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, 2015 To March, 2016

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 ☐
2. Public Participation/Involvement ☐
3. Illicit Discharge Detection & Elimination ☐
4. Construction Site Runoff Control ☐
5. Post-Construction Runoff Control ☐
6. Pollution Prevention/Good Housekeeping ☐

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: Date: 05-31-16

Donald R. Kinzler, PE, CFM
Printed Name:

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

A-1

These hand outs were given to 268 new residents in the packet. Were also available @ counter approx 50 each.

EPA
United States Environmental Protection Agency

EPA 841-F-03-003

Protecting Water Quality *from* URBAN RUNOFF

A-1

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.

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?

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 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.

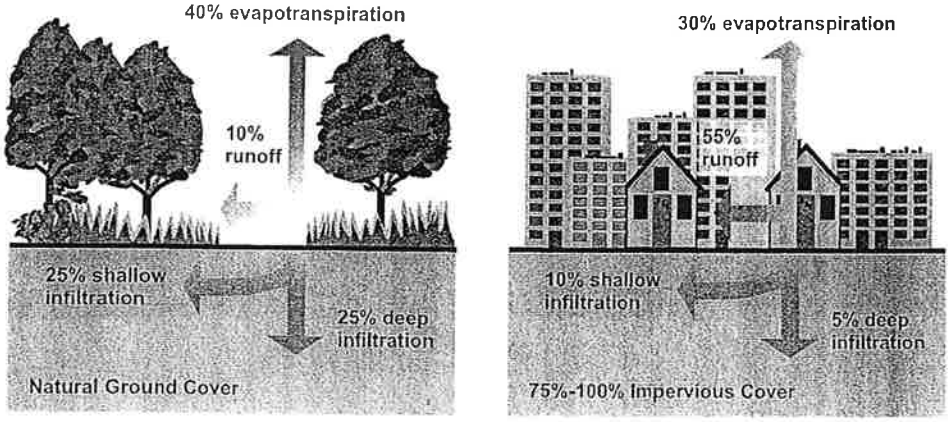
The loss of infiltration from urbanization may also cause profound groundwater changes. Although urbanization leads to great increases in flooding during and immediately after wet weather, in many instances it results in lower stream flows during dry weather. Many native fish and other aquatic life cannot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

These pollutants can harm fish and wildlife populations, kill native vegetation, foul drinking water supplies, and make recreational areas unsafe and unpleasant.



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

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.

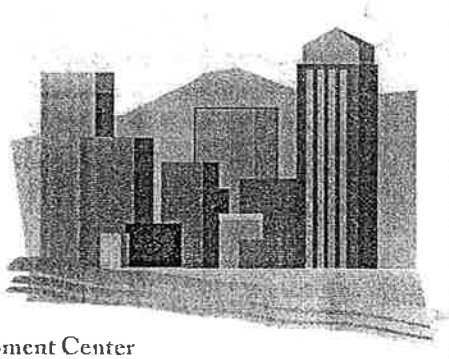
In addition, households can prevent polluted runoff by picking up after pets and using, storing, and disposing of chemicals properly. Drivers should check their cars for leaks and recycle their motor oil and antifreeze when these fluids are changed. Drivers can also avoid impacts from car wash runoff (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

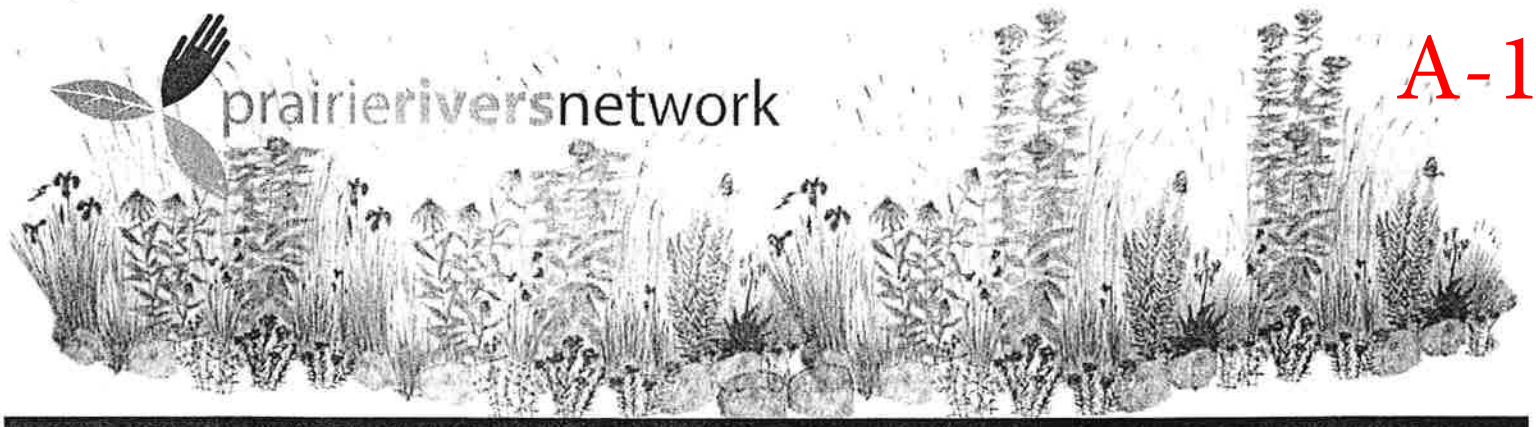
U.S. Environmental Protection Agency
Nonpoint Source Control Branch (4503T)
1200 Pennsylvania Avenue, NW
Washington, DC 20460

www.epa.gov/nps

February 2003

prairieriversnetwork

A-1



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

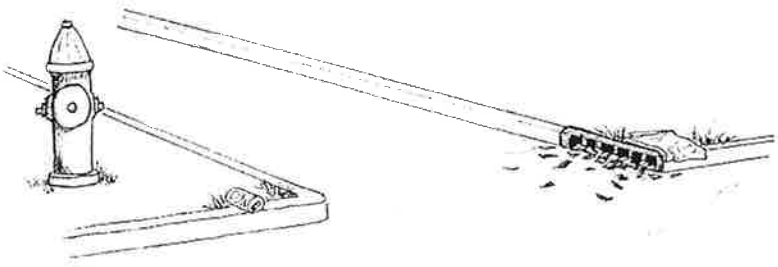
Rain gardens provide a number of benefits:

- 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.



PLANTS FOR SUN AND SHADE

SUNNY GARDEN

Common Name	Height	Color	Bloom Time
Blue Flag Iris	2-3'	Blue	May-Jun
Cardinal Flower	2-4'	Red	Jul-Sep
Golden Alexander	1-2'	Yellow	May-Jun
Great Blue Lobelia	2-4'	Blue	Aug-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
Black Snakeroot	4-9'	White	Jun-Jul
Bottlebrush Grass	2-5'	Green	Jun-Aug
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

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. In the spring and fall, 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:

Wisconsin Department of Natural Resources' "Rain gardens: A how-to manual" (http://dnr.wi.gov/org/water/wm/nps/rg/rgmanual.pdf)

North Carolina State Cooperative Extension's "Designing rain gardens (bio-retention areas)" (http://www.engr.uga.edu/service/outreach/Stormwater%20BMP/BioretentionOverview.pdf)

This rain garden brochure is a product of Prairie Rivers Network, Illinois' statewide river conservation organization.

