may be required.
- K. If I am representing the homeowner, I agree to provide the homeowner copies of all paperwork submitted to, or received from, the Village of Channahon and at the time of submittal/receipt.

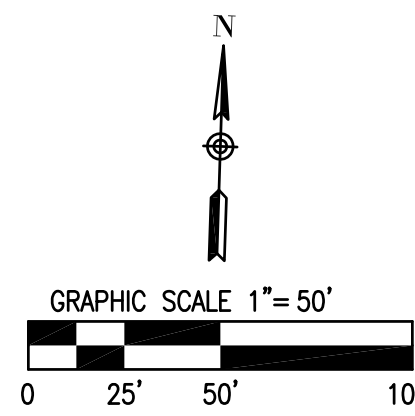
PRINT NAME: Jeff Rudnechel
 SIGNATURE:  DATE 6/23/20

Village of Channahon:

Engineering/Design Approved (date) _____

Improvement Completion Guarantee Received (date) NA

APPROVED BY:  DATE 06-25-20

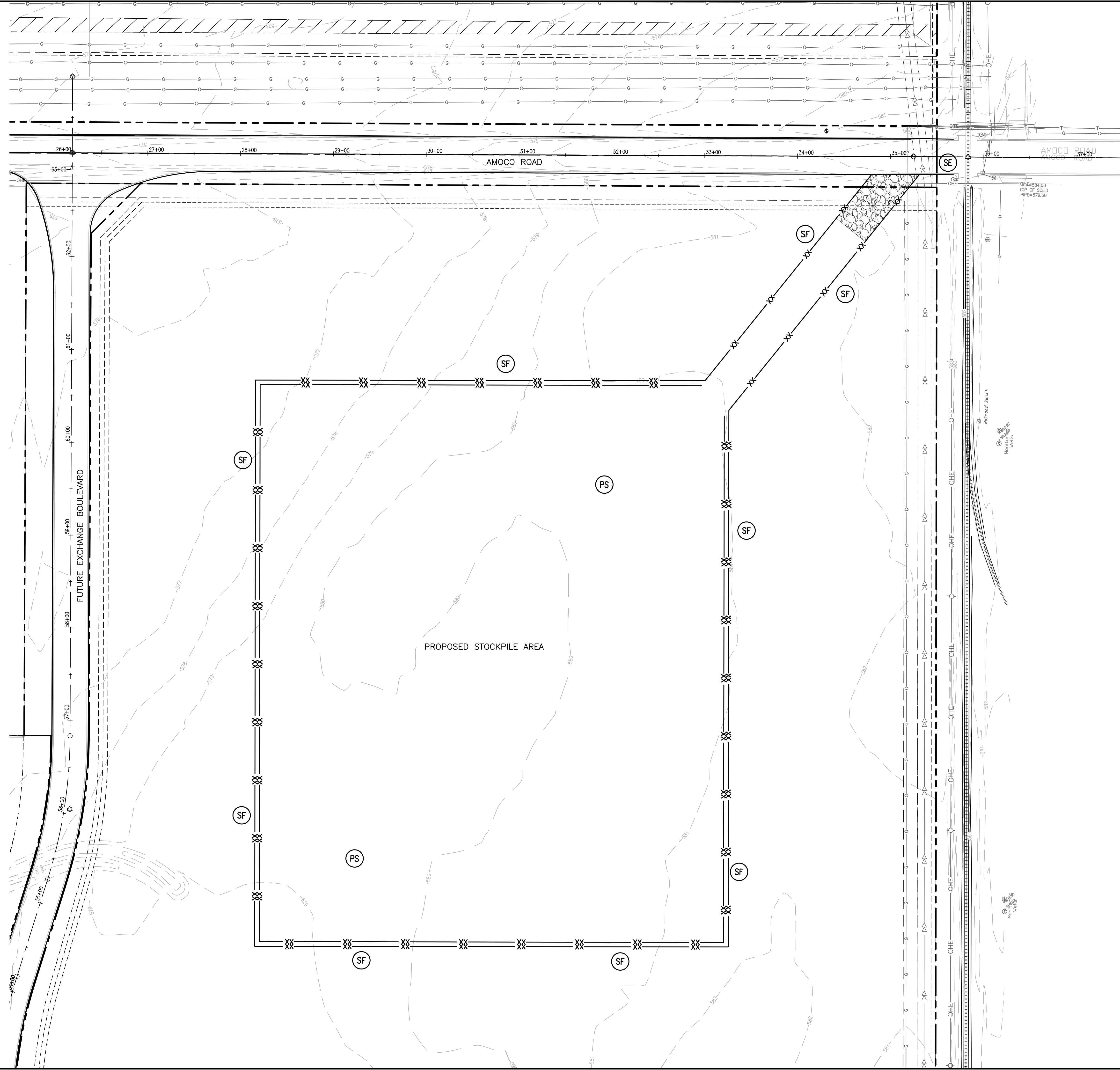


EROSION CONTROL NOTES

- 1) ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE PRIOR TO START OF CONSTRUCTION.
- 2) EARTHWORK CONTRACTOR SHALL MAINTAIN POSITIVE SITE DRAINAGE DURING CONSTRUCTION.
- 3) EARTHWORK CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL.
- 4) EARTHWORK CONTRACTOR IS RESPONSIBLE FOR MAINTAINING CLEAN PUBLIC ROADWAYS, FREE OF DIRT AND DEBRIS AT ALL TIMES.
- 5) OTHER EROSION CONTROL MEASURES SHALL BE IMPLEMENTED SHOULD AN INSPECTION OF THE SITE INDICATE A DEFICIENCY.
- 6) AREAS REACHING SUBSTANTIAL COMPLETION OF GRADING AND TOPSOIL PLACEMENT OPERATIONS SHALL BE PERMANENTLY SEEDED OR OTHERWISE LANDSCAPED WITHIN 14 DAYS FROM THE SUSPENSION OR COMPLETION OF GRADING AND TOPSOIL OPERATIONS.
- 7) SECONDARY CONTAINMENT SHALL BE REQUIRED FOR ANY BULK FUEL STORAGE THAT REMAINS ON-SITE FOR A PERIOD LONGER THAN 7 CALENDAR DAYS.
- 8) CONTAINMENT MEASURES SHALL BE REQUIRED FOR GENERATORS, PUMPS, MIXERS AND OTHER NON-ELECTRICAL POWERED EQUIPMENT THAT ARE TO BE STATIONED FOR LONGER THAN 24 HOURS.
- 9) EROSION CONTROL BLANKET SHALL BE PROVIDED IN ALL GREEN AREAS WITH SIDE SLOPES OF 4:1 OR STEEPER.
- 10) ALL GREEN AREAS SHALL BE DRESSED WITH A MINIMUM OF 6" OF TOPSOIL AND PERMANENT SEEDING.
- 11) CONTRACTOR SHALL CONTINUOUSLY KEEP AMOCO ROAD CLEAN OF DEBRIS.
- 12) REFER TO PROJECT TARPON SWPPP FOR INFORMATION REGARDING STABILIZATION PRACTICES.
- 13) CONTRACTOR SHALL STRIP EXISTING TOPSOIL AND CREATE SEPARATE STOCKPILE TO AVOID MIXING OF STRUCTURAL AND NON-STRUCTURAL MATERIALS.

EROSION CONTROL LEGEND

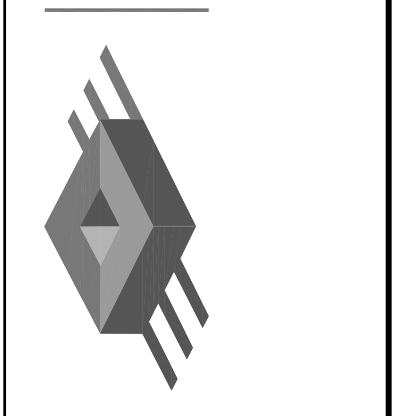
- (SF) SILT FENCE
 - (IP) INLET PROTECTION
 - (SE) STABILIZED CONSTRUCTION ENTRANCE
 - (CW) CONCRETE WASHOUT
 - (LA) LINED APRON
 - (DC) DITCH CHECK
 - (ECB) EROSION CONTROL BLANKET
NAG SC150 (OR APPROVED EQUAL)
 - (TRM) TURF REINFORCEMENT MAT
NAG SC250 (OR APPROVED EQUAL)
 - (W) OVERFLOW WEIR
 - (TRP) TEMPORARY RISER PIPE
 - (PS) PERMANENT SEEDING
- NOTE: REFER TO SWPP PLAN SHEETS AND DETAILS FOR ADDITIONAL INFORMATION.



No.	Original Plan Date	Description
1	6/23/20	

SOIL STOCKPILE
CROSSROADS 55 - BUILDING B MASS GRADING
VENTURE ONE
CHannahon, IL

JACOB & HEFNER ASSOCIATES
 1333 Butterfield Rd, Suite 300, Downers Grove, IL 60515
 PHONE: (630) 652-4600, FAX: (630) 652-4601
 www.jacobandhefner.com



1" = 120'
 E161y
 EX1



Public Works Department Work Order

Work Order No.

Date

Requested by

Assigned to

Assigned to

To Be Completed By

Division

JULIE #

Request

Work Performed

Date complete

Completed by

Completed by



Public Works Department Work Order

Work Order No.

Date

Requested by

Assigned to

Assigned to

To Be Completed By

Division

JULIE #

Request

Work Performed

Date complete

Completed by

Completed by



Public Works Department Work Order

Work Order No.
Date
Requested by
Assigned to
Assigned to
To Be Completed By
Division
JULIE #

Request

There is a large hole near the storm drain at 23927 Meadowlark.

Work Performed

9/1/20 the address is actually 25927 Navajo Dr. There is a hole at storm inlet and is in need of ring replacement. Marked for locate. Will submit Julie when Gordon is back from vaca. Storm sewer removed, replaced, new curb, restored. Done.

Date complete
Completed by
Completed by



Public Works Department Work Order

Work Order No.
Date
Requested by
Assigned to
Assigned to
To Be Completed By
Division
JULIE #

Request

Work Performed

Date complete
Completed by
Completed by



Public Works Department Work Order

Work Order No.

Date

Requested by

Assigned to

Assigned to

To Be Completed By

Division

JULIE #

Request

Work Performed

Date complete

Completed by

Completed by



Public Works Department Work Order

Work Order No.

Date

Requested by

Assigned to

Assigned to

To Be Completed By

Division

JULIE #

Request

Work Performed

Date complete

Completed by

Completed by

From: [Don Kinzler](mailto:Don.Kinzler)
To: [Gabriel Zavala](mailto:Gabriel.Zavala)
Subject: FW: 26656 Jacob, Channahon
Date: Friday, July 17, 2020 10:41:28 AM
Attachments: [26656 Jacob, Sump Connection_03-31-20.pdf](#)

From: Don Kinzler [mailto:dkinzler@channahon.org]
Sent: Tuesday, March 31, 2020 12:10 PM
To: 'David Prange' <dprange@permaseal.net>
Cc: 'Permits' <permits@permaseal.net>; 'Gabriel Zavala' <gzavala@channahon.org>
Subject: RE: 26656 Jacob, Channahon

David,

Attached is your permit subject to the provisions below.

Regards,

Donald R. Kinzler, P.E., CFM

Engineering Project Manager

Village of Channahon

24555 Navajo Dr.

Channahon, IL 60410

Ph:(815) 467-6644

Fx:(815) 467-8398

From: Don Kinzler [mailto:dkinzler@channahon.org]
Sent: Friday, March 27, 2020 9:02 AM
To: 'David Prange' <dprange@permaseal.net>
Cc: 'Permits' <permits@permaseal.net>; Gabriel Zavala <gzavala@channahon.org>
Subject: RE: 26656 Jacob, Channahon

Hi David,

We are working from home with occasional stops in the office to pick up/drop off, print, scan, etc. You can schedule the work with your client, I will issue the permit early next week. There is no fee from the Village to you or the resident for this work. Some things to note:

- Gabe Zavala, Engineering Technician, must be on site for the connection to the storm structure. He is copied here and his work cell is 815-214-4732.
- The storm sewer breach must be made by coring the wall. Use a boot if you can, not even sure they make them that size. If not, hydraulic cement must be used inside and out.
- Downspout connections to storm sewer are not allowed; only the sump discharge. Gabe must inspect the pipe run prior to your backfilling to verify no other connections are made.
- Social distancing must be maintained with everyone - contractor, Gabe, resident, etc.

I plan to stop in the office Monday or Tuesday, but if you don't hear from me by Wednesday, email me for an update.

Regards,

Don

From: David Prange [<mailto:dprange@permaseal.net>]
Sent: Friday, March 27, 2020 6:28 AM
To: Don Kinzler <dkinzler@channahon.org>
Cc: Permits <permits@permaseal.net>; Gabriel Zavala <gzavala@channahon.org>
Subject: Re: 26656 Jacob, Channahon

Good morning Don,
The job is currently on our schedule for April 13th.

Thank you,

David Prange | Permit Expediter
(o) 630.241.8859 • (c) 630.669.3842 • dprange@permaseal.net



On Thu, Mar 26, 2020 at 2:08 PM Don Kinzler <dkinzler@channahon.org> wrote:

Hi David,
When are you wanting to do this work?

Regards,
Donald R. Kinzler, P.E., CFM
Engineering Project Manager
Village of Channahon
24555 Navajo Dr.
Channahon, IL 60410
Ph:(815) 467-6644
Fx:(815) 467-8398



VILLAGE OF CHANNAHON

24555 S NAVAJO DRIVE CHANNAHON, IL 60410 | PHONE: 815-467-6644 FAX: 815-467-9774

PERMIT NO:

SCANNED

MISCELLANEOUS BUILDING PERMIT APPLICATION

PROJECT ADDRESS: 26656 S JACOB DR SUBDIVISION: _____
NO. STREET

OWNER: MIKE TOWNE ADDRESS: 26656 S JACOB DR CITY: CHANNAHON STATE/ZIP: IL 60410 PHONE: 815-260-5350

APPLICANT: DAVID PRANGE ADDRESS: 412 ROCKWELL CT CITY: BURN RIDGE STATE/ZIP: IL 60527 PHONE: 630-241-8869

CONTRACTOR: PERMA-SEAL ADDRESS: 412 ROCKWELL CT CITY: BURN RIDGE STATE/ZIP: IL 60527 PHONE: 630-241-8869

CIRCLE ONE: RESIDENTIAL COMMERCIAL AGRICULTURAL INDUSTRIAL COUNTY: WILL GRUNDY

BRIEF DESCRIPTION OF PROJECT: 1/2 HP SUMP PUMP, 77 FT 4" SOLID PVC UGE TO RILLAGE STORM SEWER

TYPE OF IMPROVEMENT/PROPOSED USE:

<input type="checkbox"/> ACCESSORY STRUCTURE	<input type="checkbox"/> GARAGE, ATTACHED	<input type="checkbox"/> PERGOLA	<input type="checkbox"/> SIGN, MONUMENT
<input type="checkbox"/> ADDITION	<input type="checkbox"/> GARAGE, DETACH	<input type="checkbox"/> POOL (IS YARD FENCED YES/NO)	<input type="checkbox"/> SIGN, BALLOON
<input type="checkbox"/> DECK	<input type="checkbox"/> GAZEBO	<input type="checkbox"/> PORCH	<input type="checkbox"/> SIGN, TEMPORARY DATES _____
<input type="checkbox"/> DEMOLITION	<input type="checkbox"/> GUTTERS	<input type="checkbox"/> ROOF	<input type="checkbox"/> WINDOWS
<input type="checkbox"/> DRIVEWAY	<input type="checkbox"/> HOT TUB	<input type="checkbox"/> SHED	<input checked="" type="checkbox"/> OTHER <u>SUMP PUMP</u>
<input type="checkbox"/> ELECTRICAL, LOW VOLTAGE	<input type="checkbox"/> INTERIOR, REMODEL	<input type="checkbox"/> SIDEWALK	<u>STORM SEWER CONNECTION</u>
<input type="checkbox"/> FENCE	<input type="checkbox"/> LAWN SPRINKLER		

* IF YOU ARE ON A SEPTIC SYSTEM, YOU ARE REQUIRED TO PROVIDE AN APPROVED COPY OF YOUR SEPTIC LAYOUT. WILL COUNTY HEALTH DEPARTMENT 815-727-8490. GRUNDY COUNTY HEALTH DEPARTMENT 815-941-3404.
 **TO EXPEDITE APPROVAL, PLEASE PROVIDE A COPY OF YOUR PLOT OF SURVEY.

EXISTING (FOR ADDITIONS, REMODEL ETC.)

FLOOR AREA: _____ SQUARE FEET

GARAGE: _____

OTHER: _____

ADDITIONAL PROPOSED

FLOOR AREA: _____ SQUARE FEET

NO. BEDROOMS: _____ NO. BATHROOMS: _____

TOTAL NUMBER OF FLOORS: _____

OTHER: _____

COST OF IMPROVEMENT

COST	\$ _____
ELECTRICAL	\$ <u>3034.75</u>
PLUMBING	\$ _____
HVAC	\$ _____
OTHER	\$ _____
TOTAL COST OF IMPROVEMENTS	\$ <u>3034.75</u>

DATE APPROVED: 3-31-20

APPROVED BY: [Signature]

****I hereby certify that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and we agree to conform to all applicable laws of this jurisdiction.**

SIGNATURE: [Signature] DATE: 3/24/2020

Melanie Arnold

From: Don Kinzler <dkinzler@channahon.org> on behalf of Don Kinzler
Sent: Monday, October 5, 2020 1:37 PM
To: Christine Crockett Johnson
Subject: RE: Upkeep of culvert
Attachments: 20201002_130520.jpg

Hi Chrissy,

Public Works cleaned out from the storm sewer outfall last week. Picture attached.

Regards,

Don

From: Don Kinzler [mailto:dkinzler@channahon.org]
Sent: Thursday, August 27, 2020 1:46 PM
To: 'Christine Crockett Johnson' <crockett4081@msn.com>
Cc: Ed Dolezal <edolezal@channahon.org>; Jodi Bette <jbette@channahon.org>
Subject: RE: Upkeep of culvert

Hi Chrissy,

I wrote a work order today. Thanks for letting us know.

Regards,

Don

-----Original Message-----

From: Christine Crockett Johnson [mailto:crockett4081@msn.com]
Sent: Thursday, August 27, 2020 1:28 PM
To: Don Kinzler <dkinzler@channahon.org>; Ed Dolezal <edolezal@channahon.org>
Subject: Upkeep of culvert

Can we get the culvert cleaned out on the canal side, further down Blackberry. It does not drain well, and has been brought to my attention that it is mostly filled with debris. If we can take care of this ourselves, we would. Please let me know. Thank you.

