

**MINNEHAHA CREEK WATERSHED DISTRICT
BOARD OF MANAGERS**

**In the Matter of Permit No. 15-445
BPS Properties LLC,
300 Sixth Ave. N., Orono, Hennepin County**

**FINDINGS OF FACT AND
CONCLUSIONS OF LAW**

FINDINGS OF FACT

1. On October 22, 2015, at a duly scheduled meeting of the Minnehaha Creek Watershed District, the above-captioned permitting matter was considered by the MCWD Board of Managers. Managers Sherry White, Pamela Blixt, Richard Miller, Brian Shekleton, William Olson and James Calkins were present. Also present were MCWD permitting technician Tom Dietrich, MCWD engineer Chris Meehan, counsel Michael Welch, and District Administrator Lars Erdahl.
2. This matter concerns a permit application for approvals needed for a proposed 11-lot subdivision at the above-captioned address. The development is also known as the Mooney Lake Preserve or Mooney Lake Preserve Development. The proposed site is 89.09 acres in area, with 8 acres proposed to be disturbed. The amount of existing impervious area on the site is 1.38 acres, with 5.1 acres proposed to become impervious.
3. A Wetland Conservation Act (WCA) Notice of Decision approving the boundaries and types for 14 wetlands on the project parcels was issued by the MCWD acting as the local governmental unit administering WCA on July 10, 2015.
4. The application (no. 15-445) sought a permit under the District's Erosion Control, Wetland Protection and Stormwater Management rules.
5. The application was received on August 24, 2015. It was determined to be complete September 15, 2015. The District's 14-day public comment period began on September 16, 2015.
6. On September 28, 2015, the District received Anne Healy Shapiro's request for consideration of the permit application at a meeting of the Board of Managers, and in keeping with resolution 049-2004, the matter was duly scheduled for consideration by the managers at the regular meeting of October 22, 2015.
7. On October 19, 2015, in advance of the meeting, District staff included in the packet of materials sent to District Managers and available to the public their staff report (Staff Report) concerning the application. Attachments to the Staff Report included the permit application,

the Site Plan (North Detail), the Site Plan (South Detail) the Minnesota Wetland Conservation Act Notice of Decision for the property, and Wetland Buffer Plans for the property (two sheets).

8. District staff also included in the packet an Affidavit of Cecilio Olivier, MS, PE (Olivier Affidavit), dated October 15, 2015. Exhibit A thereto was a "Technical Memo," critiquing the stormwater-management plan and the development in general with the same date (Olivier Memo). Exhibit B thereto was a list of documents received by Mr. Olivier and technical/legal materials reviewed by him.
9. In advance of the meeting, the Board was provided with a Technical Memo from its engineer, Chris Meehan of Wenck Associates (Meehan Memo), dated October 21, 2015. The Meehan memo provided further information concerning the review of the Mooney Lake Preserve Development, and addressed specific concerns with stormwater management and wetland protection raised by the Olivier Affidavit and Olivier Memo.
10. In advance of the meeting, counsel representing Ms. Healy Shapiro declined to have Ms. Healy Shapiro meet with MCWD staff to explore options to address her concerns with the application. Also in advance of the meeting, counsel for Ms. Healy Shapiro were notified of their opportunity to make a presentation to the Board of Managers during the meeting.
11. At the meeting, Tom Dietrich presented the staff report on application 15-445. Mr. Dietrich said that the District received several comments by email, and noted Ms. Healy Shapiro's request for consideration of the application by the Board of Managers.
12. Mr. Dietrich used a PowerPoint presentation to provide the managers with background on the proposed projects and explain analysis of the proposed land-disturbing work against the applicable regulatory criteria. He described the project's location, some details of the proposal that are particularly relevant to the District rules, the rules triggered by the application, and the staff's recommendation. He explained that the site currently had 1.38 acres of impervious areas, all of which would be removed as part of the development process. He also identified a prairie restoration, approximately 45 acres in size, included in the project. The underlying zoning ordinance in Orono permits lots with a minimum of two acres for each single-family home. On a development of this size between 30 and 34 lots could meet that standard, but the developer is only proposing a total of eleven single-family homes.
13. Mr. Dietrich provided an overview of the project's compliance with the District rules, noting that no variance is need from any rule provision.
14. Explaining the erosion control plan, he identified that erosion control was needed because the project exceeds the threshold of 5,000 square feet of land disturbance. His presentation explained protections proposed by the applicant, including silt fence, rock construction entrances, inlet protection, concrete washout protection, and final stabilization.
15. Explaining the wetland protection, he identified the specific wetland buffer areas delineated on maps of the north and south portions of the project. He indicated that there is no impact to

wetlands, and no buffer averaging, and that the project meets the criteria of the Wetland Protection Rule.