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

This brochure was made possible by donations from the following sponsors:

BLUE Illinois — Building a Lasting University Environment
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CITY OF URBANA
Savoy

Floribunda Gardens
Oswego, IL
630-554-4688
www.floribundagardens.com

The Natural Garden, Inc.
St. Charles, IL
630-584-0150
www.thenaturalgardeninc.com

Possibility Place Nursery
Monee, IL
708-534-3988
www.possibilityplace.com

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

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 during unusually strong storms and 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

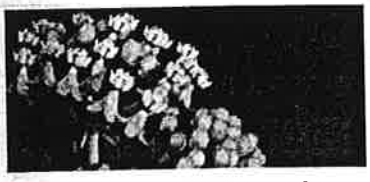
- Use native species because they are adapted to local conditions, benefit wildlife, have deep root systems, and are often perennial
- Avoid species that are aggressive or exotic
- Choose plants with different bloom times so the rain garden remains colorful during the growing season
- Remove existing 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

BASIC STEPS FOR CREATING A RAIN GARDEN

1. Choose a location
2. Determine rain garden size
3. Call JULIE
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.

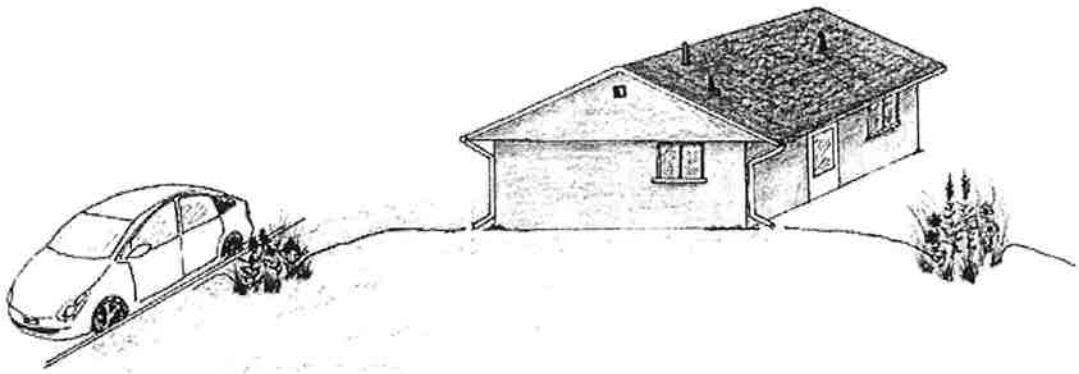
SELECTING A LOCATION FOR THE RAIN GARDEN

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, flower beds, and swales along roads or sidewalks. Avoid spots that are unlikely to receive storm water from upstream or uphill surfaces.

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 spot for a rain garden is an existing depression where water collects but also filters 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

A6/B6

Village Posts	Website Hits	Facebook Hits
Fall Leaf Collection	20	1.2K
Dead Ash Tree Removal	31	1.4K
VOC Grinding Tree Stumps	16	734
Sanitary Sewer Improvements	11	573
2015 MFT Road Maintenance	20	1.3K
2015 CERT Class	21	263
River Sampling Day	5	341
Spraypatching May 11 & June 19	6	144
CRF Asphalt Seal Coating	12	405
2015 EAB Detection Map	-	200
E-Waste Event	-	205
Order Forms for 2015 Spring Tree Sale	56	279
Spring Cleanup Event	15	245
Emerald Ash Tree Removal	31	416
Christmas Tree Pick-Up	5	100
Yard Waste Begins	28	131
2015 Water Reports Available	6	-
Channahon Spring Tree Sale	56	-
Rain Barrels for Sale	15	-
CRF Asphalt Seal Coating Before & After Photos	11	-
CRF Asphalt Seal Coating- Update	9	-

Village Website Pages	Website Hits
Village Services	222
Public Works	164
Tree Board	110
Memorial Tree Walk	106
Tree Replacement Program	93
Ongoing Construction and Projects	93
Approved Parkway Tree Planting Guide	62
Planting of Parkway Tree Permits	30
DuPage River Bridge Construction	974
Home Page	11,888
Total Hits for year	61,906

A6/B6

Cable View Opportunities per 24 hr Cycle*

80 slides in rotation, each slide is shown for 17 seconds (typical).

24 hr = 86,400 s

86,400 s ÷ 17 s = 5,082 slide views

5,082 slide views ÷ 80 slides = 63.5 views/slide

63.5 views/slide x 17 s/view = 1,080 s/slide = 18 min of view time per slide

* Actual Cable View Opportunities can vary due to cable service outages, total number of slides in rotation, etc.

B-1

Grundy County
Land Use Department
1320 Union Street
Morris, IL 60450
(815) 941-3229
(815) 941-3432 (fax)

STORMWATER ORDINANCE COMMITTEE MEETING
FRIDAY, FEBRUARY 19, 2016
7:30 AM CONFERENCE ROOM 1 AND 2
GRUNDY COUNTY ADMINISTRATIVE BUILDING

I. Roll Call

II. Committee Approval of the Stormwater Ordinance Draft to County Board for Final Decision

III. Adjournment – Next meeting Tuesday April 19, 2016 at 3:30 PM

Stormwater Commission

Date: 2/16/16

Lname	Fname	Address	City	Email	Phone	Cell Phone
Alderson	Richard	Box 67	South Wilmington		815-237-2848	
Boresi	Doug	215 West Fox Street	Coal City	dboresi@grundyco.org	815-634-2668	
Breisch	Bob	701 East Street	Mazon		815-448-2236	815-252-2239
Duffy	Dan	121 E. McEvilly Road	Minooka	dan.duffy@minooka.com	815-467-2151	
Dyer	Millie	623 First Avenue	Morris	mdyer@grundyco.org	815-942-5068	
Fritz	Matt	515 S. Broadway Street	Coal City	ccadmin@prairienet.net	815-634-2081	
Gill	Ann	710 Pheasant Lane	Coal City	agill@grundyco.org	815-634-0686	
Joyce	Richard	495 North Garfield	Coal City	joyces90@comcast.net	815-634-4521	
Kinzler	Don	24555 S. Navajo Drive	Channahon	dkinzler@channahon.org	815-467-6644	815-791-0034
Kopczick	Richard	700 N. Division	Morris	mayordick@city.mornet.org	815-942-5438	
Rasmusson	Eric	2425 W. Gore Rd.	Morris	erasmussen@grundyco.org	815-530-6580	
Welter	David	2008 Mountain Rd.	Morris	dwelter@grundyco.org	815-941-3424	

Jeff - Mazon RW.

Doug Prior

Friday Feb. 19 7:30 AM

C-1

Village of Channahon

Outfall Location Map

Legend

Final Outfalls
(60 TOTAL)

1:12,000

MAY 2016

1:100,000

C-2/F-2

Don Kinzler

From: Bruce Vaickus
Sent: Friday, May 13, 2016 7:51 AM
To: Don Kinzler
Subject: Re: NPDES Annual Report Data

Don,

Street sweeping occurred twice during the above period. April 13 to the 17th (52 lane miles)

And November 16th to the 20th (52 Lane miles)

Please have Sharon run reports for work orders. She will be able to print out all storm sewer, ditch work, curb work and the like for what you need..Training included sprayer applicator training in the right of way (32 hours) Mosquito abatement in storm sewers and swamp areas (32 hours).

On Thu, May 5, 2016 at 8:48 AM, Don Kinzler <dkinzler@channahon.org> wrote:

To All,

It's that time of year again. I am completing the Village's NPDES-MS4 Permit (stormwater discharges) Annual Report due June 1st so I need information by Friday, May 20th. The IEPA closely regulates this permit with virtually annual audits and, when warranted, they will increase audit frequency, make surprise inspections, issue disciplinary actions, etc.

Our program was audited by the IEPA this past March and was very well received largely due to the data all of you are able to provide.

Please take the time to look carefully for this information:

- **The reporting period is from March 1, 2015 to February 28, 2016.**

- **Everyone**: I need documentation of anyone's training during the reporting period whereby the subject matter would have even a remote impact on stormwater runoff or ecological benefit. These would include:

  - Erosion and sediment control seminars.

  - PW training such as salt spreading or construction methods, etc.

  - Training on PW equipment counts; better operators have less impact on what gets to the storm sewer or ditch.

  - Emergency response management or hazardous materials training for **PD** or **others**?

  - Documentation can be a VOC signed seminar authorization and payment, a "certificate" with your name on it, an attendance pad from the seminar/meeting, etc.

A fine of $250 per day as provided by Ordinance 51.99 and beginning today, August 19, 2015 is hereby imposed until the following conditions have been met with Village personnel present:

- Disconnection and removal of 8" PVC from Village storm structure and easement.
- Plug ≥ 2 feet of 8" PVC end with hydraulic cement or non-shrink grout.
- Repair storm structure with hydraulic cement or non-shrink grout.

Further, a building permit for connection to Village water and sanitary sewer will not be issued prior to completion of corrections and payment of outstanding fines.

Please contact me at 815-467-6644 with any questions.

Sincerely,

Donald Kinzler, P.E., CFM
Engineering Project Manager

Cc: Ed Dolezal, Director of Public Works
Mike Petrick, Development Director
Steve Stanick, Homeowner

C-2

Stormwater Outfall Inspection Data Form

Section 1: Background Data

Subwatershed: NorthField Block	Outfall ID: ~~X~~ 1 (one)
Date: 10/13/15	Time (Military): 1350
Temperature: 61°F	Inspector(s): Gordon
Previous 48 Hours Precipitation: 0	Photo's Taken (Y/N) If yes, Photo Numbers:

Land Use in Drainage Area (Check all that apply):

- ☒ Industrial
- ☐ Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: NorthField Block

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
Storm Sewer (Closed Pipe)	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Clay / draintile ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: ____	☒ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 36"	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
Open drainage (swale/ditch)	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other:	☐ Trapezoid ☐ Parabolic ☐ Other:		Depth: Top Width: Bottom Width:	

Section 3: Physical Indicators

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

Flow Present?	☐ Yes ☒ No	**If No, Skip to Section 7 and Close Illicit Discharge Investigation**
Flow Description	☐ Trickle ☐ Moderate ☐ Substantial	

D-4

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

May 11, 2015

Stephen M. Shanholtzer, P.E.
Manahard Consulting, Ltd.
700 Springer Dr.
Lombard, IL 60148

RE: Thornton's Development Final Engineering Review 2

Dear Mr. Shanholtzer:

The Village of Channahon has completed its review of the Engineering submittal for the Thornton's Fuel Center and Convenience Store.

