



Staff Report

DATE: 1/17/2017

Regular Item

ITEM #: 10

TO: City Council

AGENDA ITEM: Royal Golf Environmental Assessment Worksheet (EAW) Response to Comments, Findings of Fact and Record of Decision

FROM: Stephen Wensman, Planning Director

REVIEWED BY: Sarah Sonsalla
Jack Griffin
Kristina Handt

BACKGROUND:

According to State Statutes, the proposed Royal Golf Residential Development has triggered a mandatory Environmental Assessment Worksheet (EAW). The purpose of the EAW is to disclose information about potential environmental impacts of the project and to determine whether more involved Environmental Impact Statement (EIS) is required. A draft of the EAW was prepared by the Kjolhaug Environmental and accepted by the City for advertisement with the Environmental Quality Board (EQB) on October 24, 2016. The advertisement triggered a 30 day comment period which ended on November 23, 2016. The City received 11 written comments: four from state agencies, four from regional and local agencies, one from a community group, and two from Lake Elmo residents. The City had 30 days in which to respond to the comments received and to determine whether a more involved Environmental Impact Statement. Under EQB rules, the City may postpone its decision to gather critical missing information for up to 30 days or a longer period if agreed to by the developer; and the decision must be documented in written record of decision. The City exercised this option with the developer's approval in order to gather information and properly address comments provided by the Minnesota Department of Health and Minnesota Pollution Control Agency.

City Staff has reviewed the submitted comments and has prepared the attached Response to Comments, Findings of Fact, and Record of Decision for the Royal Golf Club Residential Development EAW.

RECOMMENDATION:

Staff recommends that the City Council make a negative declaration for the need for an EIS with the following motion:

“Move to adopt Resolution 2017-007 finding no need for an Environmental Impact Statement (EIS) for the Royal Gold Club Residential Development”

ATTACHMENTS:

- Resolution 2017-007
- Response to Comments, Findings of Fact, and Record of Decision for the Royal Golf Club Residential Development EAW
- EAW - Public and Agency comments.

**CITY OF LAKE ELMO
WASHINGTON COUNTY
STATE OF MINNESOTA**

RESOLUTION NO. 2017-007

***A RESOLUTION APPROVING THE RESPONSE TO COMMENTS, FINDINGS OF FACT, AND
RECORD OF DECISION FOR THE PROPOSED ROYAL GOLF CLUB RESIDENTIAL
DEVELOPMENT AND MAKING A NEGATIVE DECLARATION OF A NEED FOR AN
ENVIRONMENTAL IMPACT STATEMENT***

WHEREAS, Royal Golf has proposed 292 single-family residential lots in the City of Lake Elmo (the “City”) that will be served by municipal utilities on 222 acres of privately-owned land; and

WHEREAS, the residential development is part of the overall Royal Golf Club area, which covers 477 acres and was previously known as Tartan Park, which was a 27-hole golf course, clubhouse, and sports complex with wetlands and open space; and

WHEREAS, the existing 27-hole golf course is proposed to be rehabilitated as an 18-hole golf course and the remainder of the golf course, sports complex and some of the open space will be converted to residential use; and

WHEREAS, Minnesota Rules Part 4410.4300, subpart 19 (C) requires that an Environmental Assessment Worksheet (“EAW”) be prepared for a residential development of at least 100 unattached units or 150 attached units if the development is not consistent with the adopted comprehensive plan in a city within the seven-county Twin Cities metropolitan area; and

WHEREAS, the City is the Responsible Governmental Unit for preparing the EAW and for determining the potential for environmental impacts of the project; and

WHEREAS, the City approved the EAW for distribution on October 18, 2016 and the EAW was submitted to the Environmental Quality Board staff for publication of a notice of the EAW’s availability in the *EQB Monitor*; and

WHEREAS, the EAW was also distributed by the City to all offices on the EQB’s official distribution list; and

WHEREAS, a press release and public notice was submitted to the *Oakdale-Lake Elmo Review* on October 24, 2016, and published on November 2, 2016, describing the project, explaining that an EAW is available for review and comment, and providing details regarding the process for submitting comments on the EAW; and

WHEREAS, on October 24, 2016, the notice of availability of the EAW was published in the *EQB Monitor*, commencing the 30-day public comment period; and

WHEREAS, the 30-day comment period ended November 23, 2016 at 4:30 p.m.; and

WHEREAS, the City received 11 written comments on the EAW, four from state agencies, four from regional and local agencies, one from a community group, and two from City residents; and

WHEREAS, because it had determined that it needed additional information necessary to make a reasoned decision about the potential for, or significance of, one or more possible environmental impacts, the City postponed its decision on the need for an Environmental Impact Statement (“EIS”) for 30 days pursuant to Minnesota Rules Part 4410.1700, subpart 2a; and

WHEREAS, after the additional information was received, the City reviewed the comments, and prepared a specific written response to each in accordance with the Minnesota Rules (see attached Exhibit A); and

WHEREAS, the preparation of the EAW and the comments received on the EAW have generated information adequate to determine whether the proposed Royal Golf Club Development has the potential for significant environmental impacts; and

WHEREAS, the City Council held a public meeting on January 17, 2017 to review the EAW and consider the need for an EIS; and

WHEREAS, the City Council finds, based on the findings of fact, that an EIS for the project is not necessary because: (1) the project does not fall within a mandatory EIS category as set forth in Minnesota Rules 4410.4400; and (2) the project does not have the potential for significant environmental effects according to the criteria and procedures set forth in Minnesota Rules 4410.170; and

NOW THEREFORE BE IT RESOLVED by the City Council of the City of Lake Elmo as follows:

1. Response to Comments, Findings of Fact, and Record of Decision. The Lake Elmo City Council adopts the Response to Comments, Findings of Fact, and Record of Decision related to the proposed Royal Golf Club Residential Development incorporated herein as Exhibit A.
2. Negative Declaration. The Lake Elmo City Council finds based on the adopted Response to Comments, Findings of Fact, and Record of Decision that no Environmental Impact Statement (EIS) is required for the proposed Royal Golf Club Residential Development.
3. Direction to Publish. The Lake Elmo City Council directs that this Resolution and the attached Response to Comments, Findings of Fact, and Record of Decision be distributed within five days in accordance with Minnesota Rules Part 4410.1700, subpart 5.
4. Effective Date. This Resolution shall become effectively immediately upon its passage and without publication.

Passed and duly adopted this _____ day of _____, 2017, by the City Council of the City of Lake Elmo, Minnesota.

Mike Pearson, Mayor

ATTEST:

Julie Johnson, City Clerk

EXHIBIT A

Response to Comments, Findings of Fact, and Record of Decision For the Royal Golf Club Residential Development Environmental Assessment Worksheet

[to be attached]

**RESPONSE TO COMMENTS,
FINDINGS OF FACT,
AND RECORD OF DECISION**

FOR

**THE ROYAL GOLF CLUB RESIDENTIAL DEVELOPMENT
ENVIRONMENTAL ASSESSMENT WORKSHEET**



January 2017

RGU

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CITY OF LAKE ELMO
RESPONSE TO COMMENTS,
FINDINGS OF FACT, AND
RECORD OF DECISION
FOR
THE ROYAL GOLF CLUB RESIDENTIAL DEVELOPMENT
ENVIRONMENTAL ASSESSMENT WORKSHEET

January 2017

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- A. Written Comments Submitted to the City of Lake Elmo
- B. Updated Shoreland PUD Evaluation
- C. Comparison of Detected PFC Levels to Health Advisory Limits

INTRODUCTION

The Royal Golf Club Residential Development is proposed on 222 acres of privately-owned land. The project includes 292 single-family residential lots that will be served by municipal utilities. The project will involve installation of public and private infrastructure, grading, stormwater ponding, and open space preservation. The residential development is part of the overall Royal Golf Club area, which covers 477 acres and was previously known as Tartan Park. Tartan Park was a 27-hole golf course, clubhouse, and sports complex with wetlands and open space. The existing 27-hole golf course will be rehabilitated as an 18-hole golf course. The rest of the golf course, sports complex, and some of the open space will be converted to residential use.

The residential project has a net density of about 1.5 units per acre and will preserve about 90.8 acres as private open space. The residential area includes 198 acres of useable land and 24 acres of regulated wetlands and public waters. Shoreland overlay districts of five public waters cover about 48 percent of the project area (107 acres). At least 50 percent of this shoreland area will be open space protected by easement.

Metropolitan Council indicated the proposed project brings City's overall density down from 3.25 units/acre to 3.05 units/acre, which is still consistent with Metropolitan Council's policy of 3.0 units/acre. The overall project area includes 198.3 acres of useable land (excluding regulated wetland) and the project design preserves 90.8 acres (46 percent of the net acreage) as private open space. The shorelands on the site include at least 50 percent open space outside of lots, which will be covered by easements.

An Environmental Assessment Worksheet (EAW) was prepared pursuant to Minnesota Rules Part 4410.4300, subpart 19 (C) (Residential Development). The EAW and the respective comments have been reviewed in accordance with Minnesota Rules Part 4410.1700 to determine if the project has potential for significant environmental effects. This document includes the City of Lake Elmo (the "City")'s responses to comments that it received from persons and agencies on the official Environmental Quality Board ("EQB") distribution list, the City's findings of fact supporting its decision that an Environmental Impact Statement is not necessary for this project, and its record of decision.

EAW Notification, Distribution, and Comment Period

In accordance with Minnesota Rules Part 4410.1500, the EAW was completed and distributed to persons and agencies on the official EQB distribution list. The notification was published in the EQB Monitor on October 24, 2016, initiating the 30-day public comment period. A press release and public notice was submitted to *Oakdale-Lake Elmo Review* on October 24, 2016 and was published on November 2, 2016. The comment period ended on November 23, 2016.

COMMENTS RECEIVED

The City received 11 written comments: four from state agencies, four from regional and local agencies, one from a community group, and two from City residents (**Table 1**). Copies of the written comments are included in **Appendix A** of this document.

None of the written comments that were submitted recommended preparation of an EIS. The Metropolitan Council found the EAW to be complete and accurate with respect to regional concerns.

Washington County supported efforts to allow expansion of urban services and stated that the project implements the land use goals of the Washington County Comprehensive Plan.

Table 1. Comments Received on The Royal Golf Club Residential Development EAW

Sources				Topics															
N	Type	Commenter	Abbr.	6. Project Description	7. Cover Types	8. Permits and Approvals	9. Land Use	10. Geology/Soils/Landforms	11. Water Resources	12. Contamination/Hazardous	13. Fish, Wildlife, Ecological	14. Historic Properties	15. Visual	17. Noise	18. Transportation	19. Cumulative Potential Effects	20. Other Environmental Effects		
1	Agency	Metropolitan Council	Met C			●									●				
2	Agency	MN Pollution Control Agency	MPCA			●			●	●									
3	Agency	MN Department of Natural Resources	MDNR	●	●		●				●								
4	Agency	MN Department of Health	MDH					●		●									
5	Agency	MN State Historic Preservation Office	SHPO									●							
6	Agency	Washington County	W.Co.			●	●		●						●				
7	Agency	Washington Conservation District	WCD			●	●		●						●				
8	Agency	Valley Branch Watershed District	VBWD	●			●						●						
9	Group	Homestead Homeowners Assn.	HHA			●	●								●		●		
10	Resident	Ann M. Bucheck	AMB				●		●		●			●	●	●			
11	Resident	Matthew Archibald	MA		●					●			●						

RESPONSE TO COMMENTS

This document responds to comments organized by EAW Item number. It includes summaries of comments followed by responses. Complete comment letters are included in **Appendix A**.

Responses to comments are generally confined to substantive issues that “address the accuracy and completeness of the material contained in the EAW, potential impacts that may warrant further investigation before the project is commenced, and the need for an EIS on the proposed project,” as set forth under Minnesota Rules Part 4410.1600. Some comments included general remarks, provided recommendations, or referenced permit requirements. Such comments have been noted for the record. However, this document does not necessarily respond to comments that would not typically be considered substantive.

6.0. Project Description

MDNR Comment

Please correct the MNDNR PWI # for the unnamed public water wetland from 82-117W to 82-417W. The MNDNR ID # for the unnamed public watercourse is M-050-009-001.

Response

Comment noted for the record. The reference to 82-177W in the EAW is hereby corrected to read 82-417W.

VBWD Comment

The site is within an existing, somewhat connected, natural greenway corridor, as shown on Figure 20 of VBWD's March 2013 Results of Minnesota Routine Assessment Method (MNRAM) or Evaluating Wetland Function.

Response

Comment noted for the record. The project design includes a northwest-southeast oriented greenway that includes golf course and open space which will be a focus of the City's development review, and a second greenway that is along the western boundary of the site.

7.0. Cover Types**MDNR and MA Comments**

Has a tree preservation and replacement plan been prepared for this proposed development that meets City ordinance? The EAW includes no record of a Tree Preservation Plan or tree inventory. Tree impacts warrant further investigation. The developer should hire a forester.

Response

The Tree Preservation Plan is required as part of the preliminary plat/PUD application, which will be sent to the City in the coming weeks or months. The City will review the Tree Preservation Plan as part of the preliminary plat/PUD approval process. The project proponent is reviewing tree preservation measures with the assistance of a team that includes ecologists, a forester/arborist, and a registered landscape architect.

WCD Comment

Use native vegetation in open spaces and buffers, enhance greenways.

Response

Open space planning will be considered and advanced in association with the preliminary plat/PUD. Native vegetation plantings will be considered for low maintenance open spaces that are not forested.

8.0. Permits and Approvals**Met C Comment**

The proposed project brings City's overall density down from 3.25 units/acre to 3.05 units/acre, which is still consistent with Metropolitan Council's policy of 3.0 units/acre. The City will need to update the wastewater and MUSA sections of its Comprehensive Plan, and Metropolitan Council will need to

approve it. Sanitary sewer plans need to be submitted to Metropolitan Council at the time of submission to MPCA.

Response

Comment noted for the record. A Comprehensive Plan Amendment that is currently being reviewed by the City would update the wastewater and MUSA sections of the Comprehensive Plan, as well as provide a new land use designation for the development area.

MPCA Comment

The list of permits and approvals in the EAW does not include MPCA 401 Water Quality Certification.

Response

The project does not require any of the following permits:

- Section 401 Water Quality Certification from the MPCA;
- Individual Section 404 Permit from the U.S. Army Corps of Engineers (USACE);
- Letter of Permission from the USACE;
- Regional General Permit from the USACE;
- Section 10 Permit from the U.S. Coast Guard; or
- Federal Energy Regulatory Commission Permit.

W.Co. Comment

The County agrees that an access permit will be required at CSAH 10/10th Street and CSAH 17/Lake Elmo Avenue. The County reserves the right to require additional improvements, as needed, as a condition of these permits.

Response

Comment noted for the record.

HHA Comment

The Comprehensive Plan Amendment has not been submitted to Metropolitan Council.

Response

Comment noted for the record. The permit list included in the Findings of Fact section of this document notes that the Comprehensive Plan Amendment is to be submitted to Metropolitan Council.

9.0. Land Use (General)

W.Co. Comment

Intensifying land uses within the Municipal Urban Service Areas (MUSA) is appropriate to complement the existing golf course and clubhouse use. The result will be increased traffic at I-94 interchanges. Upgrades in interchange infrastructure typically include a city cost share. The development implements the land use and transportation goals of the Washington County Comprehensive Plan 2030.

Response

Comment noted for the record. Per the trip generation and distribution information provided in the Traffic Impact Study, 121 a.m. peak hour trips and 191 p.m. peak hour trips are directed toward the south

and west, which, conceivably, could make use of interchanges on I-94. These increased trips represent a very small increase to the regional transportation network.

HHA Comment

It is common for RGUs to delay action on Comprehensive Plan Amendments pending EAW process completion.

Response

As set forth under Minnesota Rules Part 4410.3100, the City acknowledges that final government permit or approval decisions concerning the project may not be made until after the environmental review process is complete. A comprehensive plan amendment is not considered a final project approval and therefore may run concurrently with the environmental review process.

9.1. Land Use (Shorelands)

MDNR Comment

The proposed Royal Golf Club Residential PUD development is too dense for the natural resources on the site. In making this evaluation, MDNR considered overall project suitability by looking at how the design impacts the existing natural environment on the site. MDNR looks for consistency with density allowances, setbacks, height, and more subjective performance standards dealing with protection of vegetation and sensitive slopes. A development is not suitable if it is consuming areas of high quality vegetation and areas with slopes greater than 12 percent (which MDNR considers steep slopes). Ultimately, however, it is up to the City to evaluate project suitability.

Response

The project design meets the minimum allowable base densities under Minnesota shoreland rules and PUD shoreland evaluation methods. The initial project concept plan included 360 lots. The current plan included 68 fewer lots, indicating a 19 percent reduction in overall project density. The project design places roadways on ridges and higher elevations to avoid impacting some of the sensitive resources and minimizes environmental effects to the extent practicable with the current design. Additional design modifications will be considered with the preliminary plat review to further reduce environmental impacts. The City will work with the project proponent to further reduce woodland impacts where practicable. Mitigation practices may include minimizing development impact on the woodlands and buckthorn removal.

MDNR Comment

Rewrite the statement on page 3 so that it does not imply that the City has determined that this project meets shoreland overlay district requirements.

Response

Comment noted for the record. The City and the project proponent acknowledge that the City has not completed its review of the development as it relates to shoreland overlay district requirements. The project proponent has submitted information intended to show how the project design meets the minimum requirements for shoreland density and open space. However, further review of the shoreland requirements will be conducted by the City as part of a future preliminary plat application review.

MDNR Comment

The EAW states that the City's ordinance requires only two conditions to be met to allow for PUDs. PUDs, by their very nature, are a negotiation between the local government and the proposer. The City, through the PUD process, can require additional conditions in exchange for the increased density that is allowed under a PUD.

Response

Comment noted for the record. The City will be reviewing the PUD and working with the project proponent to potentially further mitigate environmental effects and potentially provide other public improvements in exchange for deviations from City ordinances and standards.

MDNR Comment

Please update the shoreland PUD suitable area, open space, and density calculations to match those numbers provided in analyses completed after the submittal of the EAW.

Response

An updated Shoreland PUD Evaluation prepared by the project proponent has been submitted to the City and the MDNR. A recent revision of this updated Shoreland PUD Evaluation is included in **Appendix B** of this document. Further review of shoreland requirements will be conducted by the City as part of a future preliminary plat application review.

MDNR Comment

Please show the location of steep slopes on Figure 7, to help the reader determine the location of proposed lots, structures, and roads in relation to steep topographic areas.

Response

Figure 7 from the EAW has been revised to show shorelands and steep slopes. The result is shown in **Figure 1**. Slopes of at least 12 percent were identified from County soil survey mapping, as suggested under Minnesota Rules Part 6120.2500, subpart 15b. As indicated in the EAW, slopes shown on soils mapping to be at least 12 percent cover about 20 percent of the project area.

AMB Comment

Only that land within shorelands is zoned in a way that requires connection to municipal sewer; the remainder of the land could use septic systems.

Response

The City's Shoreland Ordinance requires that the PUD be connected to municipal sewer. The Royal Golf Development PUD includes the golf course and all of the residential development, and therefore, all of it is required by the City's Shoreland Ordinance to be connected to municipal sewer. Furthermore, designing the project so that part of it is sewer and part of it unsewered is not practicable because it would conflict with local and regional policies that call for efficient use of public infrastructure such as municipal sewer and water services.

9.2. Land Use (Floodplains)

VBWD Comment

The VBWD recent modeling results and statistical analysis found the 1percent-annual-chance (100-year) flood level of Downs Lake to be 893.8. The VBWD will regulate to this flood level instead of the FEMA base flood elevation of 893.0. Structures will need to have their minimum floor elevations at least two feet higher than the adjacent water bodies' VBWD-adopted 100-year flood level, as required in VBWD Rule 5, Standard 2.

Response

Comment noted for the record. The project proponent will need to adjust the flood storage replacement and building elevations to meet VBWD requirements. As stated in the EAW, homes and streets will be elevated on fill above the floodplain to comply with the City's Flood Plain Ordinance and VBWD Rules.

MDNR and AMB Comment

The statement that the project minimizes effects on floodplains is misleading. The project includes 15.6 acre-feet of fill in the flood fringe to accommodate 15 residential lots and streets. There will be significant changes to the existing floodplain. What layout design modifications could be made to avoid the need for floodplain fill? How will floodplain storage outside of the PUD boundary be managed? We want to make sure proper authorities are committed to supervising this activity as streets and 15 homes could be flooded if not completed correctly.

Response

As stated in the EAW, new homes and infrastructure will be elevated above base flood elevations and protected from foreseeable flood impacts. Elevations of homes and streets will comply with the City's Flood Plain Management Ordinance, Valley Branch Watershed District Rules, and Federal Emergency Management Agency (FEMA) requirements. Flood storage replacement, including the flood storage on the golf course, will be provided within the PUD boundary, as the golf course is part of the PUD.

The City's Flood Plain Management Ordinance allows fill within the flood fringe when flood storage replacement is provided. As stated in MDNR Floodplain Information Sheet No. 2 (2014): "FEMA and state regulations permit communities to allow the flood fringe to be obstructed and developed if standards (i.e., elevating and floodproofing structures) are met." The proposed project will be subject to approval by the City and Valley Branch Watershed District, and will require a Letter of Map Revision based on Fill (LOMR-F) from FEMA for properties constructed on fill and elevated above the floodplain elevation.

9.3. Land Use (Compatibility)

MDNR Comment

Describe the ways the PUD's design plan is compatible with surrounding land uses in more detail, as it relates to preservation of forest buffers and how they provide compatibility with surrounding land uses.

Response

Preservation of forested buffers contributes to the project's compatibility with surrounding land uses by helping to maintain the wooded character of existing roads and the relatively rural character of this part

of Lake Elmo, while allowing residential development consistent with regional plans and policies. Buffers along the western project boundary will provide for a potential greenway and wildlife corridor. The project design includes forested buffers intended to visually separate the proposed project from adjoining land uses. These buffers will provide for noise attenuation as well as visual screening. Proposed forested buffers are over 100 feet in several locations. The maximum width of buffers along the western property boundary is over 500 feet.

10.0. Geology, Soils, Landforms

MDH Comment

Consideration should be given to potential karst development and the possibility of sinkholes beneath stormwater ponds and infiltration areas in the northeast part of the site, and whether any mitigation measures are needed.

Response

The stormwater ponds proposed in the northeastern part of the site will be lined with two feet of low permeability clay. Infiltration areas will be positioned to intercept overflow from the stormwater ponds. The lining of stormwater retention ponds will minimize infiltration of water that could potentially reach carbonate bedrock. Based on preliminary plans and existing water well stratigraphy information for nearby off-site wells, the final elevation of the infiltration areas will allow for 28 to 74 feet of overburden between the base of the infiltration areas and bedrock. Maintaining this separation between infiltration areas and bedrock is expected to minimize the potential for sinkhole development.

WCD Comment

The WCD recommended compliance with NPDES permit requirements, phasing grading to limit the scale and duration of exposed soils, preserving soils for infiltration, and deep-ripping compacted soils to promote infiltration.

Response

Comment noted for the record. The project will need to comply with NPDES permit requirements. Phased grading, and preservation or decompaction of soils for infiltration will be considered and implemented where feasible and practicable.

11.0. Water Resources (Water Quality)

MPCA Comment

Specific in-water best management practices such as silt curtain, construction during low flow or winter conditions, cofferdam, or check-dams, etc. should be included in the EAW.

Response

The project is not expected to require specific in-water BMPs because it will not require work in open waters that discharge downstream. Other BMPs will prevent or reduce sediment discharge and turbidity during and after construction.

11.1. Water Resources (Wetlands)

MPCA Comment

Please note that isolated wetlands remain under MPCA jurisdiction as waters of the state and mitigation may be required.

Response

The project team consulted with MPCA staff to discuss isolated wetlands, incidental wetlands, wetland impacts, and the regulation of waters of the state. Overall, the proposed project will directly affect five wetlands. Wetland 21 is proposed to be filled and replaced in compliance with the Minnesota Wetland Conservation Act (“WCA”). Four other wetlands (Wetlands 3, 4, 6 and 16) will be partially filled, excavated, and used as part of the project stormwater management system. All four of these wetlands were created incidentally during golf course construction and currently function to catch golf course runoff. These four wetlands are isolated and therefore they are not regulated by the U.S. Army Corps of Engineers.

