MINUTES OF MEETING OF MANAGERS OF BUFFALO CREEK WATERSHED DISTRICT

The Managers of Buffalo Creek Watershed District met on the 24th day of May, 2016, at 8:00 P.M. at its regular meeting place in Suite 103, Glencoe City Center, 1107 11th Street E., Glencoe, MN, for its regular monthly business meeting.

The following members were present: Donald Belter

Larry Phillips Matt Melberg Larry Kramer Corey Henke

Also attending the meeting were: Pete Kasal, Attorney

Charles Eberhard, Engineer

President Belter called the meeting to order and announced the first order of business was the consideration of the minutes of the regular meeting of the Board of Managers held on April 26, 2016. Upon motion of Manager Kramer, which motion was seconded by Manager Henke, by unanimous vote the Board of Managers approved the minutes of the meeting held on April 26, 2016.

President Belter called upon Manager Phillips for the Treasurer's report. Manager Phillips presented a written report which outlined income and expenses as follows:

SAVINGS:	
C.B. #4206225	\$ 84,066.58
Rec'd: Interest	1.95
	\$ 84,068.53
LESS: Transfer to checking	(8,354.46)
JD 15 Branch "M"	(4,336.25)
McLeod Co. Ditch 33	(884.00)
Marsh Water Project	(17,337.50)
MAY BALANCE	\$ 53,156.22
CHECKING:	
April balance	\$ 1,000.00
Moved from savings to cover check	s issued _30,912.21
	\$ 31,912.21
Transfer from savings	(8,354.46)
Transfer from savings – JD Branch	
Transfer from savings – Bolton & M	enk – Ditch 33 (884.00)
Transfer from savings – Marsh Water	er Project CWP (17,337.50)
MAY BALANCE	\$ 1,000.00

Upon motion of Manager Kramer, which motion was seconded by Manager Henke, by unanimous vote the Board of Managers approved the Treasurer's report.

President Belter next called for agenda item — City of Glencoe Application for Permit No. 2016-5. Upon motion of Manager Henke, which motion was seconded by Manager Kramer, Application for Permit No. 2016-5 was removed from the table. Said motion was unanimously carried. President Belter called upon Attorney John Kolb of Rinke Noonan, who had reviewed the City's application on behalf of the Board. Mr. Kolb advised the Board that if they determine that the permit application should be denied, he has prepared some written Findings for the Board to consider.

President Belter called upon Chris Otterness of Houston Engineering, who reported on his evaluation of the application. He noted that the project proposes to provide a 30-inch tile outlet from holding ponds on the north side of Glencoe through a private ditch east of Glencoe and through the railroad tracks. Mr. Otterness did provide a written report and evaluation to the Board. He summarized his findings, basically stating that the existing private ditch with an additional culvert as proposed under the railroad tracks does have sufficient capacity for the additional work anticipated by the permit, but he noted that the flow would enhance water discharge to Buffalo Creek. He further noted that the project does not comply with Watershed Rule 5.05E1 in that it increases existing runoff rates for 2-year, 10-year and 100-year critical storm events. A copy of Mr. Otterness's written report is included in the minutes of this meeting.

John Rodenberg, Glencoe City Engineer, addressed the Board and acknowledged that the project as proposed by the City of Glencoe does exceed the limits set by Rule 5.05E1, but he noted that the City in submitting the application wanted to address an overall water problem on the north side of Glencoe that has existed for a number of years and that the proposal set forth by the City of Glencoe was the best solution to resolve the overall water issues for the entire north side of the City and the area around the school.

City Councilman Kevin Dietz addressed the Board and expressed his concern for the ongoing flooding issues experienced by residents of Glencoe in the past several years and stated that the City of Glencoe is simply trying to put forth a good faith effort to try and resolve the issue once and for all. Ken Schiroo, a Glencoe resident, also addressed the Board and expressed the need to address the flooding issues experienced in the area.

Following discussion among Board members, Manager Henke moved to deny the permit, which motion was seconded by Manager Phillips. Attorney Kolb presented proposed Findings of Fact and Denial of Permit and recommended their inclusion in the motion. The Board unanimously voted to deny the permit.