The Village of Channahon has received and reviewed:

- *Site Improvement Plans* prepared by Manhard Consulting, Ltd., dated REV 04-08-15.
- *Roadway Improvement Plans- US Route 6 and Frontage Road* prepared by Manhard Consulting, Ltd., dated REV 03-05-15.
- *Final Plat of Thornton's Subdivision* prepared by Manhard Consulting, Ltd. dated REV 03-25-15.
- *Preliminary Landscape Plan* prepared by Manhard Consulting, dated REV 02-27-15.
- *Supplemental Storm Sewer Calculations* prepared by Manhard Consulting, Ltd.
- *Turning Analysis* prepared by Manhard Consulting, Ltd.
- *IEPA Application for Sewer Construction Permit* prepared by Manhard Consulting, Ltd.
- *Sanitary Sewage Flow Analysis* prepared by Manhard Consulting, Ltd., dated 03-12-15
- *IEPA Division of Public Water Supply Application for Construction Permit* prepared by Manhard Consulting, Ltd.
- *EOPC Road Improvement Plans* prepared by Manhard Consulting, Ltd.
- *EOPC Site Improvement Plans* prepared by Manhard Consulting, Ltd.

Please direct the applicant to provide a written response to these comments (including VOC comments) and (3) three copies of full size site plans, Frontage Rd. plans and Final Plat of Subdivision, and 2 copies of all other materials submitted for review.

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

1. **General**

1.1 Deferred. *According to the site plan, the William C. Wunderlich property has not yet been obtained by the developer. Improvements to Route 6 and the off-site utilities cannot be completed without this property. Please provide a current status of this acquisition.*

Engineer: *The developer is scheduled to close on the Wunderlich Property...*

VOC: No action required at this time. Please provide verification of property ownership when available.

1.3 Conditionally Compliant. *Provide separate Engineer's Opinion of Probable Cost for site and Frontage Rd. improvements.*

Onsite EOPC: Provide unit costs and quantities for the following construction items:

- Connection to existing sanitary stub
- Drop connections
- Sanitary MH, mandrel, and air testing
- Connection to existing watermain stub
- 12" gate valve in vaults
- Water service with corporation stop, curb stop, valve box
- Watermain pressure testing
- Watermain chlorination and testing
- Stone rip rap with fabric for two FES
- 84" Storm MG w/frame & lid (Overflow Structure)
- Street maintenance/cleaning
- Erosion controls – silt dikes, storm structure protections I & II, stand pipes, concrete washout facilities
- Landscaping for detention basin
- Record drawing filed survey and plan submittal

Note: Storm sewer materials specific to convenience store/fuel station construction were removed.

Road Work EOPC: Provide unit costs and quantities for the following construction items:

- Adjustments to water and sanitary structures on Rt. 6
- Street maintenance/cleaning
- Concrete washout facilities
- New streetlights
- Regulatory street signs
- Street name signs
- PCC sidewalk for ADA ramps
- Detectible warnings
- Record drawing filed survey and plan submittal

1.4 Repeat Comment. *Submit a Storm Water Pollution Prevention Plan with certifications and signatures.*

Engineer: *A SWPPP and NOI have been...submitted to the IEPA. Attached is a copy of the correspondence letter for Village Records.*

VOC: Submit a copy of the SWPPP to the Village.

1.9 RI-RO and other entrance improvements should be shown in grayscale on site improvement plans as it is our understanding they are proposed to be constructed with Roadway Improvement Plans.

1.10 Provide an engineer's Drainage Certificate on the Title Sheet.

Site Improvement Plans

3. Overall Layout (Sheet 2)

3.3 *Provide sidewalk connections for both proposed and future improvements to the bike path and between businesses to give safe pedestrian access throughout the site. Attached is a general design example.*

Engineer: *...proposed sidewalk connections have been specified...it shall be understood that the site plan for the future phases shall be considered conceptual.*

VOC: The Village understands and agrees.

5. Site Dimensional and Paving Plan (Sheets 4 & 5)

5.8 Remove note 9 and provide necessary details in these plans.

6. Utility Plan (Sheets 7 & 8)

6.1 Compliant. *Add a note stating the sanitary sewer extension crossing the frontage road to the northeast shall be completed prior to construction of the frontage road.*

VOC: Please add same note for watermain crossing the frontage road.

6.4 Conditionally Compliant. *Provide a callout for sanitary manhole #2.*

Engineer: *A callout has been provided for Sanitary Manhole No. 2.*

VOC: Provide an invert for the SW connection.

6.16 Repeat Comment. *Maximize placement of watermain in the landscape median between future hotel & restaurant and truck fueling/parking lot.*

Engineer: *The proposed watermain loop has been removed from the Final Engineering Plan. This loop shall not be necessary based on the scope of Phase 1 and Phase 2 improvements. The future watermain configuration has been specified on the approved Preliminary Engineering Plans, and that document shall govern all future development plans.*

VOC: Approved preliminary engineering shows watermain located in landscaped areas as requested. Move watermain bends, valve vault and stub 20 feet further northeast to align with proposed future parking; add fire hydrant to end of stub.

6.22 Provide utility crossing information for sanitary main crossing over watermain between SMH-1 & 2.

6.23 There appears to be a conflict between SMH-1 and existing sanitary forcemain. Please adjust design or provide a construction detail for this area. Although connection to the existing stub was preferred, a core and boot connection on north side of existing MH should be considered.

6.24 Provide an 8" valve in vault extending west near HYD-7 for future watermain loop connection without shutdown of 12" watermain.

6.25 Call out sanitary drop connections for SMH-2 & 4 on this sheet.

6.26 The service stub from SMH-4 drop connection will be in conflict with watermain. Please adjust the sanitary service to > 1.5 ft beneath watermain (preferred) or lower watermain.

6.27 Show all proposed utility easement boundaries on these sheets.

6.28 Call out water service size to proposed convenience store.

6.29 It is recommended that the 6" gutter drain from the semi-truck fueling station be connected to a storm manhole.

6.30 The bottom of the Utility Crossings table on sheet 8 is cut off.

6.31 Revise note to replace or install chimney seals per "SPECIFICATIONS" or "DETAIL AND SPECIFICATIONS" for all... Also see comment 12.7.

6.32 Remove utility note 12 or call out where concrete collars are required.

6.33 Consider if the note regarding an IDOT Permit for work in the Frontage Rd. ROW is needed as this ROW will be dedicated to the Village.

7. Grading Plan (Sheets 9 & 10)

7.6 Grading Notes have been blotted out on these sheets.

7.7 "GRADING PLAN (PHASE 1 OF 2)" is missing from title block on sheet 9.

7A. Soil Erosion & Sediment Control Plan (Sheets 11 & 12)

7A.1 Add a silt dike in swale between the SW corner of the underground detention vault and the frontage road, Sheet 11.

7A.2 Add a silt dike in swale SE of FES-28. Move west silt dyke for this same area closer to sediment trap, Sheet 11.

7A.3 Provide silt fence barrier for FES-28, Sheet 12.

10. Offsite Sanitary and Water Main Plan and Profile (Sheet 14)

10.4 There appears to be a conflict between SMH-1 and existing sanitary forcemain. Please adjust design or provide a construction detail for this area. Although connection to the existing stub was preferred, a core and boot connection on north side of existing MH should be considered.

10.5 The service stub from SMH-4 drop connection will be in conflict with watermain. Please adjust the sanitary service to > 1.5 ft beneath watermain (preferred) or lower watermain.

10.6 Remove note 2, or revise to install chimney seals per "SPECIFICATIONS" or "DETAIL AND SPECIFICATIONS." Also see comment 12.7.

10.7 Note 2: chimney seal detail not on sheet 11.

11. Onsite Sanitary Service Plan and Profile (Sheet 15)

11.2 Show existing and proposed sanitary sewer, force main and water main in RI-RO and Convenience Store Frontage plan views.