After reviewing the history of Wetlands 3, 4, 6 and 16, MPCA staff determined that these basins are constructed features that are isolated and have limited environmental value. The MPCA has determined that mitigation will not be required to modify these basins and use them as part of the project stormwater management system.

The MPCA also recognized that the project will not require a Section 404 Letter of Permission, Regional General Permit, or Individual Permit from the U.S. Army Corps of Engineers, nor will the project require Section 401 Water Quality Certification from the MPCA.

11.2. Water Resources (Stormwater)

W.Co. Comment

The County will require drainage calculations and written conclusions that the project will not increase stormwater volume or runoff rate to any County right-of-way.

Response

Comment noted for the record.

WCD Comment

VBWD infiltration guidelines recommend retaining a 1.1-inch rainfall event onsite. WCD encourages use of bioretention, distribution of stormwater systems in small drainage areas, and referring to the MPCA stormwater manual for more information.

Response

The comments are noted for the record. As stated in the EAW, the project will need to comply with VBWD and City requirements. Implementation of bioretention and distributed stormwater management systems will be considered where feasible and practicable, and where designed and approved for stormwater treatment and long-term maintenance purposes.

AMB Comment

The commenter asked for supervision and mitigation oversight for stormwater systems.

Response

The City, VBWD, and the MPCA have oversight responsibility for stormwater management practices. MPCA regulations will require submission of a Stormwater Pollution Prevention Plan to address erosion control and discharge of runoff to surface waters. Stormwater systems will be contained within drainage and utility easements that allow access by City staff for inspection and maintenance purposes.

11.3. Water Resources (Wastewater)

AMB Comment

Wastewater from the clubhouse and other commercial aspects was not included and no estimates were given as to the amounts.

Response

City water use and wastewater generation associated with the golf course, clubhouse, and related facilities was discussed under Item 19 (Cumulative Potential Effects) of the EAW. The 18-hole golf course with a clubhouse, dining room, and bar and grill is expected to generate a maximum of 1,370 gallons of wastewater per day. The golf course and proposed residential development, combined, do not have potential for significant environmental effects on the regional wastewater management system.

12.0. Contamination / Hazardous Materials (Perfluorochemicals)

MPCA and MDH Comments

Lake Elmo, Horseshoe Lake, several small drainage ponds, and ditches within the golf course area and further downstream have been shown to be contaminated with perfluorochemicals (PFCs) at levels above EPA health advisory levels.

The EPA recently lowered health advisory levels for PFCs. It should be noted that MDH now uses the new EPA health advisory levels of 70 ng/L for PFOS and PFOA when evaluating health risks. The development overlies a PFC groundwater plume that has impacted groundwater quality in the primary drinking water aquifers. Recent MDH sampling has detected PFCs at concentrations above the new EPA Lifetime Health Advisory levels of 70 parts per trillion for PFOS and PFOA in the surface water in Lake Elmo, the unnamed creek that discharges from Lake Elmo onto the project property, Horseshoe Lake, and the series of ditches and stormwater ponds further downstream.

It is not possible to accurately predict whether a well will remain clear of PFC contamination in the future. The section of the EAW on PFCs should be revised to reflect that PFCs above levels of health concern are present in the groundwater in this part of Lake Elmo. MDH recommends work with MDH, MPCA, and DNR to evaluate water quality in the existing wells and surface waters on the project property and determine appropriate use of these to mitigate for these potential impacts.

Response

The City recognizes that Perfluorochemicals (PFCs) are a family of manmade chemicals that have been used for decades as an ingredient in products that resist heat, oil, stains, grease and water. PFCs were disposed of at the 3M Oakdale Disposal Site in Oakdale and the former Washington County Landfill in Lake Elmo between early 1950 and 1974. PFCs found in groundwater and surface waters on and near the

site include Perfluorooctane-sulfonic acid (PFOS), Perfluorooctanoic acid (PFOA), and Perfluorobutryate (PFBA).

The City understands that the MDH sampled surface water to assess PFC concentrations in the creek in the northwest part of the site and in Horseshoe Lake during September 2016. Some samples included PFC concentrations above EPA Health Advisory Limits (HAL), which are commonly referred to as “drinking water standards” (Table 2). The HALs include a margin of safety and identify the concentrations of PFOA and PFOS in drinking water at which adverse health effects are not anticipated to occur over a lifetime.

Table 2. Perfluorochemical Sampling by MDH near The Royal Golf Development¹

Perfluorochemical	Abbr.	2016 EPA HAL ² (ng/l)	Sample Location and Concentration (ng/l)				Conclusion ³
			Creek (NW part of Site)	Horseshoe Lake (NW)	Horseshoe Lake (S)	Horseshoe Lake (E)	
Perfluorobutryate	PFBA	7,000	440	250	260	240	Below drinking water standard.
Perfluorooctanoic acid	PFOA	70	57	68	59	75	Below and above drinking water standard.
Perfluorooctane-sulfonic acid	PFOS	70	53	370	210	290	Above drinking water standard except in creek.
PFOA + PFOS	Total	70	110	438	269	365	Above drinking water standard.

¹This table compares perfluorochemical samples to EPA standards for drinking water. The MDH (Minnesota Department of Health) MDH sampled the creek and Horseshoe Lake from public right-of-ways and a kayak during September, 2016.

²These Health Advisory Limits (HAL) are commonly referred to as drinking water standards. They identify the concentration of PFOA and PFOS in drinking water at which adverse health effects are not anticipated to occur over a lifetime. The HALs for PFOA and PFOS are based on estimated exposure from drinking water ingestion, not from skin contact or breathing. These HALs only apply to exposure scenarios involving drinking water and cannot be used in identifying risk levels for ingestion of food sources, including: fish, meat produced from livestock that consumes contaminated water, or crops irrigated with contaminated water.

³Conclusions compare PFC concentrations in surface water samples to PFC Health Advisory Level (HALs; i.e., drinking water standards).

EPA advisories indicate HALs for PFOA and PFOS are based on the estimated exposure from drinking water ingestion, not from skin contact or breathing. These HALs only apply to exposure scenarios involving drinking water and cannot be used in identifying risk levels for ingestion of food sources such as fish, meat produced from livestock that consumes contaminated water, or crops irrigated with contaminated water.

The surface waters that contain PFC concentrations above drinking water standards will be used primarily as visual and natural amenities and will not be used for drinking water. These surface waters do not have PFC concentrations above levels considered safe for non-consumptive uses. The presence of PFCs in the groundwater of Lake Elmo and other nearby suburbs is a pre-existing condition and the project does not have potential for significant environmental effects in relation to PFC-contaminated groundwater and surface water.

The recently revised EPA HALs have been noted and are specific to drinking water. Lake Elmo, Horseshoe Lake and the small drainage ponds and ditches within and downstream of the golf course are not intended to be used as drinking water. The MDH has stated that exposure to PFCs through

swimming and bathing is not a concern (MDH PFCs and Health, May 20, 2016). PFCs are poorly absorbed through skin and incidental ingestion of surface water while swimming will not result in a significant exposure.

The MDH determined through a September 2014 study that the health benefits provided by growing and eating produce greatly outweigh any potential risk from low levels of PFBA or other PFCs in produce. Based on this information and the proposal to obtain drinking water for the project through connection to the City of Lake Elmo municipal water supply, substantial adverse environmental effects are not anticipated.

PFCs above EPA HALs have been identified in the primary drinking water aquifers in the east metro area, including the area surrounding the EAW property. To date, sampling of three onsite water wells completed in the Prairie du Chien aquifer has not identified concentrations of contaminants above drinking water standards. However, PFC concentrations in Horseshoe Lake and the watercourse leading onto the site have been found to exceed EPA HALs and will not be used for drinking water. A summary of data collected from the onsite water wells and surface waters, compared to MDH and EPA drinking water standards, is provided in **Appendix C**. MDH provided data from surface water samples collected from Horseshoe Lake and a creek discharging from Lake Elmo. The PFOS concentrations in all four samples exceed the surface water criteria for fish consumption and combined fish consumption and drinking water.

Surface water is not intended to be used for drinking and access to Horseshoe Lake for fishing purposes will be limited. There are no current or proposed public access points on the Royal Golf Club property, none of the proposed residential lots extend to the lake, and the golf course provides a buffer between proposed residential lots and the lake. These factors will help limit the potential use of Horseshoe Lake for recreational fishing.

The MDH website states that bathing, swimming and using this water for irrigation of crops is not a health concern. The City and the project proponent recognize that the EPA Health Advisory Level for PFOS and PFOA apply to concentrations of these two chemicals combined in drinking water rather than irrigation or stormwater. As discussed in the EAW, the residential development will connect to the City water supply and will not be served by private wells. Proposed residential lots will not extend to the shore of Horseshoe Lake and the golf course will provide a buffer between proposed residential uses and the lakeshore, reducing the potential for the lake to be accessed for fishing. In addition, a conservation easement and natural vegetation buffer proposed along the shore of Horseshoe Lake will limit the potential for direct contact with lake water.

The project proponent invites the MDH to visit the golf course clubhouse and sample the drinking water. If necessary, appropriate precautions will be implemented to remove PFCs from golf course drinking water or provide an alternative drinking water supply until the City water connection is completed.

MPCA and MDH Comments

MPCA

It appears that the golf course will continue to use groundwater for potable, irrigation, fire protection, and maintenance use. It is important to note that the location of this development lies within known areas of aquifer contamination. Care should be exercised when using groundwater in this region for potable and irrigation purposes. Care should be exercised when using surface water from these areas for irrigation purposes so as to minimize the potential for human and environmental exposure to these contaminants.

MDH

Use of surface water or groundwater at the project site should be carefully managed to avoid human exposure and prevent further spreading of the contamination. MDH further recommends landscaping options be implemented to create significant buffers in order to restrict public access to Horseshoe Lake.

Response

The former 27-hole golf course required 20 million gallons of water for irrigation in 2015, of which 1.5 million (or 7.5 percent) was obtained from groundwater. The new golf course owners have worked with the University of Minnesota Extension Office to identify suitable drought-resistant grasses that require one-third less water for irrigation and have installed a state-of-the-art irrigation and weather system to measure moisture and forecast precipitation, which will further reduce the amount of water required for irrigation.

These management practices, together with the re-designed and smaller golf course, have resulted in future irrigation water projection needs that will be 35 percent to 66 percent less than in 2015. Using these projections, and assuming precipitation rates are similar to 2015, it may not be necessary to use any groundwater for irrigation. Thus, the use of groundwater for irrigation is expected to have a minimal impact on groundwater flow direction or PFC plume migration. Furthermore, the concentration of PFCs identified in groundwater are significantly less than those observed in surface water discharging from Lake Elmo onto the site and do not exceed current drinking water standards.

Water that exceeds drinking water criteria for PFC discharges from Lake Elmo and enters the site through a drainageway and surface water ponds. Water is occasionally diverted from this drainageway to an onsite pond that has been used in the past and will continue to be used for golf course irrigation purposes. While this process has and will continue to result in the application of PFC-contaminated water onto irrigated portions of the golf course, the volume of water used will be substantially reduced relative to existing conditions as previously indicated.

Furthermore, the irrigation water is not intended for use as a drinking water source; there will be no public access to spigots to allow for such use; the actual irrigated portion of the course is limited and confined to the areas of and surrounding greens, fairways and tee boxes, which results in a small area, relative to the entire property, that would be impacted; and, irrigation will take place at night when the golf course is closed, which prevents exposure through dermal contact.

Best management practices, including drought resistant plants and an upgraded irrigation system, will result in a significant reduction in the amount of water required for irrigation and there will be little to no potential for runoff of excess irrigation water. In the event that runoff does occur, it will flow to the same surface water chain from which it was obtained at concentrations that would be the same or similar to the source water.

Lastly, the application of this contaminated water on the golf course will have a positive effect for the watershed, as it will result in reduced volume of PFC-impacted water ultimately discharging to the St. Croix River.

12.1. Contamination / Hazardous Materials (Contaminated Soils)

MPCA Comment

The EAW does not discuss the handling of soil contaminated with materials other than agricultural chemicals. The MPCA recommends entering the site into the MPCA Brownfield Program to provide regulatory oversight for non-agricultural contamination.

Response

A Phase I Environmental Site Assessment completed for the project did not identify Recognized Environmental Conditions in the proposed development area, with the exception of agricultural chemical use. In addition, a Phase II Investigation of the property did not identify the presence of non-agricultural chemicals at concentrations above regulatory screening limits. Because the application of agricultural chemicals in accordance with manufacturer's recommendations does not constitute a release, assurance letters for such agricultural chemicals are not available through the MPCA's Brownfield Program.

The EAW property was enrolled in the Minnesota Department of Agriculture's Voluntary Investigation and Cleanup program and remediation of contaminated areas was completed in accordance with an approved Response Action Plan and Construction Contingency Plan. According to the Construction Contingency Plan, the Minnesota Duty Officer will be notified immediately if other environmental issues are identified during construction.

Follow-up coordination with the MPCA has indicated it is not appropriate to enroll the site in the MPCA's voluntary Brownfield Program. MPCA staff have indicated that they would not issue a No Association Determination for PFC contamination to the project proponent. Although an Offsite Source Determination could be obtained, such a determination would provide little benefit because a responsible party has been identified and source areas are known to be located offsite.

MDH and MA Comment

MDH assumes MPCA will be consulted in the design and construction of the Regulated Soil Management Area to ensure it provides long-term encapsulation of these soils to prevent exposures. What is the potential impact to local residential groundwater of managing excavated hazardous soils onsite? What is the impervious barrier and how has it minimized impacts of these hazards?

Response

Because the Regulated Soil Management Area was constructed to contain agricultural chemicals that were used on the golf course, its design was reviewed and approved by the Minnesota Department of Agriculture with guidance from MPCA. The design included a sloped surface covered with a low-permeability soil to promote drainage away from and reduce infiltration and leaching through the contaminated soil. A deed restriction will be placed on the Regulated Soil Management Area as part of the approval process for the area. The deed restriction will specify an inspection schedule and maintenance/repair requirements that will be approved by the Minnesota Department of Agriculture. The Regulated Soil Management Area has been designed to minimize risks to groundwater and the public.

12.2. Contamination / Hazardous Materials (Disposal Area)

MPCA and MDH Comment

The Investigation History refers to a "Possible on-site disposal area that was later confirmed to be located on the adjoining property to the southeast..." Please clarify if the disposal area has been reported to the MPCA or State Duty Officer. Please provide the location of the disposal area. The location is not shown

on any figures and no information is provided regarding this disposal area and its proximity to the project property.

Response

The disposal area is located offsite, about 900 feet east of the project boundary. The lat/long coordinates of the disposal pile are approximately 44.964611, -92.863041. The included a small pile of roof shingles, approximately 15 aerosol cans and some plastic drainage tubing that presented no apparent contamination concerns except for potential asbestos in the roofing materials. The disposal area was not reported to the MPCA or the State Duty Officer because it did not constitute an emergency, serious accident, hazardous material incident, or petroleum spill, and it was not under the control of the project proponent. The owner of the property that includes the disposal area will be notified of the concern related to the potential for asbestos in the roofing materials.

12.3. Contamination / Hazardous Materials (Pipelines)

MPCA Comment

Contact the Office of Pipeline Safety to determine appropriate setbacks from the natural gas pipeline that crosses the site.

Response

As stated in the EAW, the project proponent has proposed a 150-foot-wide easement to encompass this pipeline route. The project proponent contacted the Office of Pipeline Safety, and, at their suggestion, the project team will contact the pipeline operator to confirm that the easement width is acceptable and to determine appropriate setbacks.

13.0. Fish, Wildlife, Ecological Resources

WCD Comment

Buckthorn removal will minimize the spread of this restricted noxious weed and visual barriers could be replanted to native trees and shrubs.

Response

The project proponent has not yet determined the extent of buckthorn removal to be implemented. Open space and greenway planning will be considered and advanced in association with the Preliminary Plat/PUD. Native vegetation plantings will be considered in where appropriate and practicable.

AMB Comment

What agency will oversee Blanding's turtle mitigation measures and follow through to ensure implementation?

Response

To minimize potential adverse effects on turtles and their mobility, the project will avoid most wetlands, implement stringent sediment and erosion controls, consider the use of surmountable curbs on roadways, and consider use of erosion control materials constructed of organic fibers rather than plastic. Mitigation practices will be implemented to the extent that it can reasonably and practicably integrated into

construction plans and specifications. Construction will be overseen by the City, VBWD, and other local and state agencies.

14.0. Historic Properties

SHPO Comment

The developer hired a cultural resources consultant to conduct a Phase I Archaeological Survey prior to development. SHPO looks forward to receiving and reviewing the results of the survey.

Response

The Phase I Archaeological Survey was complete and submitted to SHPO. The survey found two small archaeological sites that were not considered potentially eligible for the national register. No further archaeological work was recommended. Effects on intact archaeological resources are not anticipated.

15.0. Visual

MA Comment

The proposal needs to address light pollution and its impact on the regional ecosystem and wildlife.

Response

Post-development intensity of artificial lighting will be typical of suburban residential development and less than typical commercial developments. Consequently, detailed assessment of light pollution is not necessary and does not pose the potential for significant environmental effects. The EAW Guidelines (Minnesota EQB 2013) suggest that EAWs address “non-routine impacts that may be due to the emission of light or a ‘visual nuisance’ caused by the project during construction or operation.” Examples of such non-routine impacts include “intense light causing a glare problem” and “lights on tall communication towers intruding on the visual integrity of a scenic vista.” The proposed project does not include these types of intense lighting.

17.0. Noise

AMB Comment

What provision is being made so the surrounding landowners are allowed their rightful peace and quiet? I would like to suggest all noise generating equipment may only be operated from 8 AM to 5 PM and only Monday to Friday.

Response

As stated in the EAW, noise levels are expected to be at or near existing levels after construction is complete. Noise levels during construction will vary considerably. Noise generated by construction equipment and residential building construction will be limited primarily to daylight hours when noise levels are typically high compared to night. Construction noise will be regulated according to the City’s Noise Ordinance. Additional noise mitigation measures will be considered if construction noise becomes problematical.

18.0. Transportation

Met C Comment

Traffic forecasts by Transportation Analysis Zone (TAZ) are not discussed in the EAW. Metropolitan Council has draft TAZ forecasts for 2040 available for local government review. The proposed development fits within the community total forecast and no change is needed.

Response

Comment noted for the record.

W.Co. Comment

It should be noted that the County's 5 Year CIP includes no programmed improvements for the CSAH 10/Lake Elmo Avenue intersection.

Response

Comment noted for the record.

W.Co. Comment

There should be further conversations with the County on the current status of the identified Regional Trail Corridor (Washington County Comprehensive Plan 2030) along CSAH 17/Lake Elmo Avenue.

Response

Comment noted for the record.

W.Co. Comment

The future clubhouse/banquet facility and the commercial public use golf course traffic was not included in the traffic analysis. Please clarify how you will incorporate this expected increase in use into the traffic study.

Response

Golf course traffic was discussed under Item 19 (Cumulative Potential Effects) and addressed in Appendix G (Traffic Impact Study) of the EAW. The Traffic Impact Study noted that the existing golf course was not in operation at the time of the turning movement counts. As a result, the site traffic forecasting included the residential units and the golf course. The traffic forecast was based on the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition (2012) single-family detached housing and golf course land uses. The Trip Generation Manual describes the golf course land use as including "9-, 18-, 27-, and 36-hole municipal courses. Some sites may also have driving ranges and clubhouses with a pro shop, restaurant, lounge, and banquet facilities." Thus, the trip generation numbers provided in the Traffic Impact Study account for the future clubhouse/banquet facility as well as the golf course. **Table 3** below shows the total trip generation used in the traffic study, which accounts for both land uses. A similar table is also provided in the appendix of the Traffic Impact Study.

Table 3. Trip Generation Estimates of Residential and Golf Course Project

ITE Code ¹	Land Use	No. of Units	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
				In	Out	Total	In	Out	Total

Table 3. Trip Generation Estimates of Residential and Golf Course Project

ITE Code ¹	Land Use	No. of Units	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
				In	Out	Total	In	Out	Total
210	Single-family detached housing	293	2,790	55	165	220	185	108	293
430	18-hole golf course with clubhouse, dining room, bar & grill	18	644	29	8	37	27	26	53
Total			3,434	84	173	257	212	134	346

¹Code corresponds to land use identified by the Institute of Transportation Engineers.

It should also be noted that the forecasted traffic was based upon information from the Institute of Transportation Engineers (ITE), the standard process for estimating traffic. Traffic data collected locally by Spack Consultants suggests the development may generate slightly lower volumes than used in the study.

HHA Comment

Baseline traffic volumes may be underestimated due to golf course and school closure at the time.

Response

The collected 2016 volumes were compared against previous counts in the area taken in May of 2013 for the Manning Avenue Corridor Management and Safety Improvement Project and MnDOT's Official AADT Counts. This comparison showed similar traffic volumes between the counts, suggesting that construction in the area and the lack of school traffic had a minimal effect on the overall volume of traffic on the study roadways. The Manning Avenue/Manning Trail intersection was included in both studies reviewed in estimating baseline traffic volumes. The 2013 Manning Avenue Study listed a total traffic volume of 1,287 vehicles during the p.m. peak hour. The traffic volumes collected in 2016 resulted in a total traffic volume of 1,300 vehicles during the p.m. peak hour. In addition, the MnDOT traffic counts from 2015 show an average daily traffic volume of 11,300 vehicles per day, compared to the daily volume of approximately 13,800 vehicles per day from 2016 volumes.

The Traffic Impact Study noted the existing golf course was not in operation at the time of the study's traffic counts. Therefore, traffic for the proposed golf course was estimated as part of the overall traffic associated with the proposed development and studied accordingly. Because the existing golf course was closed during data collection, trip generation was calculated in the Traffic Impact Study to forecast the traffic that will be generated by the proposed golf course. This trip generation, which is based on ITE rates previously discussed, includes the ancillary facilities typically included with golf courses, such as clubhouses and banquet facilities. These trips were added to the residential development trip generation, resulting with a comprehensive total of new trips caused by both the proposed golf course and the residential development. **Table 3**, above, shows the trip generation of both the residential and golf course land uses, as well as the total used in the study.

The results of the study forecast satisfactory operations into the future. A slight increase in the initial traffic volumes would not significantly affect the predicted results of acceptable operations. The City will continue to review the traffic study during the PUD/preliminary plat process and may require improvements as necessary.

AMB Comment

I disagree with the Traffic Impact Study conclusion that the proposed project will have minimal effects on adjacent public roads and that nearby intersections will continue to operate at an overall Level of Service (LOS) A. A proper study needs to be completed.

Response

The Traffic Impact Study followed standard procedures for this type of analysis, using common processes and analyses techniques. A more detailed response would require comments on specific parts of the traffic study that raise concerns or seem incorrect in ways that would cause conclusions to be incorrect. Specific traffic study comments identified above are addressed in detail. The golf course and related facilities were included in the Traffic Impact Study, as previously discussed and shown under the response to Washington County (W.Co.), **Table 3**, and the response to Homestead Homeowners Assn. (HHA)'s comment, above.

The Traffic Impact Study assumed full development of the proposed site and predicted traffic volumes to the year 2030, accounting for additional growth in the area. Partial development was not studied.

The Traffic Impact Study discussed the project site's internal roadways and access to the existing public roads. As proposed, the housing on the east side of the golf course has one access to Manning Trail North. A second access could be provided to 20th Street N, and may be required with the preliminary plat. The preference for this second access is based on the City's policy regarding cul-de-sac roads. The second access does not affect the results of the Traffic Impact Study.

The internal roadways proposed for the residential component do not all connect, resulting in separate areas with separate access points to external roadways. A resident would not be able to drive between all residential components and/or the golf course without travelling on the existing public roads. For example, a resident on the east side of the golf course would have direct access to Manning Trail North, and would need to use this road to reach any other area, regardless of destination. This affects the traffic volume on the internal roads and the locations where drivers will access the existing public roads. The Traffic Impact Study addressed travel patterns for the study roadways and intersections based on this proposed internal roadway layout and external roadway access points.

19.0. Cumulative Potential Effects

AMB Comment

The commercial aspect of the development, the golf course, clubhouse, storage area, sport complex, and driving range were not part of the study. These commercial aspects of the development will add to the traffic, congestion, water runoff, and have a strong environmental impact on the area.

