



City of Duluth
Planning Division

411 West First Street • Room 208 • Duluth, Minnesota 55802-1197
218-730-5580 • Fax: 218-730-5904 • www.duluthmn.gov

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MEMORANDUM

DATE: July 5, 2016
TO: Planning Commission
FROM: Steven Robertson, Senior Planner
SUBJECT: PL 16-072 Appeal to the Planning Commission, Wetland Replacement Plan

Introduction

Pacific Education Partners and Duluth Public Schools Academy has submitted an appeal to the Planning Commission. They are appealing the Land Use Supervisor's May 18, 2016 Notice of Decision (Denial) of their proposed wetland replacement plan to impact 100,610 square feet of wetlands to construct a new approximately 100,000 square foot school for children in grades 8 through 12. This appeal of an LGU (Local Government Unit) staff decision is a public hearing.

Review of Proposed Wetland Replacement Plan

Prior to submitting the replacement plan on April 8, 2016, the applicant had met with the Duluth Wetland Conservation Act Technical Evaluation Panel (WCA TEP) in December 2015 and March 2016. After reviewing the submitted wetland replacement plan and additional information provided following a May 2, 2016, TEP meeting, the members of the Duluth WCA TEP recommended that the City of Duluth Land Use Supervisor deny the wetland replacement plan. On May 18, 2016, the Notice of Decision (denial) was issued by Land Use Supervisor Keith Hamre with the following text:

The Wetland Replacement Plan is Denied based on 8420.0520 SEQUENCING. Subpart 1. Requirement. The local government unit must not approve a wetland replacement plan unless the local government unit finds that the applicant has demonstrated that the activity impacting a wetland complies with all of the following principles in descending order or priority:

- A. avoids direct or indirect impacts that may destroy or diminish the wetland
- B. minimizes impacts by limiting the degree or magnitude of the wetland activity

8420.0520 Subp. 3. Impact avoidance (2) The local government unit must determine whether any proposed feasible and prudent alternatives are available that would avoid impacts to wetlands.

The Wetland Replacement Plan did not adequately provide off- site alternatives or alternate project configurations. Off- site alternatives provided in the plan were not seriously considered as alternatives and rejected out of hand according to the application (sites 1 and 2, Armory and County Jail), or project elements were not designed to fit around the wetlands identified (sites 3 and 4, Arlington Road or Arrowhead Road). The applicant did not demonstrate to the LGU's satisfaction that there were not any other sites in the general area that could accommodate a project of this magnitude.

Subp. 4. Impact minimization. The applicant shall demonstrate to the local government unit's satisfaction that the activity will minimize impacts to wetlands. The applicant has not, to the LGU's satisfaction, attempted to minimize or relocate project elements that were suggested by application reviewers. The plan did not minimize the size or scope of the project in order to minimize impacts (using parking structures instead of parking lots, reduce the number of student parking spaces, using a smaller or no athletic field).

Upland areas on the applicant's property north of the proposed school site potentially could have been used for portions of the project, but these areas were excluded from the current school site building plan. However, various potential future housing plans have been shown in these areas.

The Wetland Replacement Plan discusses several limitations to the site that require a wetland impact of 2.5 acres of wetland, including but not limited to: an agreement to maintain ski trails, steep slopes, additional wetlands in the interior area of the site. These conditions should have been known by the applicant prior to purchase of the property. The Minnesota Wetland Conservation Act requires the local government unit must consider the general suitability of the project site. Based on the information provided to the City and our review of the application, this site is not suitable to a project of this scope.

Planning Commission's Role

The Planning Commission will need to do one of the following:

- 1) make a motion affirming the Land Use Supervisor's denial of the wetland replacement plan, or
- 2) make a motion reversing the decision and approving the wetland replacement plan.

The Planning Commission should review the April 8, 2016, plan as it relates to the Minnesota Rules, included as attachment 14, and copied below. These are the standards that should be used when reviewing a wetland replacement plan.