Chrissy Johnson
815-922-7187



Channahon Crow Holdings Industrial, Arco Murray

Punchlist for Acceptance - Steps 1-4

October 19, 2020

#	ITEM	STEP	ID/LOCATION	STREET	DEFICIENCY AND CORRECTION
1	Storm Sewer	1	ST 20	Bradley Ave	FES is full of debris. Clean and ensure final seed germination has occurred to prevent further infiltration.
2	Storm Sewer	1	ST 18	Bradley Ave	Tire tracks over FES, Rip-Rap has been displaced, FES buried. Clean FES, grade the area per plans, and install Rip-Rap per contract detail.
3	Storm Sewer	1	ST 15B	Bradley Ave	There are gaps between the frame and structure, and debris has collected at the bottom of the inlet. Install grout as specified to seal gaps, and clean all debris from the inlet.
4	Storm Sewer	1	ST 15A	Bradley Ave	Filter fabric for inlet protection has not been removed. Remove filter fabric for inspection.
5	Storm Sewer	1	ST 15	Bradley Ave	Manhole is buried. Locate manhole, remove soil to expose, and regrade area to match. Inspection of this structure will occur once it is located.
6	Storm Sewer	1	ST 12	Bradley Ave	Soil and sediment has eroded around manhole, some debris has entered into the structure. Clean the manhole, grade the area, and install seed and blanket as specified to prevent further infiltration.
7	Storm Sewer	1	ST 12A	Bradley Ave	Inlet basket remains in place. Remove inlet protection for inspection. There are gaps between the frame and structure. Install grout as specified to seal gaps. Clean the manhole as necessary.
8	Storm Sewer	1	ST 12B	Bradley Ave	There is concrete debris in the bottom of the inlet. Clean debris out of structure.
9	Storm Sewer	1	ST 11A	Bradley Ave	There is debris in the inlet. Clean debris.
10	Storm Sewer	1	ST 10	Bradley Ave	There is significant soil and sediment erosion occurring at this structure, and in the associated ditch. Regrade the ditch and install seed and blanket to stabilize. Inlet protection remains in this structure. Remove inlet protection for inspection.
11	Storm Sewer	1	ST 2	Parking lot	There are no steps in this catch basin. Install steps per plan detail.
12	Storm Sewer	1	ST 17	Detention Basin	Frames and catch basin top is above grade. Regrade around this structure to bury so only the lids are exposed. Remove the 4 x 4 marking post that remains here.
13	Sanitary Sewer	1	SA 2	Bradley Ave	Manhole is missing the specified steel plate dam. Install steel plate dam per detail for external drop manhole on sheet C4.4. Bottom step is out of alignment. Align bottom step to match all other steps.
14	Water Main	1	HYD -7	Parking lot	Chain hooks are missing. Install chain hooks.
15	Water Main	1	VV 6	Bradley Ave	This vault is buried under earthwork/landscaping. Locate vault, regrade this area to match. Inspection will occur after this vault is located.
16	Water Main	1	HYD-4	Bradley Ave	Auxiliary valve box is low. Raise auxiliary valve box to grade.
17	Water Main	1	HYD-11	Bradley Ave	Auxiliary valve box has been pushed towards the hydrant, and is low. Straighten auxiliary valve box and raise to grade.
18	Water Main	1	HYD-3	Bradley Ave	Auxiliary valve box is low. Raise auxiliary valve box to grade. Paint has worn off fire hydrant and rust spots are developing. Touch up fire hydrant paint.
19	Water Main	1	HYD-2	Bradley Ave	Bottom flange of fire hydrant, and auxiliary valve box are both buried. Adjust grade around hydrant so bottom flange isn't buried. Raise auxiliary valve box to grade.
20	Water Main	1	VV 5	Bradley Ave	Remove 4 x 4 marking post near structure.
21	Water Main	1	Valve Box for 3" domestic	Parking lot	Valve box is buried. Locate and raise to grade for inspection.
22	PCC pavement	2	Approximately Sta 16+50	Bradley Ave	PCC Pavement is cracked from gutter to gutter near Sta 16+50. Saw cut cracked panels to full depth, remove, and replace in accordance with Article 420.05 of the IDOT Standard Specifications.
23	Concrete C&G	2	Whole length of Bradley Ave	Bradley Ave	Concrete C&G joints are not sealed. Seal C&G joints in accordance with Article 606.07 of the IDOT Standard Specifications
24	Topsoil, seed, & blanket restoration	4	Total Project	All turf areas	The expectation for turf area restoration is 70% coverage by the specified seed mix in a given location, and that the proper amount (depth) of topsoil has been installed with no cobble stones present. Seed germination to date is spotty, and some sections of erosion control blanket have been displaced. Contractor is to place topsoil, seed, and erosion control blanket as specified until 70% coverage is obtained, and no cobble stones are present.
25	Trees	4	Total Project	All trees	Rope and burlap remain around the root flare and on top of root ball for all trees planted on site. Cut rope away from root flare and pull burlap off of surface roots. Reinstall mulch rings as specified.

Channahon Crow Holdings Industrial, Arco Murray

Punchlist for Acceptance - Steps 1-4

October 19, 2020

#	ITEM	STEP	ID/LOCATION	STREET	DEFICIENCY AND CORRECTION
26	Trees and Shrubs	4	Total Project	Parking lot	There are missing trees and shrubs in some locations, namely at the north and west ends of the project site. See the attached landscape plans with notes for specifics.
27	Shrubs	4	East side of building	Parking lot	Some Dense Yews appear to be dead along the east side of the building. Replace any dead shrubs.
28	Final grading	4	Bradley Ave	Bradley Ave	A berm has been installed along the east side of Bradley Ave in the section running north/south. This berm does not match the grading plan in the contract drawings. Regrade match the approved grading plan, and restore this location with topsoil, seed, and erosion control blanket as specified in the contract.

IDI Phase 2 Infrastructure Improvements

Punchlist for Acceptance - Steps 1-4

October 6, 2020

#	ITEM	STEP	ID/LOCATION	STREET	DEFICIENCY AND CORRECTION
1	Storm Sewer	1	INL 110	Bradley Ave	Inlet basket remains in place. Remove inlet protection for inspection.
2	Storm Sewer	1	MH 111	Bradley Ave	15 total inches of rings, 3", 4", 4", 4". Replace 12" of rings with a one foot barrel section.
3	Storm Sewer	1	INL 109	Bradley Ave	There is debris in the inlet. Clean debris.
4	Storm Sewer	1	MH 112	Bradley Ave	There is debris in the bottom of the manhole. Clean debris.
5	Storm Sewer	1	CB 102	Bradley Ave	Frame is offest. Center frame over structure and refresh mastic as necessary. Missing steps. Install steps.
6	Storm Sewer	1	CB 106	Bradley Ave	There is debris in the bottom of this structure. Clean debris.
7	Sanitary Sewer	1	San 105	Bradley Ave	Marking post for this structure is still in place. Remove marking post.
8	Concrete C&G	2	Whole length of Bradley Ave	Bradley Ave	Concrete C&G joints are not sealed. Seal C&G joints in accordance with Article 606.07 of the IDOT Standard Specifications
9	Streetlights	2	Bradley Ave	Bradley Ave	Streetlights not functioning. Repair streetlights.
10	Topsoil, seed, & blanket restoration	4	Total Project	All turf areas	The expectation for turf area restoration is 70% coverage by the specified seed mix in a given location, and that the proper amount (depth) of topsoil has been installed with no cobble stones present. Seed germination to date is spotty, and some sections of erosion control blanket have been displaced. Contractor is to place topsoil, seed, and erosion control blanket as specified until 70% coverage is obtained, and no cobble stones are present.
11	Trees	4	Total Project	All trees	Rope and burlap remain around the root flare and on top of root ball for all trees planted on site. Cut rope away from root flare and pull burlap off of surface roots. Reinstall mulch rings as specified.
12	Detention Pond	4	Detention Pond	Bradley Ave	Grade detention pond to proposed elevation. Restore with specified emergent seed mix and plugs.
13	Detention Pond	4	Detention Pond	Bradley Ave	Verify that seeding and plugging was done per plan, i.e. Upland Prarie Seed Mix, Wet to Mesic Seed Mix, Emergent Seed Mix & Plugs.



MEMO

TO: David Christel, Arco Murray
FROM: Donald Kinzler, Engineering Project Manager
CC: Tony Spinelli, Strand Engineering; Brad Hovanec, Cage Civil; ISurvey
DATE: July 13, 2020
SUBJECT: Crow Holdings Industrial – Record Drawing Review 1

The Village of Channahon has received the following:

- *Crow Holdings Industrial* Record Drawings prepared by Pat Banks Surveyor, dated February 17, 2020

Please direct the applicant to provide a written response to these comments (including VOC comments) and (2) two copies of full-size site plans as well as all other materials submitted for review with an identical submittal to Tony Spinelli, P.E. at Strand Associates, Inc.

Based upon Public Work's review of the submitted materials, we offer the following comments:

1. Site Location Map & Civil Legend – Sheet C0.0

- 1.1 Identify on the Index of Sheets which plan sheets include record drawing information.
- 1.2 The record drawings shall be certified by a Professional Engineer licensed in the State of Illinois [154.77(A)(1)(b)4]. Certification shall include a signature and seal. Subsequent submittals for review must include the required signature and seal.

2. Grading Plan – Sheets C2.0-C2.2

- 2.1 Plan sheet C2.0 is incomplete. The parking lot, interior access roads, and Frontage Road are missing from the drawing.
- 2.2 Provide a sheet legend or note to clearly identify record drawing data labels.
- 2.3 Provide as-built elevations for the Frontage Road berm.
- 2.4 Provide as-built elevations for the east and west parking lots, the south and southwest driveway, the area between the east parking lot and Frontage Road, and the area west of the west parking lot.
- 2.5 Plan Sheet C2.1 - The ditch centerline as-built elevation near Frontage Road Sta. 1+05 LT is 2.38-ft high. The as-built elevation prevents water from draining north from ST-20(FES). Verify the as-built elevation.
- 2.6 Plan Sheet C2.2 - Provide as-built information for the detention basin.
- 2.7 Plan Sheet C2.2 - Provide as-built elevations for the berm along the east property line.
- 2.8 Plan Sheet C2.2 - Provide as-built elevations for the North ADA Grading and South ADA Grading detail drawings.
- 2.9 Plan Sheet C2.2 - Provide as-built elevations for the proposed detention basin cross section drawing.
- 2.10 Plan Sheet C2.2 - Provide as-built elevations for the proposed weir detail drawing.
- 2.11 Plan Sheet C2.2 - Update the detention basin elevation storage table with as-built elevations and as-built storage volumes.
- 2.12 Plan Sheet C2.2 - Update the sediment basin volume summary with as-built storage volumes.

3. Retaining Wall & Overflow Cross Section Details – Sheet C2.3

- 3.1 Provide as-built lengths and elevations for the retaining wall.
- 3.2 Provide as-built elevation, width dimensions, and flow capacities for the overflow cross sections.

4. Frontage Road Plan & Profile – Sheets C2.4-C2.6

- 4.1 Plan Sheet C2.4 - The drawing Bar Scale is incorrect.
- 4.2 The profile viewports are not plotted to scale based on 1"=5' (vertical) listed.
- 4.3 Provide station/offset information for the streetlight located near Sta. 1+05.
- 4.4 Update the Curve C1 Elevations and Curve C3 Elevations tables with as-built elevations.
- 4.5 The as-built centerline roadway elevation at Sta. 9+93.77 shown in the plan viewport and profile viewport do not match.
- 4.6 Provide as-built elevation for ST-15A south pipe invert.
- 4.7 The as-built rim elevation for ST-15 is 0.91-ft lower than plan elevation. Verify as-built rim elevation.
- 4.8 Provide as-built pipe slope between ST-15 and ST-14.
- 4.9 Provide as-built elevations for ST-11A, ST-12A, and ST-12B.
- 4.10 Provide as-built elevations for ST-12. The UTO and U.T.G. designations are not acceptable.
- 4.11 Provide as-built elevation for ST-13 west pipe invert. The U.T.G. designation is not acceptable.
- 4.12 Provide as-built pipe slopes between ST-13 to ST-12 and ST-12 to ST11.
- 4.13 Provide as-built elevations between STA 18+07.79 to STA 19+31.72 in the Superelevation Design - Profile Viewport.

5. Frontage Road Cross Sections – Sheets C2.7-C2.9

- 5.1 Provide as-built elevations at grade breakpoints (i.e., ditch centerline, at or near parkway easement limit).
- 5.2 The as-built pavement slope at Sta. 4+00LT is incorrect.
- 5.3 The as-built Edge of Pavement elevation at Sta. 4+50LT is incorrect.
- 5.4 The as-built pavement slope at Sta. 6+50RT is incorrect.
- 5.5 The as-built pavement slope at Sta. 7+50LT is incorrect.
- 5.6 The as-built pavement slope at Sta. 10+00RT is not provided.
- 5.7 Provide as-built Edge of Pavement elevations at Sta. 12+00 (18'LT and 30'LT).
- 5.8 Provide as-built Edge of Pavement elevations at Sta. 12+50 (18'LT and 24'LT).
- 5.9 The as-built centerline elevation at Sta. 17+35.53 is incorrect.

6. Utility Plan – Sheets C3.0-C3.2

- 6.1 The as-built grade ring elevation at HYD-2 (Sta.5+53/22.5'RT) is 1.50-ft lower than plan elevation. Verify as-built elevation
- 6.2 The as-built grade ring elevation at HYD-11 (Sta.11+44.5/40.5'LT) is 1.10-ft higher than plan elevation. Verify as-built elevation.
- 6.3 Provide as-built elevations for ST-12. The UTO designation is not acceptable.
- 6.4 Provide as-built elevation for ST-13 west pipe invert. The U.T.G. designation is not acceptable.
- 6.5 Provide as-built pipe slope between ST-12B to ST-12A.
- 6.6 Provide as-built pipe slopes between ST-13 to ST-12 and ST-12 to ST11.

- 6.7 Provide as-built data for storm sewer structures and pipe between ST-1 to ST-7.
- 6.8 Provide as-built rim elevations for the watermain pressure connection valve vault, pressure connection valve box, and HYD-10.
- 6.9 Provide as-built data for storm sewer structures and pipe between ST-13B to ST-13A, ST-13C to ST-13A, and ST-13A to ST-13.
- 6.10 Provide as-built elevations for SA-1.
- 6.11 Provide as-built elevations for HYD-8 and HYD-9.
- 6.12 Provide as-built rim elevation for the watermain pressure connection valve vault located south of the building.
- 6.13 Provide as-built data for storm sewer structures and pipe between ST-8 to ST-10, ST-16 to ST-17, ST-9B to ST-9A, ST-9C to ST-9A, and ST-9A to ST-9.
- 6.14 Provide as-built data in the Sanitary Service Profile viewport.

7. Construction Details – Sheets C4.0-C4.5

- 7.1 Provide as-built elevations in the Restrictor Detail.



MEMO

TO: Kevin Huemann, Jacob & Hefner Associates
FROM: Donald Kinzler, Engineering Project Manager
CC: Ed Dolezal, Public Works Director; Matt Kramer, JHA; Gabriel Zavala, Engineering Technician; Anthony Spinelli, Strand Associates, Inc.
DATE: May 6, 2020
SUBJECT: IDI Logistics Phase 2 Infrastructure – Record Drawing Review 1

The Village of Channahon has received the following:

- *Record As-Built Drawings for Channahon Corporate Center 2018 Infrastructure Improvements* prepared by Jacob & Hefner Associates, dated February 2020

Please direct the applicant to provide a written response to these comments (including VOC comments) and (1) one copy of full-size site plans as well as all other materials submitted for review with an identical submittal to Tony Spinelli, P.E. at Strand Associates, Inc.

Based upon Public Work's review of the submitted materials, we offer the following comments:

1. General

- 1.1 The Record As-Built Drawings shall include a signature to certify the submitted drawings.
- 1.2 Add Details Sheet C9.3 to the Record As-Built Drawings and provide as-built information for the detention pond EOW modification, and modified flow control structure identified on plan sheet C6.3.
- 1.3 Add Street Lighting Plan sheets E1 and E2 with surveyed asbuilt locations of streetlights with station and offset.
- 1.4 Provide surveyed station and offset for all structures constructed in landscaped areas.

2. Grading Plan South - Sheet C4.1

- 2.1 The as-built rim elevation for MH111 (Sta. 18+65/32' LT) is listed as "BURIED". Adjust the manhole rim to grade and provide as-built information.
- 2.2 The spot elevation label for the CB near Sta. 22+80/40' LT appears to be located near Sta. 22+25/55' LT with an incorrect rim elevation. Adjust the label location and provide accurate as-built information.

3. Grading and Erosion Control Plan North – Sheet C4.3

No comments at this time.

4. S Exchange Blvd Plan & Profile Sta. 27+75 - 36+52.31 – Sheet C6.1

- 4.1 The storm manhole at Sta.31+66/30' RT does not appear to have been adjusted per plan. The as-built rim elevation provided in the Proposed Conditions viewport and the Profile viewport matches the pre-construction elevation. Please verify.
- 4.2 The as-built rim elevation provided in the Profile viewport for the storm manhole at Sta. 34+60/30' RT conflicts with the elevation provided in the Proposed Conditions viewport. Please verify.

5. Frontage Road Plan & Profile Sta. 17+12.42 - 23+38.04 – Sheet C6.2

- 5.1 Provide as-built elevation information for the Utility crossing callouts.

- 5.2 MH111 (Sta. 18+65/32' LT) is listed as "BURIED". Adjust the manhole rim to grade and provide as-built information.
- 5.3 Provide as-built pipe length and slope for the pipe connecting INL110 to MH111.
- 5.4 The as-built rim elevation provided in the Proposed Conditions viewport for sanitary manhole S105 conflicts with the elevation provided in the Profile viewport. Please verify.
- 5.5 Provide as-built pipe length and slope for the pipe connecting MH112 to MH111.
- 5.6 Provide as-built pipe length and slope for the pipe connecting INL109 to MH111.
- 5.7 Provide as-built steel casing length and size between sanitary manhole SA-3 and S105.
- 5.8 Provide as-built information for sanitary manhole SA-3 in the Profile viewport.

6. Detention Basin A Utility Plan – Sheet C6.3

- 6.1 Provide as-built steel casing length and size between the restrictor manhole and FES101.
- 6.2 Provide as-built information for the storm sewer between the restrictor manhole and FES101.
- 6.3 Provide as-built elevation for FES101.

*Illinois Association for Floodplain and Stormwater Management
Association of State Floodplain Managers*

This writing certifies that

Donald R. Kinzler, CFM

Has successfully fulfilled all the prerequisites and requirements for being a

Certified Floodplain Manager

*In recognition thereof, this certificate is awarded, 3/11/2008
Certificate Number IL-08-00374. Expires 7/31/2022*



A handwritten signature in black ink, appearing to read 'Erik Gil'.

Erik Gil, P.E., CFM
Chair, IAFSM

A handwritten signature in black ink, appearing to read 'Greg Thorpe'.

Greg Thorpe, CBO, CFM
Chair, IAFSM Certification Committee



Illinois Association for Floodplain and Stormwater Management

Certificate of Training

DONALD KINZLER

has satisfactorily completed training during the

2020 IAFSM Annual Conference

Conducted by

The Illinois Association for Floodplain and Stormwater Management

Location: Tinley Park, Illinois
Date: March 11th and 12th, 2020

PDH Credits: 11.5
CEC Credits: 10



Diane Bouckaert, PE, CFM, CPESC
Chair, Education Outreach Committee



IAFSM

*Illinois Association for
Floodplain and Stormwater Management*

CERTIFICATE

PROUDLY PRESENTED TO

Donald Kinzler

Erosion and Sediment Control Best Management Practices

Apr 22, 2020

Date of Completion

Ruekert Mielke Inc.


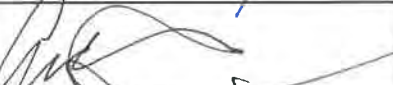







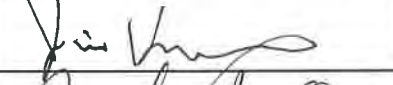
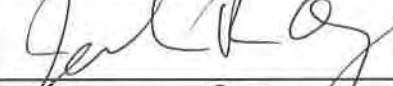

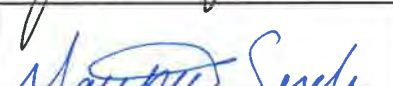
Organizer



Snow Plow Training

17. NOV. 2020

F.1

Brendon Steg	
Curtis Kratochvil	
Dan Drummond	
Eric Stobaugh	
Gordon Browning	
Jason Malsky	
Jeff Baranoski	
Jerry Helms	NA
Jim Kenney	
John (Dick) Ashley	
Justin Schultz	Covid
Matt Serdar	
Mike Pejkovich	
Ray Link	
Scott Choate	

DATE:
12/15/20

Melanie Arnold

From: Jeff Barrett <jbarrett@channahon.org> on behalf of Jeff Barrett
Sent: Thursday, October 1, 2020 8:13 AM
To: Don Kinzler
Subject: Ms4 training

Today the entire public works crew participated in the 2020 Roadway Deicing Workshop Webinar.

Jeff Barrett
Utilities and Streets Superintendent
Village of Channahon

From: [Don Kinzler](#)
To: [Jane E. Harris](#)
Subject: RE: 26465 S. Lyndsay Dr. Channahon 60410
Date: Tuesday, June 30, 2020 4:07:20 PM

Hi Jane,

Based on the current NFIP FIRM, there is no floodplain on this or any adjacent properties.