11.5 SMH-2 is mislabeled "2A."

11.6 The DROP MANHOLE DETAIL does not comply with Village ordinances.

- Mastic is required between frames, adjusting rings and structures.
- Bedding must be 6" of sand.
- Bedding, haunching and trench backfill require compacted CA-7.
- Chimney seal shall be per Village ordinance.

11.7 For the NOTE, add "AND VILLAGE INSPECTOR" after ENGINEER.

12. Construction Details (Sheets 15, 16 and 17)

12.1 Compliant. *Replace details for Fire Hydrant, Valve Vault, Manhole Type A, Inlet Type A, Catch Basin Type A, and Expansion Joint with Village of Channahon details which can be downloaded from the Village web site at...*

VOC: Please use details from www.channahon.org/wp-content/uploads/2012/07/detaildrawings.pdf These are clearer exhibits and include Village logo.

12.2 Conditionally Compliant: *Village ordinance requires the use of EJIW frames and lids per Chapter 154 Ordinances and appendices...*

Engineer: *The Material Standards have been updated with the appropriate EJIW frames...*

VOC: Several materials in these standards do not comply with ordinance and/or are redundant to a detail.

- Remove fire hydrant information. Brand and product are incorrect. Village detail on this sheet and additional information on Specifications sheet are sufficient.
- Gate Valves must be per Village ordinance: Twelve-inch and smaller, epoxy-coated resilient wedge, with non-rising stem gate valves, counter-clockwise to open, AWWA C-509; mechanical joint ends.
- Remove valve box information and detail. Only valve vaults are allowed for watermain valves.
- Remove curb stop information. Brand and product are incorrect. Village detail on this sheet and additional information on Specifications sheet are sufficient.
- Remove corporation stop information. Brand and product are incorrect. Village detail on this sheet and additional information on Specifications sheet are sufficient.
- Remove B-box information, or call out on utility sheets where a B-box is used. Brand and product are incorrect. If a b-box is used, the Village typical tap service pipe detail on this sheet and additional information on Specifications sheet are sufficient.
- For B6.12 curb, a Type M1 grate is required.

12.5 Watermain Lowering Detail: joints must be Megalug; deflections per AWWA C600 for D.I.P.

12.6 Pressure Connection Vault Detail: require 6" sand bedding; pipe bedding, haunching and trench backfill shall be CA-7; a minimum 5 ft diameter vault is required for pressure connections, please remove "unless otherwise specified in plans."

12.7 Elastomeric Band Detail: revise to comply with Village ordinance or remove detail; provide chimney seal specification under *B. Sanitary Sewers And Appurtenances* on Sheet 20.

12.8 Thrust Blocking Detail: per ordinance, material must be precast of poured concrete; where undisturbed earth is not available or not likely to be available to back up pressure-type concrete thrust blocks; the development plans shall specify Megalug retainer glands or tie rods, with or without anchor-type thrust blocks; poured PCC cannot interfere with access to joints or FH drainage.

12.9 Remove Storm Drainage Structure Concrete Collar In Asphalt Pavement Detail if none are required on these plans.

12.10 Pipe Installation Detail: remove "rigid" and "flexible pipe" titles, only concrete pipe installation matches rigid pipe detail, D.I.P. uses same installation as PVC and HDPE; remove pipe materials which are not shown on plans, i.e. clay, CMP, steel pipe, etc.; change bedding thickness to 6"; change "selected granular backfill" to CA-7.

12.11 Modified B-6.12 Curb & Gutter Detail: Remove Standard and Depressed sections as Village detail is sufficient; rebar must be continuous No. 5 set 3 inches from bottom of gutter.

12.12 Sidewalk Detail: call out minimum 5" thick PCC; change note 2 to match driveway thickness of 8".

12.13 Commercial Driveway Entrance Detail: removal of existing Village curb & gutter and replacement with depressed curb is not allowed. Depressed curb for entrances must either be poured with roadway curb, or the finished back-of-curb sawcut per the attached detail. Include this detail on the plan if this work is proposed.

12.14 Typical 90° Parking w/HC Striping Detail: revise adjacent stalls to match 9.5' x 20' stalls on dimensional plan; revise HC stalls to match 20 ft depth.

12.15 Please enlarge the Contech structure and deflector pan details which are too small for all print to be legible.

12.16 A detail for SYSTEM WQ-11 is not provided.

12.17 Please remove the bottom most WQ-4 detail which appears to be a duplicate.

13. Specifications (Sheet 20)

13.3 Repeat Comment: *Revise notes for all storm sewer, sanitary sewer, watermain, their appurtenances, testing and disinfection, construction, etc. to comply with Village of Channahon Chapter 154 Ordinances and appendices which can be found online at www.channahon.org . This will include most notes located on the right half of this sheet.*

Engineer: *The specifications have been updated for general conformance with the Village of Channahon Ordinance (Chapter 154). In addition, a note has been added to the accordingly (See Sheet No. 20).*

VOC: Contractors will look to this page for detailed material and construction specifications and should not be expected to search online or make phone calls for Village utility and roadway specifications. Specifications in "general" conformance, stating work shall be done "in accordance with JURISDICTIONAL GOVERNMENT ENTITY," or a note directing the reader to Village Ordinances are not adequate. Many utility and roadway sections do not provide detailed specifications or are in conflict with Village ordinance or Construction Details.

Please update applicable specifications to match Village of Channahon ordinances, or insert pages directly from applicable Village ordinances. Remove note directing reader to Chapter 154 of Village Ordinance.

13.6 Conditionally Compliant: *Ordinance: Pipe seals. All pipe connection openings shall be precast with resilient rubber water-tight pipe-to-manhole sleeves or seals, per ASTM C-923. Rubber gasketed manhole coupling shall be Kor-N-Seal, A-Lok, or equal.*

If developer wants Link Seals to be considered, provide manufacturers information showing they conform to ordinance. However, they may still be rejected at the discretion of Village.

Engineer: *The referenced note has been added...*

VOC: Information from the first paragraph should be included in sanitary sewer specifications. Comments regarding Link Seals were not intended to be a note and should not be included in

specifications. It was meant to clarify that when an "equal" is allowed per Village ordinance, supporting information must be provided to the Village for consideration of the change. Such information should be provided prior to ordering "equal" materials.

13.9 Repeat Comment: *Revise sidewalks, curb & gutter and frame adjustments to conform to Village of Channahon Ordinance Chapter 154 and Appendices.*

Engineer: *The specifications have been updated for general conformance with the Village of Channahon Ordinance (Chapter 154).*

VOC: Please refer to Village response for comment 13.3.

13.10 ROADWAY AND PARKING LOT IMPROVEMENTS: should be IV.

13.11 ROADWAY AND PARKING LOT IMPROVEMENTS: remove HMA notes as its use is not shown on these plans.

13.12 Concrete Pavements: welded wire fabric specification does not match detail on sheet 19.

13.13 Sidewalks: Change sidewalk thickness through driveways to 8 inches as any proposed crossings are through heavy duty concrete pavement.

13.14 Concrete Curb And Gutter Removal And Replacement: remove this note per comment 12.13.

13.15 Pavement Marking: for marking within ROW or other areas to be dedicated to the Village, use Polyurea marking per IDOT BDE Special Provision "POLYUREA PAVEMENT MARKINGS" on PCC and thermoplastic on HMA.

Frontage Road Plans

15. General Notes (Sheet 3)

15.1 *INTERPRETATION OF PLANS AND SPECIFICATIONS:*

c. add "and Jurisdictional Government Entity" after "Engineer's" on second line.

15.11 INSURANCE: Include Village of Channahon as an additional insured.

15.12 TRENCH BACKFILL: Specify CA-7 to be used for all trench backfill over utilities and appurtenances to be owned by the Village.

15.13 STORM SEWER: Specify CA-7 to be used for all benching and haunching for utilities and appurtenances to be owned by the Village.

15.14 Provide a note that existing street lights along Rt 6 are to be protected and reused, or protected and returned to the Village Public Works facility at Blackberry Rd.

17. Plan & Profile (Sheet 10)

17.3 MH-105: Add NE invert; remove E invert; remove data for pipe and structure tributary (E) to MH-105 which are no longer proposed.

17.4 It is our understanding these improvements are to be built prior to the frontage road. Therefore, install the 21 ft of 24" storm sewer and CB-9 with these plans, or provide a note that the bike path cannot be constructed until these storm sewer improvements are completed. Do the same for the 30 ft of 18" storm sewer and structure WQ-8 with regard to proposed sidewalk over those improvements; provide callout for WQ-8.