Minnesota Administrative Rules 8420.0520, Wetland Replacement, Sequencing

The local government unit must not approve a wetland replacement plan unless the local government unit finds that the applicant has demonstrated that the activity impacting a wetland complies with all of the following principles in descending order or priority:

- A. avoids direct or indirect impacts that may destroy or diminish the wetland under the criteria in subpart 3;
- B. minimizes impacts by limiting the degree or magnitude of the wetland activity and its implementation under the criteria in subpart 4;
- C. rectifies impacts by repairing, rehabilitating, or restoring the affected wetland under the criteria in subpart 5;
- D. reduces or eliminates impacts over time by operating the project in a manner that preserves and maintains the remaining wetland under the criteria in subpart 6; and
- E. replaces unavoidable impacts by restoring or, if wetland restoration opportunities are not reasonably available, creating replacement wetland areas having equal or greater public value as provided for in parts 8420.0500 and 8420.0522 to 8420.0528.

Subp. 3. Impact avoidance.

A. Avoidance is required when indicated by part 8420.0515.

B. Wetland dependence determination:

(1) Based on information provided by the applicant, the local government unit must determine if the proposed project is wetland dependent. A project is wetland dependent if wetland features or functions are essential to fulfill the basic purpose of the project. A wetland present at the site of a proposed project does not make that project wetland dependent.

(2) A project that has been determined by the local government unit to be wetland dependent is exempt from the analysis of avoidance alternatives in item C.

C. Alternatives analysis:

(1) In addition to documentation for the proposed project, the applicant must provide the local government unit with documentation describing at least two alternatives that avoid

wetland impacts, one of which may be the no-build alternative. For projects that repair or rehabilitate existing infrastructure, only one alternative is required. The alternatives may include consideration of alternate sites or alternative project configurations on the proposed site. The alternatives must be judged by the local government unit as good faith efforts, or the local government unit may require the applicant to redraft them for reconsideration.

(2) The local government unit must determine whether any proposed feasible and prudent alternatives are available that would avoid impacts to wetlands. An alternative is considered feasible and prudent if it meets all of the following requirements:

- (a) it is capable of being done from an engineering point of view;
- (b) it is in accordance with accepted engineering standards and practices;
- (c) it is consistent with reasonable requirements of the public health, safety, and welfare;
- (d) it is an environmentally preferable alternative based on a review of social, economic, and environmental impacts; and
- (e) it would create no truly unusual problems.

(3) The local government unit must consider the following in evaluating avoidance alternatives as applicable:

- (a) whether the basic project purpose can be reasonably accomplished using one or more other sites in the same general area that would avoid wetland impacts. An alternate site must not be excluded from consideration only because it includes or requires an area not owned by the applicant that could reasonably be obtained, used, expanded, or managed to fulfill the basic purpose of the proposed project;
- (b) the general suitability of the project site and alternate sites considered by the applicant to achieve the purpose of the project;
- (c) whether reasonable modification of the size, scope, configuration, or density of the project would avoid impacts to wetlands;
- (d) efforts by the applicant to accommodate or remove constraints on alternatives imposed by zoning standards or infrastructure, including requests for conditional use permits, variances, or planned unit developments;
- (e) the physical, economic, and demographic requirements of the project. Economic considerations alone do not make an alternative not feasible and prudent; and
- (f) the amount, distribution, condition, and public value of wetlands and associated resources to be affected by the project and the potential for direct and indirect effects over time.

(4) If the local government unit determines that a feasible and prudent alternative exists that would avoid impacts to wetlands, it must deny the replacement plan. If no feasible and prudent alternative is available that would avoid impacts to wetlands, the local government unit must evaluate the replacement plan for compliance with subparts 4 to 8.

Subp. 4. Impact minimization.