Response

The commercial aspect of the development is accessory to the public use of the golf course and facilities. The traffic and water use of the golf course, clubhouse, and related facilities were assessed under Item 19 (Cumulative Potential Effects) of the EAW. Golf course traffic was also addressed in **Appendix G** of the EAW (i.e., the Traffic Impact Study). See the response to Washington County, above, for more information on traffic. The golf course will be rehabilitated and reduced from 27 to 18 holes. The relatively small amount of impervious surface area and the abundant open space within the golf course indicates that golf course rehabilitation is unlikely to adversely affect runoff quantity and quality. The

sports complex will be converted to residential use and effects of this conversion were addressed throughout the EAW. Intensification of the clubhouse or related facilities will trigger a conditional use permit, and such golf course amenities would be evaluated by the City again during the conditional use permit review process.

20.0. Other Environmental Effects

HHA Comment

An EIS might be required if the golf course is developed to become residential use.

Response

The golf course is not proposed to be re-guided or re-zoned, and there is no basis to expect that it will be converted to residential use. Any proposed future residential use of the golf course would require a comprehensive land use plan amendment and rezoning.

FINDINGS OF FACT

Project Description

Proposed Project

The Royal Golf Club Residential Development is proposed on 222 acres of privately-owned land. The project includes 292 single-family residential lots that will be served by municipal utilities. The project will involve installation of public and private infrastructure, grading, stormwater ponding, and open space preservation. The residential development is part of the overall Royal Golf Club area, which covers 477 acres and was previously known as Tartan Park. Tartan Park was a 27-hole golf course, clubhouse, and sports complex with wetlands and open space. The existing 27-hole golf course will be rehabilitated as an 18-hole golf course. The rest of the golf course, sports complex, and some of the open space will be converted to residential use.

The proposed residential project has a net density of about 1.5 units per acre and will preserve about 90.8 acres as private open space. Additional open space may be identified for preservation during the preliminary plat/PUD review process. Shoreland overlay districts of five public waters cover about 48 percent of the project area (107 acres), and will minimally meet the shoreland requirement of 50 percent open space protected by an easement.

The City is working with the project proponent to review alternative designs in the interest of balancing multiple interests. These interests include project needs, environmental compliance, land use consistency, public services, and safety. While these factors may influence the project as it proceeds toward final design, environmental effects are expected to be lessened during routine design changes that occur as part of the project review and approval process.

Site Description and Existing Conditions

The Residential Development area includes 198 acres of useable land and 24 acres of regulated wetlands and public waters. The usable area includes 109 acres of golf course and sports complex, 77 acres of woodland, 10 acres of roads and parking, and two acres of ponds. About 20 percent of the area has slopes of 12 percent or greater.

Decision Regarding the Potential for Significant Environmental Effects

Minnesota Rules Part 4410.1700, subpart 7 lists four criteria that shall be considered in deciding whether a project has the potential for significant environmental effects. Those criteria and the City's findings are presented below.

A. Type, Extent, and Reversibility of Environmental Effects

Minnesota Rules Part 4410.1700, subpart 7 (A) indicates the first factor that the City must consider is the "type, extent, and reversibility of environmental effects." The City's findings are set forth below.

1. **Cover Types.** The project will convert about two acres of ponds, 41 acres of woodland, and 109 acres of golf course and sports complex to residential homes, lawns, open spaces, streets, and stormwater systems. The project includes 90.8 acres of private open space. The project will preserve about 36 acres of woodland and 24 acres of protected wetlands. Wildlife corridors exist along the west side of the site and cross the site from northwest to southeast.
2. **Shorelands.** The project meets the minimum requirements for allowable base densities under Minnesota shoreland rules and PUD shoreland evaluation methods, and includes a minimum of 50 percent open space protected by easement. Due to drainage divides, only about 58 acres of the 107 acres of shoreland on the site drain directly to shoreland waters. The open spaces, buffers, and drainage divides will help minimize effects of shoreland development on nearby waters.
3. **Floodplains.** The project is designed to compensate for effects on floodplains and is not expected to diminish the capacity of the project area to accommodate flooding. The project is expected to involve about 10 to 20 acre-feet of fill in the flood fringes of Downs Lake and Lake Rose. The project will include flood storage replacement and homes and infrastructure will be elevated above flood elevations as required by the City and the VBWD. The project will require a Letter of Map Revision based on Fill (LOMR-F) for properties constructed on fill and elevated above the floodplain.
4. **Land Use.** The proposed project is compatible with the proposed land use, zoning, and surrounding land uses. The project will require a Comprehensive Plan Amendment to guide the residential development area with a net density of 1.5-2.49 units/acre. The residential area will be rezoned from PF – Public and Quasi-Public Open Space to Golf Course Community/Planned Unit Development, which is a newly proposed zoning district.
5. **Geology and Soils.** Residential development grading operations are expected to affect about 135 to 145 acres and involve movement of about 750,000 to 1,000,000 cubic yards of soil to construct streets, residential building pads, and stormwater ponds. Sinkholes are known to occur in the greater project area and the project area underlain by carbonate bedrock. Final elevations of infiltration areas will be about 25 to 75 feet above bedrock. Maintaining this separation between infiltration areas and bedrock is expected to minimize the potential for sinkhole development.
6. **Water Quality.** Ultimately, compliance with City, VBWD, NPDES, and MPCA requirements will minimize and mitigate potential adverse effects on receiving waters. Project development will change the land use from golf course, woodland, and sports complex to single-family residential use and open space. This land use change is expected to have mixed effects on runoff water volume and quality. Stormwater rate and volume controls that comply with City and

VBWD requirements will limit increases in runoff volume and associated pollutant transport. Erosion control plans will be reviewed and accepted by the City and the VBWD prior to project construction. Potential adverse effects from construction-related sediment and erosion on water quality will be minimized by implementation of sediment control BMPs.

7. **Wetlands and Surface Waters.** The project will directly affect five wetlands. Wetland 21 covers less than 0.1 acre and is proposed to be filled and replaced in compliance with the WCA. Four other wetlands (Wetlands 3, 4, 6 and 16) will be partially filled, excavated, and used as part of the project stormwater system. These four wetlands were created incidentally during golf course construction, currently catch golf course runoff, and are isolated and incidental. Although they are waters of the state, MPCA staff have determined that they are constructed features, have limited environmental value, and that mitigation will not be required.
8. **Wastewater.** The project is expected to produce normal domestic wastewater. This wastewater is expected to be typical of residential developments. The project will not include industrial wastewater production or onsite wastewater treatment. The residential project is expected to generate about 80,000 gallons of wastewater per day. The 18-hole golf course, clubhouse, dining room, and bar and grill are predicted to generate a maximum of 1,370 gallons of wastewater per day. The City and Metropolitan Council have planned for increased capacity to convey and treat sanitary wastewater. The proposed project will require three additional sanitary sewer lift stations to support the development. One of these lift stations, along with its force main pipe, will be considered temporary infrastructure.
9. **Hazardous Materials.** The MDH sampled surface water to assess PFC concentrations in the creek and in Horseshoe Lake during September 2016. Some samples included PFC concentrations above EPA Health Advisory Limits (HAL), which are commonly referred to as “drinking water standards.” The HALs only apply to exposure scenarios involving drinking water and cannot be used in identifying risk levels for ingestion of food sources such as fish, meat produced from livestock that consumes contaminated water, or crops irrigated with contaminated water. The surface waters that contain PFC concentrations above drinking water standards will not be used for drinking water. Surface water is not intended to be used for drinking and access to Horseshoe Lake for fishing purposes will be limited. The MDH website states that bathing, swimming and using this water for irrigation of crops is not a health concern. If necessary, appropriate precautions will be implemented to remove PFCs from golf course drinking water or provide an alternative drinking water supply until the municipal water connection is completed.

A Phase II investigation determined that soil from 26 golf course greens, two tee boxes, one fairway, and one soil storage area required remediation. Remediation has been underway and contaminated soil is managed on a Regulated Soil Management Area (RSMA) located on the golf course. The RSMA has been designed to minimize risks to groundwater and the public. The design was reviewed and approved by the Minnesota Department of Agriculture with guidance from MPCA.

10. **Ecological Resources.** The project will convert golf course, sports complex, woodland, and ponds to residential land uses, including roads, homes, lawns, stormwater ponding, and open space. Habitat conversion is expected affect the number and type of wildlife species in the area, but changes in wildlife abundance are not expected to be regionally significant. Measures to minimize adverse effects on wildlife include the preservation of about 36 acres of woodland and

24 acres of wetlands/waters, creation of stormwater ponds and infiltration areas, and protection of open spaces.

11. **Historic Resources.** The Phase I Archaeological Survey was complete and submitted to SHPO. The survey found two small archaeological sites that were not considered potentially eligible for the national register. No further archaeological work was recommended. Effects on intact archaeological resources are not anticipated.
12. **Visual Resources.** Project development is expected to result in routine effects on visual resources. There are no scenic views or vistas located on or adjacent to the project area. The project does include intense lights that may cause glare or lights on tall towers. Post-development artificial lighting will be typical of suburban residential development and less than typically included in commercial developments.
13. **Noise.** Noise levels are expected to be at or near existing levels after construction is complete. Noise levels during construction will vary considerably. Noise generated by construction equipment and residential building construction will be limited primarily to daylight hours when noise levels are typically high compared to night and regulated through the City's Noise Ordinance.
14. **Transportation.** The traffic that will be generated by the proposed project does not raise capacity or safety concerns. Traffic generated by the project will have little effect on the regional transportation system. Intersections surrounding the site will continue to operate at acceptable levels of service with the addition of traffic generated by the proposed project.

B. Cumulative Potential Effects

Minnesota Rules Part 4410.1700, subpart 7 (B) indicates the second factor the City must consider is the “whether the cumulative potential effect is significant; whether the contribution from the project is significant when viewed in connection with other contributions to the cumulative potential effect; the degree to which the project complies with approved mitigation measures specifically designed to address the cumulative potential effect; and the efforts of the proposer to minimize the contributions from the project.” The City's findings are set forth below.

Projects typically combine to produce cumulative effects on City resources like water and wastewater treatment. The City has planned for growth and increased capacity to address these cumulative effects. The proposed project will implement approved mitigation measures and be consistent with land use policies for areas served by City sewer and water.

Effects of the project on natural resources are not likely to combine with effects of other projects in a manner that will result in significant environmental effects. Stormwater regulations administered by multiple agencies and erosion and water quality BMPs are expected to minimize cumulative effects of post-development runoff on downstream waters. The policies and regulations set forth by the City, the VBWD, and other government agencies provide the impetus for other mitigation measures discussed throughout this EAW. These mitigation measures will help ensure that cumulative environmental effects are minimized.

C. Extent to Which the Environmental Effects are Subject to Mitigation

Minnesota Rules Part 4410.1700, subpart 7 (C) indicates the third factor the City must consider is the “extent to which the environmental effects are subject to mitigation by ongoing public regulatory authority.” The City’s findings are set forth below.

Environmental effects on cover types, shorelands, floodplains, water quality, and traffic are subject to additional approvals and/or mitigation through requirements of local, state, and federal regulations, ordinances, management plans, and permitting processes. The following permits and approvals are required for the project addressed under the EAW and these permitting and approval processes will provide additional opportunity to require mitigation.

Potential environmental effects associated with this project will be mitigated in accordance with applicable rules and regulations. The City therefore finds that potential environmental effects of the project are less than significant and “subject to mitigation by ongoing public regulatory authority.”

Table 4. Permits and Approvals

Unit of Government	Type of Application	Status
City of Lake Elmo	EAW Final Declaration	Submitted
City of Lake Elmo	Comprehensive Plan Amendment	Submitted
City of Lake Elmo	Concept Plan Approval	Approved
City of Lake Elmo	Rezoning	To be applied for
City of Lake Elmo	Preliminary Plat/PUD Approval	To be applied for
City of Lake Elmo	Shoreland PUD Conditional Use Permit	To be applied for
City of Lake Elmo	Grading Permit	To be applied for
City of Lake Elmo	Building Permit	To be applied for
City of Lake Elmo	Stormwater Management and Erosion Control Approval	To be applied for
City of Lake Elmo	Municipal Water Connection Permit	To be applied for
City of Lake Elmo	Sanitary Sewer Connection Permit	To be applied for
Valley Branch Watershed District	Wetland Boundary / Type Determination	Approved
Valley Branch Watershed District	Grading, Stormwater and Erosion Control Permit	To be applied for
Valley Branch Watershed District	Wetland Replacement Plan Decision	Submitted
Washington County	Right-of-Way Permit (CSAH 17)	To be applied for
Washington County	Access Permit (CSAH 17)	To be applied for
Metropolitan Council	Comprehensive Plan Amendment	To be applied for
Minnesota Department of Health	Water Main Extension Approval	To be applied for
Minnesota Department of Natural Resources	Water Appropriation Permit	To be applied for (if needed)
Minnesota Pollution Control Agency	NPDES/SDS General Permit	To be applied for
Minnesota Pollution Control Agency	Sanitary Sewer Extension Approval	To be applied for
Federal Emergency Management Agency	Letter of Map Revision Based on Fill (LOMR-F)	To be applied for

Table 4. Permits and Approvals

Unit of Government	Type of Application	Status
U. S. Army Corps of Engineers	Wetland Delineation Concurrence / Jurisdictional Determination	Approved

D. Extent to Which Environmental Effects can be Anticipated and Controlled

Minnesota Rules Part 4410.1700, subpart 7 (D) indicates the final factor the City must consider is the “extent to which environmental effects can be anticipated and controlled as a result of other environmental studies undertaken by public agencies or the project proposer, including other EISs.” The City’s findings are set forth below.

1. The proposed project design, plans, EAW, related studies, and mitigation measures apply knowledge, approaches, standards, and best management practices gained from previous experience and projects that have, in general, successfully mitigated potential offsite environmental effects.
2. The EAW, in conjunction with this document, contains or references the known studies that provide information or guidance regarding environmental effects that can be anticipated and controlled.
3. Larger projects, studied under Alternative Urban Areawide Reviews (AUARs) as a substitute for an EIS, have included studies and mitigation measures comparable to those included in this EAW.
4. There are no elements of the proposed project that pose the potential for significant environmental effects that cannot be addressed by the project design, assessment, permitting and development processes and by ensuring conformance with regional and local plans.
5. The environmental effects of this development can be anticipated and controlled by the City’s PUD/preliminary plat application and regulatory processes
6. Considering the results of environmental review and permitting processes for similar projects, the City finds that the environmental effects of the project can be adequately anticipated and controlled.

Based on the EAW, comments received from agencies and individuals, the responses to comments, and the criteria above, the City finds that The Royal Golf Club Residential Development does not have the potential for significant environmental effects and does not require the preparation of an EIS.

RECORD OF DECISION

Based on the information contained in the EAW, the written comments received and the responses to those comments, and the findings of fact, the City of Lake Elmo, the RGU for this environmental review, has reached the following conclusions:

1. The EAW and this Response to Comments, Findings of Fact, and Record of Decision document, and related documentation for the project were prepared in compliance with the procedures set forth by Minnesota Rules Parts 4410.1000 to 4410.1700 and the Minnesota Environmental Quality Board.

2. The EAW and this Response to Comments, Findings of Fact, and Record of Decision document and related documentation for the project have satisfactorily addressed all of the issues for which existing information could have been reasonably obtained.
3. The project proposed does not meet any of the mandatory EIS thresholds contained in Minnesota Rules Part 4410.4400.
4. The project does not have the potential for significant environmental effects based upon the above findings of fact and the evaluation of the criteria per Minnesota Rules Part 4410.1700, subpart 7 as set forth above.
5. Pursuant to Minnesota Rules 4410.1700, subpart 5, a copy of this Response to Comments, Findings of Fact, and Record of Decision is being provided, within five days to all persons on the Minnesota Environmental Quality Board distribution list, the persons commenting on the EAW, and to persons who requested a copy. This Response to Comments, Findings of Fact, and Record of Decision will also be made available on the City of Lake Elmo's web site.

The City makes a Negative Declaration and does not require the development of an Environmental Impact Statement (EIS) for this project. City Council Resolution 2017-____ declaring a negative declaration of need for an EIS is attached as part of this document.

Figure 1
Shorelands, Floodplains, and Steep Slopes

[to be attached]

Appendix A
Written Comments Submitted to
the City of Lake Elmo
[to be attached]

Appendix B
Updated Shoreland PUD Evaluation

[to be attached]

Appendix C
Comparison of Detected PFC Levels
to Health Advisory Limits

[to be attached]

November 21, 2016

Stephen Wensman, Planning Director
City of Lake Elmo
3800 Laverne Avenue North
Lake Elmo, MN 55042

RE: City of Lake Elmo Royal Golf Club Residential Development Environmental Assessment Worksheet (EAW)
Metropolitan Council Review No. 21630-1
Metropolitan Council District No. 12

Dear Mr. Wensman:

The Metropolitan Council received the EAW for the Royal Golf Club Residential Development project in the City of Lake Elmo on October 21, 2016. The proposed project is located 222.2 gross acres located between 10th Street North and 20th Street North, and bounded by Manning Trail on the East and by Lake Elmo Avenue on the west. The proposed development includes 292 single-family detached homes connected to municipal water and sanitary sewer on approximately 198.3 net acres, with approximately 90.8 acres reserved as private open space. The proposed project is located on the site formerly owned by 3M and previously a part of Tartan Park golf course.

The staff review finds that the EAW is complete and accurate with respect to regional concerns and does not raise major issues of consistency with Council policies. An Environmental Impact Statement (EIS) is not necessary for regional purposes.

We offer the following comments for your consideration.

Item 8 – Permits and Approvals Required (LisaBeth Barajas, 651-602-1895)

As of the date of this review letter, the City's overall planned density (including all previous amendments) is 3.25 units per acre. The proposed development brings the City's overall density down to 3.05 units per acre, which remains consistent with the Council's density policy of 3 units per acre for Emerging Suburban Edge communities.

As noted in the EAW, a comprehensive plan amendment will be needed should the City decide to move forward with the proposed development. The proposed amendment should make any necessary changes to land use to support the ultimate development concept, as well as provide updates to the wastewater and MUSA sections of the comprehensive plan to show this area as within the service area as well as projected flows from the development. As City and Council staff have discussed, a comprehensive plan amendment will need to be submitted to the Council for review and authorization to before moving forward with this development.

In accordance with Minnesota Statute Section 473.513, at the time the project proposer makes application to the Minnesota Pollution Control Agency (MPCA) for a permit to construct each segment of sanitary sewer for the proposed project, a copy of the plans, design data, and a location map of the project will also need to be submitted to the Metropolitan Council. The Council's Environmental Service Municipal Services staff will need to review, comment, and

recommend issuance of the construction permit by the MPCA before connection can be made to the City's wastewater disposal system.

Forecasts (Todd Graham, 651-602-1322)

Forecasts by Transportation Analysis Zone (TAZ) are not discussed in the EAW, but this information would be helpful as part of the City's comprehensive plan should they move forward with this development. The Metropolitan Council has prepared a draft set of TAZ forecasts for 2040, which is available for local government review.

The Royal Golf Club site is within TAZ #2403. The zone is currently forecasted to gain +36 households during the period from 2010-2040. Council staff recommend adding +250 households, +700 population to the TAZ #2403 forecast. Balancing adjustments can be made to the TAZs elsewhere in the community. The City can update the TAZ forecast through correspondence with Metropolitan Council staff.

Council staff opinion is that the proposed development fits within the community total forecast prepared by the Council' no change is needed to the community total forecast.

This concludes the Council's review of the EAW. The Council will not take formal action on the EAW. If you have any questions or need further information, please contact me at 651-602-1895.

Sincerely,


LisaBeth Barajas, Manager
Local Planning Assistance

CC: Steve O'Brien, MHFA
Tod Sherman, Development Reviews Coordinator, MnDOT - Metro Division
Harry Melander, Metropolitan Council District 12
Raya Esmaeili, Reviews Coordinator



Minnesota Pollution Control Agency

520 Lafayette Road North | St. Paul, Minnesota 55155-4194 | 651-296-6300

800-657-3864 | Use your preferred relay service | info.pca@state.mn.us | Equal Opportunity Employer

November 23, 2016

Mr. Stephen Wensman
Planning Director
City of Lake Elmo
3800 Laverne Avenue North
Lake Elmo, MN 55042

Re: Royal Golf Club Residential Development Environmental Assessment Worksheet

Dear Mr. Wensman:

Thank you for the opportunity to review and comment on the Environmental Assessment Worksheet (EAW) for the Royal Golf Club Residential Development project (Project) located in the city of Lake Elmo, Washington County, Minnesota. The Project consists of the preparation of 222 acres of land for residential development. Regarding matters for which the Minnesota Pollution Control Agency (MPCA) has regulatory responsibility and other interests, the MPCA staff has the following comments for your consideration.

Permits and Approval Required (Item 8)

The table in this section of the EAW does not include the MPCA 401 Water Quality Certification.

Water Resources (Item 11)

- Specific in-water best management practices such as silt curtain, construction during low flow or winter conditions, cofferdam, or check-dams, etc. should be included in the EAW. Please note that isolated wetlands remain under MPCA jurisdiction as waters of the state and mitigation may be required. Wetland evaluation is on a case-by-case basis.
- It appears that the golf course will continue to use groundwater for potable, irrigation, fire protection, and maintenance use. It is important to note that the location of this development lies within known areas of aquifer contamination. The development overlies a perfluorochemical groundwater plume that has impacted groundwater quality in each of the primary drinking water aquifers present. Recent groundwater monitoring in the area of Horseshoe Lake has indicated the presence of perfluorochemicals at levels in excess of U.S. Environmental Protection Agency (EPA) health advisory levels.

Less than 1 mile to the north and east of the development lies the Trichloroethene (TCE) groundwater plume associated with the Baytown Township Groundwater Plume Site. The TCE plume has impacted groundwater quality in each of the primary drinking water aquifers present.

Care should be exercised when using groundwater in this region for potable and irrigation purposes. The EPA recently issued significantly lower health advisory levels for several perfluorinated substances. Because the specific configuration of the groundwater plumes in the area are not well understood and likely vary over time, it is not possible to accurately predict whether a well that has been clear of contamination in the past will remain clear of contamination in the future.

Lake Elmo, Horseshoe Lake, several small drainage ponds, and ditches within the golf course area and further downstream have been shown to be contaminated with perfluorochemicals at levels in excess of EPA health advisory levels. Care should be exercised when using surface water from these areas for irrigation purposes so as to minimize the potential for human and environmental exposure to these contaminants.

Contamination/Hazardous Materials/Wastes (Item 12)

This section refers to a natural gas pipeline that runs across part of the site. The Project proposer should contact the Office of Pipeline Safety to determine the appropriate setbacks for this structure.

The Investigation History refers to a "Possible on-site disposal area that was later confirmed to be located on the adjoining property to the southeast..." This disposal area is not identified on any maps. Please clarify if the disposal area has been reported to the MPCA or State Duty Officer. Please provide the location of the disposal area.

The section regarding "PFCs and Area Groundwater Contamination" does not capture the potential risks posed by groundwater contaminated by the PFC sources. The plume of groundwater contaminated with perfluorochemicals appears to extend beneath the site and further toward the east.

The golf course well sampling results referred to do not comply with routine compliance sample results reporting protocols. There is no indication regarding any quality control aspects of the results. If this data is intended to be used for this report, please provide an adequate presentation of the data. A summary table deep within an appendix is not an appropriate presentation of such data. Assuming that this is an oversight, the results do indicate that there are a number of perfluorochemicals present in the samples. However, the regulatory limits referred to are no longer current. The EPA issued revised drinking water criteria in 2016.

The EAW does not discuss how soil contaminated with materials other than agricultural chemicals will be handled. The MPCA recommends that the site be entered into the MPCA Brownfield Program (formerly called the Voluntary Investigation and Cleanup Program) in order to provide regulatory oversight with regard to non-agricultural related contamination issues. Accidental spills or releases from on-site equipment, buried rubble, municipal solid waste, buried demolition waste, etc. are situations regulated by the MPCA. The Brownfield Program provides technical assistance and issuance of various liability assurance letters to promote the investigation, cleanup, and redevelopment of property that is contaminated with petroleum and/or hazardous substances.

