



Roads & Bridges Committee
NOTICE OF MEETING

Thursday, August 24, 2017 ~ 4:00 pm
112 Algonquin Road

AGENDA

1. Call to Order & Roll Call
2. Public Comments
3. [Vote] [Minutes June 22, 2017](#)
4. [Vote] [Minutes July 20, 2017](#)
5. Discussion Items
 - 5.1 [2017 Road Program – Construction Status](#)
 - 5.2 [Round Barn Road Drainage Update](#)
 - 5.3 [Longmeadow Parkway – Section D](#)
 - 5.4 Cuba Township IGA
 - 5.5 Engineering Services
6. Adjournment

Chairman: Brian Cecola

NOTICE AS POSTED

ROADS & BRIDGES COMMITTEE
Meeting Minutes
112 Algonquin Road, Barrington Hills
Monday, June 22, 2017 | 4:00 pm

ADDITION TO PREVIOUSLY APPROVED MINUTES

5. ENGINEERING FIRM PRESENTATIONS AND QUESTIONS: [Minutes for this portion of the meeting have been prepared by Village Hall administrative staff.]

The Roads & Bridges Committee began its portion of the meeting with presentations of three firms that previously provided responses to the Request for Qualifications (RFQ).

The presentations began with Gewalt Hamilton and Associates, followed by Trotter and concluded with Baxter Woodman.

The companies described the range of services, current projects of the type applicable to Barrington Hills and fee schedules for the personnel likely to be assigned to the Village.

Also discussed were engineering services available other than the annual road program such as attending meetings or responding to in-field inspection requests.

No action was taken after each presentation and the sense of the members would continue the review of the three firms.

6. ADJOURNMENT: The meeting was adjourned at 5:20 PM.



ROADS & BRIDGES COMMITTEE

Meeting Minutes

112 Algonquin Road, Barrington Hills

Monday, July 20, 2017 | 4:00 pm

Committee Members Present: Trustee Brian Cecola, Chair
Trustee Michelle Nagy Maison, Co-Chair
Robert Kosin, Village Administrator
Dan Strahan, Village Engineer

Others Present: Melanie Medici, Resident
Donato Cantalupo, Resident
Linda Cools, Resident

1. ORGANIZATIONAL: The meeting of the Village of Barrington Hills Roads & Bridges Committee was called to order by Chairman Cecola at 4:00 PM.

2. PUBLIC COMMENTS:

Donato Cantalupo asked questions regarding the April 24, 2017 snow plowing bill and expressed concerns that it may have been paid twice. Trustee Cecola noted he would look into it.

Melanie Medici circulated photos to the Committee which had been emailed following the July 11-12 rainfall event. Ms. Medici requested at a minimum that a temporary fix be completed until a permanent solution can be provided.

Linda Cools addressed the committee with several questions and comments pertaining to the civil engineering proposals. Chairman Cecola noted that he anticipated that further discussion and review of the responses to the RFP would occur in August. Ms. Cools also asked questions regarding the 2017 culvert inventory.

3. APPROVAL OF MINUTES: The minutes of the Roads & Bridges Committee Meeting of June 22, 2017 were approved for the general portion of the meeting. Approval of the second portion of the meeting (presentations from engineering firms) was deferred to the next meeting.

4.1 2017 ROAD PROGRAM UPDATE

Mr. Strahan noted that work had not yet begun but construction staking was in progress. He noted that right-of-entry permits had been updated for the Old Hart Road culvert work and that a similar right-of-entry permit was being pursued for the inlet box replacement on Hills N. Dales Road. It was also noted that Cook County had indicated Brinker Road will not be resurfaced until 2018.

4.2 JULY 12, 2017 STORM EVENT – DRAINAGE REVIEW

Mr. Strahan reviewed details from the rainfall event that occurred on July 11-12 and various areas around the Village that were visited in response to subsequent drainage complaints from adjacent residents, including areas on Cuba Road, Old Hart Road, Dundee Lane, River Road, and Rolling Hills Drive. Mr. Strahan also included a review of work in progress relative to a drainage complaint received at Round Bar Road, with a drain tile survey and topographic survey pending.