17.5 Provide ADA compliant ramps for pedestrians crossing the 35' commercial entrance. Cross slope through crossing must not exceed 2%.

17.6 Show new location of relocated street light on Rt 6.

17.7 Show location of new street lights to be installed on Frontage Rd.

18. Plan & Profile (Sheet 11)

18.2 Provide ADA compliant ramps for pedestrians crossing the 35' commercial entrance. Cross slope through crossing must not exceed 2%.

18.3 Show location of new street lights to be installed on Frontage Rd.

18.4 Remove the 35 ft Commercial Entrance improvements located opposite the truck fueling center Exit Only driveway. This will be a public road connection from the west adjacent property and will be designed and constructed in the future by others.

19. Plan & Profile (Sheet 12)

19.4 Provide ADA compliant ramps for pedestrians crossing the 35' commercial entrance. Cross slope through crossing must not exceed 2%.

19.5 Show location of new street lights to be installed on Frontage Rd.

19.6 Call out MH-1 to be constructed with these plans, or call out south end of 26 ft of 30" storm sewer pipe shall be plugged.

20. Plan & Profile (Sheet 13)

20.3 Add MH southeast of CB-112 to bring the 134 ft of 12" storm pipe from under curb & gutter.

20.4 Provide ADA compliant ramps for pedestrians crossing the 35' commercial entrance. Cross slope through crossing must not exceed 2%.

20.5 Show location of new street lights to be installed on Frontage Rd.

21. Plan & Profile (Sheet 14)

21.3 Provide ADA compliant ramps for pedestrians crossing the 35' commercial entrance. Cross slope through crossing must not exceed 2%.

21.4 Show location of new street lights to be installed on Frontage Rd.

21A. Plan & Profile (Sheet 16)

21A.2 The RI-RO work will be completed with these plans prior to IDOT letting of Contract 62A00. However, there is an existing street light within RI-RO curb that is planned to be relocated with Contract 62A00. Please provide a plan to coordinate completion of the RI-RO and street light removal/relocation prior to IDOT work taking place.

21A.3 Provide ADA compliant ramps for pedestrians crossing the RI-RO entrance. Cross slope through crossing must not exceed 2%.

22. Pavement Marking Plan (Sheet 18)

22.5 A Left Turn Only, No. 3, is not found on this sheet. Please call out its location or remove from sign legend.

22.6 Please provide the following speed limit signs: a 35 mph sign on northbound Frontage Rd. before/near the first entrance into convenience store/fuel center (STA. 53+00?); a 35 mph sign on southbound Frontage Rd. near STA. 70+05; a 45 mph sign on northbound Frontage Rd. near STA. 70+05.

22A.ADA Ramp Details (Sheet 32)

22A.1 Provide a minimum 5 ft long of PCC sidewalk pavement (as measured from back-of-curb at shortest side) at bike path road and driveway crossings to facilitate installation of replaceable detectible warnings.

22A.2 Provide detail for detectible warnings to be set in PCC bike path and sidewalk. Detectible warnings to be owned and maintained by the Village must be truncated dome warning tile by TufTile Wet-Set (Replaceable), Armor-Tile Tactile Systems, Access Tile Replaceable, or equivalent, and must be brick red.

22A.3 Provide ADA ramp details for RI-RO crossing and typical driveway crossing.

23. Construction Details (Sheets 33-44)

23.3 Provide street light materials detail in case an existing street light needs to be replaced.

23.4 Please add a note that all construction within Village of Channahon ROW are required to use these details unless otherwise specified.

24. Additional Comments

24.1 Please include the Lighting Plans as part of these plans. The Lighting Plan must provide all street light removal, relocation and new installation which are included with this work.

24.2 Existing Typical Sections (Sheets 5 – 8): Remove notes 12, 13 & 14 as they are not used in these plans.

24.3 Submit a copy of the Storm Water Pollution Prevention Plan for this work with developer and inspector certifications and signatures. Contractor signatures are not required at this time.

24.4 Where applicable, provide storm sewer callouts that structure openings for storm sewer connections "by others" must be cast in place by manufacturer plugged with temporary brick and mortar installed on site.

Landscape Plan

25. Landscape Plan

25.10 Turf Area seeding is shown as IDOT Class 1. Please change to IDOT Class 1A for frontage road parkways.

25.11 Relocate trees ≥ 5 ft from utility structures and piping in ROW and out of existing or proposed watermain and sanitary sewer main easements.

25.12 Relocate trees from on top of proposed fence.

IDOT Checklist

26. IDOT Checklist

26.5 Please provide an updated IDOT Checklist with storm structure IDs from engineering plans in all storm sewer analysis tables and profile reports.

Final Plat of Subdivision

27. Final Plat of Subdivision

27.2 *Identify easement types and state "Hereby Granted" on the plat. Provide the following easements:*

- Conditionally Compliant: *Municipal Stormwater Detention & Drainage Easement over the detention vault and all of Lot 4.*

  VOC: Title of easement on sheet 2 does not match provisions.

- Conditionally Compliant: *Ingress/Egress Easements as needed to allow cross access between the lots.*

  VOC: Extend I.E.E. (sheets 2 & 3) northwest, then northeast, to cover proposed drive aisle to future connection with Lot 3.

- Conditionally Compliant: *Municipal Utility Easement over all watermain, storm sewer and sanitary sewer mains.*

  VOC: Remove P.U.E. from watermain and sanitary sewer easement (keep M.U.E.) as a separate 10 ft P.U.E. is provided along the property line.

- Easements over storm sewer are required only for those improvements conveying roadway runoff and connections between basins.

27.7 Conditionally Compliant. *Add or replace provisions and signature blocks (including list improvements) with the following as applicable:*

VOC: Please comment on the need for two Owners Certificates. Provide detailed improvements under Guarantee Of Improvements signature block.

27.8 Provide ingress/egress easement for Seneca driveway (sheet 2).

27.9 P.U.E. are not required along ROW.

27.10 Show floodplain boundaries on sheet 1.

If you have any comments or questions, please contact me at 815-467-6644.

Sincerely,

Michael C. Petrick
Director of Community Development & Information Systems

cc. Rick Claes, Sr. Managing Director
Michael MacKinnon, Director of Development
Don Kinzler, Engineering Project Manager

D-5

Inquiry No.	**1089**	**Received by**	Dolezal, E
Date	6/23/2015		
Name	Rittof, Steve		
Address	0 Blackberry Ln		
Phone	(815) 354-6142	**Alt Phone**	
Subdivision		**Unit**	
Request/Concern	Water flows out of ditch on west side of Blackberry Lane and crosses road and is causing erosion problems at his driveway.		
Action Taken	Don and I met with Steve on 6/24/15 to see situation. Looks like some culvert cleaning, ditch and shoulder maintenance is needed. Preventing overtopping of Blackberry during intense rain events is probably not practical.		
Date Complete	6/24/2015		
By	Dolezal, E		
By			
Work Order No.			

D-5

Inquiry No.	**1094**	**Received by**	Kinzler, D
Date	6/25/2015		
Name	King, Jason		
Address	26510 Highland Dr		
Phone	(815) 302-7782	**Alt Phone**	
Subdivision	The Highlands	**Unit**	5
Request/Concern	Resident would like us to address a safety concern caused by the inadequacy of the storm sewer covers in the drainage area of the backyard vicinity of W Highland Dr and Melissa Dr. The problem is the 3 storm covers are not the correct type for a wooded area. These covers may be adequate in clear residential drainage areas, but have far too small of openings and sit too close to the ground for a wooded setting.These small grates do not allow for debris to pass through. This flooding creates a backyard retention reservoir that creates a drowning hazard, as well as additional safety hazards due to the submerging of the electrical utility boxes in the backyards. Also, can the village please establish a regular clean out schedule for the outflow by the retention pond?		
Action Taken	6-25-15: DRK met with resident onsite; storm covers are already bee hive, nothing bigger is allowed; resident said drainage improved after PW hand clearing FES infall to pond; PW will further clear with backhoe along with FES outfall to restrictor structure; resident asked advice regarding getting the basin bottom cleared; would be HOA responsibility - VOC would advise and waive permit fees.		
Date Complete	6/26/2015		
By	Kinzler, D		
By			
Work Order No.	6277		

D-5

Citizen Inquiry

Inquiry No.	1097	**Received by**	Kinzler, D
Date	6/25/2015		
Name	Krymyer, Steve		
Address	25231 Jessup St		
Phone	(815) 791-3011	**Alt Phone**	
Subdivision	Channahon Proper	**Unit**	
Request/Concern	Water in garage from street runoff.		
Action Taken	6-26-15, DRK site visit: resident says runoff comes from alley along side of Jessup, bypassing a drywell next to shoulder and flowing into garage. DRK wrote WO to vac two nearby drywells and regrade shoulder to convey runoff into drywell.		
Date Complete	6/26/2015		
By	Kinzler, D		
By			
Work Order No.	6281		