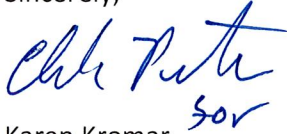
Mr. Stephen Wensman

Page 2

November 23, 2016

We appreciate the opportunity to review the Project. Please provide the notice of decision on the need for an Environmental Impact Statement. Please be aware that this letter does not constitute approval by the MPCA of any or all elements of the Project for the purpose of pending or future permit action(s) by the MPCA. Ultimately, it is the responsibility of the Project proposer to secure any required permits and to comply with any requisite permit conditions. If you have any questions concerning our review of this EAW, please contact me via email at Karen.kromar@state.mn.us or via telephone at 651-757-2508.

Sincerely,



Karen Kromar

Planner Principal

Environmental Review Unit

Resource Management and Assistance Division

KK:bt

cc: Dan Card, MPCA, St. Paul

Bill Wilde, MPCA, St. Paul

Greg Small, MPCA, St. Paul

Teresa McDill, MPCA, St. Paul



MINNESOTA DEPARTMENT OF NATURAL RESOURCES
CENTRAL REGION
1200 WARNER ROAD
SAINT PAUL, MN 55106
651-259-5800

November 22, 2016

Transmitted electronically

Stephen Wensman
3800 Laverne Ave. N.
Lake Elmo, MN 55042

RE: The Royal Golf Club Residential Development EAW

Dear Stephen Wensman,

The Minnesota Department of Natural Resources (MNDNR) has reviewed the Environmental Assessment Worksheet (EAW) for the Royal Golf Club Residential Development EAW.

General Comments

To date, MNDNR has provided formal comments on the concept PUD to the City of Lake Elmo and informal comments to the developer on the PUD density analysis. These comments have been based on the assumption that the PUD will have City water and sewer. MNDNR will formally review the preliminary PUD and plat when these are submitted to the City, to determine if they meet the PUD provisions in State shoreland rules.

MNDNR review of shoreland PUDs looks for consistency with the density allowances, setbacks, and height as well as a variety of more subjective performance standards dealing with protection of vegetation and sensitive slopes. While we look for compliance with the numerical standards, we recognize that good environmental design cannot be reduced to compliance with a set of numbers. The shoreland PUD standards were part of the 1989 State shoreland rules and were an early form of conservation design regulations. A lot has been learned about conservation design since 1989 and many communities in Minnesota have adopted different shoreland PUD standards to limit density, ensure better natural resource/open space protection, and provide for greater alignment with the community's vision.

MNDNR has concerns on the design of the Royal Golf Club Residential PUD because the proposed development is too dense for the natural resources on the site. In making this evaluation, MNDNR is considering overall project suitability by looking at how the design impacts the existing natural environment on the site. From our perspective, a development is not suitable if it is consuming areas of high quality vegetation and areas with slopes greater than 12 percent (which MNDNR considers steep slopes). Ultimately, however, it is up to the City of Lake Elmo to evaluate project suitability, natural resource protections, and transportation concerns associated with this proposal.

Specific Comments

- Page 3 - Rewrite the statement on page 3 so that it does not imply that the City has determined that this project meets shoreland overlay district requirements. At this stage of the PUD process, it is premature to state that the proposed project design complies with shoreland overlay district requirements. The City of Lake Elmo has not approved this development yet nor has the City

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fully evaluated whether the development plans are in conformance with City ordinances and State shoreland rules.

- Page 3 states that this project minimizes effects on floodplains. However, page 10, states that there will be about 15.6 acre-feet of fill in the flood fringe to accommodate 15 residential lots and streets. The statement on page 3 is misleading since there will be significant changes to the existing floodplain configuration. What layout design modifications could be made to avoid the need for floodplain fill and rerouting of flood waters into storage ponds? How will floodplain storage outside of the PUD boundary be managed (i.e., who will own and maintain these storage ponds)?
- Page 3 – Please correct the MNDNR PWI # for the unnamed public water wetland from 82-117W to 82-417W. The MNDNR ID # for the unnamed public watercourse is M-050-009-001.
- Page 8 states that the City's ordinance requires only two conditions to be met to allow for PUDs (the City's PUD ordinance and the State shoreland PUD rules). PUDs, by their very nature, are a negotiation between the local government and the proposer. The City, through the PUD process, can require additional conditions in exchange for the increased density that is allowed under a PUD. Through the PUD process and negotiations with the developer, the City can also exert influence on how a property is developed and what the design of that development looks like. For example, the City can require greater tree preservation, slope/erosion protection, interconnectivity, conservation easements, or other environmental or public benefits.
- Page 9 and Appendix A - Please update the shoreland PUD suitable area, open space, and density calculations (Tables 5 and 6 and Appendix A) to match those numbers provided in analyses completed after the submittal of the EAW. Include with this analysis a map showing areas suitable for development and those areas not suitable for development and their acreages. Also include with this analysis a map showing areas of open space and those areas not included in open space and their acreages.
- Page 11 states that the proposed project is compatible with surrounding land uses. Describe in more detail in what ways the PUD's design plan is compatible with surrounding land uses. Please provide more detail on the preservation of forest buffers and how they provide compatibility with surrounding land uses. Has this proposal considered ways to preserve existing forest areas to allow for plant and wildlife preservation?
- Figure 7 – Please show the location of steep slopes on Figure 7, to help the reader determine the location of proposed lots, structures, and roads in relation to steep topographic areas.
- Has a tree preservation and replacement plan been prepared for this proposed development that meets City ordinance?

Thank you for the consideration of our comments.

Sincerely,

/s/ Rebecca Horton

Regional Environmental Assessment Ecologist – Central Region
Division of Ecological and Water Resources

mndnr.gov





PROTECTING, MAINTAINING AND IMPROVING THE HEALTH OF ALL MINNESOTANS

November 23rd, 2016

Stephen Wensman
Planning Director
City of Lake Elmo
3800 Laverne Avenue North
Lake Elmo, MN 55042

Dear Mr. Wensman,

Thank you for providing the Minnesota Department of Health (MDH) with the opportunity to comment on the Environmental Assessment Worksheet (EAW) for the Royal Golf Club Residential Development project. The mission of MDH is to protect, maintain, and improve the health of all Minnesotans. The careful planning and development of projects such as this one supports this mission and is an important step in ensuring health in all policies.

MDH does have several comments regarding groundwater, water quality, and soil contamination at and near the site:

Section 10 – “Geology”

Although no sinkholes have been identified on the project property, the Minnesota Geological Survey (MGS) karst inventory does map one sinkhole less than one mile northeast of the project property, just north of the intersection of Manning Avenue and 27th St. N. (UTM coordinates 510846/4981836). Depth to carbonate bedrock is an important factor in the potential for karst development, with that potential increasing significantly where depths are less than 50 feet (Alexander, et al. , 2003, “Sinkholes, Sinkhole Probability, and Springs and Seeps”, Goodhue County Atlas, County Atlas Series, Atlas C-12, Part B, Plate 10). Well logs near the east property boundary of the project area indicate depth to bedrock is approximately 47-59 ft. (unique well numbers: 442166, 447252, 431201, and 503306). Two infiltration areas and two stormwater ponds are planned near the northeast corner of the project property (as shown on Figure 7). Consideration should be given to potential karst development beneath these infiltration areas and whether any mitigation measures are needed, particularly given the proximity of these areas to planned home construction.

Section 11 – “Water Resources”

The groundwater discussion should include more information regarding the perfluorochemical (PFC) contamination in the groundwater in this area. Groundwater has been impacted by PFCs from the former Washington County Landfill and 3M-Oakdale Disposal Site. Due to groundwater flow, surface water-groundwater interactions, and stormwater management activities, the groundwater east of Lake Elmo has been impacted by PFCs emerging from these disposal areas. Recent MDH sampling has detected PFCs at concentrations above the new Environmental

Protection Agency (EPA) Lifetime Health Advisory levels of 70 parts per trillion for PFOS and PFOA in the surface water in Lake Elmo, the unnamed creek that discharges from Lake Elmo onto the project property, Horseshoe Lake, and the series of ditches and stormwater ponds further downstream. Surface water ponds on the property that are part of the Project 1007 drainage system are almost certain to be similarly impacted. The full extent and distribution of PFCs in this portion of Lake Elmo are still being determined. Use of surface water or groundwater at the project site should be carefully managed to avoid human exposure and prevent further spreading of the contamination. MDH further recommends landscaping options be implemented to create significant buffers in order to restrict public access to Horseshoe Lake.

Preliminary data suggests PFC contamination is primarily in the Prairie du Chien aquifer (OPDC), but excessive use of Jordan aquifer (CJDN) wells may cause downward migration of the contamination, potentially placing downgradient CJDN wells at risk. MDH recommends the project proposer work with MDH, MPCA, and DNR to evaluate water quality in the existing wells and surface waters on the project property and determine appropriate use of these to mitigate for these potential impacts.

Section 12 – “Contamination/Hazardous Materials/Wastes”

The sub-section titled “Investigation History” indicates a “disposal area” is located on an adjoining property to the southeast. The location is not shown on any figures and no information is provided regarding this disposal area and its proximity to the project property.

The sub-section titled “Response Action Plan” indicates that contaminated soils excavated at the site are to be managed in a “Regulated Soil Management Area” beneath a 2 ft. cover. The figure shown in the Phase II Investigation Report (Appendix D) indicates the area proposed for this management area has a significant slope and may be prone to erosion. MDH assumes MPCA will be consulted in the design and construction of this facility to ensure it provides long-term encapsulation of these soils to prevent exposures.

The sub-section titled “PFCs and Area Groundwater Contamination” (page 27) should be revised to reflect that PFCs above levels of health concern are present in the groundwater in this part of Lake Elmo. Although the concentrations detected in the CJDN wells on the property do not exceed levels of health concern, as noted above continued extraction of water from the CJDN may result in increased PFCs in this aquifer over time.

Appendix D – Table 3

Although the table correctly identifies the current MDH Health Risk Limits for PFOS, PFOA, PFBA, and PFBS, it should be noted that MDH now uses the new EPA health advisory levels of 70 ng/L for PFOS and PFOA when evaluating health risks.

Health starts where we live, learn, work, and play. To create and maintain healthy Minnesota communities, we have to think in terms of health in all policies. Thank you again for the opportunity to provide comments on this EAW for the Royal Golf Club Residential Development project. Feel free to contact me at (651) 201-4907 or david.bell@state.mn.us if you have any questions regarding this letter.

Sincerely,

Stephen Wensman
The Royal Golf Club Residential Development
Page 3
November 23rd, 2016

A handwritten signature in black ink, appearing to read 'D-Bell'.

David Bell
Environmental Review Coordinator
Environmental Health Division
Minnesota Department of Health
PO Box 64975
Saint Paul, MN 55164-0975



Public Works Department

Donald J. Theisen, P.E.
Director

Wayne H. Sandberg, P.E.
Deputy Director/County Engineer

November 23, 2016

Stephen Wensman
Community Development Director
City of Lake Elmo
3600 Laverne Avenue North
Lake Elmo, Mn 55042

**Re: Washington County Comments on Environmental Assessment Worksheet (EAW) for the
Royal Golf Club Residential Development Project in the City of Lake Elmo**

Dear Mr. Wensman

Thank you for the opportunity for Washington County to submit comments on the City of Lake Elmo's Environmental Assessment Worksheet (EAW) for Royal Golf Club Residential Development (Project) in Section 25, City of Lake Elmo, dated October 17, 2016. The Project is located north of at County State Aid Highway (CSAH) 10 /10th Street, south of 20th Street North, west of Manning Trail North and east of CSAH 17/Lake Elmo Avenue. The project will convert approximately 147.9 acres of golf course, woodland, ball fields, grassland, and wetland to 292 single-family residential lots. The project will involve grading, installation of public and private infrastructure, open space preservation, tree clearing, and stormwater ponding. The project will include approximately 90.8 acres of private open space consisting of woodland, stormwater ponds, wetlands, grassland, and turf areas.

Washington County supports the City of Lake Elmo efforts to allow for the expansion of urban services (MUSA) for the development of a variety of single family residential uses as well the existing club house/banquet facility on the site.

The county has prepared the following comments in the context of the the Washington County Comprehensive Plan 2030 and the Public Works Department transportation responsibilities to ensure the health, safety and welfare of county residents, ensure environmental compliance, and minimize environmental impacts.

Section 8. Permits and Approvals Required

Any work in the county right-of way as it relates to the development including grading for the installation of culverts, installation of water and sewer services, turn lane modifications, road improvements, trails, Americans with Disability Act (ADA) ramp improvements will require a right-of-way permit.

The county agrees that an access permit will be required for direct access to the site from CSAH 10/10th Street and CSAH 17/Lake Elmo Avenue at the proposed locations since the project will be an intensification of land uses on the site. The developer has submitted turn-lane modification plans for the intersections at CSAH 10/10th Street and CSAH 17/Lake Elmo Avenue and county traffic staff will review and approve them as part of the access and right-of-way permit process.

The County reserves the right to require additional improvements, as needed, as a condition of these permits.

Section 9. Land Use

Intensifying land uses within the Municipal Urban Service Areas (MUSA) is appropriate to complement the existing golf course and club house use. The project site is located one mile north of Interstate (I)-94 so regional access will provide an efficient connection to jobs and services in Washington County and the Metropolitan Region. Access to the interstate system is provided at the Manning & I-94, and County 19 & I-94 Interchanges. The result will be increased traffic at both of these interchanges, which may result in the need for improvements/upgrades to the interchange infrastructure. Most of these expected upgrades will include a city cost share. It should be noted that the County has no plans for an interchange at County 17 & I-94.

The development implements the land use goals of the Washington County Comprehensive Plan 2030, to design the land use plan to support economic development by the following policies:

- *Locate commercial and industrial growth where urban services are available; continue to prohibit commercial and industrial land use in unsewered areas.*
- *Support land use patterns that efficiently connect housing, jobs, transportation, transit, and retail and commercial centers.*

The development also implements the transportation goals of the Washington County Comprehensive Plan 2030, to develop and maintain a roadway system that accommodates the safe and efficient movement of people and goods. Strategies in the plan include the following:

- *Increased Jobs and Housing Concentrations:*
 - *Plan for, design, and construct roadways to accommodate existing and future traffic growth.*
 - *Use effective transportation planning to accommodate existing and planned land uses, while preserving natural, cultural, and historic resources.*
 - *Develop a collaborative process with local municipalities to identify fiscally responsible system improvements that are consistent with county priorities and meet the needs of municipalities.*
 - *Coordinate with other agencies to promote a well balanced transportation system.*
 - *Coordinate with communities and provide feedback on development and redevelopment proposals.*

Section 11. Water Resources

The county has not received nor reviewed a stormwater plan to date. The developer, city or watershed district must submit the drainage report and calculations for review of any downstream impacts to the county drainage system. Along with the drainage calculations, written conclusions explaining that the volume and rate of stormwater run-off into any county right-of way will not increase as part of the project, must be provided.

Section 17. Noise

Washington County's policy is to assist local governments in promoting compatibility between land use and highways. Residential uses located adjacent to highways often result in complaints about traffic noise. Traffic noise from adjacent highways could exceed noise standards established by the Minnesota Pollution Control Agency (MPCA), the U.S. Department of Housing and Urban Development, and the U.S. Department of Transportation. Minnesota Rule 7030.0030 states that municipalities are responsible for taking all reasonable measures to prevent land use activities listed in the MPCA's Noise Area Classification (NAC) where the establishment of the land use would result in violations of established noise standards. Minnesota Statute 116.07, Subpart 2a exempts County Roads and County State Aid Highways from noise thresholds.

County policy regarding development adjacent to existing highways prohibits the expenditure of highway funds for noise mitigation measures in such areas. The developer should assess the noise situation and take any action outside of County right of way deemed necessary to minimize the impact of any highway noise.

Section 18. Transportation

The County agrees with the purpose of the Traffic Impact Study (TIS) dated October 12, 2016 to determine if improvements are needed to nearby intersections that may be impacted by traffic from the built out development.

The objectives of the study included the following:

- Document how the study intersections currently operate.
- Forecast the amount of traffic expected to be generated by the proposed development.
- Determine how the study intersections will operate in the year 2030 with no development traffic.
- Determine how the study intersections will operate in the year 2030 with development traffic.
- Determine how the surrounding roadways will operate in the year 2030 with the proposed Development
- Recommend improvements, if needed.

There was also agreement with the study intersections surrounding the site which included the following:

1. Lake Elmo Avenue N/20th Street N.
2. 20th Street N/20th Street Court N.
3. 20th Street N/East Golf Course Access
4. 20th Street N/Manning Trail N.
5. Lake Elmo Avenue N/Park Access.
6. Manning Trail N/Manning Avenue N.
7. 20th Street N/Proposed Western Access
8. Manning Trail N/Proposed Access
9. CSAH 10/Proposed Access

The county appreciates that the northern intersection of Manning Avenue N/Manning Trail N were analyzed and determined that a traffic signal would not be warranted at this location in the 2030 scenerio. This was based on the future improvements to the Manning Avenue corridor which includes a four-lane divided highway with traffic control improvements north and south of this intersection.

November 23, 2016

Washington County Comments on EAW for Royal Golf Club Residential Development
Stephen Wensman, Planning Director

Also analyzed was the CSAH 10/Lake Elmo Avenue intersection which currently operates as an all way stop intersection with combined thru/lefts and exclusive right turn lanes at all approaches. We accept the conclusion that this development will not require or drive the need for additional traffic control or infrastructure improvements at this intersection. It should be noted that there are no improvements programmed in the County's 5 Year CIP for this intersection.

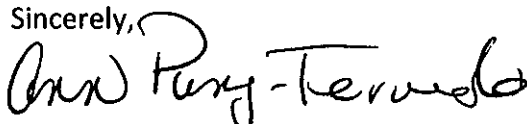
There should be further conversations with the county on the current status of the identified Regional Trail Corridor (Washington County Comprehensive Plan 2030) along CSAH 17/Lake Elmo Avenue. The County will be starting planning efforts, which include community outreach and engagement, for this segment of the Central Greenway Trail Master Plan. It is expected this process will begin in 2017. Additionally, this corridor will be evaluated as part of the Washington County Comprehensive Plan 2040 planning process.

It is noted that in the traffic analysis provided to the county, the future club house/banquet facility and the commercial public use golf course traffic was not included. As a result, the traffic study underestimates the total traffic impacts of this development. While it is true that the existing traffic volumes account for a portion of this, we understand the goal of the developer is to increase use, and thus traffic impacts, of the club house / banquet site. Please clarify how you will incorporate this expected increase in use into the traffic study.

If the comments in this letter are addressed in the EAW, the county does not feel the need for the preparation of an Environmental Impact Statement for the planned project; however, future studies, environmental documentation, and mitigation measures will need to be addressed as development occurs in the area.

If you have any questions or comments to the responses on the Royal Golf Club EAW, please contact me at Ann.pung-terwedo@co.washington.mn.us.

Sincerely,



Ann Pung-Terwedo
Senior Planner

c: Wayne Sandberg, County Engineer
Jan Lucke, Transit and Planning Manager



November 22, 2016

Stephen Wensman, Planning Director
City of Lake Elmo
3800 Laverne Ave N.
Lake Elmo, MN 55042

RE: The Royal Golf Club Residential Development EAW

Dear Steven,

The Washington Conservation District (WCD) has received and reviewed the above-mentioned EAW. The WCD review focuses on wetlands, erosion and sediment control, natural area management, and stormwater management. Based on this review the WCD offers the following comments:

Section 7 – Cover Types

Use of native vegetation and habitat restoration is encouraged in the open space areas, including native vegetated buffers around stormwater treatment systems. Enhancing the greenway corridor that connects Lake Elmo to natural areas to the east is encouraged.

Section 10 – Geology, Soils and Topography / Land Forms

Section b. Soils and Topography

- Compliance with NPDES, watershed, and local requirements will minimize adverse impacts of soil erosion and sedimentation. The WCD can provide support to the City to ensure compliance as needed. The WCD recommends phasing the earthwork and grading to the greatest extent possible to limit the scale and duration of exposed soils during construction.
- Preserve HSG B soils to the extent possible. Protecting zones of optimum infiltration from compaction is preferred
- Minimize soil compaction and provide soil restoration in landscaped areas to enhance infiltration
- Deep-rip the soils with a toothed bucket in low or compacted areas to promote infiltration after major construction is complete

Section 11 – Water Resources

Section iv. Surface Waters

- The EAW indicates the site will meet City and VBWD infiltration guidelines, which recommend retaining the 1.1" rain event on-site. WCD encourages the use of bioretention to meet the onsite volume retention standards. Bioretention promotes both infiltration and evapotranspiration which more effectively mimics terrestrial hydrology than pure infiltration systems. These systems are designed to be distributed throughout the site and treat small contributing drainage areas, breaking up larger catchments into smaller, more manageable parts. Minimizing the drainage area provides multiple benefits to stormwater treatment, including the potential for reduced infrastructure conveyance costs.

To ensure the long-term effectiveness of volume control, the following design specifications are presented for consideration:

- Do not rely on long-term infiltration from unlined stormwater ponds or wet detention basins
- Install bioretention/infiltration practices off-line
- Include flow-splitter and high-flow bypass
- Provide pre-treatment (especially for sediment to prolong the life of a practice)
- Keep the max water depth to acceptable levels based on soil types and actual infiltration rates
- Refer to the Minnesota Stormwater Manual, 2013 (on MN PCA website) for additional design and implementation considerations

The WCD is also serving on the WCA TEP and will provide comments on the wetland permitting through that process.

Section 13 – Fish, Wildlife, Plant Communities and Sensitive Ecological Resources (Rare Features)

Section d.

- Buckthorn removal from entire project area rather than leaving visual barrier along exterior roadways will minimize spread of this restricted noxious weed. Replace visual barrier of removed Buckthorn by replanting native trees and shrubs.

Conclusions

There are no known impacts that have not already been addressed in this EAW that warrant an Environmental Impact Statement. The Washington Conservation District appreciates the opportunity to review this EAW. Please call me at 651-330-8220, extension 20, if you have any questions about our review.

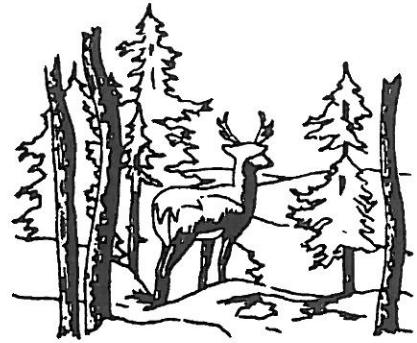
Sincerely,

A handwritten signature in black ink, appearing to read 'Jay Riggs', with a stylized, cursive script.

Jay Riggs, District Manager
Washington Conservation District

Cc: John Hanson, VBWD

November 11, 2016



Mr. Stephen Wensman
Planning Director
City of Lake Elmo
3800 Laverne Avenue North
Lake Elmo, MN 55042

Re: The Royal Golf Club Residential Development (EAW)

Dear Mr. Wensman:

Thank you for submitting a copy of the Environmental Assessment Worksheet (EAW) for the proposed The Royal Golf Club Residential Development. The proposed project is located within the Valley Branch Watershed District (VBWD). I offer the following comments on behalf of the VBWD. The numbers correspond to the numbers in the EAW.

**9. Land Use
Descriptions**

a.ii Plans (Page 6): While the site does not lie within a Minnesota Department of Natural Resources planned conservation corridor, the site is within an existing, somewhat connected, natural greenway corridor, as shown on Figure 20 of VBWD's March 2013 *Results of Minnesota Routine Assessment Method (MNRAM) for Evaluating Wetland Function* (attached).

a.iii Zoning, Floodplains (Pages 9–11): The VBWD recently completed more detailed modeling of the Downs Lake watershed that used current climate and topographic data. The modeling results and statistical analysis found the 1%-annual-chance (100-year) flood level of Downs Lake to be Elevation 893.8. The VBWD will regulate to this flood level instead of the FEMA base flood elevation of 893.0.

VBWD Rule 5, Standard 3, limits fill in lakes, ponds, and storage sites so that the cumulative effect of all possible filling will not raise the 100-year flood level more than 0.1 foot. Flood-storage replacement is allowed to conform to this VBWD rule, but wetlands should not be filled or drained to provide the flood-storage replacement.

Structures will need to have their minimum floor elevations at least 2 feet higher than the adjacent water bodies' VBWD-adopted 100-year flood level, as required in VBWD Rule 5, Standard 2.