4.3 PORTER BRIDGE INSPECTION

Mr. Strahan noted that Wiss Janney Elstner (WJE) had completed a scour inspection at the Porter Bridge in response to IDOT requirements following the July 11-12 storm event. The inspection report noted that the bridge showed no signs of distress following the event. Mr. Kosin noted that follow-up brush trimming had been completed adjacent to the bridge by a Village contractor.

4.4 SNOW PLOWING 2017-2018

Chairman Cecola noted that Village staff had met with the Cuba Township Highway Commissioner & Cuba Township Supervisor to discuss renewal of the Intergovernmental Agreement for snow plowing services, which had expired June 1, 2017. Chairman Cecola noted that a proposed 4-year agreement had been sent to the Village's insurance carrier and attorney for review.

6. ADJOURNMENT: The meeting was adjourned at 4:40 PM.

MEMORANDUM

To: Robert Kosin, VBH Director of Administration
Brain Cecola, VBH Chairman Roads & Bridges

625 Forest Edge Drive, Vernon Hills, IL 60061

TEL 847.478.9700 ■ FAX 847.478.9701

www.gha-engineers.com

From: Daniel J. Strahan, P.E., CFM
Gewalt Hamilton Associates

Date: August 21, 2017

Re: 2017 Road Program- Update

Since the last Roads & Bridges Committee meeting in July, Lorig Construction has mobilized and completed much of the work for the 2017 Road Program this week. Culvert work has been completed and final surface has been placed on all the roadways. Remaining work includes completion of final surface for approximately 10 driveway aprons, final surface at the Village Hall, pavement markings, and shoulder restoration (stone and dirt).

Below is a summary of some of the major work items completed:

Hills N' Dales Inlet Box

An inlet box was installed to replace a flat grate inlet on Hills N' Dales drive to improve the response to storm events as the existing inlet was prone to clogging.



Cuba Road/Plum Tree/US 14 Intersection

Prior to resurfacing the intersection, GHA inquired with Union Pacific (UP) staff to see if there was interest in repairing failed pavement areas within the UP right-of-way. UP staff responded quickly and coordinated with the contractor to provide flaggers and a right-of-entry permit to allow the work to be completed.



Old Hart Road Culvert

Upon beginning excavation for installation of the new culvert on Old Hart Road, it was discovered that the existing gas main and AT&T lines were not located where indicated in the atlas information provided by the utility agencies and was in conflict with the proposed 24" pipe. After reviewing multiple options, an hydraulically equivalent elliptical pipe (19"x33") was utilized.



MEMORANDUM

To: Robert Kosin, VBH Director of Administration
Brain Cecola, VBH Chairman Roads & Bridges

From: Daniel J. Strahan, P.E., CFM
Gewalt Hamilton Associates

Date: August 21, 2017

Re: Round Barn Drainage Review

Since the July Roads & Bridges meeting, progress has been made in gathering information pertaining to the Round Barn Road drainage issue.

Drain Tile Survey

On August 1, 2017, we received the attached drain tile survey from Huddleston McBride. Based on field work completed on July 20, 2017, a 4" drain tile was identified connecting the existing pond at 70 Round Barn Road under the roadway to a 6" drain tile running through 67 Round Barn Road. The 4" drain tile was found to be flooded and surcharging on the north side of the road, with only a "slight" flow south of the roadway and within the property at 67 Round Barn Road. The survey also notes numerous failed sections downstream within the 6" drain tile line, which were noted when Village staff visited the property on June 6, 2017.

The condition of the 4" drain tile may explain the frequency of stormwater flow within the ditches. The 4" drain tile was noted as having "normal flow rate and capacity", so in the past low flows from the upstream property were contained within the drain tile and discharged into Hawley Lake via the 6" drain tile. Currently an obstruction in the pipe is resulting in a surcharge into the ditch on the north side of Round Barn Road, resulting in more regular flow to the roadway culvert.

Topographic Survey

In August GHA completed a topographic survey of the road and adjacent areas along Round Barn Road. The flagged location of the drain tile was included in the survey, which is attached for reference.

The topographic survey indicates that runoff from the right-of-way flows south directly into 67 Round Barn with or without the narrow channel that was dug within the ditchline to the south of the roadway culvert. It is noted that the downstream invert of the 24" culvert is 848.74, while there are low elevations of 848.43 and 843.31 downstream located outside of the excavated area. Similarly, the ditchline to the west of the area in question terminates at an elevation of 850.46, from which point the right-of-way sheet drains south via overland flow. This ditchline ends adjacent to a lateral stub of the 4" drain tile, suggesting that there may have been a surface inlet for this drain tile at some point in the past.

