

**MONROE COUNTY DRAINAGE BOARD
REGULAR MEETING MINUTES
HEALTH BUILDING MEETING ROOM
JUNE 9, 2010 (postponed from June 2, 2010)**

MEMBERS PRESENT: Kevin Enright (*ex officio*), James Faber, William Riggert, Bill Williams

MEMBERS ABSENT: Robert Autio, Scott Dompke

STAFF PRESENT: Todd Stevenson (Drainage Engineer), Donna Barbrick (Secretary), Katie Waldman (Planning), Jason Eakin (Planning)

OTHERS: Steve Brehob (Smith Neubecker), Jeff Fanyo (Bynum Fanyo).

CALL TO ORDER: The meeting was called to order by William Riggert at 9:00 a.m.

APPROVAL OF MAY 5, 2010, MINUTES: Approval of May meeting minutes tabled with minor typographical corrections noted.

DRAINAGE ENGINEER'S REPORT

Status Update – County Storm Water Utility

Todd Stevenson and Kevin Enright talked about the planned dates for meetings regarding the proposed utility. Stevenson said that various scenarios produced by the consultants were online as PDFs.

CEDAR SPRINGS PUD DEVELOPMENT PLAN

This project was before Drainage Board at the April meeting. Since then, there have been a couple of changes and Stevenson has drafted Recommended Conditions of Approval (RCOA). Steve Brehob gave a brief overview and highlighted changes for Drainage Board. There are 44 residential lots and two large common area lots. The total of common area and conservation area is 7.42 acres or roughly 33% of the project. As far as detention, it has been moved out of the old stone quarry area to a long rain garden on the back side of three lots. The ultimate discharge location is the same and the overall drainage patterns are the same. Offsite runoff from an adjacent property will be picked up with a rear yard swale and then taken down to SR 46 to a right-of-way. There is also a tree area planned as a mitigation area. There are wet weather springs and an existing spring house. Also in April, Steve Dompke had asked for some means of access through

the project so they have now included a 25-foot access and drainage easement. Also, a walkway along the stream area and a pedestrian bridge will be included.

Faber asked about protection along the backside of the properties. Brehob said there will be ground markers at 50-foot intervals. These were used in Amber Ridge and worked well. Faber asked about the depth of the old quarry. Brehob said it didn't have much depth to it.

Faber moved to have the Cedar Springs approved with nine Recommended Conditions of Approval drafted by the Drainage Engineer. Williams seconded.

Enright had a comment about detention on lot 28. Having a basin on its own separate lot is not required but we see it as desirable. This is a good example of what we like to see.

A vote was taken and the motion passed with no opposition.

CEDAR SPRINGS APPROVED CONDITIONS OF APPROVAL

1. A long term maintenance plan for all vegetation on the site is required.
2. Prior to issuance of any grading permits, a copy of a contract between the developer and a company experienced in native plant establishment and invasive species eradication shall be provided to the County indicating specific seed mixes, seeding methods, timetables, herbicides intended for use, their application rates and methods, and a three year maintenance plan.
3. Prior to the issuance of any land use certificates or letters of occupancy, a letter of credit shall be provided for establishment and maintenance of all native plants for a period of three years from the time they are seeded or planted from plugs.
4. Temporary construction or erosion control fencing is needed to delineate areas that are not to be disturbed. Existing trees to be preserved shall be identified on the plans.
5. All topsoil that is excavated from the site for building pads or roads shall be reused on the site in rain gardens, swales, and grassed areas to the maximum extent practical.
6. Practices that infiltrate one-half inch of runoff shall be provided for the roof tops of all of the houses.
7. Permanent metal ground markers shall be used to demarcate all conservation easements and areas that will be planted with native seed mixtures at all corners and at maximum intervals of 50 feet. The markers for areas with native plants shall reference a maintenance plan and the County Drainage Board.
8. Where amended soil mixture is called for in the plans, the soil mix shall be specified along with the depth and aerial extent.
9. Details of the design are to be worked out with the Drainage Engineer.

NORTH PARK – District A Comprehensive Stormwater Mgmt Plan

Jeff Fanyo of Bynum Fanyo represented the project. Stevenson proposed focusing on The Cottages in District A. The PUD as it was written specifically asks for Drainage Board to approve the overall drainage plan for District A before the plan can move forward. Stevenson said that this project was introduced at the last meeting. The overall drainage plan is on the agenda first, before the drainage plan for The Cottages. Four ponds are in already. Drainage goes to Stout's Creek and a Stout's Creek tributary. Fanyo said that the PUD required an overall drainage plan to conceptualize drainage for each district. When roads were built, ponds and stone basins were put in. There is a town center area planned that is probably several years away. In the town center area, they anticipate placing retention within that project, probably onsite drainage retention as well as something downhill. The plan is more schematic in nature because some areas don't have a specific design yet. In District A, existing ponds will be used and there will be two new ponds and some future retention in the town center area whenever development there occurs.