Easements covering all portions of the property that lie below the 100-year flood elevation of lakes, wetlands, ponds, lowlands, and streams will need to be dedicated to the VBWD, as required in VBWD Rule 5, Standard 3.



DAVID BUCHECK • LINCOLN FETTER • JILL LUCAS • EDWARD MARCHAN • ANTHONY HAIDER

VALLEY BRANCH WATERSHED DISTRICT • P.O. BOX 838 • LAKE ELMO, MINNESOTA 55042-0538

www.vbwd.org

Thank you for the opportunity to comment on the EAW. As the EAW indicates, a VBWD permit will be required for the project. VBWD will review the project plans for conformance to the VBWD rules and regulations when a permit application is submitted. The items identified in this letter are meant to identify potential issues and assist the project designers in protecting the water resources of the area. If you have any questions or need clarifications, feel free to contact me at 952-832-2622.

Sincerely,



John P. Hanson, P.E.
Barr Engineering Co.
Engineers for the Valley Branch Watershed District

c: VBWD Managers

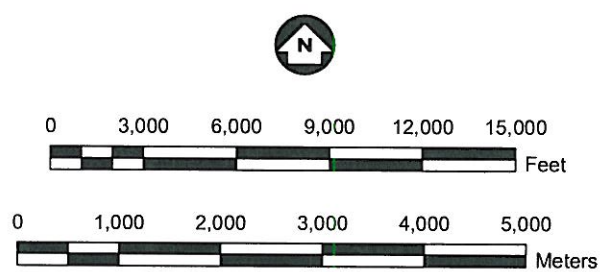
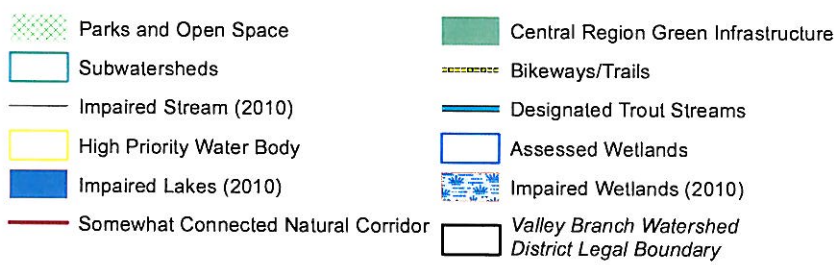
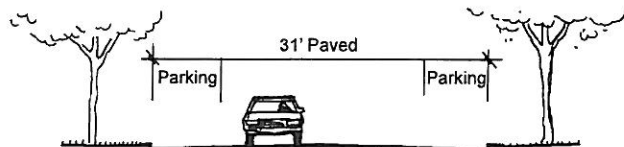


Figure 20

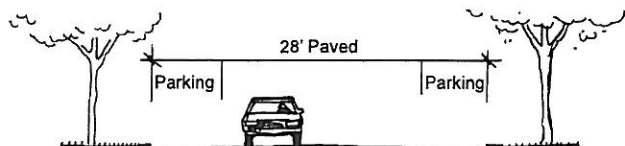
HIGH PRIORITY AREAS
AND GREENWAY CONNECTIVITY
Valley Branch Watershed District, MN

Site Design to Reduce Stormwater Runoff

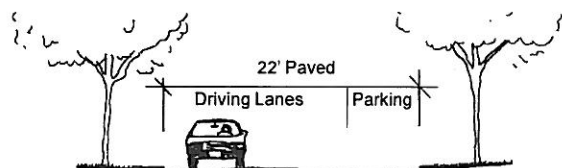
Street Design



Standard width for residential collector streets, with parking on both sides. Dimension Source: Maple Grove, Minnesota.



Standard width for residential minor streets, with parking on both sides. Dimension Source: Eden Prairie, Minn.

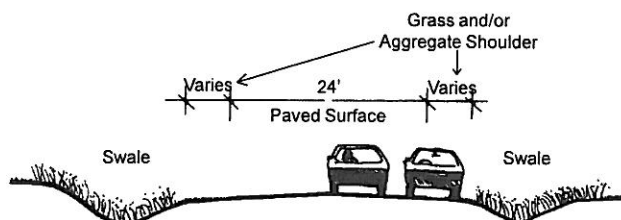


Allowing parking on only one side can further reduce the width of low-volume residential streets. Dimension Source: Robert Engstrom Companies (Fields of St. Croix, Lake Elmo, Minn.).

Many residential streets are wider than necessary. They should be designed with the minimum pavement width that will support the area's traffic volume; on-street parking needs; and emergency, maintenance, and service vehicles. For example, consider creating one parking lane rather than two for suburban residential streets.

In new subdivisions, reduce impervious surface by reducing the total length of residential streets. (See *Open Space Subdivision Design*.)

Encourage stormwater infiltration through the use of curbless road designs and overland drainage conveyance systems. On low-traffic streets, narrow the pavement and allow grass shoulders to function as an occasional parking lane.



Crowned, curbless road drains to roadside swales. Grass shoulders function as occasional parking lanes. Dimension Source: Afton, Minn.

Benefits

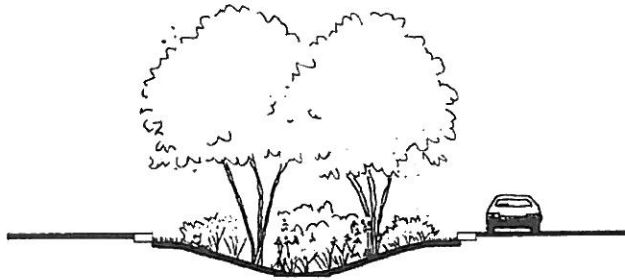
- Reducing impervious surface results in less stormwater runoff and less infrastructure to accommodate it.
- Less pavement means lower costs for development and maintenance.
- Narrower streets discourage fast driving speeds and create a more pedestrian-friendly environment.

Design Guidelines

- Design residential streets with the minimum pavement width necessary to support: the traffic volume; on-street parking needs; and emergency, maintenance, and service vehicles.

Site Design to Reduce Stormwater Runoff

Cul-de-Sac Design

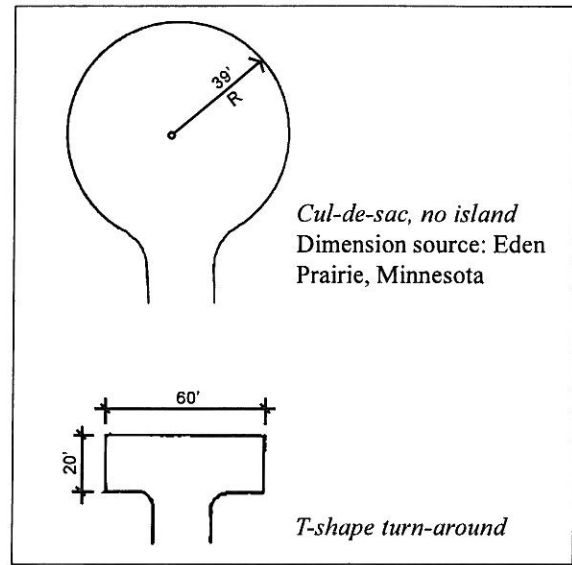
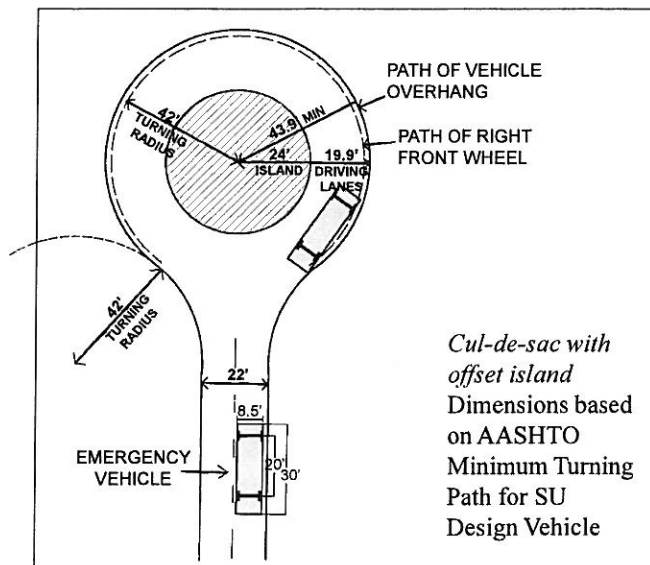


Cul-de-sac infiltration island accepts stormwater from surrounding pavement.

Reducing the size or changing the shape of cul-de-sacs can reduce the amount of impervious surface in subdivisions. Cul-de-sacs should be designed using the minimum radius that accommodates turning of emergency, service, and maintenance vehicles. Changing the radius from 40 feet to 30 feet can reduce the impervious coverage by about 50% (Schueler 1995).

Using turnaround options such as a T-shape can also greatly reduce impervious surface.

A landscaped island in the center of the cul-de-sac removes impervious surface where driving does not occur. This island can also be designed as a depression to accept stormwater runoff from the surrounding pavement. A flat apron curb will stabilize roadway pavement and allow for runoff to flow from pavement into the cul-de-sac's open center.



Drawings adapted from Schueler 1995.

Benefits

- With less impervious surface, less stormwater runoff will require management. Reducing stormwater runoff protects downstream water bodies. Less paved surface also means lower development and maintenance costs.
- Reducing pavement lessens the urban heat island effect, the increase in air temperature that can occur when highly developed areas are exposed to the sun.
- Planted cul-de-sac islands are more attractive than wide expanses of pavement.

Design Guidelines

- Design cul-de-sacs with a radius of 39 feet or less.
- Include an unpaved, depressed island with a minimum radius of 20 feet.

November 23, 2016

City of Lake Elmo
Planning and Zoning Department
Stephen Wensman, Planning Director
3800 Laverne Avenue North
Lake Elmo, Minnesota 55042

Dear Mr. Wensman:

On behalf of The Homestead Homeowner's Association, I would like to submit the following comments related to the EAW for the proposed Royal Golf Residential Development project:

- 1) The list of Permits and Approvals Required on Page 5 indicates that a Comprehensive Plan Amendment has been submitted to the Metropolitan Council. We believe this is inaccurate since the City Council has not voted to amend its current Comprehensive Plan to allow any kind of residential development on this property.
- 2) The Traffic Impact Analysis was based on data collected in July, 2016. We are concerned that this data may significantly under-represent the normal "baseline" traffic volume for the following reasons:
 - A significant portion of Lake Elmo Avenue N was closed during this time due to construction on Lake Elmo Ave and in the Old Village area.
 - Local schools were not in session due to the Summer break.
 - The Tartan Park golf course was not operational during this time. The developer has indicated that they expect 30,000 – 45,000 rounds of golf annually which will generate additional traffic volume that may not have been fully reflected in the analysis.
- 3) We've heard recently that the City Council might opt to schedule a vote on a proposed Comprehensive Plan amendment for this land at the upcoming December 6th Council meeting. We feel that a vote on December 6th would not allow enough time for a thorough review and consideration of the public comments related to this EAW. Our understanding is that it is common practice by RGU's to not take any legislative action on their comprehensive plan amendments for the area under consideration prior to the completion and public review of an EAW or EIS and official action on the pending EAW or EIS.
- 4) We would like to raise the question of whether an EIS might be required or simply be prudent for this development. As you undoubtedly know, MN Rule 4410.4400 Subp.14 defines a set of residential housing unit thresholds which trigger the need for a mandatory EIS based on "the total number of units that the proposer may ultimately develop on all contiguous land owned by the proposer or for which the proposer has an option to purchase." Unless the developer is willing to put the golf course acreage into a conservation easement in perpetuity, the total

number of housing units which could eventually be built on this entire 477-acre parcel may very well eventually exceed the thresholds defined in this rule. Our understanding is that a development with the potential for "400 unattached units or 600 attached units ... if the project is not consistent with the adopted comprehensive plan" would require a mandatory EIS.

Although our neighborhood continues to be amenable to this proposed development in concept, we remain disappointed with the proposed 292-unit housing density and we have concerns about the potential for several hundred additional homes should the golf course someday become financially unsustainable. Given the unique location and exceptional attributes of this property, coupled with the widely held local desire to preserve and protect the rural character of Lake Elmo, we feel that 'Open Space' housing densities similar to those in our neighborhood would be far preferable and more appropriate for this development.

Thank you for your continued leadership in managing this important process on behalf of our City.

Kindly

A handwritten signature in black ink, appearing to read 'Dan Rice', with a stylized, cursive script.

Dan Rice, President

Homestead Homeowners Association

11364 14th St N

Lake Elmo, MN 55042

2301 Legion Avenue
Lake Elmo MN 55042
November 21, 2016

City of Lake Elmo
Planning and Zoning Department
Stephen Wensman, Planning Director
3800 Laverne Avenue North
Lake Elmo, Minnesota 55042

Dear Mr. Wensman,

I would like to comment, ask questions, and clarify the EAW for the proposed Royal Golf Residential Development proposed by HC Golf Development, LLC in the city of Lake Elmo, Washington County. I will be referring to pages in the EAW that have given me concern.

My first concern is that the commercial aspect of the development, the golf course, club house, storage area, sport complex, and driving range were not part of the study. These commercial aspects of the development will add to the traffic, congestion, water runoff, and have a strong environmental impact on the area.

On page 3 it states "Traffic generated by the project will have little to no impact on the regional transportation system. Intersections surrounding the site will continue to operate at acceptable levels of service with the traffic generated by the proposed project." This is followed up later on page 35 by a traffic study that was completed in July, 2016, when the golf course, driving range, club house, sport complex, and storage building were closed and the streets to the east and west, Lake Elmo Avenue and Manning Avenue, were under construction and school was not in session. I disagree with the Traffic Impact Study conclusion that the proposed project will have minimal effects on adjacent public roads and that nearby intersections will continue to operate at an overall Level of Service (LOS) A. A proper study needs to be completed.

The study continues on page 35 to say "These residential development is expected to generate a total of 2,780 average daily trips, including 1,390 vehicles entering the site and 1,390 vehicles exiting the site. It continues with "The complete development analyzed included an 18-hole golf course with 293 single family home land parcels. Based on this layout, the resulting new traffic associated with the proposed development is expected to be 1,717 vehicles entering and 1,717 vehicles exiting the development per day (total daily trip generation of 3,434 vehicles)." There is a difference in traffic if the commercial aspects are included in the study and they should be as they will be part of the traffic.

Also in the traffic discussion it appears they are unsure what roads the traffic will use and which traffic to count. It would also be good to determine if the entire area will be developed at this time as this will impact the traffic count. "There is another potential access onto Manning Trail N for the proposed residential component. This future access will depend upon development of the adjacent property and is not included in this traffic analysis. It should be noted that the proposed site driveways do not provide access to the entire development as each access only services a portion of the overall site. This results in

traffic that does not mix within the site, and depending on where the driver's origin and destination, will determine which access to use.

Page 8 states "The City's ordinance also requires that shoreland PUDs be connected to public water and sewer systems, and that least 50% of the shoreland area be maintained as open space." This is true, however only that land within 1000 feet of a shoreland is zoned this way and needs to be connected to public sewer, the remainder of the land could use septic systems. In fact, depending on the placement of the lots no home would need to use public sewer.

Page 10 states "The project is proposing to place about 14.0 acre-feet of fill in the flood fringe of Downs Lake to elevate an area for construction of 15 residential lots and adjoining streets. Construction of a municipal street around the east side of Lake Rose will require about 1.6 acre-feet of fill in the flood fringe of Lake Rose." We want to make sure proper authorities are committed to supervising this activity as streets and 15 homes could be flooded if not completed correctly. This area has been flooded in the past. It is unfortunate the developer is not listening to the land and building outside of a floodplain.

Page 11 states "The proposed project is compatible with the proposed land use, zoning, and surrounding land uses. The project is designed to preserve considerable forested buffers adjacent to surrounding roadways. These vegetated buffers will enhance the compatibility of the project with nearby land uses and help preserve the forested character of the area." It is true this may be compatible with land use, but certainly not with density of the surrounding homes. The current surrounding lots are about one acre and go up to almost 50 acres per household, the proposed lots start at 0.4 acre and go up to .75 acre per household. The conversion of forest to impervious surface will significantly change the character of the area and decrease the natural habitat of the existing wildlife corridor. Also on page 32 it states: "buckthorn may be left in the understory along exterior roadways to provide visual screening." I don't believe an invasive species is considered a "forested buffer" and will not enhance the project.

Page 13 describes the "Grading operations for residential development construction are expected to affect 137.5 acres and involve movement of about 750,000 to 1 million cubic yards of soil to construct streets, residential building pads, and stormwater ponds. Grading is expected to avoid disturbance on 84.4 acres within the project area". It is unfortunate so much land has to be disturbed, however it means there will be considerable noise. Page 34 directs our attention to "Noise generated by construction equipment and residential building construction will be limited primarily to daylight hours when noise levels are commonly higher than at night." If this is true, what provision is being made so the surrounding landowners are allowed their rightful peace and quiet? I would like to suggest all noise generating equipment may only be operated from 8 AM to 5 PM and only Monday to Friday.

Page 16 states "The project is expected to produce normal domestic wastewater. This wastewater is expected to be typical of residential developments. The project will not include industrial wastewater production or onsite wastewater treatment." It is unfortunate the club house and other commercial aspects are not included as there will be wastewater from them. No estimates were given as to the amounts.

Page 18 states "The net increase in impervious surface is estimated at 38.6 acres. The creation of stormwater features and the preservation of wetland buffers and other open spaces is expected to mitigate potential adverse effects from the increase in impervious surface." Again I ask for scrutiny of any permits and close supervision and of the mitigation as they are increasing the impervious area. Also,

can we be assured there will be supervision of these projects over time to make sure they are in proper working order? Will unlimited access be given to the proper authorities to all stormwater management facilities? This area has had major flooding in the past and with the addition of so much impervious surface it will need timely reviews.

Page 30 tells us "The project area includes potential Blanding's turtle's (*Emydoidea blandingii*), habitat consisting of wetlands and sandy soils. The best Blanding's turtle habitat includes wetland complexes larger than 10 acres that are surrounded by open sandy uplands." The concern continues on Page 32 with "The project may have effects on Blanding's turtles that may occur in the area. To minimize potential adverse effects on turtles and their mobility, the project will avoid most wetlands, implement stringent sediment and erosion controls, consider the use of surmountable curbs on roadways, and consider erosion control materials constructed of organic fibers rather than plastic." I don't believe these developers wish to eliminate a state-listed threatened species, and therefore should abide by the necessary measures to assure their survival. It is one thing to "try" and another to actually do them. They also need to avoid disturbance in type 2 and 3 wetlands, no dewatering of wetlands in the winter, and use wildlife friendly erosion control methods. Also, roads should be kept to minimum standards on widths and lanes (this reduces road kills by slowing traffic and reducing the distance turtles need to cross). Who will be overseeing these measures and what agency will follow through to make sure they are done?

On Page 32 I was happy to see, "To the extent practicable, tree clearing will occur between October and April, when migratory songbirds and bats are not nesting or reproducing." This is extremely important as oak wilt is prevalent in the area and we don't wish to have trees cut at the wrong time of the year. Please check with an arborist to make sure it is safe before cutting. However, "buckthorn may be left in the understory along exterior roadways to provide visual screening" is not acceptable. Buckthorn is an invasive species and difficult to remove, but to intentionally leave it when there are alternatives available is unacceptable in Minnesota. A certified landscape architect should oversee this aspect of the project.

Page 33 states, "Although the proposed project may affect some views from nearby homes, the project proponent has included design elements in the project to minimize visual effects on nearby homeowners." There are residents on all four sides of the development and all wish to have as little sight of the development as possible. Buckthorn is not an acceptable buffer.

"The project will not involve installation of intense lights that would cause glare, nor will it include industries that would emit vapor plumes." The developer needs to follow the lighting codes of Lake Elmo.

Page 34 states, "The project is not expected to generate dust or odors at levels considered unusual for suburban development construction practices." The surrounding area does not have dense development, the area is not your "usual suburban development". "Dust, odors, and noise levels are expected to be slightly higher during project construction than project operations". Hours of operation are important especially if they will be going on for 5-7 years. The health and emotional wellbeing of the surrounding homeowners should be considered and is important. I again suggest all noise generating equipment may only be operated from 8 AM to 5 PM and only Monday to Friday.

Thank you for the opportunity to comment on the EAW.

Sincerely,

Ann M. Bucheck

From: archyeagle@gmail.com [<mailto:archyeagle@gmail.com>] **On Behalf Of** Matthew Archibald
Sent: Friday, November 18, 2016 4:11 PM
To: Stephen Wensman <SWensman@lakeelmo.org>
Cc: Matthwew Archibald <matt.archibald@gmail.com>
Subject: Royal Golf Club Environmental Assessment Worksheet 30-day comment period

Hello Mr. Wensman,

I write in comment of the EAW that was filed for the Royal Golf Club Residential Development as a concerned local resident. I live at 11365 24th Street Court North, Lake Elmo.

What else do I need to complete to fully document my concerns regarding this EAW other than writing my comments in this format here? I do not agree with the completeness of the prepared file, here are the features that I feel need more due diligence in Sections 8, 12, 15 and 20:

- **Section 8. Permit and Approvals required.**

Missing an Approval from the city. I see no record of a Tree Preservation plan or tree inventory as required by the Lake Elmo Zoning Code Chapter 154. In the EAW, Table 2 summarizes the Before and After Cover types. Included in this out line there is a 53% reduction in the woodland cover.

30% is the limit of the allowable tree removal rate within the City Code. With this documented plan to reduce woodland cover by more than 53%, this is a "potential impact that warrants detailed further investigation" and documentation. The Developer should hired a registered Forrester to inventory all the onsite trees to be added to this Environmental Impact Statement.

Unit of Government	Type of Application	Status
City of Lake Elmo	Tree Preservation Plan	Not outlined, Prepared, Submitted or Approved

154.257 TREE PRESERVATION.

A. Purpose. Within the City of Lake Elmo, trees and woodlands are considered a valuable asset to the community. The City places a priority on protecting this asset and finds that it is in the best interest to regulate the development and alteration of wooded areas within the community. All builders, developers and subdividers shall comply with all the provisions in the Zoning Code which address the preservation of existing significant trees. All builders, developers and subdividers are encouraged to preserve all healthy trees of significant value even if the trees do not meet the size requirements to be considered significant trees.

- **Section 12. Contaminatio/Hazardous Materials/ Wastes**

Within the Regulated Soil Management Area - what is the potential impact to local residential groundwater of managing all of the excavated hazardous soil on-site, at the west end of the Driving range? What type of impervious barrier was laid below the transferred Regulated soil? I see you no description for the layer used in the HELP model referenced in the report by Carlson McCain, Inc. Additional, expansion on the assumptions and outputs from this model are a gap from this report in Appendix D. By concentrating the hazardous soil at the west side of the driving range - how has this minimized the impact of these hazards on the local Groundwater? I see how this has minimized the impact to the planned development but what about the rest of the community in Lake Elmo?

- **Section 15 &/or Section 20 “Visual” and “Other Potential Environmental Effects”**

Light pollution – What are the project details related to minimizing escapement of light into the environment. The proposal needs to address light pollution and the impact on the regional ecosystem and wildlife. I think a documented report detailing the baseline local night-time brightness compared to the expected increase will be an important feature to outline as part of the Environmental Impact Statement.

Thank you for your work and attention to these comments,
Matt



KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Providing Sound, Balanced, Comprehensive Natural Resource Solutions

Memorandum

Date: Revised January 9, 2017

To: Stephen Wensman, City of Lake Elmo

cc: Rick Packer, H.C. Golf Course Development, LLC
Kristina Handt, City of Lake Elmo
Mark Kjolhaug, Kjolhaug Environmental Services Company

From: Rob Bouta, Kjolhaug Environmental Services Company

Re: Revised Shoreland PUD Evaluation, The Royal Golf Club Residential Development, Lake Elmo, MN (KES 2016-118)

On behalf of H.C. Golf Course Development, LLC, this memo transmits a revised Shoreland PUD Evaluation and map showing shoreland development and open space areas currently proposed. The Applicant understands that open space planning will be revised and further reviewed during the preliminary plat/PUD application review. We anticipate that final protected open space maps will be prepared by land surveyors and may vary slightly from the open space shown herein.

This evaluation shows that the project complies with allowable base densities in every shoreland. The project also complies with the requirement for a minimum of 50% protected open space.