Recommended Next Steps

The attached information helps identify existing drainage patterns within the area, both for low flows from typical rain and thaw volumes as well as high flows from larger storm events. While steps can be taken to reduce the volume of runoff from the right-of-way and other upstream areas south to 67 Round Barn Road, it should be noted that the existing overland flow from these upstream areas is definitively from north to south into the property and existing prior to replacement of the roadway culvert in 2010.

There are several options available to the Village and the neighboring property owners to consider that would help address the concerns expressed in this area.

- Excavated Ditch Area- The excavated area within the ditchline continues to erode and results in low flows reaching the property at 67 Round Barn Road more efficiently than it otherwise would. We would recommend that, at a minimum, this excavated area be filled in back up to previously existing grade.
- Round Barn Road Ditch lines- The topography indicates that there is no existing above ground storage volume available within the right-of-way as the Round Barn Road ditch ends on the south side of the road. However, the runoff volume could be minimized by excavating infiltration trenches in the ditches to maximize infiltration. Such an approach would be dependent upon a suitable stratum of subsoil that has a high infiltration rate and is typically only effective for low flows.
- Discharge point- Currently runoff from the ditches leaves the right-of-way via the excavated channel, creating a point discharge on the neighboring property owner that results in erosion and maintenance difficulties. If the infiltration trench discussed above is pursued in connection with a level spreader to reintroduce sheet flow, the downstream areas would be less prone to erosion from regular storm events.
- Overland Flow Route- Storm water runoff from Round Barn Road and other upstream areas (approximately 10 acres total) flows from the right-of-way of Round Barn Road to Hawley Lake via primarily overland flow through a swale on the property at 67 Round Barn Road. An existing drain tile may have played a greater role in the past but currently has limited capacity to handle the runoff that arrives at the right-of-way. The options above would lessen but not eliminate stormwater flows through this overland flow route through this private property. We would recommend the property owner consider restoring or increasing the capacity of the private drain tile if they feel it necessary to completely eliminate this overland flow.

EXISTING SUBSURFACE AGRICULTURAL
DRAIN TILE INVESTIGATION REPORT

67 ROUND BARN ROAD
GEWALT HAMILTON

67 ROUND BARN ROAD / GEWALT HAMILTON, FIELD FILE NO. 11-1-10, DATE: 7/20/2017.
IN ACCORDANCE WITH COOK COUNTY EXISTING DRAIN TILE INVESTIGATION AND LOCATION STANDARDS
COPYRIGHT © 2017, BY HUDDLESTON-McBRIDE DRAINAGE COMPANY

DESCRIPTION CHART NO. 1A: INVESTIGATION SLIT TRENCH LOCATIONS

ID NO.	SZ.	TYPE / QUALITY	FLOW %	SILT %	DEPTH	FIELD NOTES:
A	—	NO DRAIN TILE	—	—	—	NO DRAIN TILE LOCATED
B	—	NO DRAIN TILE	—	—	—	NO DRAIN TILE LOCATED
C1	4"	CLAY / GOOD	20%	CLEAN	33"	NORMAL FLOW RATE AND CAPACITY
D	—	NO DRAIN TILE	—	—	—	NO DRAIN TILE LOCATED
E	—	NO DRAIN TILE	—	—	—	NO DRAIN TILE LOCATED
F	—	NO DRAIN TILE	—	—	—	NO DRAIN TILE LOCATED
G	—	NO DRAIN TILE	—	—	—	NO DRAIN TILE LOCATED

DESCRIPTION CHART NO. 1B: SURVEY DATA POINT LOCATIONS

DATA POINT	SZ.	TYPE / QUALITY	FLOW %	SILT %	DEPTH	FIELD NOTES:
1	4"	CLAY / GOOD	FLOODED	10%	43"	LATERAL AT ROAD WAY INGRESS
2	4"	CLAY / GOOD	FLOODED	SLIGHT	48"	LATERAL AT ROAD WAY EGRESS
3	4"	CLAY / GOOD	FLOODED	SLIGHT	48"	LATERAL AT PARCEL INGRESS
4	6"	CLAY / GOOD	FLOODED	CLEAN	40"	MAINLINE AT PARCEL INGRESS