Chris Otterness next reported on the Marsh Water Project. He noted that the living snow fence originally proposed on the northwest corner of Glencoe does not appear feasible and will be dropped from the project. He did note that easement acquisition efforts should start shortly.

President Belter next called for agenda item – Ditch No. 79-2. Manager Phillips reported that the purported violation of wrongfully draining into the system has been sent to Attorney John Kolb for review and action is pending.

President Belter called for agenda item – County Ditch No. 33. Engineer Eberhard and Manager Melberg met with the viewers on the project and noted that the report is finished. Engineer Eberhard advised the Board that an informational hearing on the project is scheduled for June 14 at 7:00 P.M. and a final hearing is scheduled for July 21 at 6:30 P.M., both at the Board room location.

President Belter next called for the bills that had been presented to the Board since the last meeting. Manager Phillips reported bills as follows:

Kasal Law Office	\$ 678.48
Rinke Noonan	4,285.50
League of Minnesota Cities – insurance	2,452.00
Houston Engineering	16,514.50
Eberhard Consulting	1,127.22
Mary Henke – secretarial	539.06
Linda Phillips – secretarial/accounting	139.35
Corey Henke – per diem & mileage	200.76
Donald Belter – per diem & mileage	165.12
Larry Phillips – per diem & mileage	391.20
Larry Kramer – per diem & mileage	116.04
Matt Melberg – per diem & mileage	<u>96.60</u>
	\$26,705.83

Upon motion of Manager Henke, which motion was seconded by Manager Kramer, by unanimous vote the Board of Managers approved the above bills for payment.

President Belter next called for items of new business. Manager Phillips reported that he has met with County officials regarding a proposed list of designated waterways being prepared for recent buffer system law changes.

There being no further business to come before the Board, upon motion duly made, seconded and unanimously carried, the Board of Managers adjourned the meeting until the next regular meeting of the Board of Managers on Tuesday, June 28, 2016 at 8:00 P.M. at its regular meeting place in Suite 103, Glencoe City Center, 1107 11th Street E., Glencoe, MN.

Matt Melberg, Secretary



Technical Memorandum

To:

Buffalo Creek Watershed District Board of Managers

Cc:

Chuck Eberhard, Eberhard Consulting

John Kolb, Rinke-Noonan

Mark Larson, City of Glencoe

Justin Black, SEH

From:

Chris Otterness, P.E.

Subject:

Review of Permit Application by City of Glencoe dated April 19, 2016

BCWD Permit #16-005

Date:

May 16, 2016

INTRODUCTION / BACKGROUND

This purpose of this memorandum is to provide a technical review of the City of Glencoe's permit application to the Buffalo Creek Watershed District (BCWD) dated April 19, 2016 for the construction of outlet piping from an existing stormwater pond north of the Glencoe school campus (hereafter referred to as the north School pond), east to a private open channel drainage system east of the City (hereafter referred to as the East Ditch) and construction of an additional outlet underneath the TC&W Railroad where it crosses the East Ditch. The full submittal from the City is attached.

This permit application follows two related earlier applications. The City submitted an application dated January 15, 2016 for a proposed outlet from the north School pond to the East Ditch. This application was determined to be incomplete and was not considered by the BCWD Board of Managers. Permit 16-004 was applied for by Glencoe-Silver Lake Public Schools for an improvement at the school campus, including construction of stormwater management facilities. This permit was approved by the BWCD; however, it was later learned that the proposed construction relies upon construction of an outlet outside of the scope of the School's project, an outlet that does not currently exist and has not been permitted.

The following review is focus on verifying the compliance of the application to the BCWD's rules for Drainage Systems and Stormwater Management





REVIEW

DRAINAGE SYSTEMS (BCWD RULE 5.02)

The proposed construction is considered a "new or expanded system". The outlet is to a private drainage system that eventually drains to Buffalo Creek (an impaired public water). The following is a description of the project's relative compliance to BCWD Rule 5.02:

Rule 5.02E1: Demonstrate that the downstream capacity exists of the additional water discharged by the drainage facility.