This shoreland evaluation excludes DNR public waters from total shoreland areas. Regulated wetlands, incidental wetlands, and bluffs are excluded from net suitable areas.

Tables 1 and 2 show the overall shoreland density evaluation and open space percentage, respectively. **Tables 3 and 4** show the tiered shoreland density evaluation and open space for the Lake Elmo and DNR public watercourse shorelands. **Tables 5 and 6** show similar data for the Downs Lake shoreland. Shoreland data for Lake Rose and Horseshoe Lake are shown in **Tables 7 and 8**, and **9 and 10**, respectively. The attached **Figure** shows the current shoreland development and open space plan for onsite shorelands.

Table 1. Overall Shoreland Density Evaluation

Shoreland	Total Area		Wetlands (sq.ft.)	Bluffs (sq.ft.)	Net Suitable Area		Required Lot Size (sq. ft.)	Allowable Base Density	Proposed Density
	Sq. Ft.	Acres			Sq. Ft.	Acres			
Lake Elmo	1,223,356	28.08	15,246	40,043	1,168,067	26.82	15,000	77.9	31
Downs Lake	250,566	5.75	27,443	0	223,123	5.12	20,000	11.2	7
Lake Rose	1,911,838	43.89	207,413	0	1,704,425	39.13	20,000	85.2	41
Horseshoe Lake	1,268,757	29.13	46,543	84,694	1,137,520	26.11	20,000	56.9	32
Total	4,654,517	106.85	296,645	124,737	4,233,135	97.18		231.2	111

Table 2. Overall Shoreland Open Space Calculation

Shoreland	Total Area (sq.ft.)	Not Open Space		Net Open Space (sq.ft.)	% Open Space
		Lots (sq.ft.)	Street Right- of-Way (sq.ft.)		
Lake Elmo	1,223,356	428,300	185,695	609,361	50
Downs Lake	250,566	58,745	60,854	130,967	52
Lake Rose	1,911,838	578,051	348,719	985,068	52
Horseshoe Lake	1,268,757	538,263	110,548	619,946	49
Total	4,654,517	1,603,359	705,816	2,345,342	50

Table 3. Lake Elmo Shoreland Density Evaluation

Tier	Total Area (sq.ft.)	Wetlands (sq.ft.)	Bluffs (sq.ft.)	Net Suitable Area (sq.ft.)	Required Lot Size (sq. ft.)	Allowable Base Density	Cumulative Allowable Density	Proposed Density	Cumulative Proposed Density
Tier 1 (0-267 feet)	77,109	1,225	0	75,884	15,000	5.1	5.1	0	0
Tier 2 (267-534 feet)	263,042	7,487	34,031	221,524	15,000	14.8	19.8	5	5
Tier 3 (534-801 feet)	407,684	4,084	6,012	397,588	15,000	26.5	46.3	12	17
Tier 4 (801-1,000 feet)	475,521	2,450	0	473,071	15,000	31.5	77.9	14	31
Total	1,223,356	15,246	40,043	1,168,067		77.9	77.9	31	31

Table 4. Lake Elmo Shoreland Open Space Calculation

Tier	Total Area (sq.ft.)	Not Open Space		Net Open Space (sq.ft.)	% Open Space	Cumulative % Open Space
		Lots (sq.ft.)	Street Right-of-Way (sq.ft.)			
Shore Impact Zone (0-37.5 ft)	0	0	0	0	NA	NA
Tier 1 (0-267 feet)	77,109	0	13,524	63,585	82	82
Tier 2 (267-534 feet)	263,042	39,193	10,807	213,042	81	81
Tier 3 (534-801 feet)	407,684	192,160	85,451	130,073	32	54
Tier 4 (801-1,000 feet)	475,521	196,947	75,913	202,661	43	50
Total	1,223,356	428,300	185,695	609,361	50	

Table 5. Downs Lake Shoreland Density Evaluation

Tier	Total Area (sq.ft.)	Wetlands (sq.ft.)	Bluffs (sq.ft.)	Net Suitable Area (sq.ft.)	Required Lot Size (sq. ft.)	Allowable Base Density	Cumulative Allowable Density	Proposed Density	Cumulative Proposed Density
Tier 1 (0-320 feet)	0	0	0	0	20,000	0.0	0.0	0	0
Tier 2 (320-640 feet)	12,081	0	0	12,081	20,000	0.6	0.6	0	0
Tier 3 (640-1,000 feet)	238,485	27,443	0	211,042	20,000	10.6	11.2	7	7
Total	250,566	27,443	0	223,123		11.2	11.2	7	7

Table 6. Downs Lake Shoreland Open Space Calculation

Tier	Total Area (sq.ft.)	Not Open Space		Net Open Space (sq.ft.)	% Open Space	Cumulative % Open Space
		Lots (sq.ft.)	Street Right-of-Way (sq.ft.)			
Shore Impact Zone (0-75ft)	0	0	0	0	NA	
Tier 1 (0-320 feet)	0	0	0	0	0	
Tier 2 (320-640 feet)	12,081	0	10,790	1,291	11	11
Tier 3 (640-1,000 feet)	238,485	58,745	50,064	129,676	54	52
Total	250,566	58,745	60,854	130,967	52	

Table 7. Lake Rose Shoreland Density Evaluation

Tier	Total Area (sq.ft.)	Wetlands (sq.ft.)	Bluffs (sq.ft.)	Net Suitable Area (sq.ft.)	Required Lot Size (sq. ft.)	Allowable Base Density	Cumulative Allowable Density	Proposed Density	Cumulative Proposed Density
Tier 1 (0-320 feet)	792,725	74,793	0	717,932	20,000	35.9	35.9	7	7
Tier 2 (320-640 feet)	527,816	67,454	0	460,362	20,000	58.9	58.9	17	24
Tier 3 (640-1,000 feet)	591,297	65,166	0	526,131	20,000	26.3	85.2	17	41
Total	1,911,838	207,413	0	1,704,425		85.2	85.2	41	41

Table 8. Lake Rose Shoreland Open Space Calculation

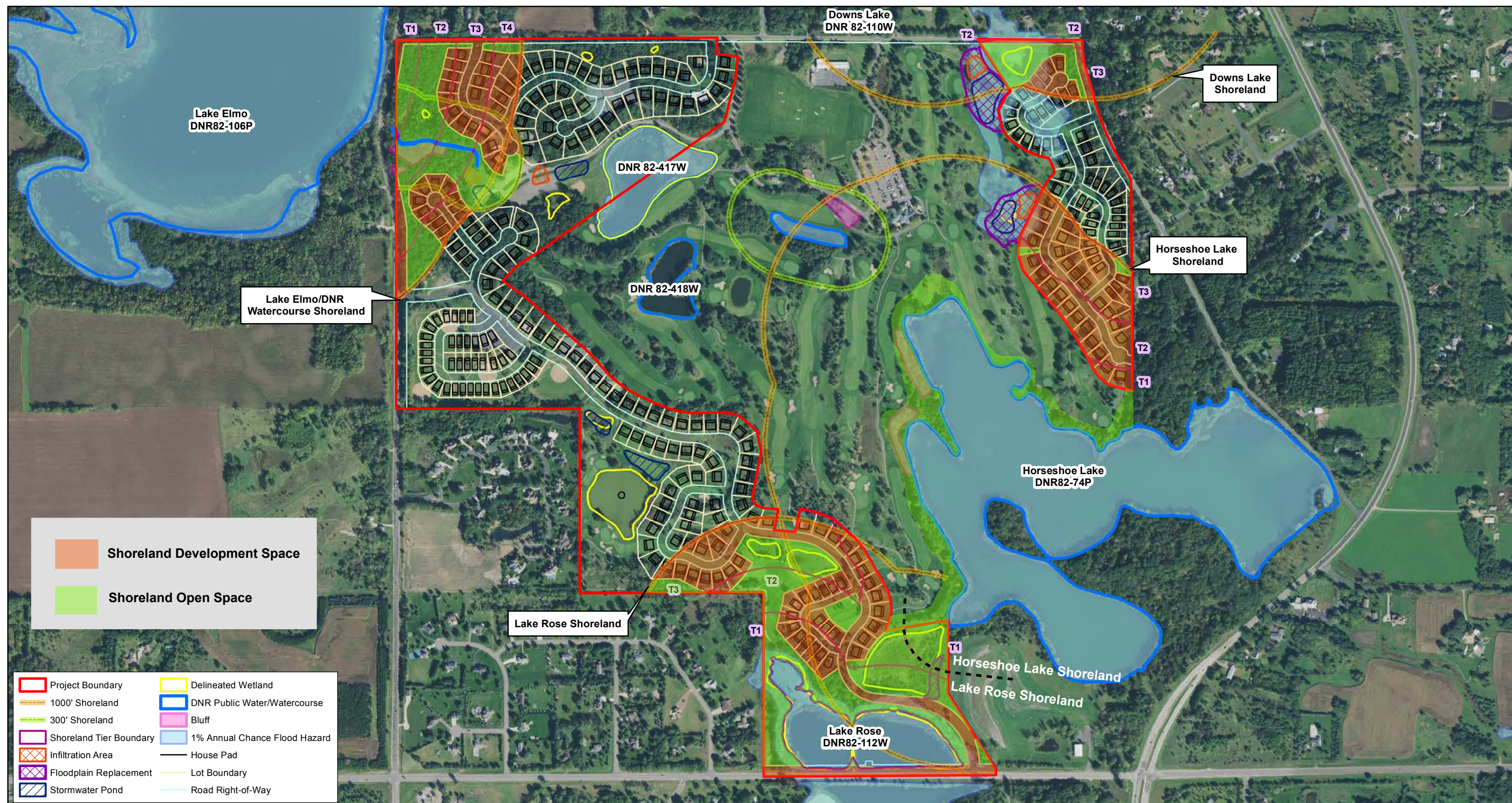
Tier	Total Area (sq.ft.)	Not Open Space		Net Open Space (sq.ft.)	% Open Space	Cumulative % Open Space
		Lots (sq.ft.)	Street Right-of-Way (sq.ft.)			
Shore Impact Zone (0-75 ft)	372,708	0	80,548	292,160	78	78
Tier 1 (0-320 feet)	792,725	88,973	194,179	509,573	64	64
Tier 2 (320-640 feet)	527,816	251,474	49,973	226,369	43	56
Tier 3 (640-1,000 feet)	591,297	237,604	104,567	249,126	42	52
Total	1,911,838	578,051	348,719	985,068	52	

Table 9. Horseshoe Lake Shoreland Density Evaluation

Tier	Total Area (sq.ft.)	Wetlands (sq.ft.)	Bluffs (sq.ft.)	Net Suitable Area (sq.ft.)	Required Lot Size (sq. ft.)	Allowable Base Density	Cumulative Allowable Density	Proposed Density	Cumulative Proposed Density
Tier 1 (0-320 feet)	650,924	42,997	84,694	523,233	20,000	26.2	26.2	2	2
Tier 2 (320-640 feet)	251,109	0	0	251,109	20,000	12.6	38.7	11	13
Tier 3 (640-1,000 feet)	366,724	0	0	366,724	20,000	18.3	57.1	19	32
Total	1,268,757	42,997	84,694	1,141,066		57.1	57.1	32	32

Table 10. Horseshoe Lake Shoreland Open Space Calculation

Tier	Total Area (sq.ft.)	Not Open Space		Net Open Space (sq.ft.)	% Open Space	Cumulative % Open Space
		Lots (sq.ft.)	Street Right-of-Way (sq.ft.)			
Shore Impact Zone (0-75 ft)	342,471	0	0	342,471	100	100
Tier 1 (0-320 feet)	650,924	39,453	0	611,471	94	94
Tier 2 (320-640 feet)	251,109	201,983	49,126	4,174	2	68
Tier 3 (640-1,000 feet)	366,724	296,827	61,422	10,088	3	49
Total	1,268,757	538,263	110,548	625,733	49	



Shoreland Development and Open Space

Comparison of PFCs Detected in On-Site Water Wells to Drinking Water Screening Limits

				On-site Water Wells			
Drinking Water Screening Limits				December 30, 2015 Sample Data			
Units	2011 MDH HRL	2016 EPA HAL		Well No. 1	Well No. 3	Well No. 4	Duplicate
Perfluorobutryate (PFBA)	ng/l	7,000	7,000	12	39.7	109	41.7
Perfluoro-n-pentanoic acid (PFPeA)	ng/l	NE	NE	<1.16	<1.52	<1.04	1.13
Perfluorohexanoic acid (PFHxA)	ng/l	NE	NE	<1.13	<1.22	<1.04	1.19
Perfluoroheptanoic acid (PFHpA)	ng/l	NE	NE	<1.13	<1.22	<1.04	<1.06
Perfluorooctanoic acid (PFOA)	ng/l	300	70	<1.13	2.53	1.53	2.63
Perflorononanoic acid (PFNA)	ng/l	NE	NE	<1.13	<1.22	<1.04	<1.06
Perfluorodecanoic acid (PFDA)	ng/l	NE	NE	<1.13	<1.22	<1.04	<1.06
Perfluoroundecanoic acid (PFUnA)	ng/l	NE	NE	<1.13	<1.22	<1.04	<1.06
Perflurorododecanoic acid (PFDoA)	ng/l	NE	NE	<1.13	<1.22	<1.04	<1.06
Perfluorobutanesulfonic acid (PFBS)	ng/l	7,000	7,000	<2.27	<2.44	<2.09	<2.11
Perfluorohexanesulfonic acid (PFHxS)	ng/l	NE	NE	<2.27	<2.44	<2.09	<2.11
Perfluorooctanesulfonic acid (PFOS)	ng/l	300	70	<2.27	3.44	5.15	3.75
Perfluorooctansulfonamide (PFOSA)	ng/l	NE	NE	1.13	<1.22	<1.04	<1.06
Total PFOA + PFOS	ng/l	300	70	<3.4	5.97	6.68	6.38
Hazard Index ⁽¹⁾ calculated		1		0.002	0.09	0.11	0.10

Comparison of PFCs Detected in Surface Water to Surface Water Screening Limits

		Screening Limits				Surface Water Samples*			
		Aquatic Organisms	Aquatic Plants	Fish	Fish	Off-site Creek	Horseshoe Lake		
Units		Chronic	Maximum	Consumption ⁽²⁾	Total ⁽³⁾	Creek	HS-1	HS-2	HS-3
Perfluorobutryate (PFBA)	ng/l					440	240	260	250
Perfluoro-n-pentanoic acid (PFPeA)	ng/l					14	12 J	ND	ND
Perfluorohexanoic acid (PFHxA)	ng/l					10	<50	12	16
Perfluoroheptanoic acid (PFHpA)	ng/l					NA	NA	NA	NA
Perfluorooctanoic acid (PFOA)	ng/l	1,705,000	15,346,000	610	1,620	57	75	59	68
Perflorononanoic acid (PFNA)	ng/l					NA	NA	NA	NA
Perfluorodecanoic acid (PFDA)	ng/l					NA	NA	NA	NA
Perfluoroundecanoic acid (PFUnA)	ng/l					NA	NA	NA	NA
Perflurorododecanoic acid (PFDoA)	ng/l					NA	NA	NA	NA
Perfluorobutanesulfonic acid (PFBS)	ng/l					0	ND	11	ND
Perfluorohexanesulfonic acid (PFHxS)	ng/l					7	9	8	12
Perfluorooctanesulfonic acid (PFOS)	ng/l	18,600	19,000	6	6	53	290	210	370
Perfluorooctansulfonamide (PFOSA)	ng/l					NA	NA	NA	NA

Notes

< = Compound not detected; reporting limit is displayed

NA = not analyzed

ND = not detected above laboratory reporting limit

NE = not established

HRL = Health Risk Limit

MDH = Minnesota Department of Health

EPA = Environmental Protection Agency

HAL = Health Advisory Level

ng/l = nanograms per liter; roughly equivalent to parts per trillion

* data obtained from MDA - sampled 9/21/16

⁽¹⁾ for PFC admixtures

Highlighted cells exceed one or more screening criteria

⁽²⁾ Based on consumption from Mississippi River at Pool 3

⁽³⁾ Based on consumption from Mississippi River at Pool 3 and drinking water

HS = Horseshoe Lake



Figure 1 - Shorelands, Floodplains, and Steep Slopes

November 21, 2016

Stephen Wensman, Planning Director
City of Lake Elmo
3800 Laverne Avenue North
Lake Elmo, MN 55042

RE: City of Lake Elmo Royal Golf Club Residential Development Environmental Assessment Worksheet (EAW)
Metropolitan Council Review No. 21630-1
Metropolitan Council District No. 12

Dear Mr. Wensman:

The Metropolitan Council received the EAW for the Royal Golf Club Residential Development project in the City of Lake Elmo on October 21, 2016. The proposed project is located 222.2 gross acres located between 10th Street North and 20th Street North, and bounded by Manning Trail on the East and by Lake Elmo Avenue on the west. The proposed development includes 292 single-family detached homes connected to municipal water and sanitary sewer on approximately 198.3 net acres, with approximately 90.8 acres reserved as private open space. The proposed project is located on the site formerly owned by 3M and previously a part of Tartan Park golf course.

The staff review finds that the EAW is complete and accurate with respect to regional concerns and does not raise major issues of consistency with Council policies. An Environmental Impact Statement (EIS) is not necessary for regional purposes.

We offer the following comments for your consideration.

Item 8 – Permits and Approvals Required (LisaBeth Barajas, 651-602-1895)

As of the date of this review letter, the City's overall planned density (including all previous amendments) is 3.25 units per acre. The proposed development brings the City's overall density down to 3.05 units per acre, which remains consistent with the Council's density policy of 3 units per acre for Emerging Suburban Edge communities.

As noted in the EAW, a comprehensive plan amendment will be needed should the City decide to move forward with the proposed development. The proposed amendment should make any necessary changes to land use to support the ultimate development concept, as well as provide updates to the wastewater and MUSA sections of the comprehensive plan to show this area as within the service area as well as projected flows from the development. As City and Council staff have discussed, a comprehensive plan amendment will need to be submitted to the Council for review and authorization to before moving forward with this development.

In accordance with Minnesota Statute Section 473.513, at the time the project proposer makes application to the Minnesota Pollution Control Agency (MPCA) for a permit to construct each segment of sanitary sewer for the proposed project, a copy of the plans, design data, and a location map of the project will also need to be submitted to the Metropolitan Council. The Council's Environmental Service Municipal Services staff will need to review, comment, and

recommend issuance of the construction permit by the MPCA before connection can be made to the City's wastewater disposal system.

Forecasts (Todd Graham, 651-602-1322)

Forecasts by Transportation Analysis Zone (TAZ) are not discussed in the EAW, but this information would be helpful as part of the City's comprehensive plan should they move forward with this development. The Metropolitan Council has prepared a draft set of TAZ forecasts for 2040, which is available for local government review.

The Royal Golf Club site is within TAZ #2403. The zone is currently forecasted to gain +36 households during the period from 2010-2040. Council staff recommend adding +250 households, +700 population to the TAZ #2403 forecast. Balancing adjustments can be made to the TAZs elsewhere in the community. The City can update the TAZ forecast through correspondence with Metropolitan Council staff.

Council staff opinion is that the proposed development fits within the community total forecast prepared by the Council' no change is needed to the community total forecast.

This concludes the Council's review of the EAW. The Council will not take formal action on the EAW. If you have any questions or need further information, please contact me at 651-602-1895.

Sincerely,


LisaBeth Barajas, Manager
Local Planning Assistance

CC: Steve O'Brien, MHFA
Tod Sherman, Development Reviews Coordinator, MnDOT - Metro Division
Harry Melander, Metropolitan Council District 12
Raya Esmaeili, Reviews Coordinator

MINNESOTA HISTORIC PRESERVATION OFFICE

November 17, 2016

Stephen Wensman
Planning Directory
City of Lake Elmo
3800 Laverne Ave N
Lake Elmo, MN 55042

RE: EAW – The Royal Golf Club Residential Development
Minneapolis, Hennepin County
MnHPO Number: 2017-0292

Dear Mr. Wensman:

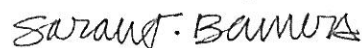
Thank you for providing this office with a copy of the Environmental Assessment Worksheet (EAW) for the above-referenced project. It has been reviewed pursuant to the responsibilities given the Minnesota Historical Society by the Minnesota Historic Sites Act and the Minnesota Field Archaeology Act.

According to Item No. 14 "Historic Properties" in the EAW, the developer has hired a cultural resources consultant to conduct a Phase I archaeological survey prior to development. We look forward to receiving and reviewing the results of this survey, once the report becomes available.

Please note that this comment letter does not address the requirements of Section 106 of the National Historic Preservation Act of 1966 and 36CFR800, Procedures of the Advisory Council on Historic Preservation for the protection of historic properties. If this project is considered for federal assistance, or requires a federal permit or license, it should be submitted to our office by the responsible federal agency.

Please contact our Compliance Section at (651) 259-3455 if you have any questions regarding our review of this project.

Sincerely,



Sarah J. Beimers, Manager
Government Programs and Compliance

MINNESOTA HISTORIC PRESERVATION OFFICE

November 17, 2016

Stephen Wensman
Planning Directory
City of Lake Elmo
3800 Laverne Ave N
Lake Elmo, MN 55042

RE: EAW – The Royal Golf Club Residential Development
Minneapolis, Hennepin County
MnHPO Number: 2017-0292

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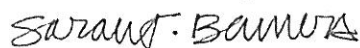
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Please contact our Compliance Section at (651) 259-3455 if you have any questions regarding our review of this project.

Sincerely,



Sarah J. Beimers, Manager
Government Programs and Compliance



Minnesota Pollution Control Agency

520 Lafayette Road North | St. Paul, Minnesota 55155-4194 | 651-296-6300

800-657-3864 | Use your preferred relay service | info.pca@state.mn.us | Equal Opportunity Employer

November 23, 2016

Mr. Stephen Wensman
Planning Director
City of Lake Elmo
3800 Laverne Avenue North
Lake Elmo, MN 55042

Re: Royal Golf Club Residential Development Environmental Assessment Worksheet

Dear Mr. Wensman:

Thank you for the opportunity to review and comment on the Environmental Assessment Worksheet (EAW) for the Royal Golf Club Residential Development project (Project) located in the city of Lake Elmo, Washington County, Minnesota. The Project consists of the preparation of 222 acres of land for residential development. Regarding matters for which the Minnesota Pollution Control Agency (MPCA) has regulatory responsibility and other interests, the MPCA staff has the following comments for your consideration.

Permits and Approval Required (Item 8)

The table in this section of the EAW does not include the MPCA 401 Water Quality Certification.

Water Resources (Item 11)

- Specific in-water best management practices such as silt curtain, construction during low flow or winter conditions, cofferdam, or check-dams, etc. should be included in the EAW. Please note that isolated wetlands remain under MPCA jurisdiction as waters of the state and mitigation may be required. Wetland evaluation is on a case-by-case basis.
- It appears that the golf course will continue to use groundwater for potable, irrigation, fire protection, and maintenance use. It is important to note that the location of this development lies within known areas of aquifer contamination. The development overlies a perfluorochemical groundwater plume that has impacted groundwater quality in each of the primary drinking water aquifers present. Recent groundwater monitoring in the area of Horseshoe Lake has indicated the presence of perfluorochemicals at levels in excess of U.S. Environmental Protection Agency (EPA) health advisory levels.

Less than 1 mile to the north and east of the development lies the Trichloroethene (TCE) groundwater plume associated with the Baytown Township Groundwater Plume Site. The TCE plume has impacted groundwater quality in each of the primary drinking water aquifers present.

Care should be exercised when using groundwater in this region for potable and irrigation purposes. The EPA recently issued significantly lower health advisory levels for several perfluorinated substances. Because the specific configuration of the groundwater plumes in the area are not well understood and likely vary over time, it is not possible to accurately predict whether a well that has been clear of contamination in the past will remain clear of contamination in the future.

Lake Elmo, Horseshoe Lake, several small drainage ponds, and ditches within the golf course area and further downstream have been shown to be contaminated with perfluorochemicals at levels in excess of EPA health advisory levels. Care should be exercised when using surface water from these areas for irrigation purposes so as to minimize the potential for human and environmental exposure to these contaminants.

Contamination/Hazardous Materials/Wastes (Item 12)

This section refers to a natural gas pipeline that runs across part of the site. The Project proposer should contact the Office of Pipeline Safety to determine the appropriate setbacks for this structure.