MAP LEGEND:

←←FLOW←←	EXISTING DRAIN TILE FLOW DIRECTION
—	EX. POLYETHYLENE MAINLINE OR SYSTEM PART
—	EX. CLAY DRAIN TILE MAINLINE OR SYSTEM PART
—	EX. CONCRETE DRAIN TILE MAINLINE OR SYSTEM PART
—	EXISTING DRAIN TILE CONTINUES TO UPLAND WATERSHED
—	EXISTING DRAIN TILE OUTLETS TO SURFACE
1-2	EXIST. DRAIN TILE (1) INSPECTION STRUCTURE / (2) CATCH BASIN
1-2	EXIST. DRAIN TILE (1) LOCATED END / (2) ASSUMED END
—	EXISTING DRAIN TILE CONTINUES TO OFF-SITE OUTLET SYSTEM
—	EXISTING DRAIN TILE FAILURE / FLOW SURCHARGE TO SURFACE
—	EXISTING DRAIN TILE MAPPED BY SPECULATION AND ASSUMPTION
—	EXISTING DRAIN TILE ABANDONED (NOT FUNCTIONAL)
—	EXISTING DRAIN TILE "BLOWOUT" OR FAILURE
—	HAND PROBE OR ELECTRONIC SCAN FOR DRAIN TILE LOCATION
—	INVESTIGATION SLIT TRENCH FOR INVESTIGATION
—	SPECIFIC PIT EXCAVATION FOR INVESTIGATION
—	SURVEY DATA POINTS
—	REPORT IDENTIFICATION NUMBER

REPORT LEGEND:

ID NO.	POINT OF EXCAVATION FOR SPECIFIC DRAIN TILE INVESTIGATION.
SZ. (SIZE).....	DRAIN TILE INTERNAL DIAMETER IN INCHES.
MATERIAL / QUALITY.....	TYPE OF TILE MATERIALS, PIPE QUALITY - GOOD, FAIR & POOR.
FLOW %	PERCENTAGE OF TILE DIAMETER OCCUPIED BY ACTIVE FLOW.
Ⓢ	RESTRICTED OR BACKED UP FLOW, SURCHARGED CONDITION
Ⓢ	PERCENTAGE OF TILE DIAMETER OCCUPIED BY RESTRICTIVE SILT.
Ⓢ	ABANDONED, FILLED WITH SILT BLOCKAGE, NO FLOW POTENTIAL
DEPTH	MEASUREMENT FROM EXISTING GROUND LEVEL TO PIPE INVERT.

(GENERAL NOTES)

MAINLINE TILE	TRUNK LINE OR MUTUAL DRAIN, COLLECTOR OF SUB-SYSTEMS.
SUB-MAIN TILE.....	SECONDARY TRUNK LINE OR RANDOM SYSTEM COLLECTOR.
LATERAL TILE	FEEDER LINE, SERVICE TILE OR SYSTEM SPUR.
"BLOWOUT"	EXISTING SYSTEM PIPE FAILURE OR RESTRICTION.
DRAIN TILE ENDS	MAINLINE, SUB-MAIN OR LATERAL PLANNED TERMINATION.
SLIT TRENCH	INVESTIGATION TRENCH, TYPICAL 2'-0" WIDE x 6'-0" DEPTH.

SPECIAL NOTES:

- ALL EXISTING AGRICULTURAL DRAIN TILES LOCATED DURING THIS INVESTIGATION SURVEY HAVE BEEN IDENTIFIED ON THIS PLAN AND FIELD STAKED AT < 50' INTERVALS. IN SOME OCCASIONS CERTAIN EXISTING LOCAL DRAIN TILE SECTIONS MAY BE SPECULATED AND CONSIDERED AS AN ASSUMED ROUTE WHICH SHALL BE DELINEATED ON THIS PLAN.
- ALL EXISTING DRAIN TILES DAMAGED DURING THE INVESTIGATION PROCESS SHALL BE REPAIRED TO THEIR ORIGINAL STATE IN ACCORDANCE WITH NATURAL RESOURCE CONSERVATION SERVICE STANDARDS FOR DRAIN TILE INSTALLATION AND REPAIR. (HUDDLESTON DRAINAGE (624) TYPICAL STANDARD #1)
- ALL EXISTING DRAIN TILE LOCATION DIMENSIONS HAVE BEEN SURVEYED BY AGRICULTURAL GRADE GPS SURVEY SYSTEMS AND INCLUDE SUB METER ACCURACY. ALL LOCATIONS PERTINENT TO FINAL DESIGN SHALL BE VERIFIED BY THE PROJECT SURVEYOR.
- THIS DRAIN TILE INVESTIGATION REPORT IS INTENDED TO IDENTIFY EXISTING DRAIN TILE MAINLINE SYSTEMS ONLY WITH ADDITIONAL PRIORITY ON DRAIN TILES WHICH MAY SERVICE THE UPLAND PROPERTY OF OTHERS OR WITH MUTUAL DRAINAGE STATUS.
- THIS DRAIN TILE INVESTIGATION REPORT SHALL BE FILED WITH HUDDLESTON DRAINAGE LAND DRAINAGE CO., AND WILL BE REPRODUCED AND DISBURSED ONLY BY PERMISSION OF THE CONTRACT PRINCIPALS.

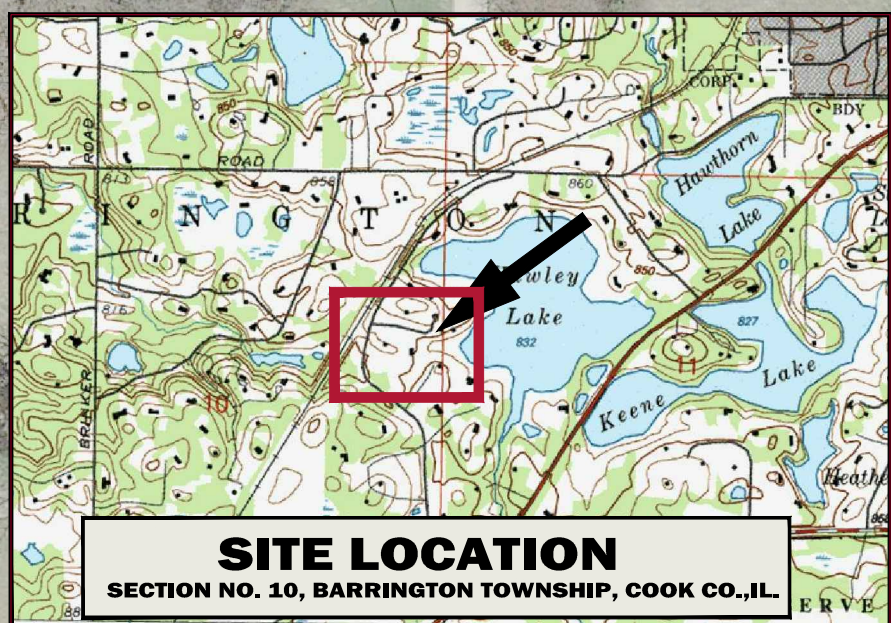
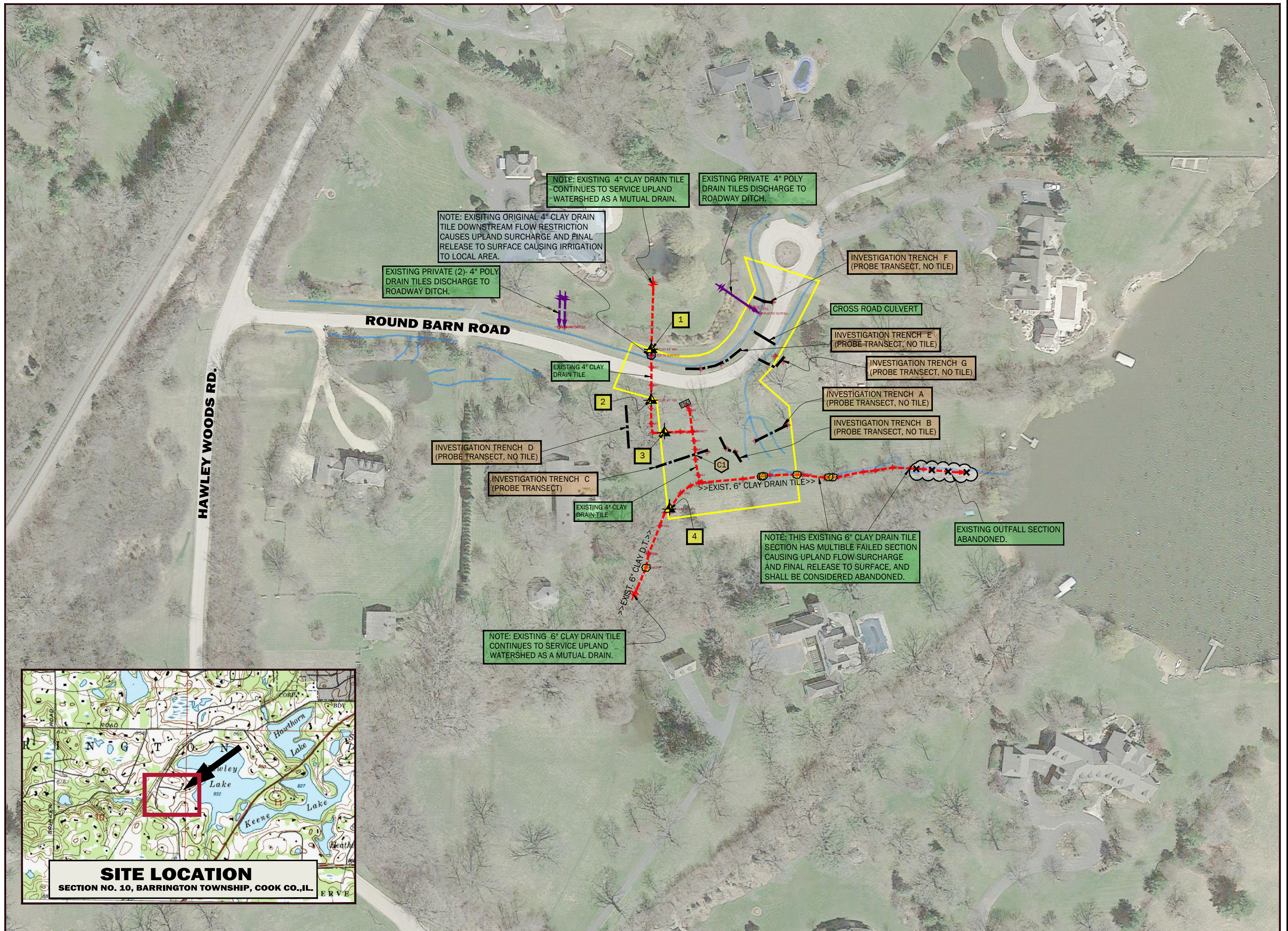
TOM HUDDLESTON, HUDDLESTON LAND DRAINAGE CO.