Regards,

Don

From: Jane E. Harris [mailto:jane888@juno.com]
Sent: Tuesday, June 30, 2020 3:59 PM
To: dkinzler@channahon.org
Subject: 26465 S. Lyndsay Dr. Channahon 60410

Don,

Thank you for taking my call this afternoon. This email serves as my request for any information you have regarding the above-referenced property's location in a flood zone/plain.

Thanking you in advance for your assistance.

Sincerely,

Jane

Jane E. Harris, Attorney at Law
P.O. Box 888
Joliet, IL 60434-0888
(815) 378-3788 Cell
(815) 726-0888 Fax
(815) 436-0888 Office

jane888@juno.com

"Happiness is not a destination. It is a method of life."

The contents of this e-mail message and any attachments are intended solely for the addressee(s) named in this message. This message is intended to be and to remain confidential and may be subject to applicable attorney/client and/or work product privileges. If you are not the addressee indicated in this message (or responsible for delivery of the message to such person), you may not copy or deliver this message to anyone. In such case, you should delete this message and any attachments immediately and kindly notify the sender by reply e-mail, or by calling (815) 436-0888. Opinions, conclusions and other information in this message that do not relate to the official business of this firm shall be understood as neither

Melanie Arnold

From: Tim Greif <tgreif@sbcglobal.net> on behalf of Tim Greif
Sent: Wednesday, January 20, 2021 2:00 PM
To: 'Don Kinzler'
Subject: RE: Tim Greif Code Question

OK thanks Don. Kinda what I figured you'd say about the variance. I'd probably only pursue that as a last resort. Thanks again for your input.

Tim

From: Don Kinzler [<mailto:dkinzler@channahon.org>]
Sent: Wednesday, January 20, 2021 1:25 PM
To: Tim Greif
Subject: RE: Tim Greif Code Question

Hi Tim,

A variance would have to go through the Development Department and be approved by the Village Board. I would not support it myself as the FEMA Flood Study associated with the new maps was updated in 2019. I have to trust that over incidental data.

You are correct that the new digital FIRMs do not have Zone X anymore, attached is the FIRM which includes this property. Note that the zone boundaries on these maps are a guideline to determine a BFE. After that a surveyor must find the actual boundary elevation location across the property. You have already done this, but it is important to note as some people think a zone boundary line on the map is all they need.

Regards,

Don

From: Tim Greif [<mailto:tgreif@sbcglobal.net>]
Sent: Wednesday, January 20, 2021 1:04 PM
To: 'Don Kinzler' <dkinzler@channahon.org>
Subject: RE: Tim Greif Code Question

Thanks Don, that was the answer I was hoping for regarding the deck. And yes, the deck floor elevation is at roughly 514, well above the FPE of 511.5.

I will take another look at the Stormwater Ordinance you attached with regard to the pole building. I'm probably going to have to downsize and/or move it closer to the road to eliminate getting into the flood plain. I understand I can build in the floodplain with compensatory storage, but that's not something that makes any sense to me from an engineering standpoint. Last spring's flood resulted in the highest pool level ever recorded at this location. I shot the high water point with a transit and it was still almost two feet below FEMA's updated BFE. Would there be any chance I might be able to get a variance on this? FEMA's latest FIRM maps show my entire property to be classified Zone "X" which is no longer considered part of a Special Flood Hazard Area.

Thanks for your help and guidance on this.

Regards,
Tim Greif

From: Don Kinzler [<mailto:dkinzler@channahon.org>]
Sent: Tuesday, January 19, 2021 10:26 AM
To: tgreif@sbcglobal.net
Cc: Stephen Kuczkowski
Subject: FW: Tim Greif Code Question

Hi Tim,

You are correct that building post supported structures (no walls, other obstructions above grade) is allowed in floodplain and without too much trouble. The keys are not adding fill to existing grades in the floodplain, and using only post construction within the floodplain.

What is the elevation of the deck floor you are expanding? If it is \geq than 1 ft above the BFE, you can disregard my next sentence. I believe a deck is considered an accessory structure which can have floor elevations below the FPE (Flood Protection Elevation = 511.5 here). If this is the case, it can still be built but must be use waterproof materials.

I also attached the Will County Stormwater Management Ordinance which was adopted by the Village of Channahon. In regards to the pole building you wanted, Article 4 discusses building in a floodplain or floodway and the regulatory hoops to jump through. It's possible, especially as pertains to floodplain, but takes more engineering.

Regards,

Don

From: Stephen Kuczkowski [<mailto:skuczkowski@channahon.org>]
Sent: Monday, January 18, 2021 1:11 PM
To: Don Kinzler <dkinzler@channahon.org>
Subject: Fwd: Tim Greif Code Question

Please respond, thanks steve

----- Forwarded message -----

From: **Tim Greif** <tgreif@sbcglobal.net>
Date: Mon, Jan 18, 2021 at 12:34 PM
Subject: Tim Greif Code Question
To: <skuczkowski@channahon.org>

Hey Steve, I need your input on a question regarding whether or not I can enlarge a deck that sits over the Base Flood Elevation at my river house.

You may remember me. I'm the guy that was going to put up a pole building over on the south side of the river on DesPlaines River Road. But we ran into issues with the old versus new BFEs issued by FEMA because one corner of the building encroached into the flood plain and Don Kinzler felt that was a problem. That pole barn never got built as a result.

My existing deck is 12 x 20 with a fabric canopy cover. I'm intending to enlarge it to 16 x 22 with the house roof extended over the deck. This will still be on concrete piers for the deck/roof support, so no foundation will

be built in the flood area. My understanding is the county stormwater regs allow structures built over the BFE on piers as long as flow is not impeded. My architect noted that the deck will extend over the BFE (as it does already) and raised the question whether this is an issue. I'm requesting a confirmation that this is an allowable modification to an existing deck. Obviously, this will be a totally new deck with the roof extended over it.

I've attached a partial plan of the property showing the existing and proposed deck addition. I also have the architect's plans available showing details if you need them, but the reason for this inquiry is simply to make sure we are allowed to extend this existing deck a bit further over the BFE. I left my phone number and name with the receptionist on Friday when I stopped in at the Village Hall to see you.

Let me know if you have any questions and feel free to call me on my cell.

Regards,

Tim Greif

1348 Ada Lane

Naperville, IL 60540-0355
Home: 630-355-9569

Cell: 630-746-6369

--

Stephen Kuczowski

Chief Building Official

skuczowski@channahon.org | P 815.467.6644 | F 815.467.9774
Village of Channahon | www.channahon.org
24555 S. Navajo Drive, Channahon, IL 60410





Invoice

4/20/2020

Lower DuPage River Watershed Coalition

10S404 Knoch Knolls Road
 Naperville, IL 60565

Bill To
Village of Channahon 24555 S. Navajo Drive Channahon, IL 60410

Invoice #	Please make check payable to Lower DuPage River Watershed Coalition		Terms
185			Due June 1
Quantity	Description	Rate	Amount
1	Agency Membership Dues Mar. 1, 2020 - Feb. 28, 2021	2,648.00	2,648.00
		Total	\$2,648.00



AGENCY MEMBERSHIP PROFILE

Agency Name: Village of Channahon
Address: 24555 S. Navajo Drive
City, Zip: Channahon, IL 60410
Phone: 815-467-6644
Chief Executive:

County: Will

Website: www.channahon.org
Title:

If your Agency operates a wastewater treatment plant, please provide the following information for each facility:

NPDES Permit #:
Receiving Stream:
Design Average Flow:
Expiration Date:

NPDES Permit #:
Receiving Stream:
Design Average Flow:
Expiration Date:

Organization contacts for trainings & outreach (if applicable):

Winter Deicing Supervisor: Jeff Barrett
Outreach/Communications: Don Kinzler
MS4 Reporting: Don Kinzler

Email: jbarrett@channahon.org
Email: dkinzler@channahon.org
Email: dkinzler@channahon.org

DESIGNATED REPRESENTATIVE:

Name: Don Kinzler
Title: Engineering Project Manager
Direct Line: 815-467-6644
Email: dkinzler@channahon.org

ALTERNATE REPRESENTATIVE:

Name: Ed Dolezal
Title: Director of Public Works
Direct Line: 815-467-6644
Email: edolezal@channahon.org

The Designated Representative is authorized to vote at LDRWC meetings on the agency's behalf and the Alternate Representative is authorized to vote in the absence of the Designated Representative.

Signature 
(digital signature OK)

Title _____

Date 4-27-20

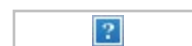
Please complete this Member Information Profile and email to ncinatl@theconservationfoundation.org

Please direct questions to Jennifer Hammer, Director of Watershed Programs
jhammer@theconservationfoundation.org or 630-428-4500 x114.

From: [The Conservation Foundation](#)
To: [Donald Kinzler](#)
Subject: Lower DuPage Member Meeting Confirmation
Date: Thursday, May 21, 2020 9:49:27 AM



Hi Donald Kinzler,



Thank you for registering for "Lower DuPage Member Meeting".

Please submit any questions to:
info@theconservationfoundation.org

Date Time: May 21, 2020 10:00 AM Central Time (US and Canada)

Join from a PC, Mac, iPad, iPhone or Android device:

[Click Here to Join](#)

Note: This link should not be shared with others; it is unique to you.

[Add to Calendar](#) [Add to Google Calendar](#) [Add to Yahoo Calendar](#)

Description: May member meeting for the Lower DuPage River Watershed Coalition

Or iPhone one-tap :

US: +13126266799,,85246933660# or
+13017158592,,85246933660#

Or Telephone:

Dial(for higher quality, dial a number based on your current location):

US: +1 312 626 6799 or +1 301 715 8592 or +1 929 205 6099 or +1 669 900 6833 or +1 253 215 8782 or +1 346 248 7799

Webinar ID: 852 4693 3660

International numbers available:

<https://us02web.zoom.us/j/keAR2HwS5f>

Melanie Arnold

From: Don Kinzler <dkinzler@channahon.org> on behalf of Don Kinzler
Sent: Tuesday, May 12, 2020 11:35 AM
To: Melanie Arnold
Subject: Channahon MS4

Hi Melonie,

Ed Dolezal, P.E., Director of Public Works, is the District 6 Municipal Representative for the Will County Stormwater Management Planning Committee.

Regards,

Don



Lower DuPage River Watershed Coalition ILR40 Activities March 2020 – February 2021

PART I. COVERAGE UNDER GENERAL PERMITS ILR40

Not applicable to the work of the LDRWC.

PART II. NOTICE OF INTENT (NOI) REQUIREMENTS

Not applicable to the work of the LDRWC.

PART III. SPECIAL CONDITIONS

Not applicable to the work of the LDRWC.

PART IV. STORM WATER MANAGEMENT PROGRAMS

A. Requirements

Not applicable to the work of the LDRWC.

B. Minimum Control Measure

1. Public Education and Outreach on Stormwater Impacts

- The LDRWC website was maintained during the reporting period and periodically updated (<http://www.dupagerivers.org>).
- A Seasonal Outreach Campaign was implemented throughout year. The “Members” tab on the website includes all past and present seasonal outreach materials for download. Materials for each season include text for websites, newsletters, posters, blogs and social media posts. The website has also been expanded to utilize this information to enhance the experience for visitors to the LDRWC website. Campaign specific materials were also developed – see examples attached at end of report. For the winter season www.SaltSmart.org website is also used as a clearinghouse of winter BMPs for residents, public agencies and private deicing companies. This website has provided a wider reach beyond the Lower DuPage River watershed and has organically grown into a regional Salt Smart Collaborative.

Seasonal outreach topics:

- Spring – Rain Gardens, Rain Barrels, Using native plants
- Summer – Healthy Lawns, Stream Ecology, Impacts of Dams
- Fall – Proper leaf collection/disposal
- Winter – SaltSmart – Winter Snow & Ice Management BMPs

2. *Public Involvement and Participation* – Due to the Coronavirus pandemic restrictions the LDRWC did not attend any in-person events. LDRWC did work with members to provide resources on setting up rain barrel sales program and materials to encourage residents to install rain barrels and rain gardens to help minimize stormwater runoff from residential properties. Over 200 rain barrels were sold within the Lower DuPage and Lower Des Plaines watershed areas.

3. *Illicit Discharge Detection and Elimination* – no activities

4. *Construction Site Storm Water Runoff Control* - no activities

5. *Post-Construction Stormwater Management in New Development and Redevelopment* - no activities

6. *Pollution Prevention/Good Housekeeping for Municipal Operations*

Chloride Reduction Workshops

In the past several years, deicing workshops have been held separately by The Conservation Foundation in partnership with Kane County, the DuPage River Salt Creek Workgroup, and the Lower DuPage River Watershed Coalition in partnership with Lower Des Plaines Watershed Group. In 2020, it was decided that these groups would collaborate and host the webinars jointly.

During the reporting period, three chloride reduction workshops and four technical webinar briefs were held. Due to precautions necessitated by the Coronavirus pandemic, the workshops were held in a webinar format. Registration was also made available to agencies in McHenry, Lake and Cooks counties as their usual deicing workshops were not being held. Accordingly, the webinars were attended by staff in DuPage, Will, Kane, Kendall, Lake, McHenry and Cook counties.

Public Roads Deicing Workshops were held on October 1 and October 14, 2020. Fortin Consulting, Inc. from Minnesota was engaged to present the material. A registration fee was required per agency in order view the webinar. The links were sharable so the webinars could be viewed individually or in groups. A poll was taken at the beginning of each webinar asking how many persons were in the room. The polling results indicated that there were 280 persons viewing the Oct. 1 webinar and 190 persons viewing the Oct. 14th webinar for a total of 470 attendees for the Public Roads webinars. Certificates of attendance were provided to those

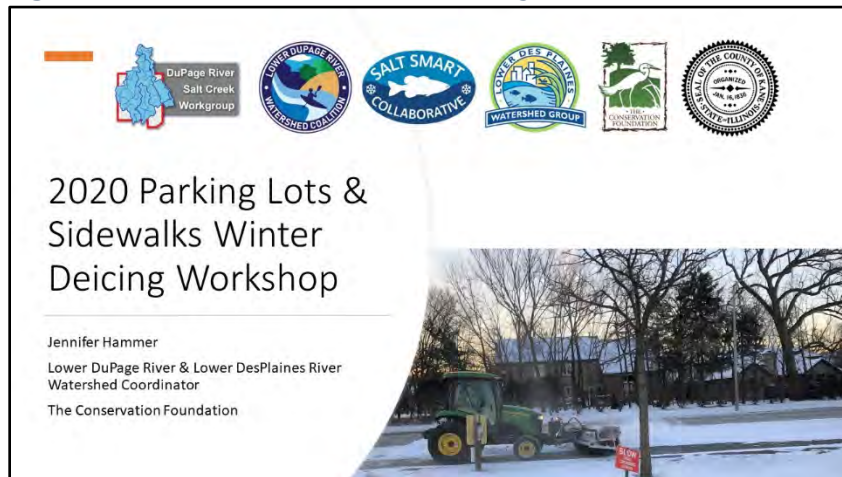
Figure 1. Deicing Workshops Registration Form, 2020.



who requested them. Evaluation surveys were sent to the persons who logged in to the webinars. A link to the *Minnesota Snow and Ice Control: Field Book for Snowplow Operators* was provided to each registrant.

On October 8, 2020 the Parking Lots and Sidewalks Deicing Workshop webinar was held with Fortin Consulting, Inc. presenting. The polling results indicated that there were 123 persons viewing the webinar. Certificates of attendance were provided to those who requested them. Evaluation surveys were sent to the persons who logging in to the webinars. A link to the *Minnesota Pollution Control Agency Winter Parking Lot & Sidewalk Maintenance Manual* was provided to each registrant.

Figure 2. Welcome & Introduction to Parking Lots & Sidewalks Presentation, 2020.



Questions from participants were entered into the chat and answered by Fortin Consulting staff, Workgroup staff as well as others participating in the training. A summary of all links provided during the training as well as other links added to the chat were captured and provided to the participants after the webinar.

Figure 3. Links from webinar presentation and chat, 2020.



October 2020 Winter Deicing Workshop Links

- Roads manual - <http://www.mnltap.umn.edu/publications/handbooks/documents/snowice.pdf>
- State-by-state Winter Maintenance Statistics - <https://clearroads.org/winter-maintenance-survey/>
- Well 14 - <https://www.cityofmadison.com/water/insidemwu/saving-madison-from-salt-1>
- "The Real Cost of Salt Use" Report - <https://www.pca.state.mn.us/sites/default/files/wq-11-06bb.pdf>
- Stormwater Research at St. Anthony Falls Laboratory, "Urban Stormwater Ponds can be a Source of Phosphorus" - <http://stormwater.safi.umn.edu/updates-newsletters/updates-april-2018>
- The Skinny on water softeners - <https://www.pca.state.mn.us/skinny-water-softeners>
- Clear Roads - <https://clearroads.org> <https://clearroads.org/materials-liquid-materials/>
- For the Model Snow and Ice Policy (for municipal operations) - <https://www.pca.state.mn.us/sites/default/files/p-tr1-51a.pdf>
- Model Municipal Ordinances - <https://www.pca.state.mn.us/sites/default/files/p-tr1-54.pdf>
- Model Private Contract (for hiring private contractors) - <https://www.pca.state.mn.us/sites/default/files/p-tr1-52a.pdf>
- Salt Smart Collaborative www.saltsmart.org
- Calibrating Manual Sanders <https://www.pca.state.mn.us/sites/default/files/roadsalt-calibratingmanualsanders.pdf>
- Watch this later for calibration! City of Shorewood Hills Calibration Video - <http://www.youtube.com/watch?v=LEt9-tut-es&t=0m29s>
- Illinois Department of Transportation - www.gettingaroundillinois.com
- Information on Henderson's Brine makers <http://www.hendersonproducts.com/brinextreme-advantage.html>
- Information on Henderson's Liquid Application Systems <http://www.hendersonproducts.com/liquid-ice-control-systems.html> Rob Florio Henderson Products rflorio@hendersonproducts.com or Chris Fack cfack@hendersonproducts.com or call/text (847)754-5035
- Ag by-product Liquids Effectiveness - http://clearroads.org/wp-content/uploads/dlm_uploads/FR_CR-13-02_Revised.pdf
- Salt Brine Blending to Optimize Deicing and Anti-Icing Performance - <http://www.dot.state.mn.us/research/documents/201220.pdf>
- More isn't always better - https://www.youtube.com/watch?v=pYm1aTn_ApE
- Deicing Application Rates for two-lane road - <https://fortinconsulting.com/wp-content/uploads/2018/04/Road-Deicing-App-Chart-Master-Copy.pdf>
- Chute design - http://www.dot.state.mn.us/maintenance/files/salt_sustainability/saltchute.pdf
- The Small Sites YouTube video is at <https://v637p.app.goo.gl/uAbZaBSPeW8fP1wx9>
- "Smart Salting for Sustainability" by AASHTO - <https://sicop.transportation.org/2020/09/14/episode-40-smart-salting-for-sustainability/>
- 4-page summary of Statewide Chloride Mgmt. Plan - <https://www.pca.state.mn.us/sites/default/files/wq-s1-94a.pdf>
- Twin Cities Metropolitan Area Chloride Management Plan - <https://www.pca.state.mn.us/sites/default/files/wq-11-06ff.pdf>
- Smart salting schedule: <https://www.pca.state.mn.us/water/smart-salting-training-calendar>
- <https://www.eco-pem.com/pvpsum-remediate-saline-sodic-soils/>
- Iowa DOT liquid spread pattern presentation from the 2020 Salt Symposium: <https://fortinconsulting.com/wp-content/uploads/2020/08/Bob-Ellis-Jeff-Vanderzaag-Winter-Maintenance.pdf>
- 2020 Salt Symposium presentations: <https://fortinconsulting.com/salt-symposium-2020-presentations/>



To complement the Winter Deicing Workshops, the Winter Technical Briefs – Mini-Webinar Series was presented to focus on specific issues. Topics in 2020 included: October 20 – Reducing Salt With Organics: The Boost & Reduce Method, October 27 – Sourcewell & Cooperative Purchasing, November 10 – Benefits of Segmented Blades and November 17 – The Fine Art of Brine Making. Staff also worked with local partners to create a training video on how to calibrate a walk behind salt spreader. These webinars and training video are posted on at www.saltsmart.org.