E-6

Minooka H.S. Parking Lot Expansion, Mass Grading, School Construction

Punchlist for Acceptance of Public Improvements

Revised 08-27-15

#	ITEM	ID/LOCATION	DEFICIENCY AND CORRECTION
2	Storm Sewer	Restrictor MH E-104; South Basin	10" restrictor PVC installed on upstream pipe entering MH instead of downstream as designed; the restrictor must be on the downstream pipe to allow maintenance within the structure instead of within the pipe. Remove existing restrictor and reinstall to downstream pipe as shown on plans. Update Record Drawing data following completion of repair.
3	Detention Basin	Southeast Basin	A top of basin elevation of 601.5 was designed for the east side of the basin, as well as on each side of the Emergency Overflow Weir, to prevent basin overtopping west to residential properties; a 601 elevation was designed around the remainder of the basin; design High Water Level = 600.4. Asbuilt top-of-basin elevations are too low or fall outside the proposed easement; the HWL boundary is also outside the proposed easement. Provide re-grading and restoration along entire east side, entire south side, east 75 ft of the north side, and entire west side to acheive design elevations. Update Record Drawing data following completion of repair, including updated asbuilt basin volume.

E-6

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

March 3, 2015

Bill Zalewski, P.E.
Vantage Point Engineering
18311 North Creek Dr., Ste. F
Tinley Park, IL 60477

RE: SouthField Church Record Drawing Review 2

Dear Mr. Zalewski:

The Village of Channahon has received the following documents:

- *SouthField Church Record Drawings* submitted by Vantage Point Engineering, dated 01-12-15
- As-built Overland Flood Route Weir elevations submitted by Vantage Point Engineering, no date

Upon review of the above referenced documents, we offer the following comments:

1. **Construction Details, Sheet 3**

   1.1 Previous Comment: *Provide asbuilt data for cross sections A-A and B-B.*

   Engineer: Cross Sections A-A and B-B are "typical" sections and not cross sections. See Sheet 8 for the cross-sections provide and Sheet 11 for the cross-sections.

   VOC: Per Village record drawing submittal guidelines: '*Show required asbuilt data on all sheets which contain corresponding proposed data...*' Please strike out proposed T/B, HWL and Bottom of Pond elevations and provide asbuilt elevations.

2. **Geometric and Striping Plan, Sheet 6**

   2.1 Please verify asbuilt parking stall quantities.

   2.2 Detention basin data is not legible. Please move into basin as on approved engineering plans. Include asbuilt detention pond data.

   2.3 For the 25 ft Municipal Easement, please strike through PROPOSED and call out GRANTED.

3. **Utility and Erosion Control Plan, Sheet 7**

   3.1 Per Village record drawing submittal guidelines (including bold type): '***Start with VOC Approved for Construction engineering plans and add asbuilt data.*** *Simply strike through proposed data and provide asbuilt data adjacent to it; asbuilt data should be easily distinguishable. All Approved for Construction (AFC) data should be shown.*'

   This sheet does not match approved engineering plans. See attached.

   3.2 Previous Comment: *Provide asbuilt sanitary service information including service pipe location, sizing, inverts, slopes, cleanouts, and septic field boundary.*

   Engineer: Clean-out located, rim provided, however we were not able to obtain inverts.

   VOC: All requested asbuilt data is required.

   3.3 Previous Comment: *Provide asbuilt utility crossing information including any new crossings.*

Engineer: We were not able to obtain inverts to confirm crossings.

VOC: Asbuilt crossing data is required.

3.4 Previous Comment: *Provide asbuilt top-of-foundation elevation.*

Engineer: Top of foundation has been added to the Grading Plan.

VOC: Per Village record drawing submittal guidelines: '*Show required asbuilt data on all sheets which contain corresponding proposed data...*' Please strike out proposed T/F elevation and provide asbuilt elevation on this sheet.

3.5 Previous Comment: *When asbuilt information matches proposed, cross out proposed and show asbuilt data.*

Engineer: Noted.

VOC: Structures INL-1, MH-1 and CB-11 have second inverts which do not have asbuilt elevations; the asbuilt elevations provided appear to specify one direction. An asbuilt pipe slope between MH-4A and MH-4 is not provided. The pipe slope between INL-7 and INL-8 is correct, but not shown as asbuilt.

4. Grading Plan, Sheet 8

4.1 Although my previous comment asked that the scale for this sheet "match the proposed plan sheet," it also specified the same scale as had been submitted. Please excuse my previous typo and provide information on this sheet at a 1 inch = 30 ft scale to match the proposed plan sheet.

4.2 Conditionally Compliant: *Provide all data and design as shown on approved engineering for this sheet, except that proposed grading contours should be given a slightly lighter line weight than asbuilt contours.*

Engineer: The original proposed contours have been lightened as well as the proposed spot elevations and the asbuilt information in full tone.

VOC: Please show solid proposed contours in grayscale with normal dashed asbuilt contours as provided on Sheet 11. Label at least some asbuilt contours. Existing contours must also be shown per AFC plans.

4.3 Conditionally Compliant: *Provide asbuilt contours and spot elevations anywhere there are proposed contours on approved final engineering.*

Engineer: Asbuilt spot grades and contours added to grading plan.

VOC: Asbuilt contours and spot grades are not provided north of driveway and parking lot; a sufficient number of spot grades are not provided around outer limits of detention pond to verify all asbuilt contours; pond and OFR asbuilt contours and spot grades must extend and tie into existing contours along the south property line, north of driveway, and west and north of parking lot. Also include asbuilt grading data along north and east project limits which did not fit with the current scale.

4.4 Cross out proposed and provide asbuilt high water level, ultimate high water level, volume provided and emergency overflow weir elevations on this sheet.

4.5 The proposed ultimate high water level elevation of 533.6 matched the proposed outfall FES-13 invert elevation. Although asbuilt FES-13 invert elevation is 533.61, the asbuilt ultimate high water level elevation is shown as 533.7. Please clarify how the asbuilt UHWL was derived.

4.6 If possible, please turn on storm structure icons on this sheet.

4.7 Previous Comments: *Provide asbuilt detention pond data. Provide asbuilt stage-storage table for detention pond.*

Engineer: Asbuilt pond sheet is attached, see Sheet 11. See Sheet 11 for the Detention Pond As-Built stage-storage table.

VOC: A stage-storage table has not been provided. If a separate asbuilt detention pond sheet is to be used, please include all detention pond information per review comments 4.2 – 4.4 and 4.6 on the sheet as well as all required information for the OFR which wraps around the east side of the building and continues west along the south property line. Requested changes per this section's review comments are also required on Grading Plan, Sheet 8.

5. Plan and Profile, Sheet 9

5.1 Previous Comment: *Provide a copy of this sheet with asbuilt data.*

Engineer: Enclosed.

VOC: Asbuilt data has not been provided on this sheet.

6. Asbuilt Cross Sections, Sheet 10

6.1 Conditionally Compliant: *Provide asbuilt OFR cross section exhibits for A-A through I-I as depicted in the Stormwater Management Report.* (Actually AA-AA through II-II)

Engineer: Sections A-A, B-B, C-C, D-D of the Stormwater Management Report are the Sections CC & DD shown on the engineering plans and have been added on the As-Built Cross Section page – Sheet 10. Sections E-E through I-I are on the marked-ups attached.

VOC: Cross sections A-A through I-I in the Stormwater Management Report are OFR weir cross sections; while on engineering plans, C-C (East), C-C (South) and D-D are locations of typical cross sections as shown on Sheet 2. Because all locations do not match, asbuilt OFR cross sections for AA-AA and BB-BB (both east of building) are still needed.

6.2 The C-C (East) and D-D cross sections shown as "proposed" on this sheet do not match the proposed typical trapezoidal swale or proposed grading from AFC plans. Per AFC plans, both swales are approximately 2.5+ ft deep. Revise proposed C-C (East) and D-D cross sections to match AFC.

6.3 Please adjust vertical scales to enhance cross sections. Consider 2 ft gridlines at 526-38 (A-A), 530-42 (B-B), 538-46 (remainder). Also call out four proposed trapezoidal elevations which match AFC grading plan.