EXISTING AGRICULTURAL DRAIN TILE INVESTIGATION PLAN

67 ROUND BARN ROAD

PREPARED FOR GEWALT HAMILTON

SECTION NO. 10, BARRINGTON TOWNSHIP, COOK CO.,IL.



PROJECT CLIENT:
GEWALT HAMILTON
DAN STRAHAN, PROJECT MANAGER
625 FOREST EDGE DR., VERNON HILLS, IL., 60061

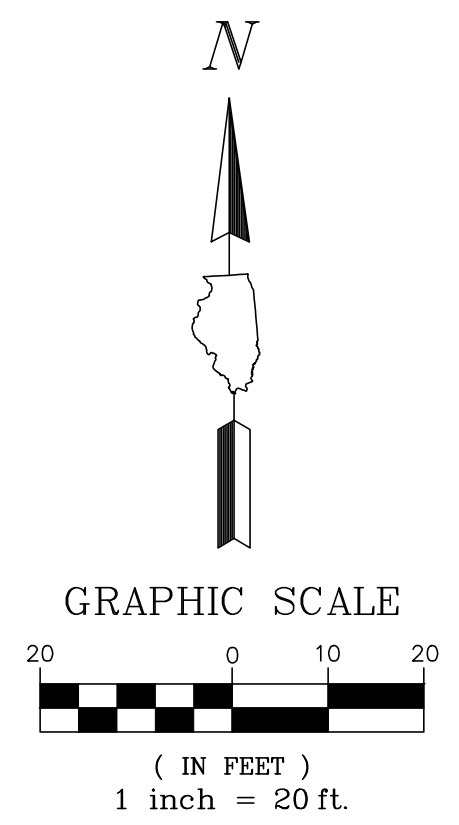
APPROVED BY AND DATE: TOM HUDDLESTON 7/20/2017
ACKNOWLEDGMENTS: HUDDLESTON DRAINAGE MAP and ARCHIVE SYSTEMS
DRAWN BY AND DATE: TOM HUDDLESTON 7/20/2017
ORIGINAL ISSUED ON: 7/20/2017
FIELD FILE NO.: 11-1-10
DRAWING NO.: 11-1-10