Figure 4. Winter Technical Briefs, 2020.



Qualifying State, Country or Local Program

Not applicable to the work of the LDRWC.

C. Sharing Responsibility

This report outlines the activities conducted by the LDRWC on behalf of its' members related to the implementation of the ILR40 permit. It is the responsibility of the individual ILR40 permit holders to utilize this information to fulfill the reporting requirements outlined in Part V.C. of the permit.

D. Reviewing and Updating Stormwater Management Programs

Not applicable to the work of the LDRWC.

PART V. MONITORING, RECORDKEEPING, AND REPORTING

A. Monitoring

The ILR40 permit states that permit holders “must develop and implement a monitoring and assessment program to evaluate the effectiveness of the BMPs being implemented to reduce pollutant loadings and water quality impacts”. The LDRWC monitoring program meets the following monitoring objectives and requirements outlined in the permit:

- Measuring pollutants over time (Part V. A. 2. b. ii)
- Sediment monitoring (Part V. A. 2. b. iii)
- Assessing physical and habitat characteristics such as stream bank erosion caused by storm water discharges ((Part V. A. 2. b. vi)
- Collaborative watershed-scape monitoring (Part V. A. 2. b. x)
- Ambient monitoring of total suspended solids, total nitrogen, total phosphorus, fecal coliform, chlorides, and oil and grease (Part V. A. 2. c.)

BIOASSESSMENT

Overview and Sampling Plan

A biological and water quality survey, is an interdisciplinary monitoring effort coordinated on a waterbody specific or watershed scale. This may involve a relatively simple setting focusing on one or two small streams, one or two principal stressors, and a handful of sampling sites or a much more complex effort including entire drainage basins, multiple and overlapping stressors, and tens of sites. The LDRWC bioassessment is the latter. The LDRWC bioassessment program began in 2012 with sampling 26 stations in the Lower DuPage River watershed. In 2015 an additional 15 stations were added for a total of 41 stations monitored. Forty-one stations were sampled in the summer of 2018. The bioassessment program functions under a quality assurance plan agreed on with the Illinois Environmental Protection Agency.

The LDRWC bioassessment program utilizes standardized biological, chemical, and physical monitoring and assessment techniques employed to meet three major objectives:

- 1) determine the extent to which biological assemblages are impaired (using IEPA guidelines);
- 2) determine the categorical stressors and sources that are associated with those impairments; and,
- 3) add to the broader databases for the DuPage River watershed to track and understand changes through time in response to abatement actions or other influences.

The data collects as part of the bioassessment is processed, evaluated, and synthesized as a biological and water quality assessment of aquatic life use status. The assessments are directly comparable to previously conducted bioassessments such that trends in status can be examined and causes and sources of impairment can be confirmed, amended, or removed. A final report containing a summary of major findings and recommendations for future monitoring, follow-up investigations, and any immediate actions that are needed to resolve readily diagnosed impairments is prepared following each bioassessment. The bioassessment reports are posted on the LDRWC at <http://www.dupagerivers.org/bioassessment-monitoring/> . It is not the role of the bioassessments to identify specific remedial actions on a site specific or watershed basis. However, the baseline data provided by the bioassessments contributes to the Integrated Priority System that was developed by the DuPage River Salt Creek Workgroup to help determine and prioritize remedial projects and is now being updated to incorporate Lower DuPage River

watershed data. A final draft of the IPS model update was completed in 2020 and is being utilized to identify and design restoration projects aimed at improving aquatic life scores.

Sampling sites for the bioassessment were determined systematically using a geometric design supplemented by the bracketing of features likely to exert an influence over stream resource quality, such as CSOs, dams and wastewater outfalls. The geometric site selection process starts at the downstream terminus or “pour point” of the watershed (Level 1 site), then continues by deriving each subsequent “panel” at descending intervals of one-half the drainage area (D.A.) of the preceding level. Thus, the drainage area of each successive level decreases geometrically. This results in seven drainage area levels in each of the three watersheds, starting at the largest (150 sq. mi) and continuing through successive panels of 75, 38, 19, 9, 5 and 2 sq. mi. Targeted sites are then added to fill gaps left by the geometric design and assure complete spatial coverage in order to capture all significant pollution gradients including reaches that are impacted by wastewater treatment plants (WWTPs), major stormwater sources, combined sewer overflows (CSOs) and dams. The number of sampling sites by method/protocol and watershed are listed in Table 1 and illustrated in Figure 1.

Representativeness – Reference Sites

Data is collected from selected regional reference sites in northeastern Illinois preferably to include existing Illinois EPA and Illinois DNR reference sites, potentially being supplemented with other sites that meet the Illinois EPA criteria for reference conditions. One purpose of this data will be to index the biological methods used in this study that are different from Illinois EPA and/or DNR to the reference condition and biological index calibration as defined by Illinois EPA. In addition, the current Illinois EPA reference network does not yet include smaller headwater streams, hence reference data is needed to accomplish an assessment of that data. Presently thirteen (13) reference sites have been established.

Figure 5. Lower DuPage River Watershed bioassessment monitoring sites for 2015 and 2018

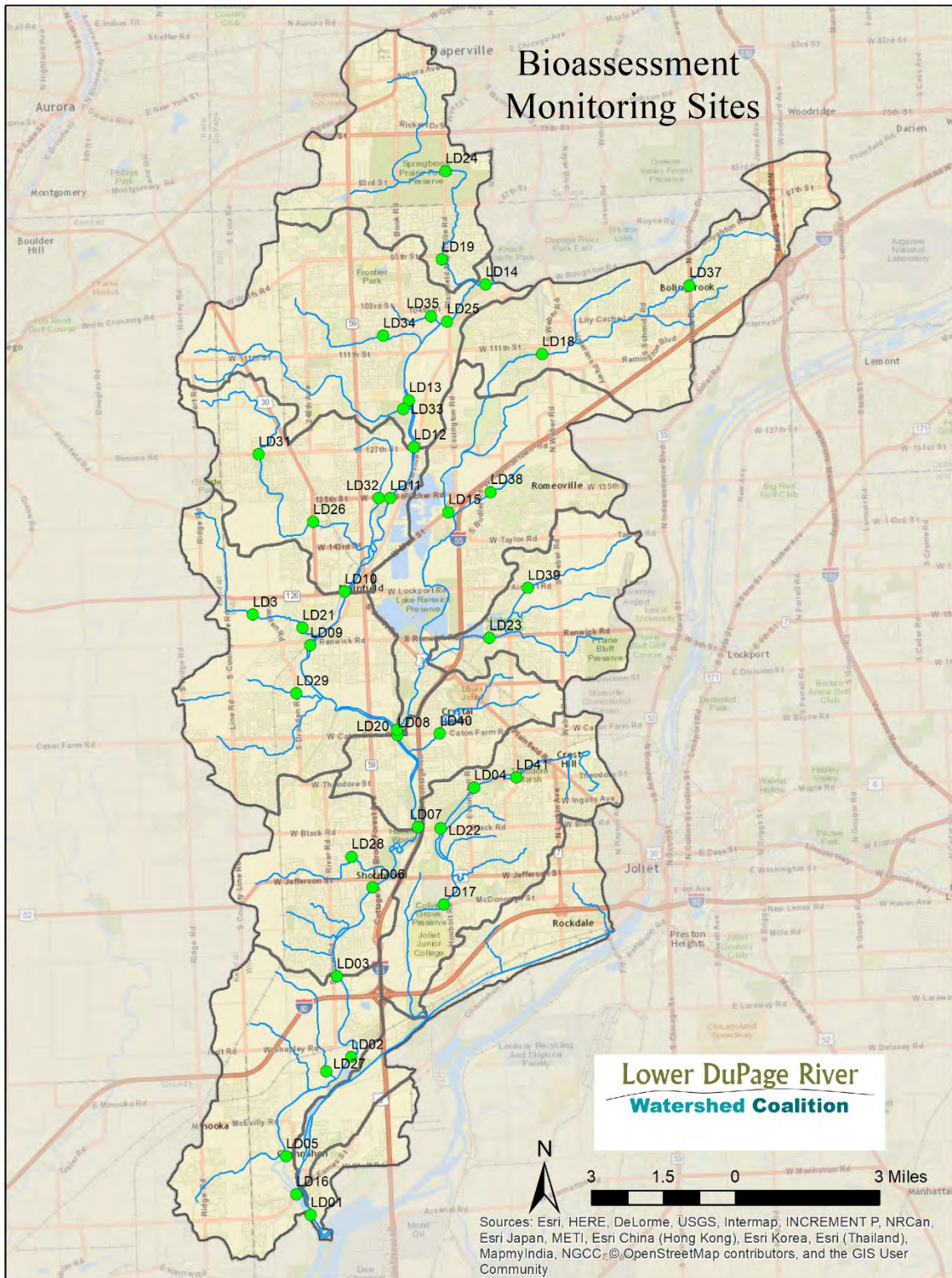


Table 1. Number of sampling sites in the LDRWC project area.

Method/Protocol	Lower DuPage River (2012)	Lower DuPage River (2015 & 18)
Biological sampling	26	41
Fish	26	41
Macroinvertebrates	26	41
QHEI	26	41
Water Column Chemical/Physical Sampling		
Nutrients*	26	41
Water Quality Metals	26	41
Water Quality Organics	8	0
Sediment Sampling	7	7

*Also included indicators or organic enrichment and ionic strength, total suspended solids (TSS), DO, pH and temperature

The bioassessment sampling includes four (4) sampling methods/protocols: biological sampling, Qualitative Habitat Evaluation Index (QHEI), water column chemical/physical parameter sampling and sediment chemistry. The biological sampling includes two assemblages: fish and macroinvertebrates.

FISH

Methodology

Methods for the collection of fish at wadeable sites was performed using a tow-barge or longline pulsed D.C. electrofishing apparatus (MBI 2006b). A Wisconsin DNR battery powered backpack electrofishing unit was used as an alternative to the long line in the smallest streams (Ohio EPA 1989). A three-person crew carried out the sampling protocol for each type of wading equipment sampling in an upstream direction. Sampling effort was indexed to lineal distance and ranged from 150-200 meters in length. Non-wadeable sites were sampled with a raft-mounted pulsed D.C. electrofishing device in a downstream direction (MBI 2007). Sampling effort was indexed to lineal distance over 0.5 km. Sampling was conducted during a June 15-October 15 seasonal index period.

Samples from each site were processed by enumerating and recording weights by species and by life stage (y-o-y, juvenile, and adult). All captured fish were immediately placed in a live well, bucket, or live net for processing. Water was replaced and/or aerated regularly to maintain adequate D.O. levels in the water and to minimize mortality. Fish not retained for voucher or other purposes were released back into the water after they had been identified to species, examined for external anomalies, and weighed either individually or in batches. While the majority of captured fish were identified to species in the field, any uncertainty about the field identification required their preservation for later laboratory identification. Identification was made to the species level at a minimum and to the sub-specific level if necessary. Vouchers were deposited and verified at The Ohio State University Museum of Biodiversity (OSUMB) in Columbus, OH.

Results

The fish sampling results presented in this report summarize the findings for the mainstem reaches of the DuPage River. Information on the tributaries and detailed analysis of all results can be found at <http://www.dupagerivers.org/bioassessment-monitoring/>. Results from the 2018 bioassessment will be available in late 2020.

The fish and macroinvertebrate results are presented as Index of Biotic Integrity (IBI) scores. IBI is an evaluation of a waterbodies biological community in a manner that allows the identification, classification and ranking of water pollution and other stressors. IBIs allow the statistical association of various anthropogenic influences on a water body with the observed biological activity in said water body and in turn the evaluation of management interventions in a process of adaptive management. Chemical testing of water samples produce only a snapshot of chemical concentrations while an IBI allows an evaluation of the net impact of chemical, physical and flow variables on a biological community structure. Dr. James Karr formulated the IBI concept in 1981.

DuPage River

As in previous studies, fish assemblages in the lower DuPage River watershed ranged from poor to good in 2015 (Figure 6), but in 2018 three sites in the mainstem fully attained the Illinois general aquatic life thresholds (LD01, LD06 and LD14). The only site with consistently good quality assemblages during all surveys is found in the Channahon Dam tailwaters, a short reach wedged in between the dam and the Des Plains River. Mainstem fish communities at most sites have improved since 2012 and 2015, and no sites were in the poor range in 2018. In contrast to the mainstem, conditions in the tributaries tended to improve from mostly poor, to mostly fair quality between 2012 and 2015, but regressed somewhat in 2018 (see figure 7).

Figure 6. Fish Index of Biotic Integrity (fIBI) scores for the Lower DuPage River from 1976-2018, in relation to municipal WWTPs and existing low head dams (noted by bars adjoining the x-axis). The shaded region demarcates the “fair” narrative range.

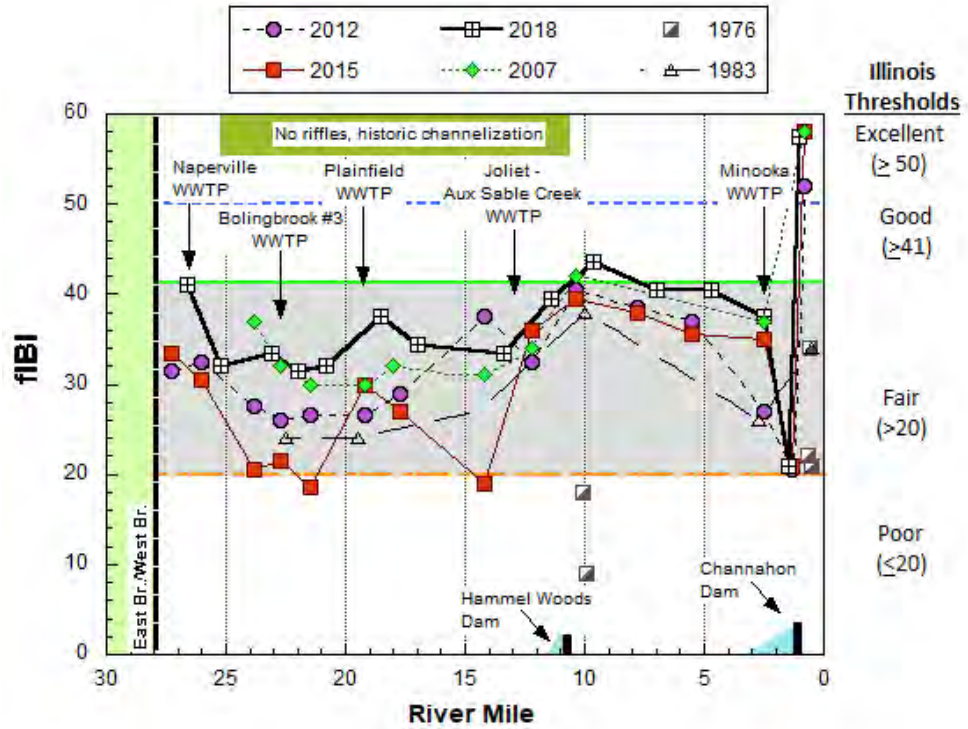
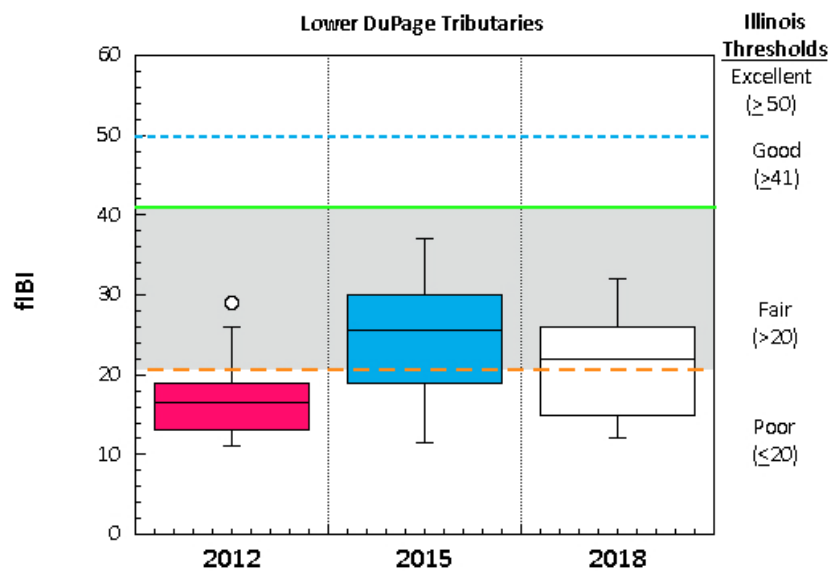


Figure 7. Box and whisker plot of fIBI scores from Lower DuPage River tributary sites in 2012, 2015, and 2018



MACROINVERTEBRATES

Methodology

The macroinvertebrate assemblage is sampled using the Illinois EPA (IEPA) multi-habitat method (IEPA 2005). Laboratory procedures followed the IEPA (2005) methodology for processing multi-habitat samples by producing a 300-organism subsample with a scan and pre-pick of large and/or rare taxa from a gridded tray. Taxonomic resolution is performed to the lowest practicable resolution for the common macroinvertebrate assemblage groups such as mayflies, stoneflies, caddisflies, midges, and crustaceans, which goes beyond the genus level requirement of IEPA (2005). However, calculation of the macroinvertebrate IBI followed IEPA methods in using genera as the lowest level of taxonomy for mIBI calculation and scoring.

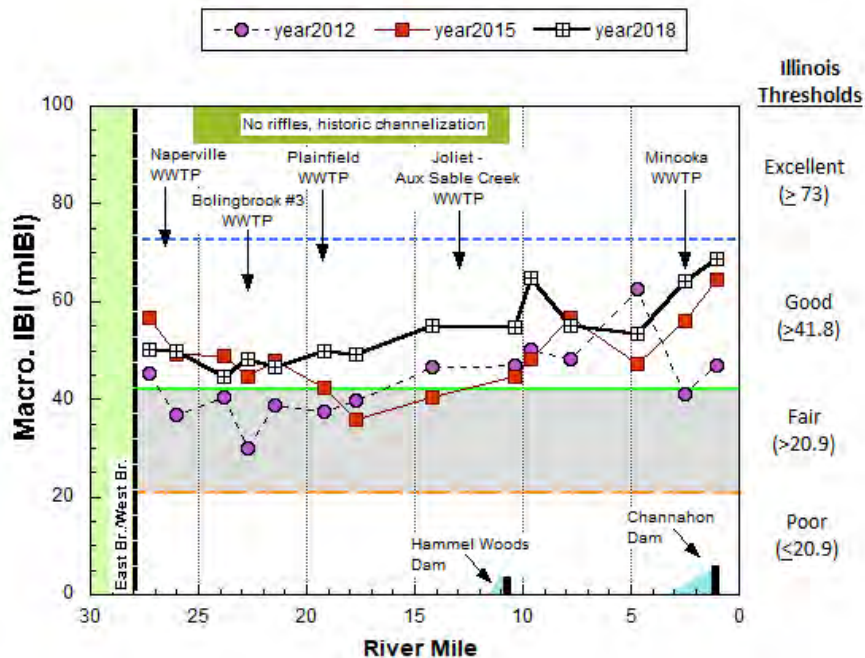
Results

The macroinvertebrate sampling results presented in this report summarize the findings for the mainstem reaches of the DuPage River. Information on the tributaries and detailed analysis of all results can be found at <http://www.dupagerivers.org/bioassessment-monitoring/>. A final draft of the 2018 is under review and should be released in mid-2021.

DuPage River

Macroinvertebrate assemblage performance in the lower DuPage River watershed (mainstem and tributaries) were all in the good range in 2018 an improvement over 2012 and 2015 (see Figure 8); 7 sites were rated as fair in 2012 and 3 in 2015. Mainstem communities improved at almost all stations compared to 2012 and 2015. The lower scoring sites (still in the good range) were in the long sluggish, historically channelized reach between the Naperville WWTP and Hammel Woods dam. The reach consists of mostly pooled or slow-run habitats with fine substrates and an abundance of macrophytes.