The applicant shall demonstrate to the local government unit's satisfaction that the activity will minimize impacts to wetlands. In reviewing the sufficiency of the applicant's proposal to minimize wetland impacts, the local government unit must consider all of the following:

- A. the spatial requirements of the project;
- B. the location of existing structural or natural features that may dictate the placement or configuration of the project;
- C. the purpose of the project and how the purpose relates to placement, configuration, or density;
- D. the sensitivity of the site design to the natural features of the site, including topography, hydrology, and existing vegetation;
- E. the value, function, and spatial distribution of the wetlands on the site;
- F. individual and cumulative impacts; and
- G. an applicant's efforts to:

- (1) modify the size, scope, configuration, or density of the project;
- (2) remove or accommodate site constraints including zoning, infrastructure, access, or natural features;
- (3) confine impacts to the fringe or periphery of the wetland; and
- (4) otherwise minimize impacts.

Summary of Staff Decision

LGU staff finds that the April 8, 2016, Wetland Replacement Plan does not meet the standards in MN Rules, and cannot recommend approval:

-The applicant has not shown that the proposed activity avoids direct or indirect impacts that may destroy or diminish the wetland.

-The applicant has not shown that wetland impacts would not be avoided and the project proposed cannot be reasonably accomplished at one or more of the other alternative sites considered by the applicant and described in the project application. The applicant has not shown that the physical layout for the project could not be met at the alternative sites considered by the applicant in the project application.

-The applicant has not shown that the proposed activity minimizes impacts by limiting the degree or magnitude of the wetland activity and its implementation.

-The applicant has not shown that modifications of the size, scope, configuration or density of the proposed project to avoid impacts to wetlands on the preferred site would not make the project infeasible. The applicant has not shown that upland areas on the preferred site could not feasibly be used before impacting the wetlands to the degree proposed in the project application.

Attachments

- 1 Notice of Decision and Duluth WCA TEP Recommendation
- 2 Applicant's Appeal of the NOD
- 3 Duluth WCA TEP Meeting Notes December 10, 2015
- 4 Duluth WCA TEP Meeting Notes March 8, 2016
- 5 Duluth Public Schools Academy Wetland Replacement Plan April 8, 2016
- 6 USACE Public Notice
- 7 Duluth WCA TEP Meeting Notes May 2, 2016
- 8 Applicant's Response to Duluth WCA TEP Questions May 9, 2016
- 10 USACE Letter with Public Comments May 16, 2016
- 11 Duluth WCA TEP Meeting Notes May 16, 2016
- 12 Applicant's Additional Information and Amended Site Plan May 16, 2016
- 13 Applicant's Letter to Keith Hamre May 16, 2016
- 14 UDC Wetland Rules and MN Rules Wetland Replacement Plan Criteria

Minnesota Wetland Conservation Act

Notice of Decision

Local Government Unit (LGU) City of Duluth	Address Planning Division, 208 City Hall Duluth, MN 55802
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1. PROJECT INFORMATION

Applicant Name Duluth Public Schools Academy (Landowner: Pacific Education Partners)	Project Name DPSA High School	Date of Application April 8, 2016	Application Number PL 16-018
<input type="checkbox"/> Attach site locator map. Application attached.			

Type of Decision:

<input type="checkbox"/> Wetland Boundary or Type	<input type="checkbox"/> No-Loss	<input type="checkbox"/> Exemption	<input type="checkbox"/> Sequencing
<input checked="" type="checkbox"/> Replacement Plan	<input type="checkbox"/> Banking Plan		

Technical Evaluation Panel Findings and Recommendation (if any):

<input type="checkbox"/> Approve	<input type="checkbox"/> Approve with conditions	<input checked="" type="checkbox"/> Deny
Summary (or attach): Information reviewed for TEP recommendation: amended Wetland Replacement Plan (Received April 8, 2016), Response to TEP Questions on May 2, 2016 (Received May 9, 2016), USACE Correspondence, Bois Forte Tribal Government and US EPA Region 5 (Received May 16, 2016).		