REVISIONS: DATE: BY: DESCRIPTION:
WEATHER CONDITIONS: SUN/WARM - 85o
DRAWING SCALE: 1" TO 100'
SHEET NO.: ONE OF ONE



HUDDLESTON McBRIDE
PROFESSIONAL LAND DRAINAGE SERVICES
9504 FOWLER RD., ROCHELLE, ILLINOIS PHONE 815-562-6007

- LEGEND**
- AIR CONDITIONER
 - BOLLARD/POST
 - BUFFALO BOX
 - BUSH/SHRUB
 - BUSH LINE/BRUSH LINE
 - CATCH BASIN
 - CLEANOUT
 - CONTOUR
 - CONTROL POINT
 - CONTROL VALVE
 - CROSS/NOTCH
 - CULVERT
 - DISK
 - DITCH/SWALE
 - DOWNSPOUT
 - DRAIN
 - ELECTRIC BOX
 - ELECTRIC LINE
 - ELECTRIC MANHOLE
 - ELECTRIC METER
 - FENCE
 - FIBER OPTIC LINE
 - FIBER OPTIC MANHOLE
 - FIRE HYDRANT
 - FLAG POLE
 - FLARED END SECTION
 - GAS LINE
 - GAS MANHOLE
 - GAS METER
 - GAS VALVE
 - GREASE TRAP
 - GROUND LIGHT FIXTURE
 - GUARDRAIL
 - GUY WIRE
 - HANDHOLE
 - HANDHOLE (HEAVY DUTY)
 - INLET
 - IRON PIPE
 - IRON ROD
 - LIGHT POLE
 - MAG NAIL/P.K. NAIL
 - MAILBOX
 - OVERHEAD ELECTRIC LINE
 - POWER POLE
 - ROCK
 - RIP RAP
 - R.O.W. MARKER
 - SANITARY FORCEMAIN LINE
 - SANITARY SEWER LINE
 - SANITARY SEWER MANHOLE
 - SIGN
 - SOIL BORING
 - SPOT ELEVATION
 - SPRINKLER HEAD
 - STORM SEWER LINE
 - STORM SEWER MANHOLE
 - TELEPHONE LINE
 - TELEPHONE MANHOLE
 - TELEPHONE BOX/PEDESTAL
 - TELEVISION LINE
 - TELEVISION MANHOLE
 - TELEVISION BOX/PEDESTAL
 - TRAFFIC SIGNAL
 - TRAFFIC SIGNAL CONTROL BOX
 - TREE-CONIFEROUS (SIZE/TAG#)
 - TREE-DECIDUOUS (SIZE/TAG#)
 - TREE STUMP
 - VALVE BOX
 - VALVE VAULT
 - VRAD BOX
 - WATER FOUNTAIN
 - WATER VALVE
 - WATERLINE EDGE
 - WATERMAIN LINE
 - WATER METER
 - WATER METER PIT
 - WELL HEAD
 - WETLAND
 - WETLAND FLAG



BENCHMARK:
ELEVATIONS SHOWN HEREON ARE OBTAINED VIA GPS USING TRIMBLE VRS@NOW™ (NO PUBLISHED MONUMENT VERIFIED) DATUM: NAVD88

CONTROL POINTS:

Point #	Northing	Eastng	Elevation	Description
1	1991671.35	1031042.81	856.01	CP1-MAG
2	1991565.22	1030695.98	855.14	CP2-MAG
3	1991597.72	1030621.68	855.98	CP3-MAG
4	1991518.23	1030953.47	851.68	CP4-MAG

GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL. 60061
TEL 847.478.9700 ■ FAX 847.478.9701

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EXISTING CONDITIONS
VBH-67 ROUND BARN DRAINAGE
67 ROUND BARN ROAD
VILLAGE OF BARRINGTON HILLS, ILLINOIS