Ground topography indicates that the East Ditch downstream of the proposed open channel is of sufficient capacity to convey the additional flows resulting from the project described in the City submittal. Installation of the 30" culvert under the railroad tracks will <u>decrease</u> peak flood elevations in the East Ditch upstream of the railroad tracks, despite the additional flow in the ditch resulting from the project.

The capacity of Buffalo Creek to accommodate additional flows, however, is less clear. Buffalo Creek frequently floods, resulting in damage to adjacent property. Therefore, Buffalo Creek already exceeds its capacity for an extended duration for the 100-year rainfall event (when and how long this occurs is unknown). As the additional flow (approximately 29 cfs for the 100-year rainfall event) is a small fraction of the peak 100-year flow in Buffalo Creek, and since this flow will not likely reach Buffalo Creek at the peak flood stage, constructing the project in itself may not result in additional flooding along Buffalo Creek. However, long-term enforcement of the BCWD's rate control rule (Rule 5.05E1) is critical in avoiding future additional flooding along Buffalo Creek. Long-term enforcement is also necessary to protect Buffalo Creek from future channel deterioration.

Rule 5.02E2: Demonstrate that the proposed project complies with all local, State, and Federal wetland regulations:

The project proposes to modify the outlet of an existing wetland mitigation area. If a permit is issued, it should be contingent upon verification from McLeod County and the U.S. Army Corps of Engineers that the modification of the outlet complies with the Wetland Conservation Act and the Clean Water Act.

Rule 5.02E3: Design and maintain drain tile system intakes in a way that minimizes the introduction of sediments to the drainage facility:

Not applicable to this permit.

Rule 5.02E4: All new and improved outlets into existing public drainage systems or public waters...:

Not applicable to this permit. The proposed new outlet is into a private drainage system.

STORMWATER MANAGEMENT (BCWD RULE 5.05)

Although the proposed project is not itself a development or redevelopment, the purpose of the project is to provide a new outlet to serve an existing development, a proposed new development (the GSL school campus







improvement); and future development. The following is a description of the project's relative compliance to BCWD Rule 5.02:

Rule 5.05E1: Runoff rates for the proposed development or redevelopment of a property shall not exceed existing runoff rates for the 2-year, 10-year, and 100-year critical storm events. The runoff rate for the property after development or redevelopment must not exceed the runoff rate in existence prior to the proposed development or redevelopment.

The proposed project is <u>not</u> compliant with Rule 5.05E1. Per the modeling data provided in the submit**t**al, the project proposes to increase the runoff rate to the East Ditch from the 2-year rainfall event from 0.0 cfs to 10.3 cfs. Likewise, the 10-year and 100-year rainfall runoff rates are proposed to increase from 0.0 cfs to 10.5 cfs and 28.8 cfs, respectively.

The City of Glencoe's engineer (SEH) has provided in the current application a model of the as-design condition based on the February 25, 1997 permit application for the construction of the North Central Stormwater Pond. The 1997 permit application indicated a proposed "relief channel" that would result in a discharge of approximately 59 cfs for the 100-year rainfall event. SEH's model assumes that this "relief channel" discharges directly to the East Ditch. The City's current permit application contends that an outflow of 59 cfs to the East Ditch for the 100-year rainfall event was permitted by the BCWD following the February 25, 1997 permit application, and that the current submission constitutes a decrease in flows compared to the permitted condition.

However, historic documentation does not support this contention:

- 1. The BCWD April 22, 1997 meeting minutes indicate that the Board of Managers approved Permit No 97-1 related to the February 25, 1997 permit application contingent upon the City of Glencoe obtaining an easement from the GSL school district. A May 8, 1997 letter from the GSL School District to the City of Glencoe indicated that they were no longer considering the proposed easement to the City, understanding that a revised easement would be prepared following completion of the project. We do not have any documentation indicating that the permit conditions were satisfied or that the completed permit was ever delivered to the City.
- 2. The 1997 application does not clearly define the alignment, orientation, or outlet of the relief channel. However, an April 1, 1997 letter from RCM Associates (the 1997 project engineer) to MFRA (engineer for the BCWD) indicated that the relief channel was intended to be directed to the wetland mitigation area east of the high school, and <u>not</u> the East Ditch. The outlet for this wetland mitigation area is noted in this letter as an existing agricultural tile line of either a 6-inch or 8-inch diameter, which eventually outlets into the East Ditch. This outlet likely has a capacity of less than 1 cfs.
- 3. The permit, if issued, would have expired one year after issuance.