2. LOCAL GOVERNMENT UNIT DECISION

Date of Decision: May 18, 2016
<input type="checkbox"/> Approved <input type="checkbox"/> Approved with conditions (include below) <input checked="" type="checkbox"/> Denied

The Wetland Replacement Plan is Denied based on 8420.0520 SEQUENCING. Subpart 1. *Requirement. The local government unit must not approve a wetland replacement plan unless the local government unit finds that the applicant has demonstrated that the activity impacting a wetland complies with all of the following principles in descending order or priority:*

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satisfaction that there were not any other sites in the general area that could accommodate a project of this magnitude.

Subp. 4. Impact minimization. *The applicant shall demonstrate to the local government unit's satisfaction that the activity will minimize impacts to wetlands.*

The applicant has not, to the LGU's satisfaction, attempted to minimize or relocate project elements that were suggested by application reviewers. The plan did not minimize the size or scope of the project in order to minimize impacts (using parking structures instead of parking lots, reduce the number of student parking spaces, using a smaller or no athletic field).

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The Wetland Replacement Plan discusses several limitations to the site that require a wetland impact of 2.5 acres of wetland, including but not limited to: an agreement to maintain ski trails, steep slopes, additional wetlands in the interior area of the site. These conditions should have been known by the applicant prior to purchase of the property. The Minnesota Wetland Conservation Act requires the local government unit must consider the general suitability of the project site. Based on the information provided to the City and our review of the application, this site is not suitable to a project of this scope.

LGU Findings and Conclusions (attach additional sheets as necessary):

For Replacement Plans using credits from the State Wetland Bank:

Bank Account #	Bank Service Area	County	Credits Approved for Withdrawal (sq. ft. or nearest .01 acre)

Replacement Plan Approval Conditions. In addition to any conditions specified by the LGU, the approval of a Wetland Replacement Plan is conditional upon the following:

- Financial Assurance:** For project-specific replacement that is not in-advance, a financial assurance specified by the LGU must be submitted to the LGU in accordance with MN Rule 8420.0522, Subp. 9 (List amount and type in LGU Findings).
- Deed Recording:** For project-specific replacement, evidence must be provided to the LGU that the BWSR "Declaration of Restrictions and Covenants" and "Consent to Replacement Wetland" forms have been filed with the county recorder's office in which the replacement wetland is located.
- Credit Withdrawal:** For replacement consisting of wetland bank credits, confirmation that BWSR has withdrawn the credits from the state wetland bank as specified in the approved replacement plan.

Wetlands may not be impacted until all applicable conditions have been met!

LGU Authorized Signature:

Signing and mailing of this completed form to the appropriate recipients in accordance with 8420.0255, Subp. 5 provides notice that a decision was made by the LGU under the Wetland Conservation Act as specified above. If additional details on the decision exist, they have been provided to the landowner and are available from the LGU upon request.		
Name Keith Hamre	Title Director of Planning and Construction Services, City of Duluth	
Signature 	Date May 18, 2016	Phone Number and E-mail 218.730.5297 khmare@duluthmn.gov

THIS DECISION ONLY APPLIES TO THE MINNESOTA WETLAND CONSERVATION ACT. Additional approvals or permits from local, state, and federal agencies may be required. Check with all appropriate authorities before commencing work in or near wetlands.

Applicants proceed at their own risk if work authorized by this decision is started before the time period for appeal (30 days) has expired. If this decision is reversed or revised under appeal, the applicant may be responsible for restoring or replacing all wetland impacts.

This decision is valid for three years from the date of decision unless a longer period is advised by the TEP and specified in this notice of decision.

