

Village of Downers Grove  
Stormwater and Flood Plain Oversight Committee Meeting

Thursday, August 11, 2016  
7:00 PM

Downers Grove Public Works Facility  
Conference Room  
5101 Walnut Avenue  
Downers Grove, Illinois

AGENDA

- I. CALL TO ORDER
- II. ROLL CALL
- III. MEETING MINUTES
- IV. PUBLIC COMMENTS
- V. NEW BUSINESS
- VI. STAFF REPORT
- VII. OLD BUSINESS
  - A. Continued Discussion Related to Proposed Amendments to Stormwater & Zoning Regulations
- VIII. PUBLIC COMMENTS
- IX. ADJOURN



VILLAGE OF DOWNERS GROVE  
Stormwater and Flood Plain Oversight Committee Meeting  
July 20, 2016, 7:00 p.m.

Downers Grove Public Works Facility  
5101 Walnut Avenue, Downers Grove, Illinois

**I. CALL to ORDER**

Chair Gorman called the meeting to order at 7:00 p.m. A roll call followed and a quorum was established.

**II. ROLL CALL**

Members Present: Chair Gorman, Mr. Civito, Mr. Crilly, Mr. Ruyle, Mr. Scacco, Mr. Schoenberg

Members Absent: Mr. Wicklander

Staff Present: Nan Newlon, Director of Public Works  
Julie Lomax, Development Engineer  
Kerry Behr, Development Engineer  
Susan Quasney, Development Engineer

Public Present: Mr. Phillip Shaw, 5117 Brookbank, Downers Grove  
Mr. Jim Boves, 1325 Gilbert, Downers Grove

**III. APPROVAL of June 23, 2016 Minutes**

Modifications to the minutes as follows:

Dan Schoenberg made motion to adjourn, Mr. Scacco made the second. Meeting adjourned at 9:30pm.

Modify that Committee members had engineering concerns with requiring top of foundation requirements.

Grammatical errors, page 7; second last paragraph, remove the work "is". Last page second paragraph, modify "look into required discharges points" to "look into requiring discharge points".

Spelling of Mr. Schoenberg's last name.

Mr. Crilly made a motion, seconded by Mr. Schoenberg, to approve the June 23, 2016 minutes as modified above. Motion carried by a voice vote 6-0.

#### **IV. PUBLIC COMMENTS**

None – except those as part of New Business, Public Hearing, Appeal below.

#### **V. NEW BUSINESS**

##### **A. Public Hearing – Appeal of a Notice of Violation**

Chair Gorman asked to begin with the Public Hearing for Appeal of a Notice of Violation at 5117 Brookbank.

Mr. Phillip Shaw of 5117 Brookbank explained the history of his property. In 1977, they built the home and developed the property. They had to obtain a topographic survey and soil borings. The Village had to give a permit. After he moved in final grading was approved. And for all this time, we've maintained the property pretty much as it is today; however, there's a lot of trees. We planted the lot of trees, and a lot of trees have just grown. And I've been very reluctant to cut trees down.

Mr. Shaw continued, when we did the final grading, we sloped the yard down to bank the creek, not into it, but in general along this line. And it worked pretty well for a few years, and then we got a series of very heavy rains flooding almost up to the house and a result a lot of silt. The flooding caused undercutting of the banks. As a result, in the late 80's I approached the village about putting in a retaining wall along our property. The village said you have to get a permit from the Corps. Obtained permit through the Corp and built the wall which has functioned very well. For all these years they have maintained the wall.

Mr. Shaw explained that as part of maintenance, they have also had to regrade the yard every 5-7 years due to siltation; not the entire yard, but wherever the silt builds up. The deposits of silt cause problems with mowing the lawn. For the service crew, 6-8" it was causing a safety issue of slipping into the creek. During the late 90's, we were getting ponding here, and it would last for days after a rain, and then it would last for weeks. So in 2004, needed to regrade again. He cut a ditch around the trees and brought it over to the low part of the headwall of the box culvert. The ditch worked very well. It was almost flat, but it worked. However, in two years, the ditch quit flowing. Now he explained the standing water was back. In 2010, we had to grade again, and I cut, re-cut the ditch. In under a year, the water quit flowing. When 2013 came, the ditch was gone. It wasn't just not there, you could not find the ditch. It was gone.