16. Explaining the stormwater management plan, he first noted that the developer is planning to increase the present 1.38 acres of impervious area by approximately 3.78 acres, therefore the developer must provide stormwater management meeting the District's stormwater criteria for the entire site. Mr. Dietrich reviewed the locations of nine lot-specific rain gardens, two infiltration basins, a proposed stormwater-treatment pond, and a filtration basin on the project plans.
17. He explained that the District's rules require the applicant's stormwater management plan to provide for the abstraction of the first one inch of rainfall from the impervious areas, which in this case required 18,513 cubic feet of abstraction. The submitted stormwater-management plan provides more than 20,000 cubic feet of abstraction (specifically 20,625 cubic feet), not counting the restored prairie.
18. He explained that, as a general matter, the stormwater management systems proposed will improve water quality in runoff from the site to Mooney Lake and Hadley Lake.
19. He explained that there is a stipulation included in the staff-recommended action on the application that calls for confirmation of a low floor two feet above the 100-year flood elevation on lot 2, block 2. He said that on the plans this level appears to be met, but that needs to be verified at the time of construction.
20. Mr. Dietrich concluded by stating that the proposed project meets all of the District's applicable rules, and recommended approval with the conditions and stipulations listed in the Staff Report.
21. District engineer Chris Meehan noted that the Meehan Memo responding to the Olivier Memo was sent to the managers via email and uploaded earlier today. Mr. Meehan stated that the principal finding of the Meehan Memo is that the stormwater management plan not only meets District requirements but as noted earlier improves water quality in runoff. He welcomed questions from the managers.
22. Manager White stated that the matter is before the Board of Managers at the request of an interested party and that the managers will take comment from the public and attendees at the meeting tonight, but repetitive comments and comments that are not relevant to MCWD's authority are disfavored and she appreciates brevity of those wishing to present.
23. Jeff Watson, from the law firm of Moss and Barnett, appeared before the Board of Managers on behalf of George Stickney and BPS Properties, the applicant. He said he had nothing to add to the staff report but was happy to answer any questions that the managers may have.
24. James Lane, of counsel with the firm of Robert R. Hooper and Associates, appeared before the managers and stated that he represents the plaintiffs in the suit against the developer, City of Orono and Minnehaha Creek Watershed District. He recognized Anne Healy, who had requested that the matter be heard by the Board of Managers, and Ms. Healy stood to be recognized, but did not speak before the Board of Managers.

25. Mr. Lane said that he would like to have Mr. Olivier from EOR and Doug Mensing from Applied Ecological Services present what he described as compelling evidence that the Board of Managers should delay action on the permit and direct staff to work with these professionals to improve the environmental protectiveness of the development. He encouraged the managers to listen to Mr. Olivier and not to simply accept staff's findings and recommendations, then exercise independent judgement with regard to the application.
26. Mr. Olivier appeared before the managers and noted that he wished to make it clear that he was not leveling any criticism at the District staff and or the District's rules. He stated that district staff do an excellent job of reviewing and implementing the Minnehaha Creek rules; and stated that the Minnehaha Creek rules do a good job of protecting resources in general.
27. Mr. Olivier referred to his serious concerns.
28. He stated that some of the concerns articulated in the Olivier Memo were addressed by new information. He mentioned upgrades on the size, shape, and location of the rain gardens.
29. Referring to a note on the proposed plans stating, "Houses, impervious surfaces and individual driveways need to direct all runoff to the proposed rain gardens, curbs will be required on all driveways to accomplish this," he stated that this was a welcome addition.
30. Regarding the wetlands protection plan, he explained that he had verified a one-foot bounce and 200 parts per billion input from his own analysis, so that was not an issue for him anymore.
31. He stated that there were some inconsistencies in driveway areas and widths that, through review, have already been addressed.
32. He stated that, as designed now, the runoff discharge rates are met.
33. He stated that the rest of the development from his perspective is very well done and protective, but the woods area was the one he was concerned about. He added that he understood the woods is not something the District could do much about.
34. Mr. Olivier was critical that there were not design details about how routing water to the rain gardens would be done in all cases, identifying challenges due to topography.
35. He stated that there are not specific borings that he could find for each one of the rain gardens, and added that it could be important to have those borings.
36. He stated that there are no design details on rate control weirs on the rain gardens.
37. He stated that from his perspective peak rate control is addressed in the area of the woods, but added that erosion will be due to concentrated flows because weirs will concentrate the flows from the rain gardens. He encouraged inclusion of some diversion features.
38. Mr. Olivier stated that he believed the runoff retention proposed is not enough to actually mimic existing hydrology, which is a very specific, pristine and natural hydrology.