Figure 8. Macroinvertebrate Index of Biotic Integrity (mIBI) scores for the Lower DuPage River in 2012, 2015, and 2018 in relation to municipal WWTPs and existing low head dams (noted by bars adjoining the x-axis). The shaded region demarcates the “fair” narrative range.



HABITAT

Methodology

Physical habitat was evaluated using the Qualitative Habitat Evaluation Index (QHEI) developed by the Ohio EPA for streams and rivers in Ohio (Rankin 1989, 1995; Ohio EPA 2006b) and as modified by MBI for specific attributes. Attributes of habitat are scored based on the overall importance of each to the maintenance of viable, diverse, and functional aquatic faunas. The type(s) and quality of substrates, amount and quality of instream cover, channel morphology, extent and quality of riparian vegetation, pool, run, and riffle development and quality, and gradient used to determine the QHEI score which generally ranges from 20 to less than 100. QHEI scores and physical habitat attribute were recorded in conjunction with fish collections.

Results

The QHEI data presented in this report summarize the findings for the mainstem reaches of the Lower DuPage River. Information on the tributaries and detailed analysis of all results can be found at <http://www.dupagerivers.org/bioassessment-monitoring/>. A final draft of the 2018 is under review and should be released in mid-2021.

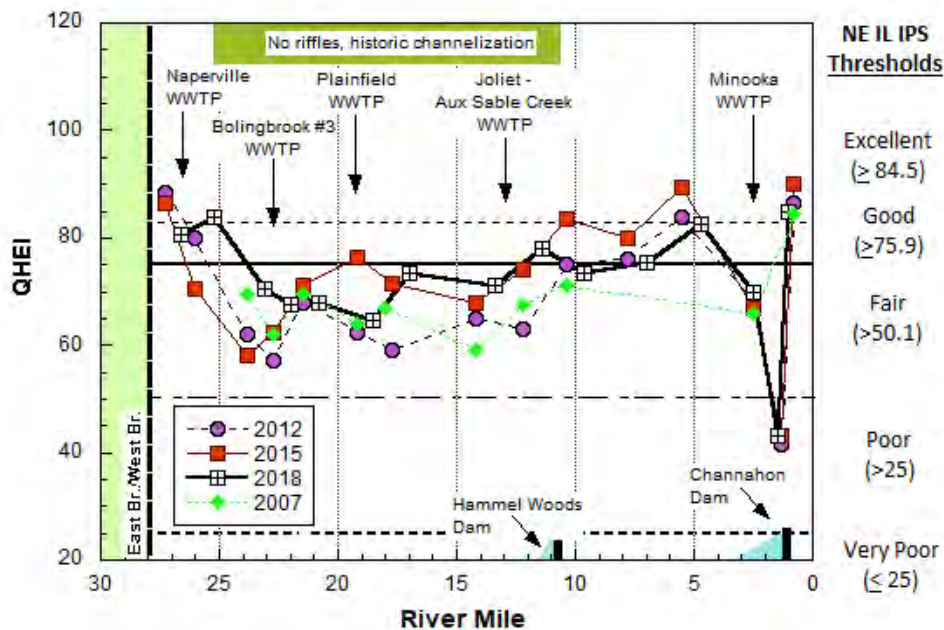
The physical habitat of a stream is a primary determinant of biological quality. Streams in the glaciated Midwest, left in their natural state, typically possess riffle-pool-run sequences, high

sinuosity, and well-developed channels with deep pools, heterogeneous substrates and cover in the form of woody debris, glacial tills, and aquatic macrophytes. The QHEI categorically scores the basic components of stream habitat into ranks according to the degree to which those components are found in a natural state, or conversely, in an altered or modified state.

DuPage River

As in previous surveys, 2015 DuPage River habitat quality varied by location but was more than adequate to support warm water communities throughout most of its 27.8-mile length (see figure 4). Extreme upper mainstem habitats remained clearly exceptional, but continued to decline to the lower good range in the sluggish, historically channelized reach between the Naperville WWTP and the Hammel Woods low-head dam (~ RMs 25-10.6). Two projects are being developed to improve habitat and dissolved oxygen levels within this reach. The first project is to removed the Hammel Woods dam. This project is designed and is awaiting permits. Construction is anticipated to take place during low flows in 2021.

Figure 9. Qualitative Habitat Evaluation Index (QHEI) scores and narrative ranges in the Lower DuPage River in 2007, 2012, 2015 and 2018 in relation to municipal WWTPs and existing low head dams (noted by bars adjoining the x-axis). QHEI scores less than 45 are often typical of highly modified channels or dam pools. The IPS narrative ranges of QHEI scores from excellent to very poor are indicated by solid and dashed lines.



Water and Sediment Chemistry

Methodology

Water column and sediment samples are collected as part of the LDRWC bioassessment programs. The total number of sites sampled is detailed in Table 1. The number of samples collected at each site is largely a function of the sites drainage area with the frequency of sampling increasing as drainage size increases. Organics sampling is a single sample done at a subset of sites. Sediment sampling is done at a subset of 41 sites using the same procedures as IEPA.

The parameters sampled for are included in Table 2 and can be grouped into demand parameters, nutrients, demand, and metals. Locations of sample sites are shown on Figure 5. All sampling occurs between May and October of the sample year. The Standard Operating Procedure for water quality sampling can be found at <http://www.dupagerivers.org/bioassessment-monitoring/>. A final draft of the 2018 is under review and should be released in mid-2021.

Table 2. Water Quality and sediment Parameters sampled as part of the LDRWC Bioassessment Program.

Water Quality Parameters	Sediment Parameters
Demand Parameters 5 Day BOD Chloride Conductivity Dissolved Oxygen pH Temperature Total Dissolved Solids Total Suspended Solids	Sediment Metals Arsenic Barium Cadmium Chromium Copper Iron Lead Manganese Nickel Potassium Silver Zinc
Nutrients Ammonia Nitrogen/Nitrate Nitrogen – Total Kjeldahl Phosphorus, Total	
Metals Cadmium Calcium Copper Iron Lead Magnesium Zinc	Sediment Organics Organochlorine Pesticides PCBS Percent Moisture Semivolatile Organics Volatile Organic Compounds

Results

The discussion presented below focuses on the constituents listed in the MS4 permit: total suspended solids, total nitrogen, total phosphorus, and chlorides. Total nitrogen is presented as ammonia, nitrate, and total kjeldahl nitrogen (TKN). Fecal coliform and oil and grease sampling will be added to all future bioassessment sampling starting in 2021 ensuring that both parameters will be sampled during the effective period of the ILR40 permit. A final draft of the 2018 is under review and should be released in mid-2021.

Detailed analysis and results for the other water quality constituents is located at <http://www.dupagerivers.org/bioassessment-monitoring/>

Lower DuPage River - Chemical Water Quality

As discussed in previous reports, nutrient levels in the Lower DuPage River mainstem are heavily influenced by WWTP inputs from its sources upstream, the East and West Branches. In each Lower DuPage survey, phosphorus and nitrate levels have ranged from highly elevated to slightly elevated (based on NE Illinois IPS Model thresholds), depending largely on flow conditions and contributions from upstream point sources. Concentrations have tended to be highest in the extreme upper mainstem, nearer to the confluence with the branches. Under very low-flows in 2012, nitrates routinely exceeded the 10 mg/l criterion in the upper reach and phosphorus was almost entirely above the recommended 1.0 mg/l effluent limit from headwaters to mouth. In both surveys, contributions from WWTPs along the Lower DuPage mainstem may have helped maintain nutrient levels but parameters experience minimal change downstream from the discharges. Both median and mean ammonia concentrations were near or below detection throughout the DuPage River mainstem in 2012 and 2015, but there was an increase in ammonia in 2018, albeit in the IPS fair range, but none were exceedances of water quality criteria that depend on temperature and pH (Figure 8, top). This likely originated in the upper part of the watershed. A final draft of the 2018 is under review and should be released in mid-2021.



2020 Watershed Outreach Summary

2020 Outreach Materials

Other Monitoring - LDRWC

Our Watershed Our Work Get Involved Blog **Members**

- Meetings & Events
- Meeting Presentations
- NPDES Permit Requirements
- Seasonal Campaigns**
- Become a Member

USING THE SAME STATE APPROVED DATA COLLECTION AND ANALYSES AS OTHER MAJOR WATERSHED GROUPS IN THE REGION, WE WILL INCORPORATE OUR DATA INTO A TOOL THAT WILL IDENTIFY AND RANK RESTORABILITY PROJECTS AT THE STREAM REACH LEVEL.

THE LOWER DES PLAINES WATERSHED GROUP

IMPROVING SURFACE WATERS IN ILLINOIS

Lower DuPage River Watershed Coalition

Our Watershed Our Work Get Involved **Members**

- Meetings & Events
- Membership Meeting Minutes
- Seasonal Campaigns**
- PFA's Resources
- Become a Member

PRESERVING AND ENHANCING WATER QUALITY IN THE LOWER DUPAGE RIVER AND ITS TRIBUTARIES.

LOWER DUPAGE RIVER WATERSHED COALITION

Join Our Pet Waste Campaign

When Nature Calls...Pick It Up!

Dog poop is gross, pollutes local waterways and can carry harmful bacteria and other diseases. By encouraging responsible pet ownership we can help keep our streams, sidewalks and paths clean. We have put together outreach materials to bring a little humor to an otherwise unpleasant job.

Participation also helps your community meet stormwater permit requirements to provide education and outreach to residents on ways they can help keep pollutants like pet waste out of stormwater. This program can also be used to as part of your communities plan to address fecal coliform TMDLs.

Keep our neighborhoods, parks, preserves beautiful.
...Scoop the Pool!

lowerdesplaineswatershed.org/seasonal-campaigns
dupagerivers.org/seasonal-campaigns



Spring

Topics:

- Stormwater runoff
- Rain gardens
- Rain barrels



STORMWATER RUNOFF

Rain that does not absorb into the ground becomes runoff that picks up pollutants as it travels across lawns and roads. **The polluted runoff eventually travels through storm drains into our local waterways and contaminates the water.**

WHAT IS A RAIN GARDEN?

A "Rain Garden" is simply a shallow depression in your yard that's planted with native plants that are accustomed to wet conditions. Rain gardens help to collect and filter rainwater and allow it to seep naturally into the ground.

Summer

Topics:

- Lawn maintenance
- Components of a healthy stream
- Aquatic insects
- Impact of dams

Reduce mosquitos at home by removing places where mosquitos like to breed.

Eliminate sources of shallow, standing water from around your home. Some common places where mosquitos like to lay their eggs include buckets, empty gardening containers, wheelbarrows, car tires and pet water bowls.




TAKE CARE OF YOUR LAWN NATURALLY

Don't mow too low.
Mowing a lawn too short exposes surface roots and dries out the soil faster. In general, try not to mow more than 1/3 of the height of the grass at a time.

Use a mulching mower.
Mulching mowers leave behind shredded grass clippings that act as compost to fertilize your lawn without adding chemicals.

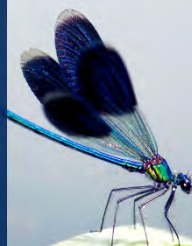

Consider native plant landscaping.
This will reduce the amount of lawn on your property, requiring less fertilizer, watering and mowing. Native plants also provide habitat for beneficial birds and butterflies.



The more diverse a stream's physical habitat is, the more diverse the aquatic life that live there.

Different fish and insects need different types of habitat.

A variety of habitat in and around a stream - from pools and riffles to native plant buffers - encourages a diversity of fish and insects.

Why remove dams?

Most dams in our region no longer serve any purpose, but cause a host of problems for local streams. **In one move, dam removal can increase fish diversity, improve water quality and create a safe place for people to enjoy.**





Fall

Topics:

- Leaf collection before a storm protects water quality – Madison case study
- Creating a leaf mold bin
- Where do dragonflies go in the winter?

DONDE DEJAS TUS HOJAS IMPORTA!

Las hojas se caen al suelo creando grandes cantidades de escombros orgánicos. Esto causa dos problemas:

1 Las hojas que son desechadas en la calle pueden **obstruir el desagüe** y causar **inundaciones** locales.

2 Muchas hojas agregan un **exceso de nutrientes** a los ríos. Hojas en descomposición alimentan **algas**. Un crecimiento excesivo de algas... convierte nuestra agua verde y huele mal. **mata a los pescados**

¿Que puedes hacer con tus hojas?

- Participar en el programa de recolección de hojas de su comunidad.
- Fertilizar su pasto naturalmente— triturar sus hojas con su cortacésped.
- Compostar las hojas para usar en su jardín.
- Mantener las calles y el desagüe libre de hojas.

Creado por The Conservation Foundation para el Lower DuPage River Watershed Coalition y el Lower Des Plaines Watershed Group.

Want healthy rivers?

KEEP LEAVES OFF THE STREET!

Leaf collection and street cleaning, especially right before it rains, can **dramatically reduce the amount of nutrients entering local streams.**

Logos: Lower DuPage River Watershed Coalition, Lower Des Plaines Watershed Group

Did you know...?

Some species of dragonflies migrate south for the winter!

Like the Monarch Butterfly, the Green Darner migrates over three generations. The first generation flies south to the Gulf Coast, Florida, or the Caribbean. The second stays in the south without migrating at all. The third generation makes the journey back north!

Photo: Ed Hammer

Logos: Lower DuPage River Watershed Coalition, Lower Des Plaines Watershed Group

Winter – Salt Smart

saltsmart.org

Topics:

- Anti-icing
- How salt works
- Where do fish go in the winter?




SEEING STRIPES?

This technique is called **Anti-Icing**.




Applying a salt brine **before** a storm prevents snow from sticking to the pavement, making clean-up much faster.

Logos: SALT SMART COLLABORATIVE, LOWER DUPAGE RIVER WATERSHED COALITION, LOWER DES PLAINES WATERSHED GROUP



HOW DOES ROAD SALT WORK?

Road salt, or sodium chloride, lowers the freezing point of water. Salt makes ice melt even when the temperature is below water's normal freezing point of 32 degrees.

Above 32° F	32° F	Below 15° F
 water	 ice	 ice
 salt water	 salt water or slush	 ice

Logos: SALT SMART COLLABORATIVE, LOWER DUPAGE RIVER WATERSHED COALITION, LOWER DES PLAINES WATERSHED GROUP



STREAM RESTORATION HELPS FISH SURVIVE THE WINTER!

Fish need specific habitat in the winter: places with warmer, slower water where they can use less energy.

Restoration projects create a variety of habitats so fish can have a home at any time of the year!

Logos: SALT SMART COLLABORATIVE, LOWER DUPAGE RIVER WATERSHED COALITION, LOWER DES PLAINES WATERSHED GROUP



WHERE DO FISH GO IN THE WINTER?

- Many fish gather in deep pools and runs, where the water is warmer and slower.
- Ice at the surface can provide a layer of insulation between the slightly warmer waters below and the colder air above.

Logos: SALT SMART COLLABORATIVE, LOWER DUPAGE RIVER WATERSHED COALITION, LOWER DES PLAINES WATERSHED GROUP

Winter – Salt Smart

Safe Driving Poster/Graphic

Don't Cruise Control
Tires may spin too fast on icy roads and cause you to lose control.

Don't Crowd the Plow
Give plow drivers space to clear the road. Never pass a snow plow.

When There's Snow, Go Slow
Drive slowly through snow to stay in control of your car.

Keep Your Distance
Stopping on ice requires a greater distance. Increase your following distance and begin stopping sooner.

Wait It Out
If it's an option, stay home until the roads are clear.

Build in Extra Time
Clearing off your car and driving safely through the snow adds more time to your commute.

Be Prepared
Keep a winter emergency kit in your trunk. Include items like a blanket, jumper cables, and a small shovel.

Stay Safe on Snowy Streets!
Winter Driving Tips

Snow + Ice Removal FAQ

Salt smart. Save more.

Snow and Ice Removal Frequently Asked Questions

How does salt work to remove snow and ice?
Rock salt, or sodium chloride, works by lowering the freezing point of water, causing ice to melt even when the temperature is below water's normal freezing point of 32 degrees. For the salt to work, a heat source is needed. The heat source can be air temperature above 15 degrees Fahrenheit, heat from the sun or friction from car tires driving over the salt and ice.

When the temperature drops below 15 degrees, rock salt is no longer effective at removing snow and ice. At very low temperatures, use a blend formulated for low temperatures that contains calcium chloride or magnesium chloride to help melt ice.

When will the street in front of my house be plowed?
During a snow storm, road crews generally begin clearing streets according to the following priorities:
First priority street routes – high-volume roadways and access to hospitals, police stations and fire stations.
Second priority street routes – streets that lead directly onto first priority street routes.
Third priority street routes – neighborhood streets and cul-de-sacs.

Why do some streets have less snow and ice when plowing is done?
Snow and ice removal plans try to provide consistent service, but some residential streets will be clearer than others due to certain factors, such as: when during the snow storm it is plowed, the amount of traffic on the road before and after plowing, the pavement temperatures and the type of pavement surface.

Why did I see a truck driving in snow with its blade up?
Sometimes plow trucks need to drive with their blades up. Trucks may drive with blades up when traveling to or from their route locations or maintenance facility in order to drive at normal speeds and avoid wearing out the plow blade when not on routes. Also, some trucks use an underbody blade for smaller snowfalls or spreading deicing materials.

Why is the snow plow operator driving so quickly down my street?
It might appear that snow plows are driving too fast for road conditions. Plows drive at around 25 MPH to efficiently clear snow and ice. The loud sound of plowing, flashing lights on the vehicle, snow discharge and sparks from contact between the plow blade and uneven road roadways may make the plow truck appear to be driving faster than it is.

Why is snow pushed in front of my driveway?
Snow plows are designed to push snow to the side, so it is inevitable for snow to collect at the end of driveways and sidewalks during plowing. Plows will make multiple passes down your street, which can cause additional snow to pile up at the end of your driveway after you have shoveled. Residents are responsible for clearing snow at the end of their driveway and at sidewalk crossings if they have a corner lot. It is illegal to shovel snow back into the roadway as this creates unsafe driving conditions.

If my driveway is plowed in and I shovel the snow back into the street, can crews come by and clean it up?
No. Putting snow back into the street is illegal and unsafe.

saltsmart.org

Bookmark

SALT SMART COLLABORATIVE
SAVE MORE

Together we can protect our local waterways by using the right amount of salt while keeping roads, driveways and sidewalks safe.

4 Steps to Be Salt Smart

- 1 Shovel first.**
Clear all snow from driveways and sidewalks before it turns to ice.
- 2 Size up.**
More salt does not mean more melting. A 12-ounce coffee mug of salt should be enough for 500 sq ft of driveway or about 10 sidewalk squares.
- 3 Spread.**
Distribute salt evenly, not in clumps.
- 4 Switch.**
Rock salt stops working if the temperature is below 15 degrees. When temperatures drop that low, switch to a deicer formulated for colder temperatures.

SALT SMART COLLABORATIVE

Winter – Salt Smart

Cups and bookmarks are available now – contact Jennifer or Lea to put in your order



Scatter cups



Bookmarks

Winter – Salt Smart

New Videos!

A YouTube video player showing a person in winter gear holding a white container. The video title is "More Isn't Always Better | Salt Smart". The video has 39 views, 1 like, and 0 comments. The channel is "Will County Watersheds" and the video is marked as "SUBSCRIBED". The description reads: "Apply salt sparingly this winter to protect the quality of rivers and streams in Illinois. Learn more at <http://saltsmart.org/>".

Fun PSA for Residents

A YouTube video player showing a yellow walk-behind salt spreader in a garage. The video title is "How to Calibrate a Walk Behind Salt Spreader". The video has 45 views, 3 likes, and 0 comments. The channel is "Will County Watersheds" and the video is marked as "SUBSCRIBED". The description reads: "Salt needs to be spread at the correct application rate to effectively melt ice and to prevent wasting resources and water pollution. You'll need to calibrate your broadcast spreader to make sure it's at the right application rate."