Mr. Shaw continued, in the fall of 2015, we had to regrade again. In order to access the property, because it bermed up around, they had to construct a access point so they regraded a portion of the yard. They also pulled out a lot of silt and dead grass. He explained that they also reestablished the slope of the yard here, and then we sodded it. It was during this time that Village staff informed Mr. Shaw you are doing development in the floodplain which requires a permit. Mr. Shaw explained, he was just doing maintenance under my agreement with the Corps of Engineers, as he will continue to do.

Mr. Shaw explained that he can't tell you how much fill he's put in because of the erosion behind the wall there, but it causing a problem with all the stone from the street getting washed downstream.

Chairman Gormas asked, have you not had anything trucked into your property; is that right?

Mr. Shaw stated, we do, on occasion.

Mr. Boves of 1325 Gilbert stated: My name is Jim Boves, and I live just north of the property. And rather than touch on the numerous inaccuracies that I've heard tonight, I will just touch on a couple that I think are maybe more appropriate to what you're dealing with. First of all, the ditch was covered over last year. Until then, it worked just fine. And now, when it retains all the water because the ditch is no longer in existence, and it was covered over with new dirt, it enters into my property.

Ms. Lomax explained, we have no problem with the maintenance that has been done. The issue is placing fill, whether it's silt or dirt that's brought in, within that ditch, which now creates a pool of water in the right-of-way. And that really is the issue. Ms. Behr said staff has received complaints from residents where the water is getting so deep, it's starting to come up over the road, and it's becoming a safety issue for residents who need to get through on this road. There is always maintenance that happens as part of living on a creek because of its dynamic, but there's a difference between maintenance and regrading your property.

Mr. Boves stated that he has lived there since 1974, and the recent work done has blocked drainage. He has lived there several years longer than Mr. Shaw has, and never seen the ditch silt up. Early last year Mr. Shaw's driveway was redone, and a pipe was put under it as a form of continuation for the ditch. And the pipe is where it was before, and the ditch was where it was before. He's just filled it in.

Ms. Behr explained, the violation sent out cited Section 26.504. which states, development shall not result in unreasonable new or additional expense to any person other than the developer for flood protection, stream uses, functions or attributes; nor unreasonably increase flood elevations or decrease flood conveyance upstream or downstream in the area. So that was what we had cited was the drainage issues.

Mr. Scacco asked if other solutions have been considered? Staff stated the possibility to convey flow within right-of-way, but homeowner did not want trees removed so this option was not a potential solutions in previous discussions.

Chairman Gorman stated, if that's the sole issue and it's in the village right-of-way, and it's somewhat related to a lack of maintenance on the ditch, and largely related to filling – regrading or pushing the silt, I think rather than a violation, we should be looking at maybe a village maintenance action also, as far as regrading the ditch, restoring the ditch. But I think

the violation comes into play certainly. It was regrading without a permit. It blocked the drainage, that's why it's sitting here with all this algae in there.

Mr. Shaw explained that the whole point of this is that since the late 90's, the water hasn't flowed, so he took it upon himself to dig a ditch.

Ms. Behr explained that drainage throughout the village is variable. Our ditches go within the right-of-way, then they go onto private property in some cases, as was here. Ms. Newlon stated, Denburn Woods is a very special kind of unique place in the village. It has limited right-of-way. The drainage kind of winds its way through. It's unique in that you have distinct private property and public property drainage with ditches and culverts. There's many properties where the homeowners maintain the ditches because they have special cobbles and walls and all kinds of unique features. And it does go in and out of private and public property because of the unique nature of the area. So we try to do our best to maintain the paths of drainage and respecting what private properties have graded as well, so it is a rather challenging and unique area.

Mr. Schoenberg felt it wasn't so much a floodplain issues, but a conveyance issues. This is kind of a special area where the rights-of-way have been treated casually, that the landscaping choices of the residents there have been pretty much allowed to expand around these rural-looking streets. So as a result, the drainage relies heavily on the wise landscaping choices of the residents. The drainage path that he saw did not look natural. Water wants to get to creek, but can't. I do think Mr. Shaw has some responsibilities for having made some of those choices in the past. This is part of the mix.