7. Detention Pond Asbuilts, Sheet 11

7.1 Remove or revise this sheet per Section 4 comments.

With your next record drawing review submittal, please provide a written response to these comments (including VOC comments) and 2 full size signed and stamped record drawing sets.

A Punch List inspection and list of deficiencies requiring corrective action will be provided under separate cover after Record Drawings have been preliminarily approved and as weather permits.

Please call me at 815-467-6644 with any questions you may have.

Sincerely,

Donald Kinzler, P.E., CFM
Engineering Project Manager

Cc (via email): Ed Dolezal, Director of Public Works
Steve Kuczkowski, Building Inspector
Mike Petrick, Director of Development
Bryan Reiser, PBS Inc.

OUTLET PROTECTION NOTE:
THE PROPOSED OUTLET PROTECTION SHALL BE NORTH AMERICAN GREEN SHOREMAX WITH SC250 UNDERLAYMENT OR AN APPROVED EQUAL.

OUTLET PROTECTION MINIMUM DIMENSIONS:

END SECTION SIZE	WIDTH (FT)	LENGTH (FT)
12"	4	5
18"	6	7.5
24"	8	10

TURF REINFORCEMENT NOTE:
THE PROPOSED TURF REINFORCEMENT SHALL BE NORTH AMERICAN GREEN SC250 REINFORCED WITH VEGETATION OR AN APPROVED EQUAL.

UTILITY CROSSING INFORMATION

1 – 10" STM INV. = 538.5±
– 6" SAN T/P = 537.0±

2 – 8" SAN INV. = 539.0±
– 10" STM T/P = 537.5±

LEGEND

- PROPOSED SILT FENCE
- PROPOSED STORM SEWER
- PROPOSED INLET PROTECTION
- PROPOSED STORM STRUCTURE
- PROPOSED CONSTRUCTION ENTRANCE
- PROPOSED RIP RAP
- SB #8 SOIL BORING LOCATION
- PROPOSED 6" VERTICAL CURB
- PROPOSED B-6.12 CURB AND GUTTER
- PROPOSED B-6.24 CURB AND GUTTER
- PROPOSED LIGHT FIXTURE
- 16 WETLAND MARKER

N

0 15 30
SCALE: 1" = 30'

U.S. ROUTE 6

CATCH BASIN 539.85 / 533.30

CATCH BASIN 540.56

CATCH BASIN 541.04

CATCH BASIN 541.58

CATCH BASIN 541.51 / 535.21 W / 535.03 S / 535.03 E

CATCH BASIN 542.16

CATCH BASIN 542.58 / 536.83 E / 537.03 W

STORM MH 542.70 / 536.80 N / 536.86 S

STORM MH 541.97 / 535.05 N / 535.32 S / 535.32 W

CATCH BASIN 540.31

CATCH BASIN 539.33 / 533.85

STORM MH 539.42 / 532.37 N / 532.12 E / 532.67 S / 532.07 W

CATCH BASIN 540.36 / 532.96 W / 533.16 E / 533.26 S

PROPOSED 25' MUNICIPAL EASEMENT

SILT FENCE (TYP.)

PROP. FLOODPLAIN ELEV.=533.36 AS CALCULATED

ZONE A SCALED FROM FEMA MAP

WETLAND LIMITS

24" RCP 532.05

CONSTRUCTION ENTRANCE

N 3°11'46" E 732.77'

24"ES#14 533.3

OUTLET PROTECTION (TYP.) SEE NOTE

EXIST FLOODPLAIN ELEV.=533.58 AS CALCULATED

DUAL 24"INL#08 48"CM#10 537.3 TC 533.8 WITH 12" PIPE CONN.

DUAL 24"INL#08 48"CB#8 538.4 TC DEP. 533.8 WITH 12" PIPE CONN.

OVERFLOW PIPE 67'-24" @ 0.45%

27-12" @ 3.70%

85-12" @ 3.29%

SB #9

SB #10

SB #6

24"ES#13 533.6

12"ES#12 531.0

48"CB#11 536.9 TC DEP. 531.3 S 532.8 N

12"ES#9 531.0

32-12" @ 0.94%

SOUTH DETENTION POND
100-YEAR DET. HWL=533.12
100-YEAR ULT. HWL=533.25
DET. VOL. REQ'D HWL=1.50 AC-FT
COMPENSATORY VOLUME REQ'D=0.30 AC-FT
TOTAL VOL. PROV'D @ 533.8±1.8± AC-FT

DET. HWL=533.12

ULT.HWL=533.25

18"ES#6 531.0

EXIST FLOODPLAIN ELEV.=534.85 AS CALCULATED

48"CB#5 537.5 TC DEP 531.7

152'-18" @ 0.86%

32'-18" @ 2.19%

TURF REINFORCEMENT (TYP.) SEE NOTE

4" PVC 533.96

6" RCP 532.89

4" PVC 533.87

6" RCP 532.77

EXIST FLOODPLAIN ELEV.=534.85 AS CALCULATED

48"MH#4 540.4 / 533.0 E,W / 535.5 N

PROPOSED LIGHT (TYP.) (SEE ARCH. PLANS)

APPROXIMATE LOCATION OF PROPOSED SEPTIC FIELD.

10" PVC DOWNSPOUT PICK-UP @ 1.00% MIN. ACTUAL LOCATION WILL BE DETERMINED UPON LOCATION OF PROPOSED DOWN SPOUTS (TYP.)

14'-12" @ 2.81%

24"INL#1 540.7 / 536.7 S / 538.4 W

24"INL#7 541.2 / 537.0

104.56'

PROPOSED BUILDING FF=542.5

41.00'

INV.=±539.0±

6" PVC SDR 26 @ ±2.00%

2" WATER SERVICE PIPE

PROPOSED CLEAN OUT

48"IMH#2 540.6 / 535.5

97'-12" @ 1.30%

66.06'

APPROXIMATE LOCATION OF PROPOSED WELL POINT

SILT FENCE (TYP.)

24"HH#4A 541.5 / 537.0

31'-15" @ 0.74%

48"IMH#3 540.3 / 534.0

95'-12" @ 1.48%

1289.25'
N 86°17'53" W

4' X 4' MIN. 3/4" CONSTRUCTION GRADE PLYWOOD WITH WHITE BACKGROUND AND RED LETTERS.

SWPPP
NOTE #2
SWPPP PLAN SHEET
NOI & PERMIT
4"X4" TREATED POST

SWPPP SIGN DETAIL

NOTES:

1) PROTECT PLAN SHEET & PERMIT WITH PLEXIGLASS ATTACHED TO BOARD AND CAULKED.

2) THE SWPPP SIGN SHOULD READ:
"A STORM WATER POLLUTION PREVENTION PERMIT COVERS THIS CONSTRUCTION SITE. IF ANY NON-STORM WATER DISCHARGE OR VEHICULAR TRACKING OCCURS PLEASE CALL THE VILLAGE OF CHANNAHON (815) 467-8644. THE SWPPP REPORT IS LOCATED IN THE CONSTRUCTION TRAILER.

24"INL#5 590.1 TC 589.7 – DENOTES TOP OF CURB GRADE

NOTE:
THE PROPOSED SEPTIC FIELD & WELL SHALL BE PER WILL COUNTY HEALTH DEPARTMENT REQUIREMENTS.

CONCRETE WASHOUT NOTE:
CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCED AT LOCATIONS DETERMINED BY THE CONTRACTOR.

VANTAGEPOINT ENGINEERING
18311 NORTH CREEK DRIVE, SUITE E, TINLEY PARK, IL 60477
T (708) 370-8010
VANTAGEPOINTENG.COM
CIVIL ENGINEERING | LAND PLANNING | SURVEYING
PROFESSIONAL DESIGN FIRM NO. 184.007760

CLIENT:
PROFESSIONAL BUILDING SERVICES
P.O. BOX 278, CRETE, ILLINOIS
PHONE: 708.672.4010 FAX: 708.672.3607

SOUTHFIELD CHURCH

PROPOSED UTILITY AND EROSION CONTROL PLAN

CHANNAHON, WILL COUNTY, ILLINOIS

REVISIONS
DATE: 09/18/13
SCALE: 1"=30'
PROJ MGR: GGA / DESIGNED: GGA
DRAFTED BY: BJS / CHECKED: MAW
SHEET: 7 / OF: 9
VPE# 13-28

PLOT DATE: 09/19/14 – 15:53 by gregm

DRAWING PATH: H:\13-028\ENG PLANS\EROSION CONTROL AND STORM SEWER.dwg

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 7/31/2016

Chair, IAFSM

Chair, Certification Committee

ASFPM CFM® CERTIFIED

F-1

F-2

Don Kinzler

From:	Don Kinzler
Sent:	Friday, August 28, 2015 2:45 PM
To:	Jim Blanche
Cc:	Bob Van Dolson; Jim Anderson; John Bryk; Thomas Durkin; Ed Dolezal; Mike Petrick
Subject:	Erosion and Sediment Control - MHS SW Detention Basin
Attachments:	Basin Storm Sewer pdf.pdf; Erosion & Sediment Control_08-10-15.pdf

Dear Mr. Blanche,

The Village has received a complaint from the Hunter's Crossing Home Owner's Association regarding soil sediment erosion entering the detention basin located at the SW corner of Rt. 6 and Bell Rd. The sediment is entering from a storm system which has the MHS southwest basin and other areas tributary to it. Attached are pictures of sediment erosion in/around the MHS basin, around MHS storm sewer, and also a storm sewer tributary area map. Based on the location of other tributary inlets, and the exposed topsoil in and around the MHS basin, the Village believes the MHS basin is the main or exclusive source of the sediment buildup in the HC detention pond.