Salt Spreader
Calibration Tutorial



Winter Deicing Technical Briefs



Winter Technical Briefs
Mini-Webinar Series

**Reducing Salt With Organics -
The Boost & Reduce Method**
Denver Preston - KTech



Winter Technical Briefs
Mini-Webinar Series

Benefits of Segmented Blades
Scott Weber & Robert Lowth, Village of Hanover Park



Winter Technical Briefs
Mini-Webinar Series

Sourcewell & Cooperative Purchasing
Darren Simon, JX Enterprises - Peterbilt



Winter Technical Briefs
Mini-Webinar Series

The Fine Art of Brine Making
Dan Gilliland, Henderson Products, Inc.



Recordings available at
[Saltsmart.org/workshops](https://saltsmart.org/workshops)
and
"Will County Watersheds"
YouTube Page



Join the Pet Waste Campaign



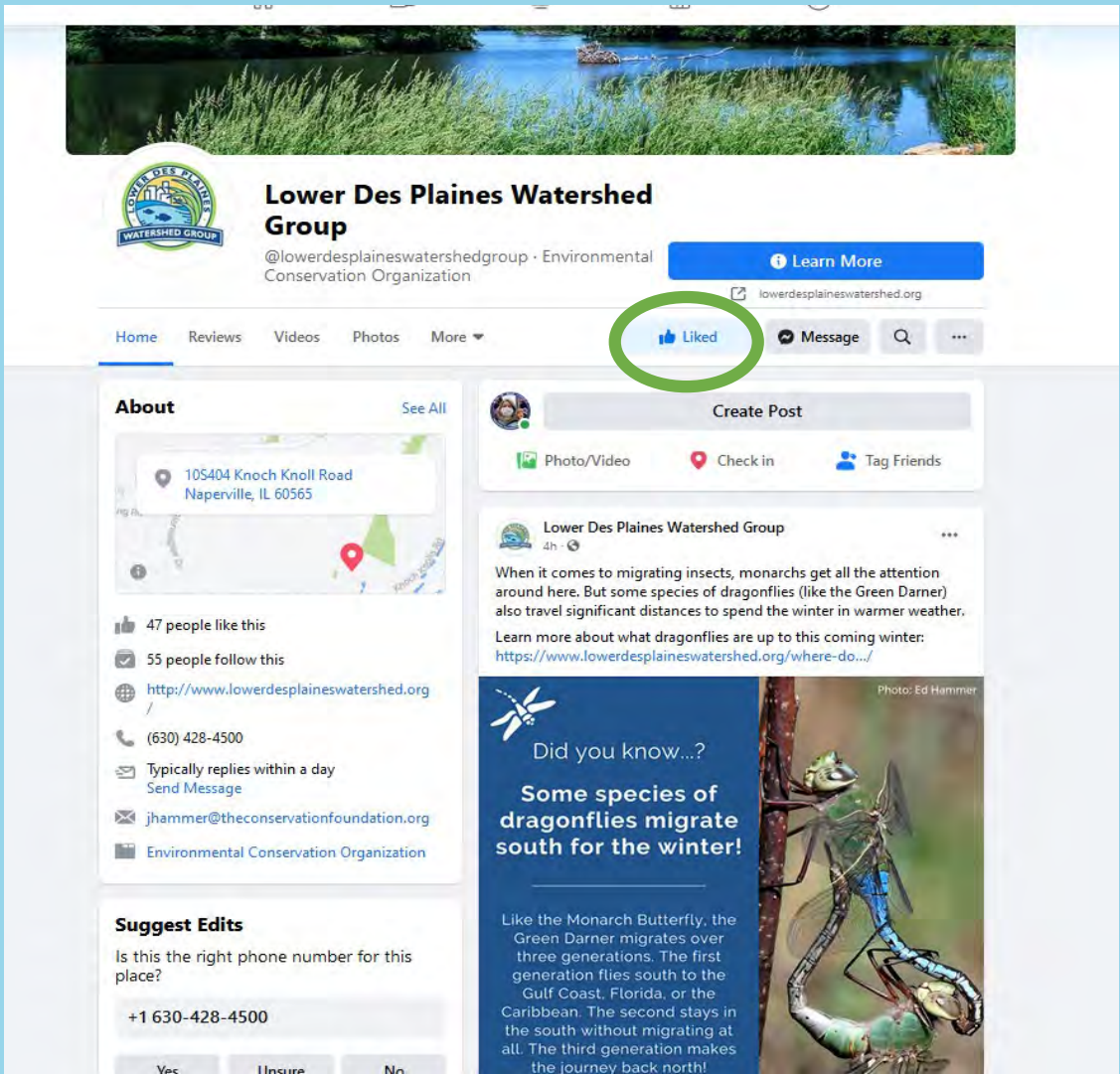
Remind residents to scoop the poop to protect water quality!

- **We Provide:**
 - Sign + Dog Waste Bag Dispenser and bags
 - Or Just Sign(s)
- **You Provide:**
 - Post & Installation – send us a picture
 - Participate in Social Media Campaign

Funded By:
Illinois American Water Environmental Grant



Connect With Us!



Lower Des Plaines Watershed Group
 @lowerdesplainswatershedgroup · Environmental Conservation Organization

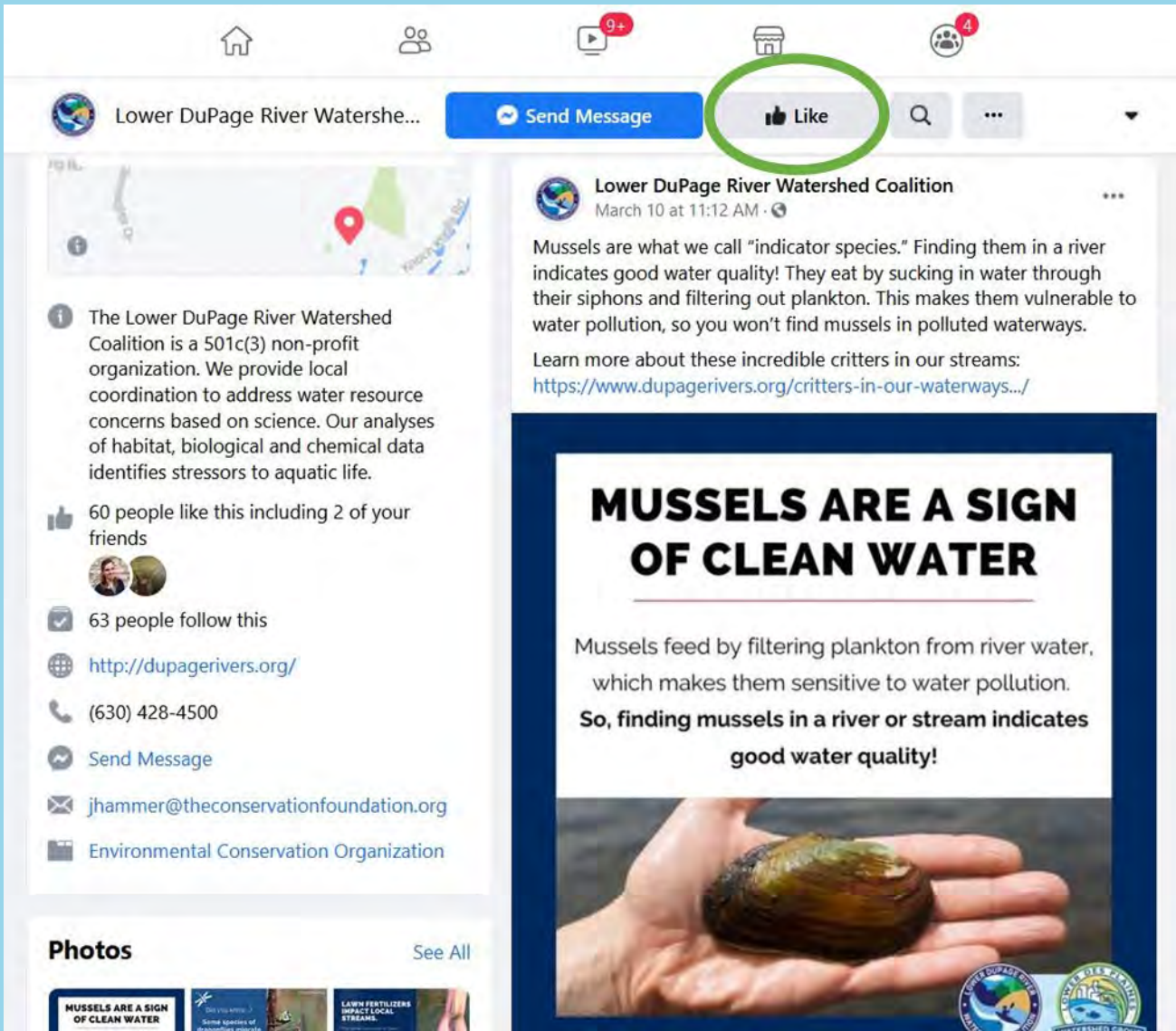
105404 Knoch Knoll Road
Naperville, IL 60565

47 people like this
55 people follow this

Did you know...?
Some species of dragonflies migrate south for the winter!

Like the Monarch Butterfly, the Green Darner migrates over three generations. The first generation flies south to the Gulf Coast, Florida, or the Caribbean. The second stays in the south without migrating at all. The third generation makes the journey back north!

Like (circled in green)



Lower DuPage River Watershed Coalition
 March 10 at 11:12 AM

Mussels are what we call "indicator species." Finding them in a river indicates good water quality! They eat by sucking in water through their siphons and filtering out plankton. This makes them vulnerable to water pollution, so you won't find mussels in polluted waterways.

Learn more about these incredible critters in our streams:
<https://www.dupagerivers.org/critters-in-our-waterways.../>

MUSSELS ARE A SIGN OF CLEAN WATER

Mussels feed by filtering plankton from river water, which makes them sensitive to water pollution.
So, finding mussels in a river or stream indicates good water quality!

Like (circled in green)

60 people like this including 2 of your friends

63 people follow this

<http://dupagerivers.org/>

(630) 428-4500

Send Message

jhammer@theconservationfoundation.org

Environmental Conservation Organization

Photos See All

MUSSELS ARE A SIGN OF CLEAN WATER

LAWN FERTILIZERS IMPACT LOCAL STREAMS



**Lower Des Plaines Watershed Group ILR40 Activities
March 2020 – February 2021**

PART I. COVERAGE UNDER GENERAL PERMITS ILR40

Not applicable to the work of the LDWG.

PART II. NOTICE OF INTENT (NOI) REQUIREMENTS

Not applicable to the work of the LDWG.

PART III. SPECIAL CONDITIONS

Not applicable to the work of the LDWG.

PART IV. STORM WATER MANAGEMENT PROGRAMS

A. Requirements

Not applicable to the work of the LDWG.

B. Minimum Control Measure

1. Public Education and Outreach on Stormwater Impacts

LDWG outreach activities for the year ending 2020 included:

- The LDWG website was maintained during the reporting period and periodically updated (<http://www.lowerdesplaineswatershed.org>).
- A Seasonal Outreach Campaign was implemented throughout year. The “Members” tab on the website includes all past and present seasonal outreach materials for download. Materials for each season include text for websites, newsletters, posters, blogs and social media posts. The website has also been expanded to utilize this information to enhance the experience for visitors to the LDWG website. Campaign specific materials were also developed – *see examples attached at end of report*. For the winter season www.SaltSmart.org website is also used as a clearinghouse of winter BMPs for residents, public agencies and private deicing companies. This website has provided a wider reach beyond the Lower DuPage River watershed and has organically grown into a regional Salt Smart Collaborative.

Seasonal outreach topics:

- Spring – Rain Gardens, Rain Barrels, Using native plants
- Summer – Healthy Lawns, Stream Ecology, Impacts of Dams
- Fall – Proper leaf collection/disposal
- Winter – SaltSmart – Winter Snow & Ice Management BMPs

2. *Public Involvement and Participation* – Due to the Coronavirus pandemic restrictions the LDWG did not attend any in-person events. LDWG did work with members to provide resources on setting up rain barrel sales program and materials to encourage residents to install rain barrels and rain gardens to help minimize stormwater runoff from residential properties. Over 200 rain barrels were sold within the Lower DuPage and Lower Des Plaines watershed areas.

3. *Illicit Discharge Detection and Elimination* – no activities

4. *Construction Site Storm Water Runoff Control* - no activities

5. *Post-Construction Stormwater Management in New Development and Redevelopment* - no activities

6. *Pollution Prevention/Good Housekeeping for Municipal Operations*

Chloride Reduction Workshops

In the past several years, deicing workshops have been held separately by The Conservation Foundation in partnership with Kane County, the DuPage River Salt Creek Workgroup, and the Lower DuPage River Watershed Coalition in partnership with Lower Des Plaines Watershed Group. In 2020, it was decided that these groups would collaborate and host the webinars jointly.

During the reporting period, three chloride reduction workshops and four technical webinar briefs were held. Due to precautions necessitated by the Coronavirus pandemic, the workshops were held in a webinar format. Registration was also made available to agencies in McHenry, Lake and Cooks counties as their usual deicing workshops were not being held. Accordingly, the webinars were attended by staff in DuPage, Will, Kane, Kendall, Lake, McHenry and Cook counties.

Public Roads Deicing Workshops were held on October 1 and October 14, 2020. Fortin Consulting, Inc. from Minnesota was engaged to present the material. A registration fee was required per agency in order view the webinar. The links were sharable so the webinars could be viewed individually or in groups. A poll was taken at the beginning of each webinar asking how many persons were in the room. The polling results indicated that there were 280 persons viewing the Oct. 1 webinar and 190 persons viewing the Oct. 14th webinar for a total of 470

Figure 1. Deicing Workshops Registration Form, 2020.



attendees for the Public Roads webinars. Certificates of attendance were provided to those who requested them. Evaluation surveys were sent to the persons who logged in to the webinars. A link to the *Minnesota Snow and Ice Control: Field Book for Snowplow Operators* was provided to each registrant.

On October 8, 2020 the Parking Lots and Sidewalks Deicing Workshop webinar was held with Fortin Consulting, Inc. presenting. The polling results indicated that there were 123 persons viewing the webinar. Certificates of attendance were provided to those who requested them. Evaluation surveys were sent to the persons who logging in to the webinars. A link to the *Minnesota Pollution Control Agency Winter Parking Lot & Sidewalk Maintenance Manual* was provided to each registrant.

Figure 2. Welcome & Introduction to Parking Lots & Sidewalks Presentation, 2020.



Questions from participants were entered into the chat and answered by Fortin Consulting staff, Workgroup staff as well as others participating in the training. A summary of all links provided during the training as well as other links added to the chat were captured and provided to the participants after the webinar.

Figure 3. Links from webinar presentation and chat, 2020.



October 2020 Winter Deicing Workshop Links

- Roads manual - <http://www.mnltap.umn.edu/publications/handbooks/documents/snowice.pdf>
- State-by-state Winter Maintenance Statistics - <https://clearroads.org/winter-maintenance-survey/>
- Well 14 - <https://www.cityofmadison.com/water/insidemwu/saving-madison-from-salt-1>
- "The Real Cost of Salt Use" Report - <https://www.pca.state.mn.us/sites/default/files/wq-11-06bb.pdf>
- Stormwater Research at St. Anthony Falls Laboratory, "Urban Stormwater Ponds can be a Source of Phosphorus" - <http://stormwater.safi.umn.edu/updates-newsletters/updates-april-2018>
- The Skinny on water softeners - <https://www.pca.state.mn.us/skinny-water-softeners>
- Clear Roads - <https://clearroads.org> <https://clearroads.org/materials-liquid-materials/>
- For the Model Snow and Ice Policy (for municipal operations) - <https://www.pca.state.mn.us/sites/default/files/p-tr1-51a.pdf>
- Model Municipal Ordinances - <https://www.pca.state.mn.us/sites/default/files/p-tr1-54.pdf>
- Model Private Contract (for hiring private contractors) - <https://www.pca.state.mn.us/sites/default/files/p-tr1-52a.pdf>
- Salt Smart Collaborative www.saltsmart.org
- Calibrating Manual Sanders <https://www.pca.state.mn.us/sites/default/files/roadsalt-calibratingmanualsanders.pdf>
- Watch this later for calibration! City of Shorewood Hills Calibration Video - <http://www.youtube.com/watch?v=LEt9-tut-es&t=0m29s>
- Illinois Department of Transportation - www.gettingaroundillinois.com
- Information on Henderson's Brine makers <http://www.hendersonproducts.com/brinextreme-advantage.html>
- Information on Henderson's Liquid Application Systems <http://www.hendersonproducts.com/liquid-ice-control-systems.html> Rob Florio Henderson Products rflorio@hendersonproducts.com or Chris Fack cfack@hendersonproducts.com or call/text (847)754-5035
- Ag by-product Liquids Effectiveness - http://clearroads.org/wp-content/uploads/dlm_uploads/FR_CR-13-02_Revised.pdf
- Salt Brine Blending to Optimize Deicing and Anti-Icing Performance - <http://www.dot.state.mn.us/research/documents/201220.pdf>
- More isn't always better - https://www.youtube.com/watch?v=pYm1aTn_ApE
- Deicing Application Rates for two-lane road - <https://fortinconsulting.com/wp-content/uploads/2018/04/Road-Deicing-App-Chart-Master-Copy.pdf>
- Chute design - http://www.dot.state.mn.us/maintenance/files/salt_sustainability/saltchute.pdf
- The Small Sites YouTube video is at <https://v637p.app.goo.gl/uAbZaBSPeW8fP1wx9>
- "Smart Salting for Sustainability" by AASHTO - <https://sicop.transportation.org/2020/09/14/episode-40-smart-salting-for-sustainability/>
- 4-page summary of Statewide Chloride Mgmt. Plan - <https://www.pca.state.mn.us/sites/default/files/wq-s1-94a.pdf>
- Twin Cities Metropolitan Area Chloride Management Plan - <https://www.pca.state.mn.us/sites/default/files/wq-11-06ff.pdf>
- Smart salting schedule: <https://www.pca.state.mn.us/water/smart-salting-training-calendar>
- <https://www.eco-pem.com/pvpsum-remediate-saline-sodic-soils/>
- Iowa DOT liquid spread pattern presentation from the 2020 Salt Symposium: <https://fortinconsulting.com/wp-content/uploads/2020/08/Bob-Ellis-Jeff-Vanderzaag-Winter-Maintenance.pdf>
- 2020 Salt Symposium presentations: <https://fortinconsulting.com/salt-symposium-2020-presentations/>



To complement the Winter Deicing Workshops, the Winter Technical Briefs – Mini-Webinar Series was presented to focus on specific issues. Topics in 2020 included: October 20 – Reducing Salt With Organics: The Boost & Reduce Method, October 27 – Sourcewell & Cooperative Purchasing, November 10 – Benefits of Segmented Blades and November 17 – The Fine Art of Brine Making. Staff also worked with local partners to create a training video on how to calibrate a walk behind salt spreader. These webinars and training video are posted on at www.saltsmart.org.

Figure 4. Winter Technical Briefs, 2020.



Qualifying State, Country or Local Program

Not applicable to the work of the LDWG.

C. Sharing Responsibility

This report outlines the activities conducted by the LDWG on behalf of its’ members related to the implementation of the ILR40 permit. It is the responsibility of the individual ILR40 permit holders to utilize this information to fulfill the reporting requirements outlined in Part V.C. of the permit.

D. Reviewing and Updating Stormwater Management Programs

Not applicable to the work of the LDRWC.

PART V. MONITORING, RECORDKEEPING, AND REPORTING

A. Monitoring

The ILR40 permit states that permit holders “must develop and implement a monitoring and assessment program to evaluate the effectiveness of the BMPs being implemented to reduce pollutant loadings and water quality impacts”. The LDWG will began a monitoring program in the summer of 2018 that meets the following monitoring objectives and requirements outlined in the permit:

- Measuring pollutants over time
- Sediment monitoring

- Assessing physical and habitat characteristics such as stream bank erosion caused by storm water discharges
- Collaborative watershed-scale monitoring
- Ambient monitoring of total suspended solids, total nitrogen, total phosphorus, fecal coliform, and chlorides

The first round of bioassessment monitoring was completed in 2018 at the twenty-nine (29) identified sites on the mainstem Des Plaines River from the confluence with the Kankakee River up to the I-355 bridge. The remaining thirty-three (33) mainstem sites were scheduled for sampling in 2019. As stated in the 2019 Annual Report, sampling was not completed in 2019 due to unsafe, high water conditions. A subset of fifteen (15) stations was resampled in 2020, all data collected on the mainstem (2018, 2019 and 2020) will be compiled in a report that will be available in late 2021. In addition to the mainstem Des Plaines River sites, forty (40) sites were sampled across the Hickory Creek watershed. The Bioassessment Report for Hickory Creek is also expected in late 2021. Plans to sample the remaining fifteen (15) tributaries will be completed in 2021 with a Bioassessment Report due in late 2022. Details of the bioassessment program are below.