Mr. Schoenberg continued, I think there's a violation there. And, similarly, there's an obligation by the village that we'll keep our rights of way in good repair, too. Rather than pursue the violation in this specific case, and I do think there is a violation, I think it is more appropriate to negotiate some type of new conveyance path. Ideally, it would be in the public right-of-way where the village could then take over maintenance in the future. I do think the cost of this must be borne significantly by Mr. Shaw, because I think, again, some of his past choices have a direct bearing on what we have here today.

Mr. Scacco stated, Mr. Shaw created a problem here. Right now it's placing this dam basically in the creek, but at the same time, there's no real way for water to get back to where it wants to go.

Mr. Ruyle stated that he has a different take. A topographic survey would show where the ditch was located, but it has not been maintained by the village, regardless of the fact that he planted a tree on the property line. Mr. Shaw needs to be able to access the rear yard. Although he should have gotten a permit for the work done. He is going to have on-going maintenance and needs access. And the road is already higher than it was originally. With or without the fill, the water would not flow to the creek. If Mr. Shaw is willing to spend money, possibly on a cross culvert? Or relocating the trees, this could be a solution.

Mr. Ruyle stated we should work out a technique that is going to allow the village to have a ditch on its property and maintain it. He would like to see if Mr. Shaw would be willing to spend the money to take and have those two trees moved back onto his property, so as not to change the appearance of the entrance to Denburn Woods.

Chairman Gorman stated some issues are probably with the ditch not draining well to begin with. So it seems yes, the violation is valid. But also there's a need for village maintenance. A right-of-way permit could be issued for him to do the work, and be inspected and accepted by the village. I would like to see some sort of middle ground resolved.

Ms. Newlon stated it necessary to have some fallback for the village to negotiate with Mr. Shaw on a resolution, so perhaps maybe still have the violation, but in lieu of the daily penalty, would be to uphold the violation but in lieu of the fine or the fee, that the village work with Mr. Shaw to compensate the village for the cost of reestablishing the ditch in the right-of-way.

Chairman Gorman clarified, that the final solution would be to keep the temporary roadway with a culvert running along the drainage line to allow access for equipment for maintenance.

Staff expressed concerns that other residents have requested similar things and that we have denied such request and only allow access via a driveway.

Mr. Scacco made a motion that committee recommend to the Village Council that the appeal be granted with the following modification: Mr. Shaw will enter an agreement by September 1st with the village to restore the drainage in the right-of-way along Brookbank, with Mr. Shaw bearing all costs for the work, otherwise the appeal is denied. Seconded by Mr. Schoenberg. Motion carried by a voice vote 6-0.

#### **VI. STAFF REPORT**

Chair Gorman recommended that staff report and new business be tabled until next time.

#### **VII. OLD BUSINESS**

Mr. Ruyle made a motion, seconded by Mr. Crilly to adjourn the meeting at 9:24 p.m. Motion carried by voice vote of 6-0.



# Memorandum

**TO:** SW&FPOC

**DATE:** August 5, 2016

**FROM:** Julie A Lomax, PE, CFM  
Development Engineer

Kerry K. Behr, PE, CFM  
Development Engineer

**SUBJECT:** **Recommendations to Reduce the Negative Impacts of Stormwater runoff from Residential Construction Activities**

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## **SUMMARY**

In 2015, the Village Council identified Consider Changes to the Stormwater Utility as a Top Priority Action Item. The Council has been discussing potential changes related to the utility over the past several months. While the fundamental policy question to be addressed relates to the type and amount of revenue that should be used to pay for stormwater related expenses (utility fees or property taxes), the Village Council has directed staff to consider more stringent stormwater regulations to lessen the negative impacts of runoff generated by residential construction activity.

## **STAFF ANALYSIS**

Staff has identified various options to help lessen the negative impacts of runoff generated by residential runoff. These options are presented in the attached Report.

## **COMMITTEE ACTION FOR EACH ITEM:**

1. "Recommend" to the Village Council **or** "Do not recommend" to the Village Council (no opinion would be considered a "Do not recommend").
2. Comments and/or clarification for each item voted on

## **ATTACHMENTS:**

1. Report entitled "Follow up to Stormwater & Floodplain Oversight Committee, Recommendations to Reduce the Negative Impacts of Stormwater Runoff from Residential Construction Activities, dated August 5, 2016.