The Investigation History refers to a "Possible on-site disposal area that was later confirmed to be located on the adjoining property to the southeast..." This disposal area is not identified on any maps. Please clarify if the disposal area has been reported to the MPCA or State Duty Officer. Please provide the location of the disposal area.

The section regarding "PFCs and Area Groundwater Contamination" does not capture the potential risks posed by groundwater contaminated by the PFC sources. The plume of groundwater contaminated with perfluorochemicals appears to extend beneath the site and further toward the east.

The golf course well sampling results referred to do not comply with routine compliance sample results reporting protocols. There is no indication regarding any quality control aspects of the results. If this data is intended to be used for this report, please provide an adequate presentation of the data. A summary table deep within an appendix is not an appropriate presentation of such data. Assuming that this is an oversight, the results do indicate that there are a number of perfluorochemicals present in the samples. However, the regulatory limits referred to are no longer current. The EPA issued revised drinking water criteria in 2016.

The EAW does not discuss how soil contaminated with materials other than agricultural chemicals will be handled. The MPCA recommends that the site be entered into the MPCA Brownfield Program (formerly called the Voluntary Investigation and Cleanup Program) in order to provide regulatory oversight with regard to non-agricultural related contamination issues. Accidental spills or releases from on-site equipment, buried rubble, municipal solid waste, buried demolition waste, etc. are situations regulated by the MPCA. The Brownfield Program provides technical assistance and issuance of various liability assurance letters to promote the investigation, cleanup, and redevelopment of property that is contaminated with petroleum and/or hazardous substances.

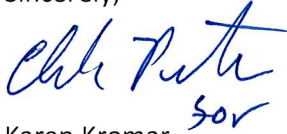
Mr. Stephen Wensman

Page 2

November 23, 2016

We appreciate the opportunity to review the Project. Please provide the notice of decision on the need for an Environmental Impact Statement. Please be aware that this letter does not constitute approval by the MPCA of any or all elements of the Project for the purpose of pending or future permit action(s) by the MPCA. Ultimately, it is the responsibility of the Project proposer to secure any required permits and to comply with any requisite permit conditions. If you have any questions concerning our review of this EAW, please contact me via email at Karen.kromar@state.mn.us or via telephone at 651-757-2508.

Sincerely,



Karen Kromar

Planner Principal

Environmental Review Unit

Resource Management and Assistance Division

KK:bt

cc: Dan Card, MPCA, St. Paul
Bill Wilde, MPCA, St. Paul
Greg Small, MPCA, St. Paul
Teresa McDill, MPCA, St. Paul



PROTECTING, MAINTAINING AND IMPROVING THE HEALTH OF ALL MINNESOTANS

November 23rd, 2016

Stephen Wensman
Planning Director
City of Lake Elmo
3800 Laverne Avenue North
Lake Elmo, MN 55042

Dear Mr. Wensman,

Thank you for providing the Minnesota Department of Health (MDH) with the opportunity to comment on the Environmental Assessment Worksheet (EAW) for the Royal Golf Club Residential Development project. The mission of MDH is to protect, maintain, and improve the health of all Minnesotans. The careful planning and development of projects such as this one supports this mission and is an important step in ensuring health in all policies.

MDH does have several comments regarding groundwater, water quality, and soil contamination at and near the site:

Section 10 – “Geology”

Although no sinkholes have been identified on the project property, the Minnesota Geological Survey (MGS) karst inventory does map one sinkhole less than one mile northeast of the project property, just north of the intersection of Manning Avenue and 27th St. N. (UTM coordinates 510846/4981836). Depth to carbonate bedrock is an important factor in the potential for karst development, with that potential increasing significantly where depths are less than 50 feet (Alexander, et al. , 2003, “Sinkholes, Sinkhole Probability, and Springs and Seeps”, Goodhue County Atlas, County Atlas Series, Atlas C-12, Part B, Plate 10). Well logs near the east property boundary of the project area indicate depth to bedrock is approximately 47-59 ft. (unique well numbers: 442166, 447252, 431201, and 503306). Two infiltration areas and two stormwater ponds are planned near the northeast corner of the project property (as shown on Figure 7). Consideration should be given to potential karst development beneath these infiltration areas and whether any mitigation measures are needed, particularly given the proximity of these areas to planned home construction.

Section 11 – “Water Resources”

The groundwater discussion should include more information regarding the perfluorochemical (PFC) contamination in the groundwater in this area. Groundwater has been impacted by PFCs from the former Washington County Landfill and 3M-Oakdale Disposal Site. Due to groundwater flow, surface water-groundwater interactions, and stormwater management activities, the groundwater east of Lake Elmo has been impacted by PFCs emerging from these disposal areas. Recent MDH sampling has detected PFCs at concentrations above the new Environmental

Protection Agency (EPA) Lifetime Health Advisory levels of 70 parts per trillion for PFOS and PFOA in the surface water in Lake Elmo, the unnamed creek that discharges from Lake Elmo onto the project property, Horseshoe Lake, and the series of ditches and stormwater ponds further downstream. Surface water ponds on the property that are part of the Project 1007 drainage system are almost certain to be similarly impacted. The full extent and distribution of PFCs in this portion of Lake Elmo are still being determined. Use of surface water or groundwater at the project site should be carefully managed to avoid human exposure and prevent further spreading of the contamination. MDH further recommends landscaping options be implemented to create significant buffers in order to restrict public access to Horseshoe Lake.

Preliminary data suggests PFC contamination is primarily in the Prairie du Chien aquifer (OPDC), but excessive use of Jordan aquifer (CJDN) wells may cause downward migration of the contamination, potentially placing downgradient CJDN wells at risk. MDH recommends the project proposer work with MDH, MPCA, and DNR to evaluate water quality in the existing wells and surface waters on the project property and determine appropriate use of these to mitigate for these potential impacts.

Section 12 – “Contamination/Hazardous Materials/Wastes”

The sub-section titled “Investigation History” indicates a “disposal area” is located on an adjoining property to the southeast. The location is not shown on any figures and no information is provided regarding this disposal area and its proximity to the project property.

The sub-section titled “Response Action Plan” indicates that contaminated soils excavated at the site are to be managed in a “Regulated Soil Management Area” beneath a 2 ft. cover. The figure shown in the Phase II Investigation Report (Appendix D) indicates the area proposed for this management area has a significant slope and may be prone to erosion. MDH assumes MPCA will be consulted in the design and construction of this facility to ensure it provides long-term encapsulation of these soils to prevent exposures.

The sub-section titled “PFCs and Area Groundwater Contamination” (page 27) should be revised to reflect that PFCs above levels of health concern are present in the groundwater in this part of Lake Elmo. Although the concentrations detected in the CJDN wells on the property do not exceed levels of health concern, as noted above continued extraction of water from the CJDN may result in increased PFCs in this aquifer over time.

Appendix D – Table 3

Although the table correctly identifies the current MDH Health Risk Limits for PFOS, PFOA, PFBA, and PFBS, it should be noted that MDH now uses the new EPA health advisory levels of 70 ng/L for PFOS and PFOA when evaluating health risks.

Health starts where we live, learn, work, and play. To create and maintain healthy Minnesota communities, we have to think in terms of health in all policies. Thank you again for the opportunity to provide comments on this EAW for the Royal Golf Club Residential Development project. Feel free to contact me at (651) 201-4907 or david.bell@state.mn.us if you have any questions regarding this letter.

Sincerely,

Stephen Wensman
The Royal Golf Club Residential Development
Page 3
November 23rd, 2016

A handwritten signature in black ink, appearing to read 'D-Bell'.

David Bell
Environmental Review Coordinator
Environmental Health Division
Minnesota Department of Health
PO Box 64975
Saint Paul, MN 55164-0975



MINNESOTA DEPARTMENT OF NATURAL RESOURCES
CENTRAL REGION
1200 WARNER ROAD
SAINT PAUL, MN 55106
651-259-5800

November 22, 2016

Transmitted electronically

Stephen Wensman
3800 Laverne Ave. N.
Lake Elmo, MN 55042

RE: The Royal Golf Club Residential Development EAW

Dear Stephen Wensman,

The Minnesota Department of Natural Resources (MNDNR) has reviewed the Environmental Assessment Worksheet (EAW) for the Royal Golf Club Residential Development EAW.

General Comments

To date, MNDNR has provided formal comments on the concept PUD to the City of Lake Elmo and informal comments to the developer on the PUD density analysis. These comments have been based on the assumption that the PUD will have City water and sewer. MNDNR will formally review the preliminary PUD and plat when these are submitted to the City, to determine if they meet the PUD provisions in State shoreland rules.

MNDNR review of shoreland PUDs looks for consistency with the density allowances, setbacks, and height as well as a variety of more subjective performance standards dealing with protection of vegetation and sensitive slopes. While we look for compliance with the numerical standards, we recognize that good environmental design cannot be reduced to compliance with a set of numbers. The shoreland PUD standards were part of the 1989 State shoreland rules and were an early form of conservation design regulations. A lot has been learned about conservation design since 1989 and many communities in Minnesota have adopted different shoreland PUD standards to limit density, ensure better natural resource/open space protection, and provide for greater alignment with the community's vision.

MNDNR has concerns on the design of the Royal Golf Club Residential PUD because the proposed development is too dense for the natural resources on the site. In making this evaluation, MNDNR is considering overall project suitability by looking at how the design impacts the existing natural environment on the site. From our perspective, a development is not suitable if it is consuming areas of high quality vegetation and areas with slopes greater than 12 percent (which MNDNR considers steep slopes). Ultimately, however, it is up to the City of Lake Elmo to evaluate project suitability, natural resource protections, and transportation concerns associated with this proposal.

Specific Comments

- Page 3 - Rewrite the statement on page 3 so that it does not imply that the City has determined that this project meets shoreland overlay district requirements. At this stage of the PUD process, it is premature to state that the proposed project design complies with shoreland overlay district requirements. The City of Lake Elmo has not approved this development yet nor has the City

mndnr.gov



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fully evaluated whether the development plans are in conformance with City ordinances and State shoreland rules.

- Page 3 states that this project minimizes effects on floodplains. However, page 10, states that there will be about 15.6 acre-feet of fill in the flood fringe to accommodate 15 residential lots and streets. The statement on page 3 is misleading since there will be significant changes to the existing floodplain configuration. What layout design modifications could be made to avoid the need for floodplain fill and rerouting of flood waters into storage ponds? How will floodplain storage outside of the PUD boundary be managed (i.e., who will own and maintain these storage ponds)?
- Page 3 – Please correct the MNDNR PWI # for the unnamed public water wetland from 82-117W to 82-417W. The MNDNR ID # for the unnamed public watercourse is M-050-009-001.
- Page 8 states that the City's ordinance requires only two conditions to be met to allow for PUDs (the City's PUD ordinance and the State shoreland PUD rules). PUDs, by their very nature, are a negotiation between the local government and the proposer. The City, through the PUD process, can require additional conditions in exchange for the increased density that is allowed under a PUD. Through the PUD process and negotiations with the developer, the City can also exert influence on how a property is developed and what the design of that development looks like. For example, the City can require greater tree preservation, slope/erosion protection, interconnectivity, conservation easements, or other environmental or public benefits.
- Page 9 and Appendix A - Please update the shoreland PUD suitable area, open space, and density calculations (Tables 5 and 6 and Appendix A) to match those numbers provided in analyses completed after the submittal of the EAW. Include with this analysis a map showing areas suitable for development and those areas not suitable for development and their acreages. Also include with this analysis a map showing areas of open space and those areas not included in open space and their acreages.
- Page 11 states that the proposed project is compatible with surrounding land uses. Describe in more detail in what ways the PUD's design plan is compatible with surrounding land uses. Please provide more detail on the preservation of forest buffers and how they provide compatibility with surrounding land uses. Has this proposal considered ways to preserve existing forest areas to allow for plant and wildlife preservation?
- Figure 7 – Please show the location of steep slopes on Figure 7, to help the reader determine the location of proposed lots, structures, and roads in relation to steep topographic areas.
- Has a tree preservation and replacement plan been prepared for this proposed development that meets City ordinance?

Thank you for the consideration of our comments.

Sincerely,

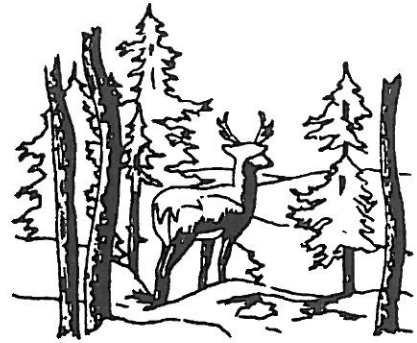
/s/ Rebecca Horton

Regional Environmental Assessment Ecologist – Central Region
Division of Ecological and Water Resources

mndnr.gov



November 11, 2016



Mr. Stephen Wensman
Planning Director
City of Lake Elmo
3800 Laverne Avenue North
Lake Elmo, MN 55042

Re: The Royal Golf Club Residential Development (EAW)

Dear Mr. Wensman:

Thank you for submitting a copy of the Environmental Assessment Worksheet (EAW) for the proposed The Royal Golf Club Residential Development. The proposed project is located within the Valley Branch Watershed District (VBWD). I offer the following comments on behalf of the VBWD. The numbers correspond to the numbers in the EAW.

**9. Land Use
Descriptions**

a.ii Plans (Page 6): While the site does not lie within a Minnesota Department of Natural Resources planned conservation corridor, the site is within an existing, somewhat connected, natural greenway corridor, as shown on Figure 20 of VBWD's March 2013 *Results of Minnesota Routine Assessment Method (MNRAM) for Evaluating Wetland Function* (attached).

a.iii Zoning, Floodplains (Pages 9–11): The VBWD recently completed more detailed modeling of the Downs Lake watershed that used current climate and topographic data. The modeling results and statistical analysis found the 1%-annual-chance (100-year) flood level of Downs Lake to be Elevation 893.8. The VBWD will regulate to this flood level instead of the FEMA base flood elevation of 893.0.

VBWD Rule 5, Standard 3, limits fill in lakes, ponds, and storage sites so that the cumulative effect of all possible filling will not raise the 100-year flood level more than 0.1 foot. Flood-storage replacement is allowed to conform to this VBWD rule, but wetlands should not be filled or drained to provide the flood-storage replacement.

Structures will need to have their minimum floor elevations at least 2 feet higher than the adjacent water bodies' VBWD-adopted 100-year flood level, as required in VBWD Rule 5, Standard 2.

Easements covering all portions of the property that lie below the 100-year flood elevation of lakes, wetlands, ponds, lowlands, and streams will need to be dedicated to the VBWD, as required in VBWD Rule 5, Standard 3.



DAVID BUCHECK • LINCOLN FETCHER • JILL LUCAS • EDWARD MARCHAN • ANTHONY HAIDER

VALLEY BRANCH WATERSHED DISTRICT • P.O. BOX 838 • LAKE ELMO, MINNESOTA 55042-0538

www.vbwd.org

Based on Figure 7 of the EAW, it's unclear if the proposed fill below the Down's Lake 100-year flood level is being mitigated accurately and if the proposed homes will have minimum floor elevations that are in compliance to VBWD rules.

Compatibility

9.b and 9.c. As noted in the EAW, the site is currently zoned for public and quasi-public open space, rather than residential use. Much of the adjacent land is either open parkland or used for residential housing with lots of at least 1 acre. The proposal is to create lots 0.4 to 0.75 acres. The EAW states that the project is designed to preserve considerable forested buffers adjacent to roadways. This will help hide the more densely developed lots from the existing, adjacent land, but the conversion of forest to impervious surface will significantly change the character of the area and decrease the natural habitat of the existing wildlife corridor. Additional mitigation measures should be identified, evaluated, and implemented, including but not limited to increasing the width of the corridor between Lake Elmo and the golf courses and configuring the lots to preserve trees and other natural features.

11. Water Resources

Description

a.i Surface Water (pages 13-15)

This section of the EAW does not mention the VBWD's Project 1007 system that runs through the site. Project 1007 directs outflows from the northern two-thirds of the VBWD south and east to a storm sewer pipe along Interstate 94, which ultimately discharges to the impaired Wild and Scenic St. Croix River. Approximately 20 square miles drains through this site. Maintaining this conveyance through the site is critical. Project 1007 is mentioned in the Stormwater section of the EAW on page 18.

Effects

b.3.ii Stormwater (pages 17-20)

Without seeing details, no determination can be made on the adequacy of the size and location of stormwater management facilities (ponds and infiltration areas) shown on Figure 7. Based on the concepts shown on the figure, additional infiltration areas will be needed to treat runoff from all impervious surfaces. For example, no stormwater management facility is shown near Rose Lake, and it's unlikely that the entire site will be graded or equipped with storm sewer pipes to convey the runoff to the proposed tiny infiltration area shown near the Lake Elmo outlet channel. However, as noted in the EAW, a VBWD permit will be required and the project will be reviewed for conformance to the VBWD rules and regulations when a permit application is submitted.

The VBWD will need to have unlimited access to all stormwater management facilities. The facilities depicted at the northeast corner of the site are shown on the golf course rather than in the residential subdivision. This could be problematic.

The project shows several cul-de-sacs. The VBWD encourages the developer to work with the City of Lake Elmo to limit the amount of impervious surface for streets and cul-de-sacs. Please see the attached factsheets. Reducing the amount of impervious surface will reduce the construction cost to the developer, reduce the maintenance cost to the City, and reduce the size of stormwater management facilities to construct and maintain.

b.3.iv.a Wetlands (page 21)

As noted in the EAW, a VBWD permit will be required and the project will be reviewed for conformance to the VBWD rules and regulations when a permit application is submitted.

Thank you for the opportunity to comment on the EAW. As the EAW indicates, a VBWD permit will be required for the project. VBWD will review the project plans for conformance to the VBWD rules and regulations when a permit application is submitted. The items identified in this letter are meant to identify potential issues and assist the project designers in protecting the water resources of the area. If you have any questions or need clarifications, feel free to contact me at 952-832-2622.

Sincerely,

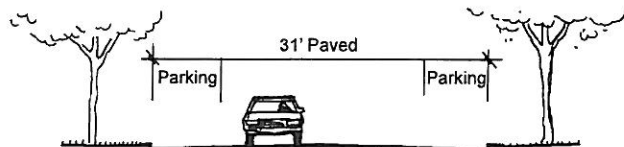
A handwritten signature in blue ink, appearing to read "John P. Hanson", with a stylized flourish at the end.

John P. Hanson, P.E.
Barr Engineering Co.
Engineers for the Valley Branch Watershed District

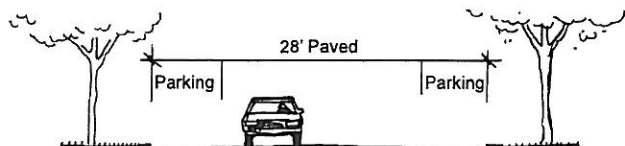
c: VBWD Managers

Site Design to Reduce Stormwater Runoff

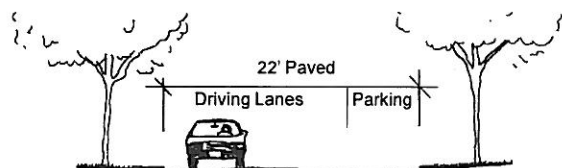
Street Design



Standard width for residential collector streets, with parking on both sides. Dimension Source: Maple Grove, Minnesota.



Standard width for residential minor streets, with parking on both sides. Dimension Source: Eden Prairie, Minn.

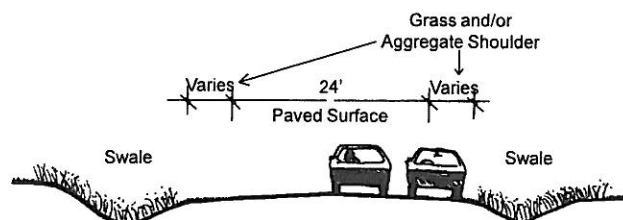


Allowing parking on only one side can further reduce the width of low-volume residential streets. Dimension Source: Robert Engstrom Companies (Fields of St. Croix, Lake Elmo, Minn.).

Many residential streets are wider than necessary. They should be designed with the minimum pavement width that will support the area's traffic volume; on-street parking needs; and emergency, maintenance, and service vehicles. For example, consider creating one parking lane rather than two for suburban residential streets.

In new subdivisions, reduce impervious surface by reducing the total length of residential streets. (See *Open Space Subdivision Design*.)

Encourage stormwater infiltration through the use of curbless road designs and overland drainage conveyance systems. On low-traffic streets, narrow the pavement and allow grass shoulders to function as an occasional parking lane.



Crowned, curbless road drains to roadside swales. Grass shoulders function as occasional parking lanes. Dimension Source: Afton, Minn.

Benefits

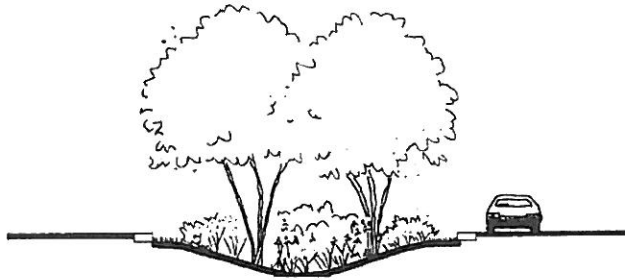
- Reducing impervious surface results in less stormwater runoff and less infrastructure to accommodate it.
- Less pavement means lower costs for development and maintenance.
- Narrower streets discourage fast driving speeds and create a more pedestrian-friendly environment.

Design Guidelines

- Design residential streets with the minimum pavement width necessary to support: the traffic volume; on-street parking needs; and emergency, maintenance, and service vehicles.

Site Design to Reduce Stormwater Runoff

Cul-de-Sac Design

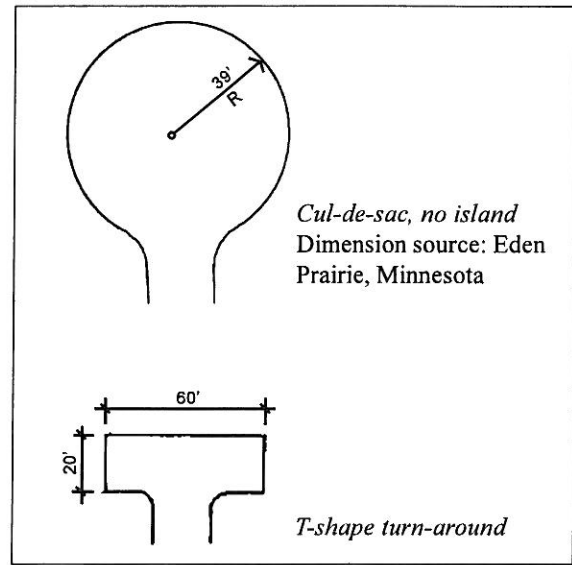
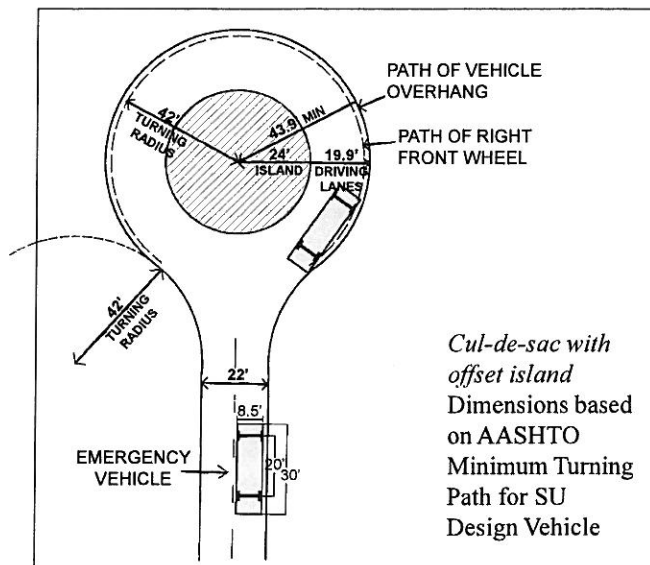


Cul-de-sac infiltration island accepts stormwater from surrounding pavement.

Reducing the size or changing the shape of cul-de-sacs can reduce the amount of impervious surface in subdivisions. Cul-de-sacs should be designed using the minimum radius that accommodates turning of emergency, service, and maintenance vehicles. Changing the radius from 40 feet to 30 feet can reduce the impervious coverage by about 50% (Schueler 1995).