The historic documentation does not indicate a permitted or existing outlet from the north central pond area to the East Ditch of greater than 8-inches in diameter. The proposed 30-inch diameter outlet was never contemplated. The proposed 30-inch diameter outlet and resulting stormwater flows do not meet BCWD's rate control requirements (Rule 5.05E1).

Rule 5.05E2: All development or redevelopment of property shall treat 0.5 inch of runoff from all newly created or redeveloped impervious surface on the property such that implemented storm water BMPs, consistent with MPCA guidance documents, achieve removal of 90 percent of total suspended solids and 50 percent of total phosphorus prior to any runoff leaving the property.







Not applicable. No new impervious surface is proposed as part of this application. However since original construction of the north School pond, additional development has occurred to use the north School pond as a stormwater outlet. It is not clear whether water quality treatment was considered by the City in permitting the subsequent development.

Rule 5.05E3: The applicant must submit runoff calculations for 2-year, 10-year, and 100-year critical storm events. The applicant must also submit water quality calculations demonstrating that the total suspended soli ds and phosphorus standards will be met.

The applicant submitted runoff calculations. No water quality calculations are necessary as this application does not propose new impervious surface. (see note above).

CONCLUSION

The proposed application does not meet BCWD Rule 5.05E1 -- rate control standards. We do not recommend approval of the application as submitted. Flow capacity from a new outlet to the East Ditch should be limited to the design capacity of the outlet to the wetland mitigation area east of the school, or replacement of said outlet. Alternatively, a design may be considered which would utilize construction of new regional stormwater detention practice(s) to mitigate the additional flows resulting from a new outlet north School pond to the East Ditch. Such a project should be designed to limit flow in the East Ditch to no more than existing flow for the 2-, 10-, and 100year rainfall events.

STATE OF MINNESOTA BOARD OF MANAGERS, BUFFALO CREEK WATERSHED DISTRICT

of	e Matter of the Application of the City Glencoe for Watershed District Permit 6-005	Findings of Fact and Denial of Permit
Disti (App	s Regular Meeting on May 24, 2016, the Board of Marict considered the application of the City of Glencoe olication #16-005) for certain stormwater improvement before the Board, Manager mover to adopt the following findings of fact and the control of the c	for a Watershed District permit ents within the City. Based on the ved, seconded by Manager
Find	ings:	
1.	The Buffalo Creek Watershed District is a special Minnesota Statutes Chapter 103D.	ourpose unit of government under
2.	Pursuant to the authority granted to it under Stat adopted administrative rules establishing controls activities related to water quality, water quantity, the District.	s and performance standards over
3.	The District's rules require permits prior to unders an applicant's actions where the applicant is unab found within the rules.	taking covered activities and may limit le to meet the performance standards
4.	The District's rules apply equally to private landov District.	vners and municipalities within the
5.	On or about April 19, 2016, the City of Glencoe (the construction of outlet piping from an existing store school campus (hereafter referred to as the north channel drainage system east of the City (hereafter	mwater pond north of the Glencoe School pond), east to a private open

6. After determining the application was complete, the Board assigned application number 16-005 to the permit and requested technical review by its engineer.

construction of an additional outlet underneath the TC&W Railroad where it crosses the

East Ditch.