BIOASSESSMENT

A biological and water quality survey, is an interdisciplinary monitoring effort coordinated on a waterbody specific or watershed scale. This may involve a relatively simple setting focusing on one or two small streams, one or two principal stressors, and a handful of sampling sites or a much more complex effort including entire drainage basins, multiple and overlapping stressors, and tens of sites. The LDWG bioassessment is the latter.

The LDWG bioassessment program continued in 2020 resampling a subset of the 2019 mainstem Des Plaines River stations. Based on remaining budget, fifteen (15) stations we chosen for the resampling effort. All of the data collected on the mainstem Des Plaines River in 2018, 2019 and 2020 will be analyzed together and compiled into a single report due in late 2021.

Also sampled in 2020 was the forty (40) stations in the Hickory Creek watershed. The number of stations was reduced from the originally planned fifty (50) sites after field reconnaissance determined some sites to be dry, impoundments, or inaccessible. See table below for complete sampling schedule. The Bioassessment includes fish, macroinvertebrate, QHEI – habitat and water chemistry at all sites and sediment sampling at a subset of sites.

Table 1 – Bioassessment Sampling Schedule

Watershed	Year Sampled	# of Stations
Lower mainstem Lower Des Plaines River	2018	29
Upper mainstem Lower Des Plaines River + northern tributaries	2019	33 – aborted due to high water
Upper mainstem Lower Des Plaines River resample subset	2020	15
Hickory Creek subwatershed	2020	40
Remaining Tributaries	2021	56

The LDWG bioassessment program utilizes standardized biological, chemical, and physical monitoring and assessment techniques employed to meet three major objectives:

- 1) determine the extent to which biological assemblages are impaired (using IEPA guidelines);
- 2) determine the categorical stressors and sources that are associated with those impairments; and,
- 3) add to the broader databases for the Des Plaines River watershed to track and understand changes through time in response to abatement actions or other influences.

The data collected as part of the bioassessment is processed, evaluated, and synthesized as a biological and water quality assessment of aquatic life use status. The assessments are directly comparable to previously conducted bioassessments such that trends in status can be examined and causes and sources of impairment can be confirmed, amended, or removed. A final report containing a summary of major findings and recommendations for future monitoring, follow-up investigations, and any immediate actions that are needed to resolve readily diagnosed impairments is prepared following each bioassessment. The bioassessment reports will be posted on the LDWG website. It is not the role of the bioassessments to identify specific remedial actions on a site specific or watershed basis.

Sampling sites for the bioassessment were determined systematically using a geometric design supplemented by the bracketing of features likely to exude an influence over stream resource quality, such as CSOs, dams and wastewater outfalls. The geometric site selection process starts at the downstream terminus or “pour point” of the watershed (Level 1 site), then continues by deriving each subsequent “panel” at descending intervals of one-half the drainage area (D.A.) of the preceding level. Thus, the drainage area of each successive level decreases geometrically. This results in seven drainage area levels in each of the three watersheds, starting at the largest (150 sq. mi) and continuing through successive panels of 75, 38, 19, 9, 5 and 2 sq. mi. Targeted sites are then added to fill gaps left by the geometric design and assure complete spatial coverage in order to capture all significant pollution gradients including reaches that are impacted by wastewater treatment plants (WWTPs), major stormwater sources, combined sewer overflows (CSOs) and dams. The number of sampling sites by method/protocol and watershed are listed in Table 1 and illustrated in Figure 1. Field reconnaissance will be needed to confirm suitability of sites prior to sampling season.

Representativeness – Reference Sites

Data is collected from selected regional reference sites in northeastern Illinois preferably to include existing Illinois EPA and Illinois DNR reference sites, potentially being supplemented with other sites that meet the Illinois EPA criteria for reference conditions. One purpose of this data will be to index the biological methods used in this study that are different from Illinois EPA and/or DNR to the reference condition and biological index calibration as defined by Illinois EPA. In addition, the current Illinois EPA reference network does not yet include smaller headwater

streams, hence reference data is needed to accomplish an assessment of that data. Presently thirteen (13) reference sites have been established.

The bioassessment sampling includes four (4) sampling methods/protocols: biological sampling, Qualitative Habitat Evaluation Index (QHEI), water column chemical/physical parameter sampling and sediment chemistry. The biological sampling includes two assemblages: fish and macroinvertebrates.

FISH

Methodology

Methods for the collection of fish at wadeable sites was performed using a tow-barge or longline pulsed D.C. electrofishing apparatus (MBI 2006b). A Wisconsin DNR battery powered backpack

electrofishing unit was used as an alternative to the long line in the smallest streams (Ohio EPA 1989). A three-person crew carried out the sampling protocol for each type of wading equipment sampling in an upstream direction. Sampling effort was indexed to lineal distance and ranged from 150-200 meters in length. Non-wadeable sites were sampled with a raft-mounted pulsed D.C. electrofishing device in a downstream direction (MBI 2007). Sampling effort was indexed to lineal distance over 0.5 km. Sampling was conducted during a June 15-October 15 seasonal index period.

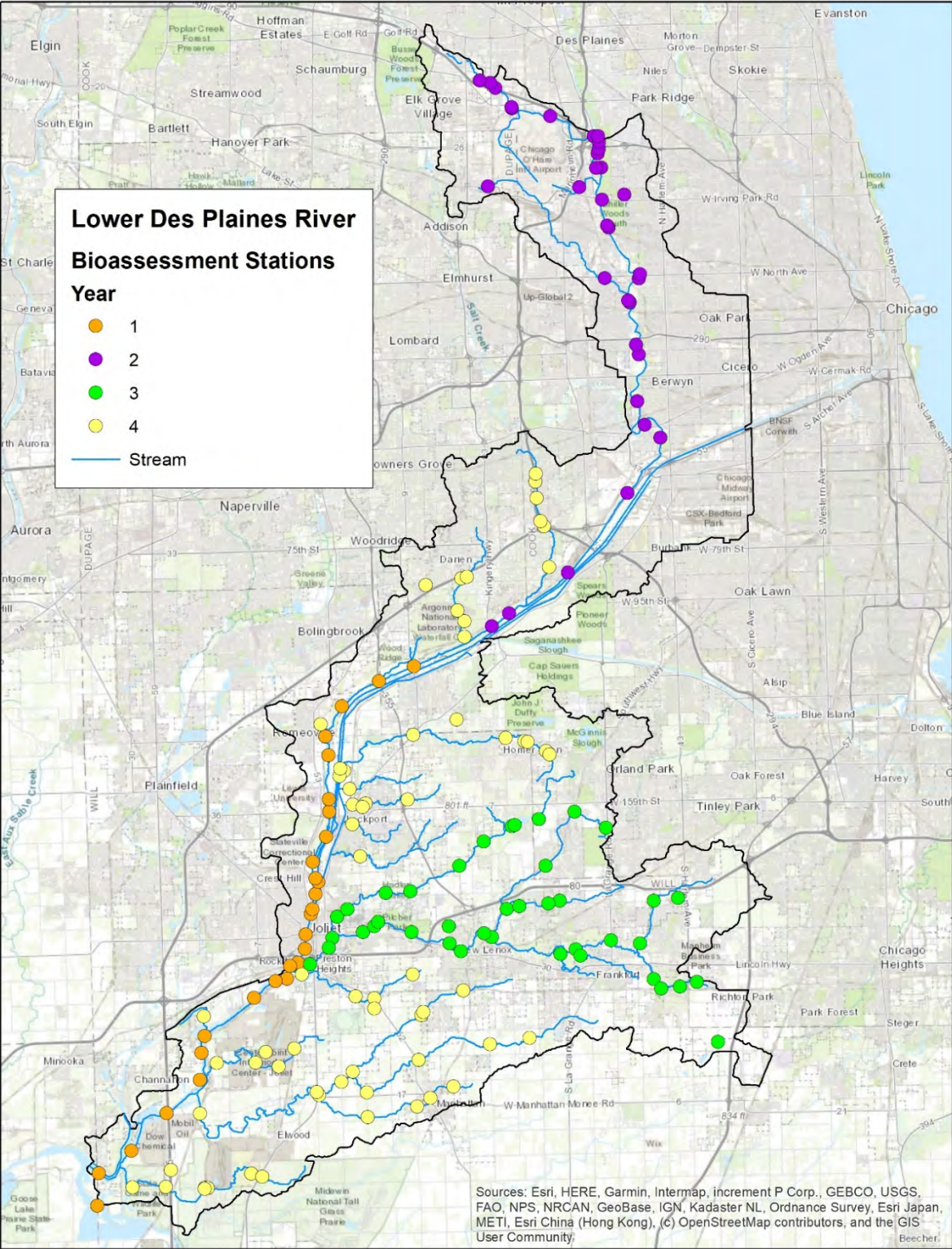
Samples from each site were processed by enumerating and recording weights by species and by life stage (y-o-y, juvenile, and adult). All captured fish were immediately placed in a live well, bucket, or live net for processing. Water was replaced and/or aerated regularly to maintain adequate D.O. levels in the water and to minimize mortality. Fish not retained for voucher or other purposes were released back into the water after they had been identified to species, examined for external anomalies, and weighed either individually or in batches. While the majority of captured fish were identified to species in the field, any uncertainty about the field identification required their preservation for later laboratory identification. Identification was made to the species level at a minimum and to the sub-specific level if necessary. Vouchers were deposited and verified at The Ohio State University Museum of Biodiversity (OSUMB) in Columbus, OH.

MACROINVERTEBRATES

Methodology

The macroinvertebrate assemblage is sampled using the Illinois EPA (IEPA) multi-habitat method (IEPA 2005). Laboratory procedures followed the IEPA (2005) methodology for processing multi-habitat samples by producing a 300-organism subsample with a scan and pre-pick of large and/or rare taxa from a gridded tray. Taxonomic resolution is performed to the lowest practicable resolution for the common macroinvertebrate assemblage groups such as mayflies, stoneflies, caddisflies, midges, and crustaceans, which goes beyond the genus level requirement of IEPA (2005). However, calculation of the macroinvertebrate IBI followed IEPA methods in using genera as the lowest level of taxonomy for mIBI calculation and scoring.

Figure 5. Lower Des Plaines River Bioassessment Stations. Year represents order of sampling within bioassessment 5-year cycle.



HABITAT

Methodology

Physical habitat was evaluated using the Qualitative Habitat Evaluation Index (QHEI) developed by the Ohio EPA for streams and rivers in Ohio (Rankin 1989, 1995; Ohio EPA 2006b) and as modified by MBI for specific attributes. Attributes of habitat are scored based on the overall importance of each to the maintenance of viable, diverse, and functional aquatic faunas. The type(s) and quality of substrates, amount and quality of instream cover, channel morphology, extent and quality of riparian vegetation, pool, run, and riffle development and quality, and gradient used to determine the QHEI score which generally ranges from 20 to less than 100. QHEI scores and physical habitat attribute were recorded in conjunction with fish collections.

Chemistry

Methodology

Water column and sediment samples are collected as part of the LDWG bioassessment programs. The number of samples collected at each site is largely a function of the site’s drainage area with the frequency of sampling increasing as drainage size increases. Grab sample is taken at center of flow. Temperature, dissolved oxygen, pH and conductivity are sampled in the field. Sediment sampling is done at a subset of 158 sites using the same procedures as IEPA.

The parameters sampled for are included in Table 2 and can be grouped into demand parameters, nutrients, demand, metals and organics. All sampling occurs between May and October of the sample year.

Table 2 Water Quality and sediment Parameters sampled as part of the LDWG Bioassessment Program.

Water Quality Parameters	Sediment Parameters
<p>Demand Parameters 5 Day BOD Chloride Conductivity Dissolved Oxygen pH Temperature Total Dissolved Solids Total Suspended Solids</p> <p>Nutrients Ammonia Nitrogen/Nitrate Nitrogen – Total Kjeldahl Phosphorus, Total Chlorophyll-a (new in 2020)</p> <p>Metals Cadmium Lead Calcium Magnesium Copper Zinc Iron</p>	<p>Sediment Metals Arsenic Barium Cadmium Chromium Copper Iron Lead Manganese Nickel Potassium Selenium Silver Zinc</p> <p>Sediment Organics Organochlorine Pesticides PCBS Percent Moisture Semi-volatile Organics Volatile Organic Compounds</p>

Fecal Coliform

In 2020 fecal coliform was collected at ten (10) sites, three (3) on the Des Plaines River and seven (7) in the Hickory Creek Watershed. Grab samples were collected at center of flow five (5) times within a thirty (30) day period. Results from the fecal coliform sampling can be found below in Table 3.

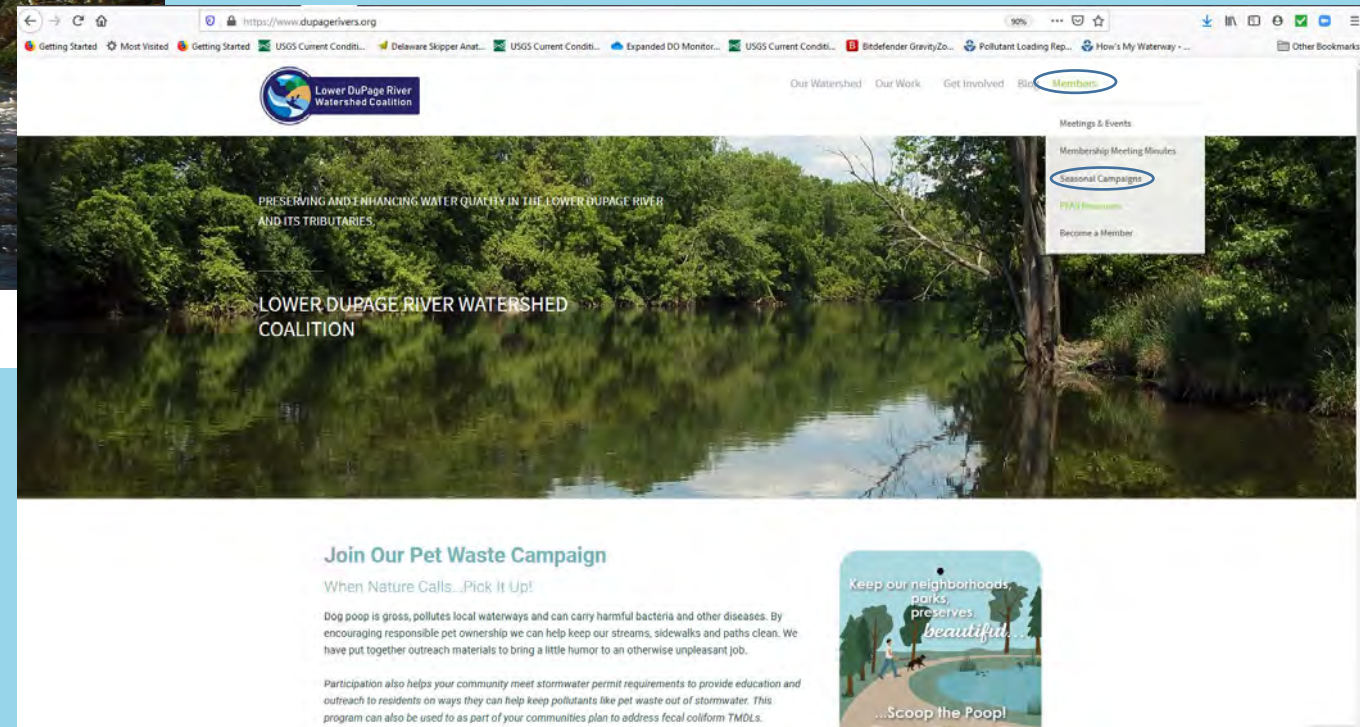
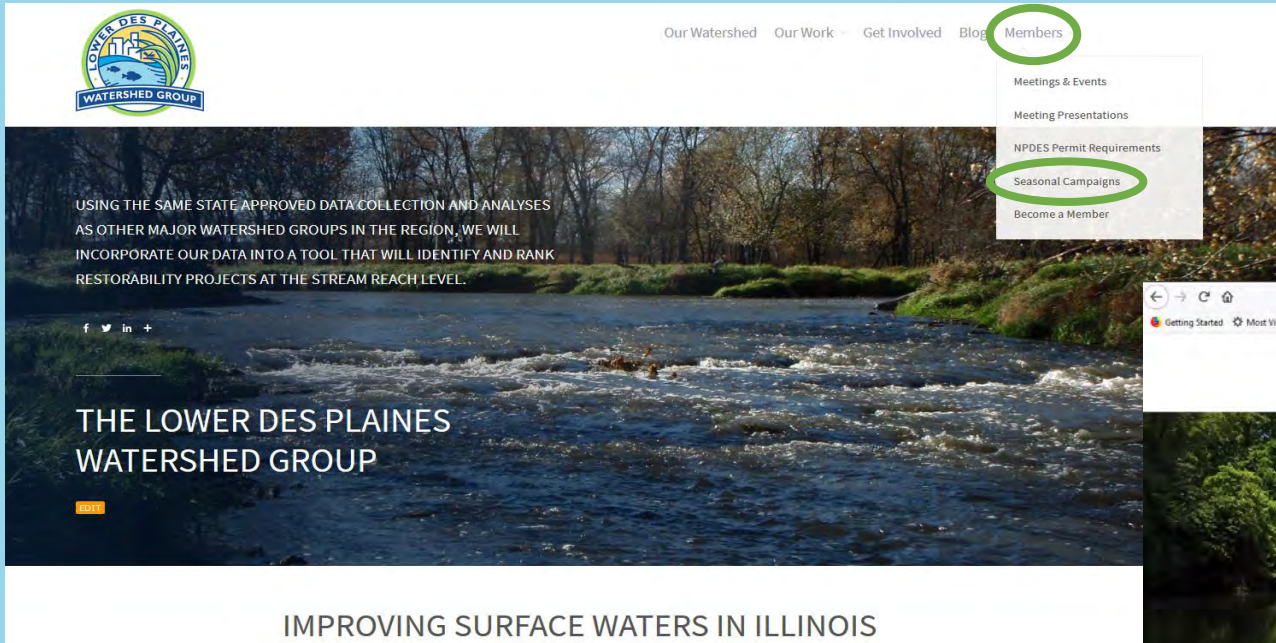
Table 3. 2020 Fecal Coliform data. Results in Colony Forming Units (CFU)

Station ID	Location	9/22/2020	9/28/2020	10/6/2020	10/8/2020	10/12/2020
Des Plaines River						
LDG03	DS of I-55 Bridge	<50	<50	<50	<50	<50
LDG12	US McDonough Street	<50	<50	<50	<50	50
LDG14	US Ruby Street	<50	250	<50	50	50
Hickory Creek						
LDGG01	DS South Joliet Street	50	<50	100	50	150
LDGG03	US Miller Avenue	2250	1200	100	50	150
LDGG11	US Marley Road	50	<50	<50	<50	<50
Spring Creek						
LDGGA01A	DS Washington Street	200	400	50	<50	<50
LDGGA07	DS Parker Road	<50	<50	<50	<50	<50
Marley Creek						
LDGGB01	DS West Regan Road	150	50	<50	<50	<50
Union Ditch						
LDGGC01	DS Pedestrian Bridge off Walnut Creek Drive	50	<50	<50	<50	<50



2020 Watershed Outreach Summary

2020 Outreach Materials



lowerdesplaineswatershed.org/seasonal-campaigns
dupagerivers.org/seasonal-campaigns



Spring

Topics:

- Stormwater runoff
- Rain gardens
- Rain barrels



STORMWATER RUNOFF

Rain that does not absorb into the ground becomes runoff that picks up pollutants as it travels across lawns and roads. **The polluted runoff eventually travels through storm drains into our local waterways and contaminates the water.**



WHAT IS A RAIN GARDEN?