39. While Mr. Olivier disagreed that one or two inches of retention would be sufficient in the woods area, he added that in the other areas that could be true, and that there would be a reduction in phosphorous because they would be adding stormwater facilities where there are none on the site now, and there would be some reduction for that reason. For runoff levels coming out of the woods, he continued to believe those would be a problem in terms of volume, and that they would have a higher concentration of pollutants because of development there.
40. He also described several issues as important concerns but that were not high on his list. He said that the additional runoff volume into a land-locked lake like Mooney Lake was not going to be a big impact – maybe a quarter of an inch maximum in a big storm event, which he did not consider to be a big deal. He stated that the plans did not account for runoff volume increase due to climate change, but that it's probably not an important concern on the list.
41. As to alternatives, Mr. Olivier stated that not building in the big woods was unrealistic from his perspective, but that the number of lots in the woods could be reduced from 3 to 2, or perhaps 1. The applicant could look into the possibility of introducing permeable surfaces, incorporating flow-dispersion designs, other BMPs in addition to rain gardens, and stronger covenant controls that address new impervious areas.
42. Doug Mensing discussed the loss of Big Woods from the proposed development. He said that the Big Woods remnant on this property is well documented as good quality, with mature trees and great habitat potential. He described the maple-basswood forest and reviewed some of the elements of the project design that could be improved from a conservation design prospective. Manager White encouraged Mr. Mensing to address issues that are about water quality. Mr. Mensing stated that with regard to stormwater, an existing drainage swale on the property that leads to Mooney Lake absorbs a lot of the rainwater that falls, but “this system is kind of on the edge, and is already exhibiting some signs of erosion.” He also stated that the proposed design will cause untreated runoff to the lake.
43. Responding to Mr. Olivier and Mr. Mensing, Mr. Meehan stated that these were all points that the District staff and engineer took into consideration in analyzing the proposed development, and emphasized that the applicant has gone above and beyond the District's rules for all of these factors. He specifically referenced the low number of lots, the conservation easement, volume controls, and water quality improvements.
44. Mr. Meehan also clarified that the District will review plans for single-family homes to be constructed on the proposed lots.
45. In response to a question from Manager Blixt about whether staff would review the building plans to ensure that weirs are included in the rain gardens, he stated that the weirs and designs for each individual home site and associated rain gardens will be specified as the home goes into place and that what's currently in the plans are typical details. He added that soil borings will be conducted at that time home designs are proposed as well. He also noted that staff and the District engineer will review runoff retention on each home site as plans are finalized to evaluate whether they are properly sized and that there won't be erosion.

46. With regard to the sloping of the driveways to ensure that all runoff is captured, Mr. Meehan stated that each of the homes will be a custom design and that as the District staff will review the plans and confirm that the grading and gutters directing runoff into the raingardens are in place.
47. In response to a further question from Manager Blixt, Mr. Dietrich noted that the property owners in the surrounding area will not necessarily receive notice of each individual home as it comes to MCWD, but we can do that on a case-by-case basis, and that such notice could be provided here.
48. Mr. Dietrich added that in accordance with the approval of the final plat by the City of Orono, rain gardens will be constructed before the lots are developed and will be in place at the time of the development of those homes.
49. Mr. Watson appeared before the Board of Managers and said that the city required that rain gardens be specified when the building permit for each home is pulled.
50. With regard to a question from Manager Calkins, Mr. Meehan stated that there District engineer has characterized the soils in the area using standard soil classification data but the District has not conducted borings.
51. Manager Calkins asked about higher infiltration rates in a forest area than will be achieved in a finished turf-grass scenario, and Mr. Meehan acknowledged that that is in fact the case but those volumes and changes were taken into account in analyzing runoff volumes and designating runoff coefficients for purposes of the District permit review.
52. In response to a further question from Manager Calkins, Mr. Meehan stated that District staff and engineer used a 10 percent increase for the runoff coefficient to account for the change to runoff rates that will come because of the loss of forest canopy from the development. Manager Calkins asked about the likely loss of more trees than has been planned. Mr. Meehan noted that the District's modeling assumed no trees and accounted for tree loss in the curve number that the engineer used for the stormwater management analysis.
53. Manager Miller moved and Manager Calkins seconded approval of Permit 15-445 with the conditions and stipulations outlined by staff in the staff report, and directed staff to prepare findings and conclusions from the evening's review of the matter for approval by the managers at the next meeting. The motion passed 6-0.
54. The project does not propose wetland impacts, such as would trigger a need for the applicant to apply for replacement-plan approval under the Wetland Conservation Act.
55. The applicant's plans leave existing wetland buffers undisturbed.
56. Eight of the 14 wetlands on the project parcels are located downgradient of the proposed work.