3. APPEAL OF THIS DECISION

Pursuant to MN Rule 8420.0905, any appeal of this decision can only be commenced by mailing a petition for appeal, including applicable fee, within thirty (30) calendar days of the date of the mailing of this Notice to the following as indicated:

Check one:

<input checked="" type="checkbox"/> Appeal of an LGU staff decision. Send petition and \$350 fee (if applicable) to: Planning Commission 208 City Hall, 411 West First Street Duluth, MN 55802 Contact: Steven Robertson 218.730.5580	<input type="checkbox"/> Appeal of LGU governing body decision. Send petition and \$500 filing fee to: Executive Director Minnesota Board of Water and Soil Resources 520 Lafayette Road North St. Paul, MN 55155
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4. LIST OF ADDRESSEES

<input checked="" type="checkbox"/> SWCD TEP member: R.C. Boehm
<input checked="" type="checkbox"/> BWSR TEP member: Lynda Peterson
<input checked="" type="checkbox"/> LGU TEP member (if different than LGU Contact): Steven Robertson
<input checked="" type="checkbox"/> DNR TEP member:
<input checked="" type="checkbox"/> DNR Regional Office (if different than DNR TEP member)
<input type="checkbox"/> WD or WMO (if applicable):
<input checked="" type="checkbox"/> Applicant and Landowner (if different)
<input type="checkbox"/> Members of the public who requested notice: NA
<input checked="" type="checkbox"/> Corps of Engineers Project Manager
<input type="checkbox"/> BWSR Wetland Bank Coordinator (wetland bank plan decisions only)

5. MAILING INFORMATION

➤ For a list of BWSR TEP representatives: www.bwsr.state.mn.us/aboutbwsr/workareas/WCA_areas.pdf

➤ For a list of DNR TEP representatives: www.bwsr.state.mn.us/wetlands/wca/DNR_TEP_contacts.pdf

➤ Department of Natural Resources Regional Offices:

NW Region: Reg. Env. Assess. Ecol. Div. Ecol. Resources 2115 Birchmont Beach Rd. NE Bemidji, MN 56601	NE Region: Reg. Env. Assess. Ecol. Div. Ecol. Resources 1201 E. Hwy. 2 Grand Rapids, MN 55744	Central Region: Reg. Env. Assess. Ecol. Div. Ecol. Resources 1200 Warner Road St. Paul, MN 55106	Southern Region: Reg. Env. Assess. Ecol. Div. Ecol. Resources 261 Hwy. 15 South New Ulm, MN 56073
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For a map of DNR Administrative Regions, see: http://files.dnr.state.mn.us/aboutdnr/dnr_regions.pdf

➤ For a list of Corps of Project Managers: www.mvp.usace.army.mil/regulatory/default.asp?pageid=687
or send to:

US Army Corps of Engineers
St. Paul District, ATTN: OP-R
180 Fifth St. East, Suite 700
St. Paul, MN 55101-1678

➤ For Wetland Bank Plan applications, also send a copy of the application to:

Minnesota Board of Water and Soil Resources
Wetland Bank Coordinator
520 Lafayette Road North
St. Paul, MN 55155

6. ATTACHMENTS

In addition to the site locator map, list any other attachments:

<input type="checkbox"/>

Minnesota Wetland Conservation Act Technical Evaluation Panel Findings Report

Date(s) of Site Visit/Meeting: Monday May 16, 2016 LGU: City of Duluth
 County: St. Louis LGU Contact: Steven Robertson
 Project Name: DPSA High School Phone #: 218 730 5295
 Location of Project: _____ Email: _____
 (attach map if possible) _____ Address: srobertson@duluthmn.gov

<u>TEP ATTENDEES:</u>	<u>OTHER ATTENDEES:</u>	<u>OTHER ATTENDEES:</u>
LGU: Steven Robertson	Kyle Deming (LGU)	
SWCD: R.C. Boheim		
BWSR: Lynda Peterson		
DNR: Vacant		

PROJECT DESCRIPTION AND PURPOSE OF MEETING:

Review submitted materials and make a recommendation to the LGU related to the Wetland Replacement Plan.

TYPE OF MEETING: *Check all applicable*

Office On-Site Phone Conference E-Mail Other: _____

TEP FINDINGS AND RECOMMENDATIONS ¹:

Recommend Denial of Wetland Replacement Plan; standards of 8420.0520 Subp. 3. Impact avoidance and Subp. 4. Impact minimization not met.