Stevenson asked if there were questions about the overall plan. Faber asked about plans for vegetation along the creeks. Fanyo said the existing vegetation will remain in place except for a lot of the flood plain. The flood plain area is put into a linear park. The allowed uses in that park are active and passive recreational activities. There is existing railroad bed that will be made into a multi-purpose path. There are plans for recreational fields in the flood plain. As far as new plantings, nothing has been planned on that at this time. There is existing vegetation. There is a pasture that will be kept for now. The linear park is actually a separate lot unto itself. When they get to a certain level of completion, there is a requirement then that the multi-purpose path will be built.

Faber said his main concern is keeping mud from getting into Stout's Creek. He asked about tree cover. Stevenson said that there is a row of trees on the east side and trees on the north hillside. The trees are going to be removed up to 10 feet off the back of the buildings and a little closer in some areas. They will be replaced with a 20-foot buffer yard with trees.

Stevenson asked whether the overall concept for the district could be approved by Drainage Board before getting into the specifics for The Cottages. Williams said, so it would have to come back later with more detail once the site plan has been done? Fanyo said, yes, they are looking at a potential user for one site right now. Faber asked about additional excavation. Fanyo said no, not beyond a certain area.

Stevenson said, he wanted to add that the mud disturbance that Faber might have seen was from District B where there has been some disturbance and that he has asked Chris Spiek in Planning to go look at that. There is a need for upgrading of some measures to prevent erosion. There's a sediment pond that's filled in and some erosion in a ditch. Fanyo said he brought that up to Steve Crider a couple of weeks ago.

Faber asked about rain gardens. Stevenson said rain gardens are a long-term practice and this site is still under active construction. He said rock check dams and sediment ponds need to be maintained.

Williams made a motion to approve the conceptual plan for District A provided they return with more detailed plan as the area develops.

Faber seconded. A vote was taken and motion passed with no opposition.

Stevenson asked Eakin and Waldman if this overall drainage plan would have to be looked at again as other site plans come in? Eakin said no, there are some big-ticket, one-time deals that really need to happen with this project; one is the linear park open space plan. That plan and the general conceptual plan will be seeking approval. As it develops out, they wanted Drainage Board to see the overall plan. From here on, it will be site specific. If there are changes planned, it may generate a second look. Stevenson said this is very conceptual and there's room for making specific changes. This isn't something we normally do.

NORTH PARK – The Cottages at Bloomington

Stevenson brought out plans that showed the grading. Basically the land slopes down to Stout's Creek and then some area slopes down to a tributary. There is a bit of a ridge. Fanyo said they sized the culverts to keep the 100-year event from backing up. They went with two 6 x 12 box culverts. Stevenson commented he thought it might be better if there was one. It might even be an IDEM requirement now. Two is a problem because of trapped debris. Fanyo said they had done hydraulic sizing and they would need a 24 x 6.

Stevenson asked, is this something that is going in now? Fanyo said no, the actual connection doesn't have to be made until they get to 75%. Stevenson said, so you've done the sizing but it's not going in now. He said he went down there and saw that there's a single pipe in there now and there's a place where the channel is open. Fanyo said that breach probably happened a while ago.

Fanyo said they sized the collection system to handle a 100-year event. Some of the buildings collect storm water into that system and some collect into a pipe that runs back into the detention area. That's a low area that takes drainage to another small pond.

Faber asked how high is the rise you had to go across with a pipe? Fanyo said, there's a 730 contour here and here and a 735 contour here. When they go through it's probably about nine feet deep. That's not unusual.

Faber asked how many units. Fanyo said, there are 155 units total plus the clubhouse. It was approved at 15 units per acre and is being built out at about 7 units per acre. There are 22.02 acres and the roughly 5 acres of linear park. The linear park essentially follows the floodplain line. There are lot lines for the linear park. The PUD required the park on its own lot.

Riggert asked if the basins each had storm water quality. Fanyo said, yes. Riggert asked about a marking on the map. Fanyo said that indicated erosion control blanket that lies on the surface. Eakin asked about some islands where he didn't see any pass-throughs or

cut-throughs. Fanyo said there's supposed to be an underdrain, similar to others in the plan.

Stevenson commented about something that was a PUD requirement. He did not mention it as a specific recommended condition of approval. In the ordinance it does say that the parking lots or expanses of impervious surface will utilize techniques that treat storm water within or adjacent to the area prior to releasing to a large management facility. They do have bio-retention in the parking lots and islands, however for a couple of the parking lots, it's only for half of the parking lots and the other half drains straight to a large management facility. Fanyo said, he thinks that there is something that they need to add there. His recollection was about when there are more than four bays of parking. This detail may need to be worked out and they will read through the ordinance to make a determination. For now the issue is left out there. It's not an actual Drainage Board requirement, but a Plan Commission requirement. Stevenson said that they might have to either re-slope or put something along the edge. Fanyo said they might put in some permeable paving with gravel underneath.