**Follow up to Stormwater & Floodplain Oversight Committee**

**Recommendations to Reduce the Negative Impacts of Stormwater  
Runoff from Residential Construction Activities**

**August 5, 2016**

*At the Stormwater and Floodplain Oversight Committee meeting on June 23, 2016, staff presented several potential code changes to be considered by the SW&FPOC to address stormwater issues in the Village. The following is a summary of the items and SW&FPOC discussion from the last meeting.*

## Summary

Potential Code Change	SWFPOC Action		
	Recommended	Further Discussion Needed	Not Recommended / No Opinion
Increase the minimum required side yard setback in the R-4 zoning district to six feet (6') or 10% of the lot width, whichever is greater	X		
Maximum impervious area regulation / open space requirement		X	
Require sump pumps to connect to a minor drainage system or Post Construction Best Management Practices (PCBMP)		X	
Increase the stormwater runoff fee and/or fee-in-lieu for constructing PCBMPs		X	
Require additional PCBMPs for basements deeper than nine feet (9')		X	
Restrict foundation and/or finished grade elevation			X
Require on-site stormwater detention with an outlet to an established minor drainage system			X
Remove local PCBMP requirements (700 square feet instead of 2,500 square feet)			X
Eliminate the building coverage "bonus" for detached garages and front porches			X
Reduce minimum foundation drain tile size requirement from six-inch (6") diameter to four-inch (4") diameter			X

### **Increase the Minimum Required Side Yard Setback in the R-4 District**

Currently, the minimum required side yard setback in the R-4 District is five feet (5') or 10% of the lot width, whichever is greater. Many new single family houses and additions to existing houses are constructed on 50-foot wide lots, resulting in a five foot (5') side yard setback. In some cases, the five foot (5') side yard does not provide ample room for stormwater drainage improvements and negatively impacts adjacent properties.

The consensus of the Committee was to recommend increasing the side yard setback for the R-4 district to 6 feet or 10% of the lot width, whichever is greater.

Motion to:

- Recommend**
- Do Not Recommend**

### **Maximum Impervious Area / Open Space Requirements**

Currently, the Village regulates the maximum building coverage in the Zoning Ordinance - 32% of the lot area. Building coverage is measured as the area of the lot occupied by principal and accessory buildings and by structures with a surface area of more than four (4) square feet and a height of 18 inches or more. Driveways, patios, and some decks are not included in this calculation, which can add significantly to the amount of stormwater runoff from a property. The Village does not currently have Open Space Requirements.

Discussion Points:

- Majority of all existing residential development is between 20% and 50% impervious coverage
- Only 17% of residential development has impervious coverage of 50% or more
- Less than 3% of the 142 new homes completed since 2013 have impervious coverage of 50% or more
- Many complaints from new single family homes have total impervious coverage of less than 40% (some from projects with a net decrease in impervious area)
- Regulating existing non-conforming properties

Motion to:

- Recommend**
- Do Not Recommend**

### **Require Sump Pumps to Connect to a Minor Stormwater System or PCBMP**

Under the current code, sump pumps are required to discharge onto yards with a minimum setback of 20 feet from downstream lot lines. In many cases, sump pumps meeting code requirements still discharge significant amounts of water which negatively affects adjacent

properties. In these cases, the Village practice is to require the sump pump to discharge into a PCBMP. When feasible, these systems overflow to a minor stormwater system.

Discussion Points:

- Not all areas in the Village have storm sewer or ditch for conveyance
- Reduction in sump pump discharge on adjacent properties
- Potential increased flow downstream
- Require for all sump pumps or continue to require only for active sump pumps

Motion to:

- Recommend**
- Do Not Recommend**

**Increase the Site Runoff Storage Fee**

Under the current code the Village collects a fee for all residential construction projects that do not provide detention. Revenues from these fees are placed in the Stormwater Fund. The current fee ranges between \$0.565 per square foot to \$0.71 per square foot of impervious area depending on the watershed in which the project is located. The typical fee for a new single family house is \$800. In 2015, a total of \$113,157.25 in fees were paid. The purpose of this fee is to provide revenue to construct regional storage for runoff and it includes costs for engineering, land acquisition, construction and operations and maintenance. The Village may consider increasing the fee to account for increases in the cost of land acquisition and construction, as well as potential conveyance infrastructure to convey runoff from new construction to regional storage facilities.