A "Rain Garden" is simply a shallow depression in your yard that's planted with native plants that are accustomed to wet conditions. Rain gardens help to collect and filter rainwater and allow it to seep naturally into the ground.



Summer

Topics:

- Lawn maintenance
- Components of a healthy stream
- Aquatic insects
- Impact of dams

Reduce mosquitos at home by removing places where mosquitos like to breed.

Eliminate sources of shallow, standing water from around your home. Some common places where mosquitos like to lay their eggs include buckets, empty gardening containers, wheelbarrows, car tires and pet water bowls.




TAKE CARE OF YOUR LAWN NATURALLY

Don't mow too low.
Mowing a lawn too short exposes surface roots and dries out the soil faster. In general, try not to mow more than 1/3 of the height of the grass at a time.

Use a mulching mower.
Mulching mowers leave behind shredded grass clippings that act as compost to fertilize your lawn without adding chemicals.

Consider native plant landscaping.
This will reduce the amount of lawn on your property, requiring less fertilizer, watering and mowing. Native plants also provide habitat for beneficial birds and butterflies.



The more diverse a stream's physical habitat is, the more diverse the aquatic life that live there.

Different fish and insects need different types of habitat.

A variety of habitat in and around a stream - from pools and riffles to native plant buffers - encourages a diversity of fish and insects.




Why remove dams?

Most dams in our region no longer serve any purpose, but cause a host of problems for local streams. **In one move, dam removal can increase fish diversity, improve water quality and create a safe place for people to enjoy.**





Fall

Topics:

- Leaf collection before a storm protects water quality – Madison case study
- Creating a leaf mold bin
- Where do dragonflies go in the winter?

DONDE DEJAS TUS HOJAS IMPORTA!

Las hojas se caen al suelo creando grandes cantidades de escombros orgánicos. Esto causa dos problemas:

1 Las hojas que son desechadas en la calle pueden **obstruir el desagüe** y causar **inundaciones** locales.

2 Muchas hojas agregan un **exceso de nutrientes** a los ríos. Hojas en descomposición alimentan **algas**. Un crecimiento excesivo de algas... **convierte nuestra agua verde y huele mal** **mata a los pescados**

¿Que puedes hacer con tus hojas?

- Participar en el programa de recolección de hojas de su comunidad.
- Fertilizar su pasto naturalmente—triturar sus hojas con su cortacésped.
- Compostar las hojas para usar en su jardín.
- Mantener las calles y el desagüe libre de hojas.

Creado por The Conservation Foundation para el Lower DuPage River Watershed Coalition y el Lower Des Plaines Watershed Group.

Want healthy rivers?

KEEP LEAVES OFF THE STREET!

Leaf collection and street cleaning, especially right before it rains, can **dramatically reduce the amount of nutrients entering local streams.**

Logos: Lower DuPage River Watershed Coalition, Lower Des Plaines Watershed Group

Did you know...?

Some species of dragonflies migrate south for the winter!

Like the Monarch Butterfly, the Green Darner migrates over three generations. The first generation flies south to the Gulf Coast, Florida, or the Caribbean. The second stays in the south without migrating at all. The third generation makes the journey back north!

Photo: Ed Hammer

Logos: Lower DuPage River Watershed Coalition, Lower Des Plaines Watershed Group

Winter – Salt Smart

Topics:

- Anti-icing
- How salt works
- Where do fish go in the winter?



SEEING STRIPES?

This technique is called **Anti-Icing**.

Applying a salt brine **before** a storm prevents snow from sticking to the pavement, making clean-up much faster.

Logos: SALT SMART COLLABORATIVE, LOWER DUPAGE RIVER WATERSHED COALITION, LOWER DES PLAINES WATERSHED GROUP



HOW DOES ROAD SALT WORK?

Road salt, or sodium chloride, lowers the freezing point of water. Salt makes ice melt even when the temperature is below water's normal freezing point of 32 degrees.

Above 32° F	32° F	Below 15° F
 water	 ice	 ice
 salt water	 salt water or slush	 ice

Logos: SALT SMART COLLABORATIVE, LOWER DUPAGE RIVER WATERSHED COALITION, LOWER DES PLAINES WATERSHED GROUP



STREAM RESTORATION HELPS FISH SURVIVE THE WINTER!

Fish need specific habitat in the winter: places with warmer, slower water where they can use less energy.

Restoration projects create a variety of habitats so fish can have a home at any time of the year!

Logos: SALT SMART COLLABORATIVE, LOWER DUPAGE RIVER WATERSHED COALITION, LOWER DES PLAINES WATERSHED GROUP



WHERE DO FISH GO IN THE WINTER?

- Many fish gather in deep pools and runs, where the water is warmer and slower.
- Ice at the surface can provide a layer of insulation between the slightly warmer waters below and the colder air above.

Logos: SALT SMART COLLABORATIVE, LOWER DUPAGE RIVER WATERSHED COALITION, LOWER DES PLAINES WATERSHED GROUP

Winter – Salt Smart

Safe Driving Poster/Graphic

Don't Cruise Control
Tires may spin too fast on icy roads and cause you to lose control.

Don't Crowd the Plow
Give plow drivers space to clear the road. Never pass a snow plow.

When There's Snow, Go Slow
Drive slowly through snow to stay in control of your car.

Keep Your Distance
Stopping on ice requires a greater distance. Increase your following distance and begin stopping sooner.

Wait It Out
If it's an option, stay home until the roads are clear.

Build in Extra Time
Clearing off your car and driving safely through the snow adds more time to your commute.

Be Prepared
Keep a winter emergency kit in your trunk. Include items like a blanket, jumper cables, and a small shovel.

Stay Safe on Snowy Streets!
Winter Driving Tips

Snow + Ice Removal FAQ

Salt smart. Save more.

Snow and Ice Removal Frequently Asked Questions

How does salt work to remove snow and ice?
Rock salt, or sodium chloride, works by lowering the freezing point of water, causing ice to melt even when the temperature is below water's normal freezing point of 32 degrees. For the salt to work, a heat source is needed. The heat source can be air temperature above 15 degrees Fahrenheit, heat from the sun or friction from car tires driving over the salt and ice.

When the temperature drops below 15 degrees, rock salt is no longer effective at removing snow and ice. At very low temperatures, use a blend formulated for low temperatures that contains calcium chloride or magnesium chloride to help melt ice.

When will the street in front of my house be plowed?
During a snow storm, road crews generally begin clearing streets according to the following priorities:
First priority street routes – high-volume roadways and access to hospitals, police stations and fire stations.
Second priority street routes – streets that lead directly onto first priority street routes.
Third priority street routes – neighborhood streets and cul-de-sacs.

Why do some streets have less snow and ice when plowing is done?
Snow and ice removal plans try to provide consistent service, but some residential streets will be clearer than others due to certain factors, such as: when during the snow storm it is plowed, the amount of traffic on the road before and after plowing, the pavement temperatures and the type of pavement surface.

Why did I see a truck driving in snow with its blade up?
Sometimes plow trucks need to drive with their blades up. Trucks may drive with blades up when traveling to or from their route locations or maintenance facility in order to drive at normal speeds and avoid wearing out the plow blade when not on routes. Also, some trucks use an underbody blade for smaller snowfalls or spreading deicing materials.

Why is the snow plow operator driving so quickly down my street?
It might appear that snow plows are driving too fast for road conditions. Plows drive at around 25 MPH to efficiently clear snow and ice. The loud sound of plowing, flashing lights on the vehicle, snow discharge and sparks from contact between the plow blade and uneven road roadways may make the plow truck appear to be driving faster than it is.

Why is snow pushed in front of my driveway?
Snow plows are designed to push snow to the side, so it is inevitable for snow to collect at the end of driveways and sidewalks during plowing. Plows will make multiple passes down your street, which can cause additional snow to pile up at the end of your driveway after you have shoveled. Residents are responsible for clearing snow at the end of their driveway and at sidewalk crossings if they have a corner lot. It is illegal to shovel snow back into the roadway as this creates unsafe driving conditions.

If my driveway is plowed in and I shovel the snow back into the street, can crews come by and clean it up?
No. Putting snow back into the street is illegal and unsafe.

saltsmart.org

Bookmark

SALT SMART COLLABORATIVE
SAVE MORE

Together we can protect our local waterways by using the right amount of salt while keeping roads, driveways and sidewalks safe.

4 Steps to Be Salt Smart

- 1 Shovel first.**
Clear all snow from driveways and sidewalks before it turns to ice.
- 2 Size up.**
More salt does not mean more melting. A 12-ounce coffee mug of salt should be enough for 500 sq ft of driveway or about 10 sidewalk squares.
- 3 Spread.**
Distribute salt evenly, not in clumps.
- 4 Switch.**
Rock salt stops working if the temperature is below 15 degrees. When temperatures drop that low, switch to a deicer formulated for colder temperatures.

SALT SMART COLLABORATIVE

Winter – Salt Smart

Cups and bookmarks are available now – contact Jennifer or Lea to put in your order



Scatter cups



Bookmarks

Winter – Salt Smart

New Videos!

A YouTube video player showing a person in winter gear holding a white container. The video title is "More Isn't Always Better | Salt Smart". The video has 39 views, 1 like, and 0 comments. The channel is "Will County Watersheds" and the video is marked as "SUBSCRIBED". The description reads: "Apply salt sparingly this winter to protect the quality of rivers and streams in Illinois. Learn more at <http://saltsmart.org/>".

Fun PSA for Residents

A YouTube video player showing a yellow walk-behind salt spreader in a garage. The video title is "How to Calibrate a Walk Behind Salt Spreader". The video has 45 views, 3 likes, and 0 comments. The channel is "Will County Watersheds" and the video is marked as "SUBSCRIBED". The description reads: "Salt needs to be spread at the correct application rate to effectively melt ice and to prevent wasting resources and water pollution. You'll need to calibrate your broadcast spreader to make sure it's at the right application rate."

Salt Spreader
Calibration Tutorial



Winter Deicing Technical Briefs



Winter Technical Briefs
Mini-Webinar Series

**Reducing Salt With Organics -
The Boost & Reduce Method**
Denver Preston - KTech



Winter Technical Briefs
Mini-Webinar Series

Benefits of Segmented Blades
Scott Weber & Robert Lowth, Village of Hanover Park



Winter Technical Briefs
Mini-Webinar Series

Sourcewell & Cooperative Purchasing
Darren Simon, JX Enterprises - Peterbilt



Winter Technical Briefs
Mini-Webinar Series

The Fine Art of Brine Making
Dan Gilliland, Henderson Products, Inc.



Recordings available at
[Saltsmart.org/workshops](https://saltsmart.org/workshops)
and
"Will County Watersheds"
YouTube Page



Join the Pet Waste Campaign



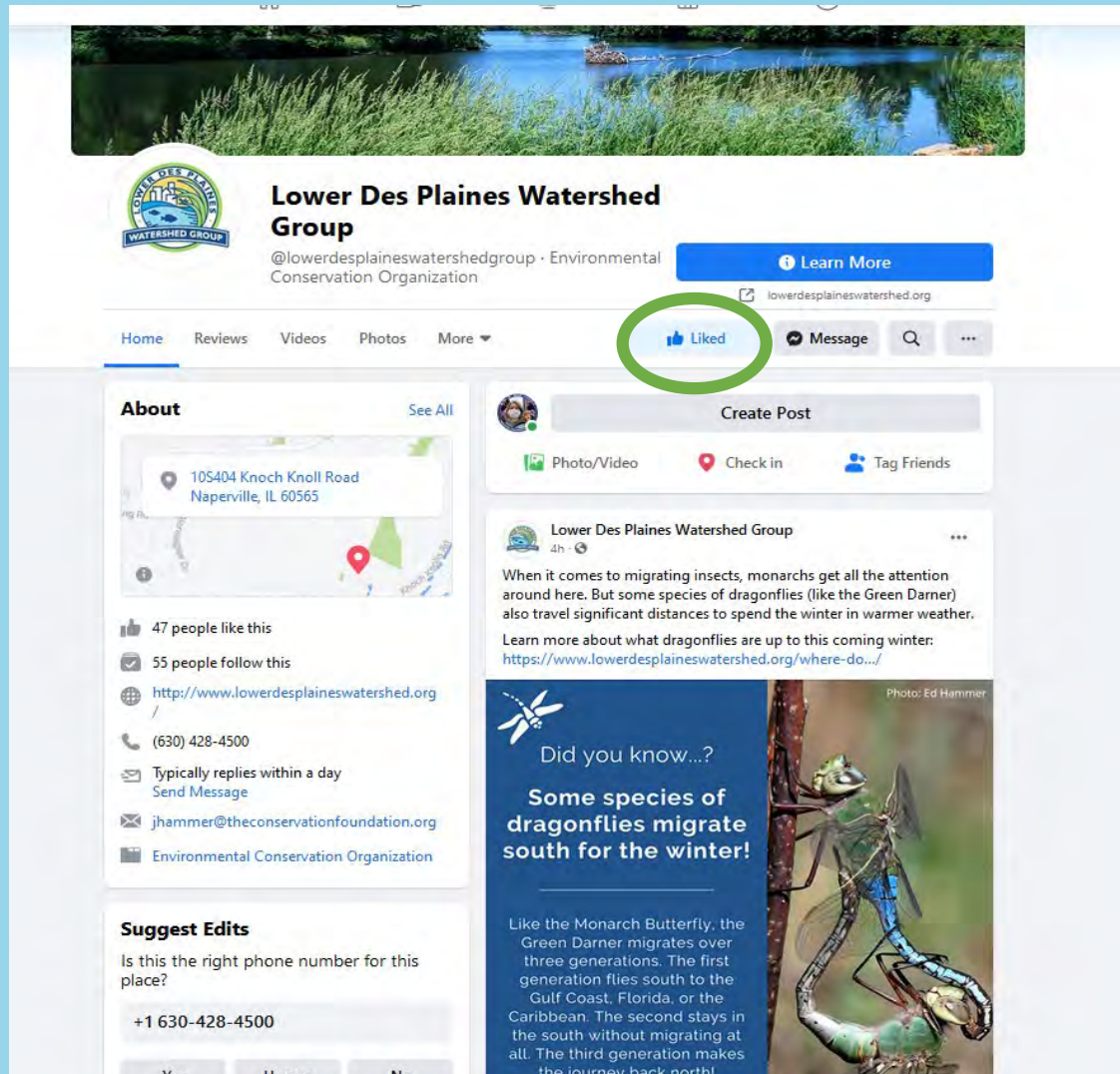
Remind residents to scoop the poop to protect water quality!

- **We Provide:**
 - Sign + Dog Waste Bag Dispenser and bags
 - Or Just Sign(s)
- **You Provide:**
 - Post & Installation – send us a picture
 - Participate in Social Media Campaign

Funded By:
Illinois American Water Environmental Grant



Connect With Us!



Lower Des Plaines Watershed Group
 @lowerdesplainswatershedgroup · Environmental Conservation Organization

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105404 Knoch Knoll Road
Naperville, IL 60565

47 people like this
55 people follow this

<http://www.lowerdesplainswatershed.org/>

(630) 428-4500

Typically replies within a day
Send Message

jhammer@theconservationfoundation.org

Environmental Conservation Organization

Suggest Edits

Is this the right phone number for this place?

+1 630-428-4500

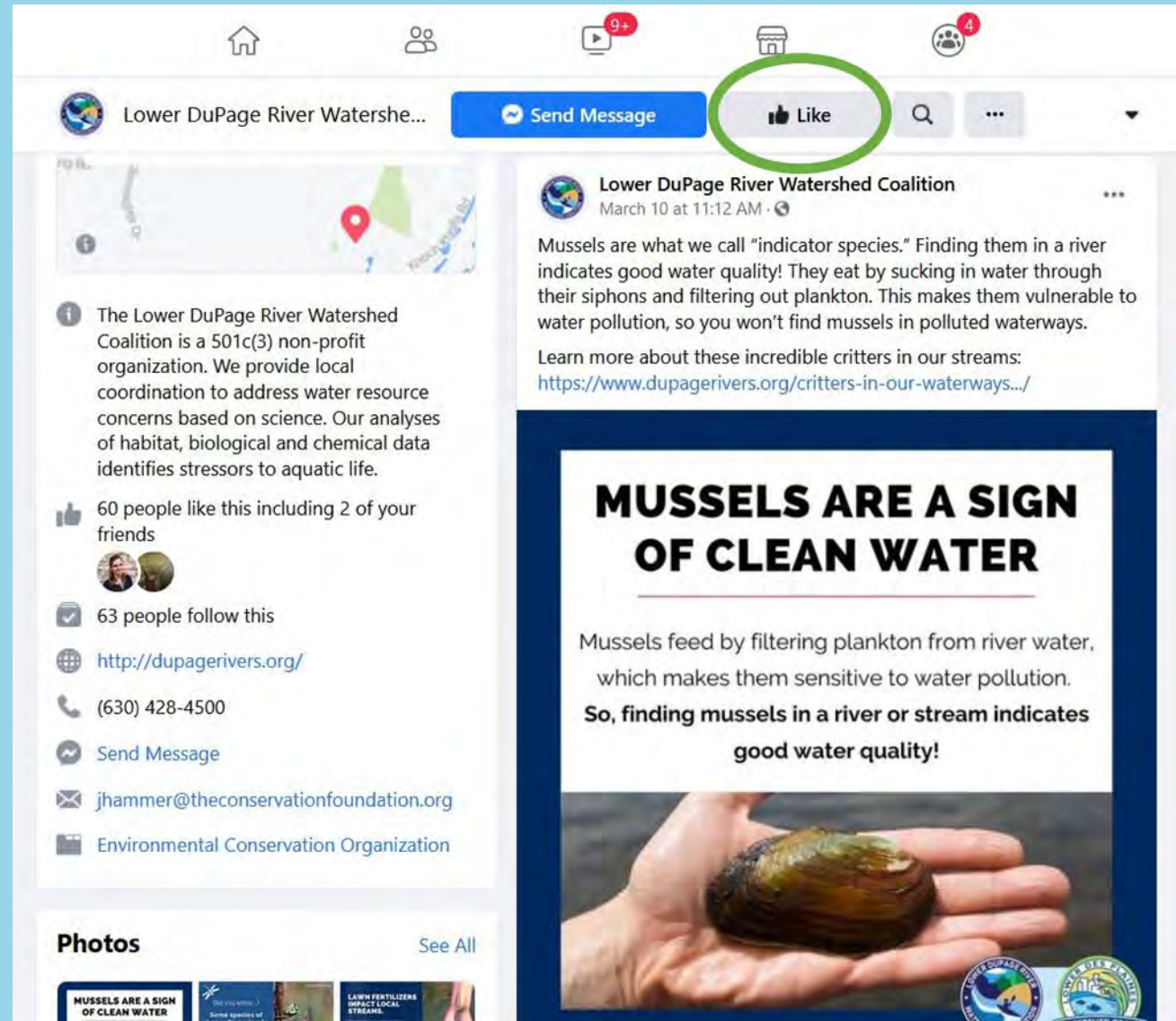
Yes Unsure No

Did you know...?

Some species of dragonflies migrate south for the winter!

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Photo: Ed Hammer



Lower DuPage River Watershe... Send Message Like

Lower DuPage River Watershed Coalition
 March 10 at 11:12 AM

Mussels are what we call "indicator species." Finding them in a river indicates good water quality! They eat by sucking in water through their siphons and filtering out plankton. This makes them vulnerable to water pollution, so you won't find mussels in polluted waterways.

Learn more about these incredible critters in our streams:
<https://www.dupagerivers.org/critters-in-our-waterways.../>

MUSSELS ARE A SIGN OF CLEAN WATER

Mussels feed by filtering plankton from river water, which makes them sensitive to water pollution. So, finding mussels in a river or stream indicates good water quality!

60 people like this including 2 of your friends

63 people follow this

<http://dupagerivers.org/>

(630) 428-4500

Send Message

jhammer@theconservationfoundation.org

Environmental Conservation Organization

Photos See All

MUSSELS ARE A SIGN OF CLEAN WATER

Some species of dragonflies migrate south for the winter!

LAWN FERTILIZERS IMPACT LOCAL STREAMS.