Stevenson said, another issue had to do with Chapter 761 tree removal. He said sometimes ponds can be designed around the trees since trees can be included in the basins. Fanyo said they did regrade this pond so as to not disturb some of the trees. There was a discussion about the locations, types and sizes of the trees. Faber commented that scrubby trees didn't concern him. Stevenson said, Drainage Board does not really specify sizes of trees although he would agree that he's not really concerned about small, scrubby trees. There was a comparison of the current trees and the plantings shown on the plan. Stevenson noted that the plan is saving the trees that were required to be preserved for Plan Commission requirements. There was a discussion about a large Maple tree located near the planned roundabout.

Fanyo commented that he had not yet seen the recommended conditions of approval. Stevenson passed out copies of the RCOA. After looking them over, Fanyo thought that the list looked good.

Referring to the RCOA #5, Stevenson commented about the way topsoil is managed and how it really is a long-term best management practice. If topsoil is removed or only an inch or so is left with clay underneath that, it leads to problems with infiltration and then people tend to fertilize leading to increased nutrient loadings. The way topsoil is managed is very important.

Faber commented on RCOA #8, "There may be a need to increase pond capacities." Stevenson said he would talk to Jon Thomas about that. Williams asked about the RCOA concerning a three-year maintenance bond. Why three? Stevenson said because some companies think that when establishing native plants from scratch that first three years are really critical. After that, there is usually enough density to keep out the weeds.

Stevenson said that the one thing for Jeff to look at would be the interpretation of some of the parking lot bio-retention. Fanyo said that there would be a way to deal with it with permeable paving if that was required.

Faber motioned to approve The Cottages at North Park with the eight RCOAs put forth by the Drainage Engineer plus looking into the aspect of treatment of drainage from parking areas prior to discharge. Williams seconded the motion.

There was a discussion about tree preservation, specifically a 30-inch maple tree. It would require special treatment around the roundabout to preserve the tree. Fanyo said he would take a closer look at it. It may depend on the condition of the tree. There was a discussion of drainage in the roundabout and about maintenance and landscaping of the roundabout.

The vote was taken and the motion passed with no opposition.

There being no more official business, the meeting adjourned at 10:30 a.m.

Approved:

Signed:

Attest:

Scott Dompke, President

Donna Barbrick, Secretary

THE COTTAGES AT BLOOMINGTON – NORTH PARK DISTRICT
A
RECOMMENDED DRAINAGE BOARD CONDITIONS OF
APPROVAL

10. A long term maintenance plan for all vegetation on the site is required. The plan shall be posted in the main building.
11. Prior to issuance of any grading permits, a copy of a contract between the developer and a company experienced in native plant establishment and invasive species eradication shall be provided to the County indicating specific seed mixes, seeding methods, timetables, herbicides intended for use, their application rates and methods, and a three year maintenance plan.
12. Prior to the issuance of any land use certificates or letters of occupancy, a letter of credit shall be provided for establishment and maintenance of all native plants for a period of three years from the time they are seeded or planted from plugs.
13. Permanent metal ground markers shall be used to demarcate all conservation easements and areas that will be planted with native seed mixtures at all corners and at maximum intervals of 25 feet. The markers for areas with native plants shall reference a maintenance plan and the County Drainage Board.
14. All topsoil that is excavated from the site for building pads, parking, or roads shall be reused on the site in rain gardens, swales, and grassed areas to the maximum extent practical. The manner in which this is done shall be depicted on the construction plans.
15. The Chapter 761 (Storm Water Management) requirement for tree preservation in proposed detention areas will require some type of design change. One possibility would be to minimize proposed grading within the ponds by using walls to reduce the impact from adjacent fill.
16. The storm drainage system shall be designed to convey the entire 100 year storm peaks to the detention ponds.
17. Details of the design are to be worked out with the Drainage Engineer. There may be a need to increase the proposed pond capacities.

On the plans presented to the Drainage Board, please show the pipe that will be used to convey roof runoff from the north row of dwelling units to Pond 2, along with an increase in amended soil mix depth to 12 inches in the bioretention and detention pond areas. Obviously, if trees are preserved within the detention ponds an amended soil mix will not be possible.

In Section 3.4(a) of the North Park ordinance, there is a statement that “Parking areas and other large expanses of impervious surfaces shall utilize techniques that manage and treat storm water within or adjacent to the area (site) prior to releasing water into a large management facility.” In two of the parking lots, about half of the runoff goes directly to the detention pond, along with all of the parking proposed along the roads does the same. It seems like the interpretation of the ordinance would have to be pretty loose to allow this. The interpretation of this statement will ultimately be made by the Plan Commission. I support the intent of this provision because use of smaller practices located close to sources is an integral component of low impact design. Also, the design

of the practices within or adjacent to impervious surfaces will have to insure that there is capture of the first one-half inch of runoff.