57. The applicant is applying the full buffer width required by the MCWD Wetland Protection Rule to the wetlands, without utilizing any buffer width averaging.
58. The District expects that, as a result of the project, runoff volume from the property will decrease compared to existing conditions, under which runoff from 1.38 acres of impervious area is untreated.
59. The District also expects that, as a result of the project, runoff from impervious surfaces on the project site will be treated, resulting in a reduction of loading of phosphorous and other pollutants to downstream waterbodies, including Mooney Lake.
60. The technical review conducted by District staff accounted for the planned modifications to the topography, including the change in tree cover and the canopy, as well as other site conditions.
61. Procedures that are in place provide adequate safeguards that, as new structures are proposed, impervious areas throughout the development are appropriately addressed, with the benefit of additional information not currently known about the specific locations of home sites (and related home setbacks), and potential or alternative sites for rain gardens.

CONCLUSIONS OF LAW

1. The District possesses authority under Minnesota Statutes sections 103D.335, 103D.341, and 103D.345 to adopt and implement rules and issue permits applicable to erosion and sediment control, stormwater runoff management and wetlands protection.
2. The District is the Wetland Conservation Act Local Governmental Unit for Orono and the Property.
3. The applicant's erosion control plan conforms to all criteria outlined in Section 5(b) of the District's Erosion Control Rule, and otherwise meets or exceeds the requirements of that Rule.
4. Because the project triggers the District's Stormwater Management rule, under Sections 3(b), 4(a), and 5(a) of the Wetland Protection Rule wetland buffers must be provided on each wetland on the property downgradient from land-disturbing activity to be taken on the project. The project meets or exceeds the applicable buffer criteria, providing buffers of 30 feet on Manage 2 wetlands and 20 feet on Manage 3 wetlands – the full widths required by the rule.
5. Because the approval is conditioned on the applicant's obtaining District approval of and recording a maintenance declaration on the deed to the development property, ensuring continued protection and maintenance of the buffer areas, the project satisfies that requirement of Paragraph 7(a) of the Wetland Protection Rule.

6. The project meets the District's Wetland Protection rule.
7. Regarding stormwater management, all proposed Best Management Practices (BMPs) are designed and are to be installed in accordance with generally-accepted design practices and guidance from the Minnesota Pollution Control Agency's Stormwater Manual.
8. In accordance with Section 3(d) of the District's Stormwater Management rule, BMPs have been incorporated to provide the necessary volume of abstraction through on-site infiltration and peak flow control and to limit pollutant discharge from the site.
9. In accordance with paragraph 3(c)(1) of that rule, the applicant's plan provides for the abstraction of at least the first one inch of rainfall from the site's impervious surface. The plan, in fact, provides approximately 110 percent of the required level of abstraction.
10. The stormwater management plan provides phosphorus control by virtue of its meeting the volume control requirement of paragraph 3(c)(1) of that rule.
11. In accordance with paragraph 3(b) of that rule, the proposed stormwater ponds and infiltration practices will prevent a net increase in the runoff rate for the 1-, 10- and 100-year TP40 rain events. Those facilities are in fact designed to reduce runoff below the existing rates for those rain events. Thus, in accordance with Section 3(b)(2) of that rule, no rate increase will occur from any drainage area of the site.
12. The applicant has shown that the stormwater rate and volume criteria are met.
13. The project as proposed will not increase the bounce and inundation of any wetland or waterbody beyond the limits outlined in Stormwater Management rule Section 8(b)(1-2).
14. The project does not propose any changes to runout-control elevations for any waterbody or wetland, satisfying the criteria of section 8(b)(2) of that rule.
15. The proposed peak runoff rates meet the District's rate-control requirements.
16. The proposed stormwater management system satisfies the District's requirements.
17. The project as proposed meets applicable requirements under the District's Erosion Control, Wetland Protection, and Stormwater Management rules.

Manager _____ moved, and Manager _____ seconded, the adoption of the above findings of fact and conclusions of law in the Board of Managers' October 22, 2015, conditional approval of permit application 15-445. On the motion to adopt the findings of fact and conclusion there were ___ ayes, ___ nays, ___ abstentions.

November 12, 2015

Kurt Rogness, Secretary
MCWD Board of Managers

DRAFT