Using turnaround options such as a T-shape can also greatly reduce impervious surface.

A landscaped island in the center of the cul-de-sac removes impervious surface where driving does not occur. This island can also be designed as a depression to accept stormwater runoff from the surrounding pavement. A flat apron curb will stabilize roadway pavement and allow for runoff to flow from pavement into the cul-de-sac's open center.



Drawings adapted from Schueler 1995.

Benefits

- With less impervious surface, less stormwater runoff will require management. Reducing stormwater runoff protects downstream water bodies. Less paved surface also means lower development and maintenance costs.
- Reducing pavement lessens the urban heat island effect, the increase in air temperature that can occur when highly developed areas are exposed to the sun.
- Planted cul-de-sac islands are more attractive than wide expanses of pavement.

Design Guidelines

- Design cul-de-sacs with a radius of 39 feet or less.
- Include an unpaved, depressed island with a minimum radius of 20 feet.



Public Works Department

Donald J. Theisen, P.E.
Director

Wayne H. Sandberg, P.E.
Deputy Director/County Engineer

November 23, 2016

Stephen Wensman
Community Development Director
City of Lake Elmo
3600 Laverne Avenue North
Lake Elmo, Mn 55042

**Re: Washington County Comments on Environmental Assessment Worksheet (EAW) for the
Royal Golf Club Residential Development Project in the City of Lake Elmo**

Dear Mr. Wensman

Thank you for the opportunity for Washington County to submit comments on the City of Lake Elmo's Environmental Assessment Worksheet (EAW) for Royal Golf Club Residential Development (Project) in Section 25, City of Lake Elmo, dated October 17, 2016. The Project is located north of at County State Aid Highway (CSAH) 10 /10th Street, south of 20th Street North, west of Manning Trail North and east of CSAH 17/Lake Elmo Avenue. The project will convert approximately 147.9 acres of golf course, woodland, ball fields, grassland, and wetland to 292 single-family residential lots. The project will involve grading, installation of public and private infrastructure, open space preservation, tree clearing, and stormwater ponding. The project will include approximately 90.8 acres of private open space consisting of woodland, stormwater ponds, wetlands, grassland, and turf areas.

Washington County supports the City of Lake Elmo efforts to allow for the expansion of urban services (MUSA) for the development of a variety of single family residential uses as well the existing club house/banquet facility on the site.

The county has prepared the following comments in the context of the the Washington County Comprehensive Plan 2030 and the Public Works Department transportation responsibilities to ensure the health, safety and welfare of county residents, ensure environmental compliance, and minimize environmental impacts.

Section 8. Permits and Approvals Required

Any work in the county right-of way as it relates to the development including grading for the installation of culverts, installation of water and sewer services, turn lane modifications, road improvements, trails, Americans with Disability Act (ADA) ramp improvements will require a right-of-way permit.

The county agrees that an access permit will be required for direct access to the site from CSAH 10/10th Street and CSAH 17/Lake Elmo Avenue at the proposed locations since the project will be an intensification of land uses on the site. The developer has submitted turn-lane modification plans for the intersections at CSAH 10/10th Street and CSAH 17/Lake Elmo Avenue and county traffic staff will review and approve them as part of the access and right-of-way permit process.

The County reserves the right to require additional improvements, as needed, as a condition of these permits.

Section 9. Land Use

Intensifying land uses within the Municipal Urban Service Areas (MUSA) is appropriate to complement the existing golf course and club house use. The project site is located one mile north of Interstate (I)-94 so regional access will provide an efficient connection to jobs and services in Washington County and the Metropolitan Region. Access to the interstate system is provided at the Manning & I-94, and County 19 & I-94 Interchanges. The result will be increased traffic at both of these interchanges, which may result in the need for improvements/upgrades to the interchange infrastructure. Most of these expected upgrades will include a city cost share. It should be noted that the County has no plans for an interchange at County 17 & I-94.

The development implements the land use goals of the Washington County Comprehensive Plan 2030, to design the land use plan to support economic development by the following policies:

- *Locate commercial and industrial growth where urban services are available; continue to prohibit commercial and industrial land use in unsewered areas.*
- *Support land use patterns that efficiently connect housing, jobs, transportation, transit, and retail and commercial centers.*

The development also implements the transportation goals of the Washington County Comprehensive Plan 2030, to develop and maintain a roadway system that accommodates the safe and efficient movement of people and goods. Strategies in the plan include the following:

- *Increased Jobs and Housing Concentrations:*
 - *Plan for, design, and construct roadways to accommodate existing and future traffic growth.*
 - *Use effective transportation planning to accommodate existing and planned land uses, while preserving natural, cultural, and historic resources.*
 - *Develop a collaborative process with local municipalities to identify fiscally responsible system improvements that are consistent with county priorities and meet the needs of municipalities.*
 - *Coordinate with other agencies to promote a well balanced transportation system.*
 - *Coordinate with communities and provide feedback on development and redevelopment proposals.*

Section 11. Water Resources

The county has not received nor reviewed a stormwater plan to date. The developer, city or watershed district must submit the drainage report and calculations for review of any downstream impacts to the county drainage system. Along with the drainage calculations, written conclusions explaining that the volume and rate of stormwater run-off into any county right-of way will not increase as part of the project, must be provided.

Section 17. Noise

Washington County's policy is to assist local governments in promoting compatibility between land use and highways. Residential uses located adjacent to highways often result in complaints about traffic noise. Traffic noise from adjacent highways could exceed noise standards established by the Minnesota Pollution Control Agency (MPCA), the U.S. Department of Housing and Urban Development, and the U.S. Department of Transportation. Minnesota Rule 7030.0030 states that municipalities are responsible for taking all reasonable measures to prevent land use activities listed in the MPCA's Noise Area Classification (NAC) where the establishment of the land use would result in violations of established noise standards. Minnesota Statute 116.07, Subpart 2a exempts County Roads and County State Aid Highways from noise thresholds.

County policy regarding development adjacent to existing highways prohibits the expenditure of highway funds for noise mitigation measures in such areas. The developer should assess the noise situation and take any action outside of County right of way deemed necessary to minimize the impact of any highway noise.

Section 18. Transportation

The County agrees with the purpose of the Traffic Impact Study (TIS) dated October 12, 2016 to determine if improvements are needed to nearby intersections that may be impacted by traffic from the built out development.

The objectives of the study included the following:

- Document how the study intersections currently operate.
- Forecast the amount of traffic expected to be generated by the proposed development.
- Determine how the study intersections will operate in the year 2030 with no development traffic.
- Determine how the study intersections will operate in the year 2030 with development traffic.
- Determine how the surrounding roadways will operate in the year 2030 with the proposed Development
- Recommend improvements, if needed.

There was also agreement with the study intersections surrounding the site which included the following:

1. Lake Elmo Avenue N/20th Street N.
2. 20th Street N/20th Street Court N.
3. 20th Street N/East Golf Course Access
4. 20th Street N/Manning Trail N.
5. Lake Elmo Avenue N/Park Access.
6. Manning Trail N/Manning Avenue N.
7. 20th Street N/Proposed Western Access
8. Manning Trail N/Proposed Access
9. CSAH 10/Proposed Access

The county appreciates that the northern intersection of Manning Avenue N/Manning Trail N were analyzed and determined that a traffic signal would not be warranted at this location in the 2030 scenerio. This was based on the future improvements to the Manning Avenue corridor which includes a four-lane divided highway with traffic control improvements north and south of this intersection.

November 23, 2016

Washington County Comments on EAW for Royal Golf Club Residential Development
Stephen Wensman, Planning Director

Also analyzed was the CSAH 10/Lake Elmo Avenue intersection which currently operates as an all way stop intersection with combined thru/lefts and exclusive right turn lanes at all approaches. We accept the conclusion that this development will not require or drive the need for additional traffic control or infrastructure improvements at this intersection. It should be noted that there are no improvements programmed in the County's 5 Year CIP for this intersection.

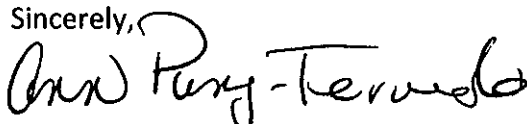
There should be further conversations with the county on the current status of the identified Regional Trail Corridor (Washington County Comprehensive Plan 2030) along CSAH 17/Lake Elmo Avenue. The County will be starting planning efforts, which include community outreach and engagement, for this segment of the Central Greenway Trail Master Plan. It is expected this process will begin in 2017. Additionally, this corridor will be evaluated as part of the Washington County Comprehensive Plan 2040 planning process.

It is noted that in the traffic analysis provided to the county, the future club house/banquet facility and the commercial public use golf course traffic was not included. As a result, the traffic study underestimates the total traffic impacts of this development. While it is true that the existing traffic volumes account for a portion of this, we understand the goal of the developer is to increase use, and thus traffic impacts, of the club house / banquet site. Please clarify how you will incorporate this expected increase in use into the traffic study.

If the comments in this letter are addressed in the EAW, the county does not feel the need for the preparation of an Environmental Impact Statement for the planned project; however, future studies, environmental documentation, and mitigation measures will need to be addressed as development occurs in the area.

If you have any questions or comments to the responses on the Royal Golf Club EAW, please contact me at Ann.pung-terwedo@co.washington.mn.us.

Sincerely,



Ann Pung-Terwedo
Senior Planner

c: Wayne Sandberg, County Engineer
Jan Lucke, Transit and Planning Manager

2301 Legion Avenue
Lake Elmo MN 55042
November 21, 2016

City of Lake Elmo
Planning and Zoning Department
Stephen Wensman, Planning Director
3800 Laverne Avenue North
Lake Elmo, Minnesota 55042

Dear Mr. Wensman,

I would like to comment, ask questions, and clarify the EAW for the proposed Royal Golf Residential Development proposed by HC Golf Development, LLC in the city of Lake Elmo, Washington County. I will be referring to pages in the EAW that have given me concern.

My first concern is that the commercial aspect of the development, the golf course, club house, storage area, sport complex, and driving range were not part of the study. These commercial aspects of the development will add to the traffic, congestion, water runoff, and have a strong environmental impact on the area.

On page 3 it states "Traffic generated by the project will have little to no impact on the regional transportation system. Intersections surrounding the site will continue to operate at acceptable levels of service with the traffic generated by the proposed project." This is followed up later on page 35 by a traffic study that was completed in July, 2016, when the golf course, driving range, club house, sport complex, and storage building were closed and the streets to the east and west, Lake Elmo Avenue and Manning Avenue, were under construction and school was not in session. I disagree with the Traffic Impact Study conclusion that the proposed project will have minimal effects on adjacent public roads and that nearby intersections will continue to operate at an overall Level of Service (LOS) A. A proper study needs to be completed.

The study continues on page 35 to say "These residential development is expected to generate a total of 2,780 average daily trips, including 1,390 vehicles entering the site and 1,390 vehicles exiting the site. It continues with "The complete development analyzed included an 18-hole golf course with 293 single family home land parcels. Based on this layout, the resulting new traffic associated with the proposed development is expected to be 1,717 vehicles entering and 1,717 vehicles exiting the development per day (total daily trip generation of 3,434 vehicles)." There is a difference in traffic if the commercial aspects are included in the study and they should be as they will be part of the traffic.

Also in the traffic discussion it appears they are unsure what roads the traffic will use and which traffic to count. It would also be good to determine if the entire area will be developed at this time as this will impact the traffic count. "There is another potential access onto Manning Trail N for the proposed residential component. This future access will depend upon development of the adjacent property and is not included in this traffic analysis. It should be noted that the proposed site driveways do not provide access to the entire development as each access only services a portion of the overall site. This results in

traffic that does not mix within the site, and depending on where the driver's origin and destination, will determine which access to use.

Page 8 states "The City's ordinance also requires that shoreland PUDs be connected to public water and sewer systems, and that least 50% of the shoreland area be maintained as open space." This is true, however only that land within 1000 feet of a shoreland is zoned this way and needs to be connected to public sewer, the remainder of the land could use septic systems. In fact, depending on the placement of the lots no home would need to use public sewer.

Page 10 states "The project is proposing to place about 14.0 acre-feet of fill in the flood fringe of Downs Lake to elevate an area for construction of 15 residential lots and adjoining streets. Construction of a municipal street around the east side of Lake Rose will require about 1.6 acre-feet of fill in the flood fringe of Lake Rose." We want to make sure proper authorities are committed to supervising this activity as streets and 15 homes could be flooded if not completed correctly. This area has been flooded in the past. It is unfortunate the developer is not listening to the land and building outside of a floodplain.

Page 11 states "The proposed project is compatible with the proposed land use, zoning, and surrounding land uses. The project is designed to preserve considerable forested buffers adjacent to surrounding roadways. These vegetated buffers will enhance the compatibility of the project with nearby land uses and help preserve the forested character of the area." It is true this may be compatible with land use, but certainly not with density of the surrounding homes. The current surrounding lots are about one acre and go up to almost 50 acres per household, the proposed lots start at 0.4 acre and go up to .75 acre per household. The conversion of forest to impervious surface will significantly change the character of the area and decrease the natural habitat of the existing wildlife corridor. Also on page 32 it states: "buckthorn may be left in the understory along exterior roadways to provide visual screening." I don't believe an invasive species is considered a "forested buffer" and will not enhance the project.

Page 13 describes the "Grading operations for residential development construction are expected to affect 137.5 acres and involve movement of about 750,000 to 1 million cubic yards of soil to construct streets, residential building pads, and stormwater ponds. Grading is expected to avoid disturbance on 84.4 acres within the project area". It is unfortunate so much land has to be disturbed, however it means there will be considerable noise. Page 34 directs our attention to "Noise generated by construction equipment and residential building construction will be limited primarily to daylight hours when noise levels are commonly higher than at night." If this is true, what provision is being made so the surrounding landowners are allowed their rightful peace and quiet? I would like to suggest all noise generating equipment may only be operated from 8 AM to 5 PM and only Monday to Friday.

Page 16 states "The project is expected to produce normal domestic wastewater. This wastewater is expected to be typical of residential developments. The project will not include industrial wastewater production or onsite wastewater treatment." It is unfortunate the club house and other commercial aspects are not included as there will be wastewater from them. No estimates were given as to the amounts.

Page 18 states "The net increase in impervious surface is estimated at 38.6 acres. The creation of stormwater features and the preservation of wetland buffers and other open spaces is expected to mitigate potential adverse effects from the increase in impervious surface." Again I ask for scrutiny of any permits and close supervision and of the mitigation as they are increasing the impervious area. Also,

can we be assured there will be supervision of these projects over time to make sure they are in proper working order? Will unlimited access be given to the proper authorities to all stormwater management facilities? This area has had major flooding in the past and with the addition of so much impervious surface it will need timely reviews.

Page 30 tells us "The project area includes potential Blanding's turtle's (*Emydoidea blandingii*), habitat consisting of wetlands and sandy soils. The best Blanding's turtle habitat includes wetland complexes larger than 10 acres that are surrounded by open sandy uplands." The concern continues on Page 32 with "The project may have effects on Blanding's turtles that may occur in the area. To minimize potential adverse effects on turtles and their mobility, the project will avoid most wetlands, implement stringent sediment and erosion controls, consider the use of surmountable curbs on roadways, and consider erosion control materials constructed of organic fibers rather than plastic." I don't believe these developers wish to eliminate a state-listed threatened species, and therefore should abide by the necessary measures to assure their survival. It is one thing to "try" and another to actually do them. They also need to avoid disturbance in type 2 and 3 wetlands, no dewatering of wetlands in the winter, and use wildlife friendly erosion control methods. Also, roads should be kept to minimum standards on widths and lanes (this reduces road kills by slowing traffic and reducing the distance turtles need to cross). Who will be overseeing these measures and what agency will follow through to make sure they are done?

On Page 32 I was happy to see, "To the extent practicable, tree clearing will occur between October and April, when migratory songbirds and bats are not nesting or reproducing." This is extremely important as oak wilt is prevalent in the area and we don't wish to have trees cut at the wrong time of the year. Please check with an arborist to make sure it is safe before cutting. However, "buckthorn may be left in the understory along exterior roadways to provide visual screening" is not acceptable. Buckthorn is an invasive species and difficult to remove, but to intentionally leave it when there are alternatives available is unacceptable in Minnesota. A certified landscape architect should oversee this aspect of the project.

Page 33 states, "Although the proposed project may affect some views from nearby homes, the project proponent has included design elements in the project to minimize visual effects on nearby homeowners." There are residents on all four sides of the development and all wish to have as little sight of the development as possible. Buckthorn is not an acceptable buffer.

"The project will not involve installation of intense lights that would cause glare, nor will it include industries that would emit vapor plumes." The developer needs to follow the lighting codes of Lake Elmo.

Page 34 states, "The project is not expected to generate dust or odors at levels considered unusual for suburban development construction practices." The surrounding area does not have dense development, the area is not your "usual suburban development". "Dust, odors, and noise levels are expected to be slightly higher during project construction than project operations". Hours of operation are important especially if they will be going on for 5-7 years. The health and emotional wellbeing of the surrounding homeowners should be considered and is important. I again suggest all noise generating equipment may only be operated from 8 AM to 5 PM and only Monday to Friday.

Thank you for the opportunity to comment on the EAW.

Sincerely,

Ann M. Bucheck

November 23, 2016

City of Lake Elmo
Planning and Zoning Department
Stephen Wensman, Planning Director
3800 Laverne Avenue North
Lake Elmo, Minnesota 55042

Dear Mr. Wensman:

On behalf of The Homestead Homeowner's Association, I would like to submit the following comments related to the EAW for the proposed Royal Golf Residential Development project:

- 1) The list of Permits and Approvals Required on Page 5 indicates that a Comprehensive Plan Amendment has been submitted to the Metropolitan Council. We believe this is inaccurate since the City Council has not voted to amend its current Comprehensive Plan to allow any kind of residential development on this property.
- 2) The Traffic Impact Analysis was based on data collected in July, 2016. We are concerned that this data may significantly under-represent the normal "baseline" traffic volume for the following reasons:
 - A significant portion of Lake Elmo Avenue N was closed during this time due to construction on Lake Elmo Ave and in the Old Village area.
 - Local schools were not in session due to the Summer break.
 - The Tartan Park golf course was not operational during this time. The developer has indicated that they expect 30,000 – 45,000 rounds of golf annually which will generate additional traffic volume that may not have been fully reflected in the analysis.
- 3) We've heard recently that the City Council might opt to schedule a vote on a proposed Comprehensive Plan amendment for this land at the upcoming December 6th Council meeting. We feel that a vote on December 6th would not allow enough time for a thorough review and consideration of the public comments related to this EAW. Our understanding is that it is common practice by RGU's to not take any legislative action on their comprehensive plan amendments for the area under consideration prior to the completion and public review of an EAW or EIS and official action on the pending EAW or EIS.
- 4) We would like to raise the question of whether an EIS might be required or simply be prudent for this development. As you undoubtedly know, MN Rule 4410.4400 Subp.14 defines a set of residential housing unit thresholds which trigger the need for a mandatory EIS based on "the total number of units that the proposer may ultimately develop on all contiguous land owned by the proposer or for which the proposer has an option to purchase." Unless the developer is willing to put the golf course acreage into a conservation easement in perpetuity, the total

number of housing units which could eventually be built on this entire 477-acre parcel may very well eventually exceed the thresholds defined in this rule. Our understanding is that a development with the potential for "400 unattached units or 600 attached units ... if the project is not consistent with the adopted comprehensive plan" would require a mandatory EIS.

Although our neighborhood continues to be amenable to this proposed development in concept, we remain disappointed with the proposed 292-unit housing density and we have concerns about the potential for several hundred additional homes should the golf course someday become financially unsustainable. Given the unique location and exceptional attributes of this property, coupled with the widely held local desire to preserve and protect the rural character of Lake Elmo, we feel that 'Open Space' housing densities similar to those in our neighborhood would be far preferable and more appropriate for this development.

Thank you for your continued leadership in managing this important process on behalf of our City.

Kindly

A handwritten signature in black ink, appearing to read 'Dan Rice', with a stylized, flowing script.

Dan Rice, President

Homestead Homeowners Association

11364 14th St N

Lake Elmo, MN 55042

From: [Corbett, Michael J. \(DOT\)](#)
To: [Stephen Wensman](#)
Cc: [Scheffing, Karen \(DOT\)](#); [Sherman, Tod \(DOT\)](#); [Moynihan, Debra \(DOT\)](#)
Subject: The Royal Golf Club Residential Development EAW
Date: Monday, November 07, 2016 2:05:01 PM

Hello Mr. Wensman,

Thank you for the opportunity to review the Environmental Assessment Worksheet (EAW) for The Royal Golf Club Residential Development EAW, located in Lake Elmo, MN. The Minnesota Department of Transportation (MnDOT) has reviewed the EAW and has no concerns.

If you have any questions, please let me know.

Michael Corbett, PE

MnDOT Metro Division – Planning
1500 W County Road B-2
Roseville, MN 55113
651-234-7793
Michael.J.Corbett@state.mn.us

The Minnesota Department of Transportation invites you to take our two-minute survey to help us improve our services. [MnDOT External Customer Survey](#)
Thank you for telling us about your experience



November 22, 2016

Stephen Wensman, Planning Director
City of Lake Elmo
3800 Laverne Ave N.
Lake Elmo, MN 55042

RE: The Royal Golf Club Residential Development EAW

Dear Steven,

The Washington Conservation District (WCD) has received and reviewed the above-mentioned EAW. The WCD review focuses on wetlands, erosion and sediment control, natural area management, and stormwater management. Based on this review the WCD offers the following comments:

Section 7 – Cover Types

Use of native vegetation and habitat restoration is encouraged in the open space areas, including native vegetated buffers around stormwater treatment systems. Enhancing the greenway corridor that connects Lake Elmo to natural areas to the east is encouraged.

Section 10 – Geology, Soils and Topography / Land Forms

Section b. Soils and Topography

- Compliance with NPDES, watershed, and local requirements will minimize adverse impacts of soil erosion and sedimentation. The WCD can provide support to the City to ensure compliance as needed. The WCD recommends phasing the earthwork and grading to the greatest extent possible to limit the scale and duration of exposed soils during construction.
- Preserve HSG B soils to the extent possible. Protecting zones of optimum infiltration from compaction is preferred
- Minimize soil compaction and provide soil restoration in landscaped areas to enhance infiltration
- Deep-rip the soils with a toothed bucket in low or compacted areas to promote infiltration after major construction is complete

Section 11 – Water Resources

Section iv. Surface Waters

- The EAW indicates the site will meet City and VBWD infiltration guidelines, which recommend retaining the 1.1" rain event on-site. WCD encourages the use of bioretention to meet the onsite volume retention standards. Bioretention promotes both infiltration and evapotranspiration which more effectively mimics terrestrial hydrology than pure infiltration systems. These systems are designed to be distributed throughout the site and treat small contributing drainage areas, breaking up larger catchments into smaller, more manageable parts. Minimizing the drainage area provides multiple benefits to stormwater treatment, including the potential for reduced infrastructure conveyance costs.

To ensure the long-term effectiveness of volume control, the following design specifications are presented for consideration:

- Do not rely on long-term infiltration from unlined stormwater ponds or wet detention basins
- Install bioretention/infiltration practices off-line
- Include flow-splitter and high-flow bypass
- Provide pre-treatment (especially for sediment to prolong the life of a practice)
- Keep the max water depth to acceptable levels based on soil types and actual infiltration rates
- Refer to the Minnesota Stormwater Manual, 2013 (on MN PCA website) for additional design and implementation considerations

The WCD is also serving on the WCA TEP and will provide comments on the wetland permitting through that process.

Section 13 – Fish, Wildlife, Plant Communities and Sensitive Ecological Resources (Rare Features)

Section d.

- Buckthorn removal from entire project area rather than leaving visual barrier along exterior roadways will minimize spread of this restricted noxious weed. Replace visual barrier of removed Buckthorn by replanting native trees and shrubs.

Conclusions

There are no known impacts that have not already been addressed in this EAW that warrant an Environmental Impact Statement. The Washington Conservation District appreciates the opportunity to review this EAW. Please call me at 651-330-8220, extension 20, if you have any questions about our review.

Sincerely,

A handwritten signature in black ink, appearing to read "Jay Riggs", with a stylized, cursive script.

Jay Riggs, District Manager
Washington Conservation District

Cc: John Hanson, VBWD