Discussion Points:

- Funds generated could be used to expand the cost share program and/or fund neighborhood stormwater projects
- Projects generated from increased fee and/or fee-in-lieu will not be constructed immediately

Motion to:

- Recommend**
- Do Not Recommend**

**Increase the Post Construction Best Management Practice (PCBMP) Fee in Lieu**

The current code allows the Village to grant a fee in lieu to applicants that can demonstrate they are unable to provide the required PCBMPs on-site. The Village has only granted one such variance in the past. However, any funds collected are given to the County to construct improvements. Staff has found the fees collected are significantly lower than actual construction costs. The Village may consider modifications to the current fee in lieu structure to increase funds collected and allow these funds to remain in the Village.

Discussion Points:

- PCBMPs have limited effectiveness in some instances
- Projects generated from increased fee and/or fee-in-lieu will not be constructed immediately

Motion to:

- Recommend**
- Do Not Recommend**

**Require Additional PCBMPs for Basements Deeper than Nine Feet (9')**

The current code does not regulate the depth of basements. New houses are often constructed with deeper basements than older houses and can require multiple or extensive sump pump systems to manage groundwater. In some cases sump pumps may run continuously, even during drier periods, and volume will increase during periods of rain. This often creates a condition where low lying areas stay continually wet from constant discharge.

Discussion Points:

- Provide additional storage for sump pump discharge / displaced groundwater beyond standard basement depth to offset added sump pump discharge

Motion to:

- Recommend**
- Do Not Recommend**

**Require Foundation and Finished Grade Elevations to be Aligned with the Properties Located on Either Side of the Site**

The current Village code does not include regulations regarding the elevation of the tops of foundations for new houses and additions. In some cases, the foundations and adjacent grades are constructed at elevations significantly higher than those of adjacent houses and overall building height is measured from the proposed grades.

Discussion Points:

- Limited effectiveness in areas with variable topography
- Overall grading must take into account conveyance (occasionally top of foundation must be raised to provide positive drainage away from existing and proposed structures)

Motion to:

- Recommend**

- Do Not Recommend**

**Require On-site Stormwater Detention for New Residential Development**

Under the current Village code, stormwater detention must be provided for new construction with 25,000 square feet or more of net new impervious area. Installation of PCBMPs such as rain gardens and dry wells are required for construction activities that result in 700 square feet or more of net new impervious area but fall below the 25,000 square feet threshold.

*Consensus of the Committee was to not recommend detention for residential construction under 25,000 sf of net new impervious. Detention is cost prohibitive, not necessarily effective, and difficult/costly to maintain.*

Motion to:

- Recommend**
- Do Not Recommend**

**Remove Local PCBMP Requirements**

In 2015, the Village adopted a revision to its stormwater ordinance which requires all developments that result in new impervious area of greater than 700 square feet to install PCBMPs. Examples of these include dry wells, rain gardens or permeable pavers with added base. These regulations are intended to improve water quality, to mitigate the stormwater impacts of new development on neighboring properties, and to reduce the amount of water entering the public portion of the stormwater management system.

*Consensus of the Committee was to not recommend removing the local PCBMP requirements. The systems provide added water quality and stormwater runoff storage volume.*

Motion to:

- Recommend**
- Do Not Recommend**

**Eliminate the Building Coverage Exception for Detached Garages and Front Porches**

The current code does not include detached garages in the rear yard and rear-loading attached garages with a building footprint of 500 square feet or less towards overall building coverage. Front porches with a total footprint of 250 square feet or less are also not counted towards overall -building coverage.

*Consensus of the Committee was that this was an item that should be considered in conjunction with zoning and planning issues. Stormwater runoff issues are included in the discussion of total impervious coverage / open space requirements.*

Motion to:

- Recommend**
- Do Not Recommend**

**Reduce Minimum Foundation Drain Tile Size Requirement**

Under the current code, the minimum size of the foundation drain tile is six inches. This is a local code amendment. The International Building Code requires a minimum size of four inches. The six-inch drain tile carries substantially more water than a four-inch drain tile and increases the amount of water flowing through the sump pump discharge.

*The Committee did not have a consensus on the foundation drain tile size as this is a building Code issue.*

Motion to:

- Recommend**
- Do Not Recommend**