SIGNATURES

 _____ SWCD Representative Do not concur <input type="checkbox"/>	<u>5/18/2016</u> Date	 _____ BWSR Representative Do not concur <input type="checkbox"/>	<u>5/18/16</u> Date
 _____ LGU Representative Do not concur <input type="checkbox"/>	<u>5/18/16</u> Date	_____ DNR Representative Do not concur <input type="checkbox"/>	_____ Date

¹ TEP Findings should be a meaningful concise summary detailing the project conditions, technical data, and what rules apply. The TEP recommendation should be clear, based on rule and best professional judgement.



June 15, 2016

Direct Dial: 320-656-3518
Gleistico@RinkeNoonan.com

Keith Hamre, Director of Planning and Construction Services
City of Duluth
Planning Commission
208 City Hall
411 West First Street
Duluth, MN 55802

SENT VIA OVERNIGHT MAIL

**Re: Pacific Education Partners (Duluth Public Schools Academy)
Our File No. 26535-0001**

Dear Mr. Hamre, City of Duluth LGU:

Please be advised that the undersigned has been retained by Pacific Education Partners with respect to the project located at 43XX Rice Lake Road, in the City of Duluth, Minnesota, and more specific, the Notice of Decision issued under the Minnesota Wetland Conservation Act by the City of Duluth as the Local Government Unit. Pursuant to MN Rule 8420.0905, enclosed please find Pacific Education Partners' Petition for Appeal of Wetland Conservation Act Decision, exhibits and our check no. 77359 in the amount of \$350.00 as the applicable filing fee.

Due to Mr. Hamre's absence from the office, it was necessary for us to file this appeal. However, it is my client, their developer and my personal intentions to work with the City of Duluth on this matter to reach an amicable resolution of all matters as to the site for the Duluth Public Schools Academy.

If you have any questions regarding this appeal, please do not hesitate to contact me. Thank you.

Sincerely,

Gary R. Leistico
GRL/dvf

Enclosures

Keith Hamre
June 15, 2016
Page 2

cc: Blackhoof Development (w/encls) – Via Email
Pacific Education Partners (w/encls) – Via Email
Duluth Public Schools Academy, c/o Mark Pilon (w/encls) – Via Email
Steven Robertson, City of Duluth, LGU TEP Member (w/encls) – By U.S. Mail
R.C. Boheim, South St. Louis SWC, LGU TEP Member (w/encls) – By U.S. Mail
Lynda Peterson, MN Board of Water & Soil Resources,
LGU TEP Member (w/encls) – By U.S. Mail
Nathan N. LaCoursiere/Allison Luttermann, Assistant City Attorneys,
City of Duluth (w/encls) – By U.S. Mail

Steven Robertson, Senior Planner
City of Duluth, Planning Division
411 W 1st Street, Room 208
Duluth, MN 55802

R. C. Boheim
South St. Louis Soil & Water Conservation
215 North First Avenue East, Room 301
Duluth, MN 55802

Lynda Peterson
Minnesota Board of Soil & Water Resources
520 Lafayette Road North
Saint Paul, MN 55155

Nathan N. LaCoursiere
Allison Luttermann
Assistant City Attorneys
Office of the City Attorney
410 City Hall
411 West First Street
Duluth, MN 55802-1198

[26535-0001/2348066/1]

CITY OF DULUTH PLANNING COMMISSION



The Matter of the Appeal of Pacific Education Partners and Duluth Public Schools Academy of the Minnesota Conservation Act Decision, dated May 18, 2016

**PETITION FOR APPEAL OF
WETLAND CONSERVATION ACT
DECISION**

TO: DULUTH PLANNING COMMISSION, 208 CITY HALL, 411 WEST FIRST STREET, DULUTH, MN 55802, THE LOCAL GOVERNMENT UNIT ADMINISTERING THE WETLAND CONSERVATION ACT, MINNESOTA STATUTES CHAPTER 103G, RULES PART 8420