- 7. Permit application 16-005 follows two related earlier applications. The City submitt ed an application dated January 15, 2016, for a proposed outlet from the north School pond to the East Ditch. This application was determined to be incomplete and was not considered by the BCWD Board of Managers. Permit 16-004 was applied for by Glen coe-Silver Lake Public Schools for an improvement at the school campus, including construction of stormwater management facilities. This permit was approved by the BWCD; however, it was later learned that the proposed construction relies upon construction of an outlet outside of the scope of the School's project, an outlet that does not currently exist and has not been permitted.
- 8. Permit application 16-005 is subject to District rules 5.02 related to drainage systems and 5.05 related to stormwater management.
- 9. The proposed construction is a new or expanded drainage system. The outlet is to a private drainage system that eventually drains to Buffalo Creek (an impaired public water). The following paragraphs address the City's compliance or ability to comply with rule 5.02.
- Rule 5.02E1: Demonstrate that the downstream capacity exists of the additional water 10. discharged by the drainage facility: Ground topography indicates that the East Ditch downstream of the proposed open channel is of sufficient capacity to convey the additional flows resulting from the project described in the City's application. Installation of the 30" culvert under the railroad tracks will decrease peak flood elevations in the East Ditch upstream of the railroad tracks, despite the additional flow in the ditch resulting from the project. However, sufficient capacity does not exist in Buffalo Creek to accommodate additional flows. Buffalo Creek frequently floods, resulting in damage to adjacent property. Therefore, Buffalo Creek already exceeds its capacity for an extended duration for the 100-year rainfall event. The proposed action will increase flow to Buffalo Creek in the 100-year run-off event by approximately 29 cubic feet per second (cfs). This increase is a small fraction of the peak 100-year flow in Buffalo Creek and may not, by itself, result in additional flooding along Buffalo Creek. However, long-term enforcement of the BCWD's rate control rule (Rule 5.05E1) is critical in avoiding future additional flooding along Buffalo Creek. Long-term enforcement is also necessary to protect Buffalo Creek from future channel deterioration.
- 11. Rule 5.02E2: Demonstrate that the proposed project complies with all local, State, and Federal wetland regulations: The project proposes to modify the outlet of an existing wetland mitigation area and may trigger permit or approval requirements from McLeod County and the U.S. Army Corps of Engineers. The City has not addressed whether the modification of the outlet complies with the Wetland Conservation Act and the Clean Water Act.

- 12. Although the proposed project is not itself a development or redevelopment, the purpose of the project is to provide a new outlet to serve an existing development, a proposed new development (the GSL school campus improvement), and future development. The following paragraphs address the City's compliance or ability to comply with rule 5.05.
- 13. Rule 5.05E1: Runoff rates for the proposed development or redevelopment of a property shall not exceed existing runoff rates for the 2-year, 10-year, and 100-year critical storm events. The runoff rate for the property after development or redevelopment must not exceed the runoff rate in existence prior to the proposed development or redevelopment. The proposed project is not compliant with Rule 5.05E1. Per the modeling data provided in the submittal, the project proposes to increase the runoff rate to the East Ditch from the 2-year rainfall event from 0.0 cfs to 10.3 cfs. Likewise, the 10-year and 100-year rainfall runoff rates are proposed to increase from 0.0 cfs to 10.5 cfs and 28.8 cfs, respectively. No effort has been made by the City to mitigate these increases or to investigate alternatives to delivering these flows to the already overburdened downstream system.
- 14. The City's application included a model of the as-designed condition for a project described in a February 25, 1997, permit application for the construction of the North Central Stormwater Pond. The 1997 permit application indicated a proposed "relief channel" that would result in a discharge of approximately 59 cfs for the 100-year rainfall event. SEH's model assumes that this "relief channel" discharges directly to the East Ditch. The City's current permit application contends that an outflow of 59 cfs to the East Ditch for the 100-year rainfall event was permitted by the BCWD following the February 25, 1997, permit application, and that the current submission constitutes a decrease in flows compared to the permitted condition. However, the City is unable to produce the completed permit from 1997.
- 15. Historic documentation does not support the City's contention that the 1997 permit application contemplated or included the currently proposed stormwater outlet or that the permit was ever issued by the District.
- 16. The BCWD April 22, 1997, meeting minutes indicate that the Board of Managers approved Permit No 97-1 related to the February 25, 1997, permit application contingent upon the City of Glencoe obtaining an easement from the GSL school district. A May 8, 1997, letter from the GSL School District to the City of Glencoe indicated that they were no longer considering the proposed easement to the City, understanding that a revised easement would be prepared following completion of the project. There is no documentation indicating that the 1997 permit conditions were satisfied or that the completed permit was ever issued to the City.
- 17. The 1997 application does not clearly define the alignment, orientation, or outlet of the relief channel. However, an April 1, 1997, letter from RCM Associates (the 1997 project