NO.	BY	DATE	REVISION	NO.	BY	DATE	REVISION

FILE: 9355.153_EX.dwg	SHEET NUMBER: 1
DRAWN BY: PJS	GHA PROJECT #: 9355.153
DATE: 8/1/17	
CHECKED BY: AS	SCALE: 1"=20'
DATE: 8/1/17	OF 1 SHEETS

© 1995-2017 GHA. ROUND BARN ROAD DRAINAGE (REVISED) 8/1/2017 8:30 AM

MEMORANDUM

To: Brian Cecola, VBH
Chairman Roads & Bridges

From: Dan Strahan, P.E., CFM
Gewalt Hamilton Associates (GHA)

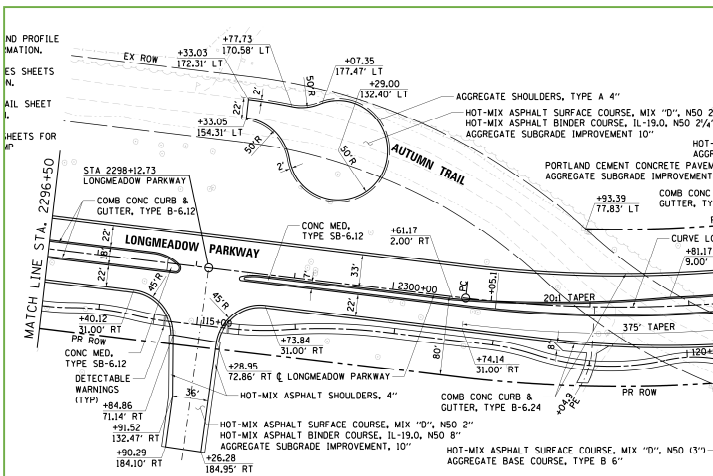
Date: August 21, 2017

Re: Longmeadow Parkway Update

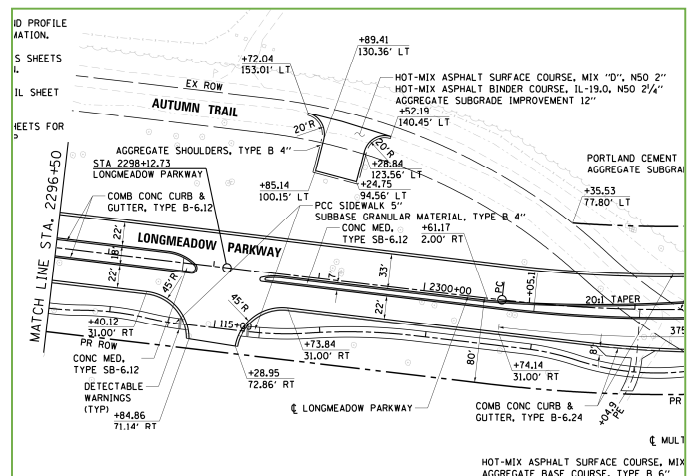
On August 10, 2017, the Village received hard copies of the final plans and specifications of Section D of the proposed Longmeadow Parkway project, which begins east of IL 25 and extends to IL 62, including intersection improvements on IL 62. PDF copies of the plans and specs were received by our office on August 16, 2017 and provided to the Village.

To date we have not complete a detailed review of the final plans, but we have completed a preliminary review of the plans and have noted a number of differences between the Final PS&E plan set (dated August 7, 2017), and the pre-final plan set dated April 22, 2016:

- The pre-final plan had indicated a cul-de-sac to be created at the end of Autumn Trail. This has been modified to what appears to be a 60' wide apron south of the roadway (see below).



Pre-Final Plan Set Excerpt- Sheet 25



Final PS&E Excerpt- Sheet 31

- Maintenance of Traffic sheets have been added indicate how construction will be staged on IL 62 during construction.
- A draft Plat of Highways (5 sheets) has been added showing the right-of-way and easement acquisition areas adjacent to the project.

Kane County has initially planned on a January 20, 2017 letting (bid opening) date for the project; however, they have had to delay the letting date a number of times as the land acquisition process continues. Kane County staff currently has a target letting of November 17, 2017. This would require that final right-of-way acquisition be certified by October 4, 2017.