The conveyance of sediment from the basin to offsite property is a violation of the following Village Soil Erosion Regulations:

- 157.03 (3): *Special precautions should be taken to prevent damages resulting from any necessary development activity within or adjacent to any stream, lake, pond, or wetland. Preventative measures should reflect the sensitivity of these areas to erosion and sedimentation.*
- 157.03 (11): *All waste generated as a result of site development activity should be properly disposed of and should be prevented from being carried off the site by either wind or water.*
- 157.05 (C)(9): *All temporary and permanent erosion and sediment control practices must be maintained and repaired as needed to assure effective performance of their intended function.*

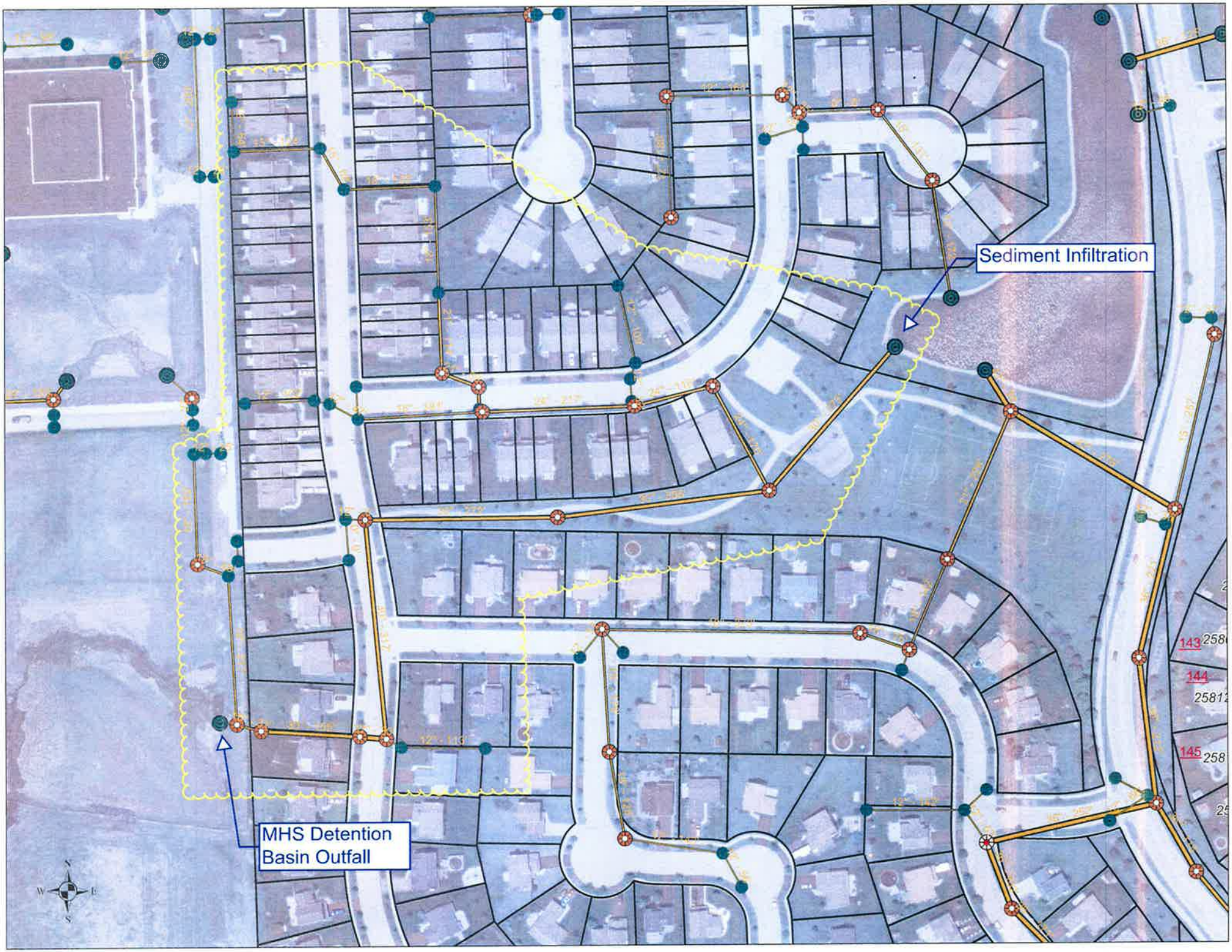
At this time, the Village is respectfully asking MHS to take these actions:

- The current detention basin ground cover is weeds which, by their nature, are not an adequate vegetative sediment control. Please remove existing ground cover and replace with a suitable detention pond ground cover. Although design plans called for the basin to be planted with Kentucky Bluegrass, the Village is open to discussing other forms of permanent ground cover which might require less maintenance.
- Per approved engineering plans, 15' square vegetative buffers are required around all farm field storm structures tributary to the MHS basin. However, as seen in attached photos, a herbicide is being used to kill vegetation around these structures as well as around the top of the basin. The farmer and/or high school must stop this practice immediately and into the future.
- Consider adding a 10-15 foot vegetative buffer around the south and west sides of the basin, along the farm field. The Village cannot require this, but it would provide a low slope barrier against topsoil erosion from the field into the basin. As it is now, topsoil is cultivated/bare right up to the edge of the steeper basin slope.
- Remove migrated sediment from around Hunters Crossing FES.
- Please consider making these corrections in conjunction with remaining MHS punch list grading work in the same SW detention basin.

Please contact me with any questions. If desired, the Village would host a meeting with MHS and the Hunters HOA to help facilitate completion of 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


Sediment Infiltration
MHS Detention Basin Outfall
143
144
145

F-2

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

August 19, 2015

RE: 26656 McKinley Woods Rd. Illegal Storm Sewer Connection

Dear Mr. Doyle,

This letter is to inform you that you are in violation of Village Ordinance 51.35, *PROTECTION OF SEWAGE WORKS FROM DAMAGE. No unauthorized person shall maliciously, willfully, or negligently break, damage, destroy, or tamper with any structure, appurtenance, or equipment which is a part of the sewage works.* The details for this violation are as follows:

Around 9 am on August 18, 2015, Ed Dolezal, Director of Public Works and I visited 26656 McKinley Woods Rd. to investigate the status of proposed water and sanitary sewer service connections to Village utilities for this property. Mr. Dolezal and I spoke with you regarding the following:

- A Village building permit, which has not yet been obtained, is required for proposed water and sewer connections.
- Village inspectors are required to be onsite during physical connections to Village water and sanitary mains.
- If connections are made during non-working hours (M-F, 7:30 am - 4 pm), the permittee would be responsible for inspector overtime costs.
- When asked about possible storm sewer work, the you said you planned to install PVC storm sewer to connect sump pump and rain gutter discharges to a Village manhole located near the rear of the property. In response I clarified that only sump discharges are allowed connection to Village storm sewer, but even for that the structure in question is not intended to take stormwater from 26656 McKinley Woods Rd. Mr. Dolezal and I said this could be further discussed the following day (today) when you applied for a building permit to be used for the water and sanitary connections.
- At the time of the meeting, a single 36" ADS pipe and multiple 8" PVC pipe were laying on the ground. The UC made no request or mention regarding connection to the Village storm structure having been made or planned.

Around 2 pm I revisited the site to discuss the proposed sump pump connection and observed a series of ADS storm manholes had been placed on beds of pea gravel and topped with frames and open grates. These manholes were connected by 8" PVC to each other and to a Village owned storm sewer manhole located in Village easement on private property at 25715 Westwood Ct. This connection was made without a permit from, or notification to, the Village of Channahon; a violation of Village Ordinance 51.35.