engineer) to MFRA (engineer for the BCWD) indicated that the relief channel was intended to be directed to the wetland mitigation area east of the high school, and mot the East Ditch. The outlet for this wetland mitigation area is noted in this letter as a n existing agricultural tile line of either a 6-inch or 8-inch diameter, which eventually outlets into the East Ditch. This outlet likely has a capacity of less than 1 cfs.

- 18. The 1997 permit, if issued, would have expired one year after issuance and, therefore, even if it did contemplate and include the current action, it would no longer be valid to support the proposed action.
- 19. The historic documentation does not indicate a permitted or existing outlet from the north central pond area to the East Ditch of greater than 8-inches in diameter. The proposed 30-inch diameter outlet was never contemplated. The proposed 30-inch diameter outlet and resulting stormwater flows do not meet BCWD's rate control requirements (Rule 5.05E1).
- 20. Rule 5.05E2: All development or redevelopment of property shall treat 0.5 inch of runoff from all newly created or redeveloped impervious surface on the property such that implemented storm water BMPs, consistent with MPCA guidance documents, achieve removal of 90 percent of total suspended solids and 50 percent of total phosphorus prior to any runoff leaving the property. No new impervious surface is proposed as part of this application. However, since original construction of the north School pond, additional development has occurred to use the north School pond as a stormwater outlet. It is not clear whether water quality treatment was considered by the City in permitting the subsequent development.
- 21. The City proposes to use an existing, private drainage system as part of its stormwater conveyance to Buffalo Creek as an outlet for drainage. Landowners possessing property interests in the private drainage system have expressed concerns regarding the City's proposed use of the drainage system and potential for interference with private drainage and damage to adjacent lands. They City has not indicated its intent to acquire interests in the private drainage system.
- 22. The proposed action will transfer a substantial amount of stormwater from one subwatershed within the City to another subwatershed. Essentially, the proposed action will direct water to a location to which it does not currently, naturally drain. Though not addressed in the District's rules, the proposed action violates a basic principle of stormwater management which is to manage the water where it falls and along the natural course of drainage. There is sufficient land area within the existing subwatershed to meet the storage demand of the current and proposed development without sending additional flows downstream.

Or	d	e	r	
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A.	Based on the record herein, the City of Glencoe's application for permit #16-005 is DENIED .						
	The application for pericontrols and performar detailed in the findings	ice standards contain	because the City had been the City had been the District's a	as failed to meet the administrative rules as			
	The record of this decis materials contained in p and the minutes and ot	permit application #1	6-005, the report of	nit application 97-1, the the District's engineer,			
D.	This order is appealable	pursuant to Statutes	Section 103D.537.	,			
foregoir	scussion, the President og Findings and Order a ons as follows:	called the question. I	The question was on yeas, nays, _	the adoption of theabsent, and			
abstern	ons as follows.						
	Yea	Nay	Absent	Abstain			
Donald l	Belter 🗆		0				
Larry Ph	llips 🗆						
Corey He	enke 🗆						
Larry Kra	mer 🗆						
Matt Me	lberg 🗆						
Upon vot	e, the President declar	ed the motion passed	d and the Findings a	nd Order adopted.			
Donald B	oltor Procident		Dated	: May 24, 2016			

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I, Matt Melberg, Secretary of the Buffalo Creek Watershed District, do hereby certify that I have compared the above Resolution with the original thereof as the same appears of record and on file with the Board of Managers and find the same to be a true and correct transcript thereof. The above order was filed with me, Secretary of the Board of Managers, on May 24, 2016.

IN	TESTIMONY	WHEREOF,	ı	hereunto s	et	my	hand	this	24 th	day	of	May,	2016.
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Matt Melberg	