Pacific Education Partners and Duluth Public Schools Academy, as and for its appeal of the Minnesota Wetland Conservation Act (WCA) Notice of Decision, dated May 18, 2016, (herein referred to as "Decision") as it relates to Application PL 16-018, state and allege as follows:

1. Pacific Education Partners is the owner of property located at 43XX Rice Lake Road, Duluth, MN 55811.
2. Duluth Public Schools Academy is the authorized contact on behalf of the Applicant, Pacific Education Partners.
3. David Chmielewski is the authorized Owner's Agent of Pacific Education Partners and Duluth Public Schools Academy.
4. David Chmielewski, on behalf of Pacific Education Partners, submitted a WCA wetland replacement plan application dated April 4, 2016 on April 8, 2016 to the City of Duluth, the Local Government Unit (LGU). A true and correct copy of the application is attached as **Exhibit A**.
5. City of Duluth Planning and Construction Services issued a Notice of Decision dated May 18, 2016 and signed by Director Keith Hamre. A true and correct copy of the

Decision is attached hereto and included herein as **Exhibit B**.

6. Pursuant to MN Rule 8420.0905, any appeal of a WCA Notice of Decision can be commenced by mailing a petition for appeal, and applicable fee, within thirty (30) calendar days of the date of mailing of the Notice to the indicated agency on the Notice of Decision, and in this case, the City of Duluth Planning Commission. The City of Duluth Planning Commission is believed to be the local government unit (LGU) delegate with staff responsibility for enforcing and implementing the WCA.

7. This is Pacific Education Partners' Petition for Appeal of the Decision dated May 18, 2016. The Petition for Appeal is based on the WCA application and attachments, supplemental submissions, those matters addressed below, with additional information to be presented to the City of Duluth Planning Commission, which opportunity is hereby requested.

8. The LGU's Staff Findings and Conclusions are arbitrary, based on mere averments, and not supported by adequate facts within the Decision. The Decision improperly relies on the unsupported conclusion that the application did not contain satisfactory off-site alternatives as required by Minnesota Rule 8420.0520, Subp. 3 and that the application did not attempt to minimize or relocate project elements as suggested by the LGU pursuant to Minnesota Rule 8420.0520, Subp. 4.

9. Minn. R. 8420.0520 governs wetland replacement plans and requires that an applicant demonstrate that it has considered a sequence of principles that ensure activity impacting a wetland is properly mitigated.

10. The first consideration in this sequencing is *Impact Avoidance*. Minnesota Rule 8420.0520, Subp. 3. To meet this requirement, an applicant must provide the LGU with information on the proposed project along with at least two alternatives that avoid wetland

impacts. Alternatives may include alternate sites or alternative project configurations on the proposed site. The potential alternatives need only to be a good faith effort to comply by the applicant. Minn. R. 8420.0520, Subp. 3(C)(1). If an LGU determines that a feasible and prudent alternative exists that would avoid impact to wetlands, the replacement plan will be denied. Minn. R. 8420.0520, Subp. 3(C)(4).

11. Pacific Education Partners and Duluth Public Schools Academy provided a 47 page comprehensive report as an attachment to the wetland replacement Application. In this report, 5 off-site project locations along with 4 on-site project locations were considered as alternatives. Additionally, numerous plan considerations were made well in advance of the Application to determine the minimum site requirements necessary while still properly operating as a school (i.e. minimum land size, reduction in parking spaces from 450 to 300, designing school as multi-level, etc.).

12. Notwithstanding the 9 formal project alternatives advanced, the LGU stated that “the applicant did not demonstrate to the LGU’s satisfaction that there were not any other sites in the general area that could accommodate a project of this magnitude.” This is the improper standard for denial of an application based on impact avoidance. In order to deny based on this Subpart of the rule, the LGU must determine if there is a “feasible and prudent alternative” that exists avoiding impact to wetlands. Minn. R. 8420.0520, Subp. 3(C)(4). The LGU did not make this determination and therefore the denial is improper. Moreover, the applicant provided in the Application adequate evidence that there were no other “feasible and prudent alternative”, pursuant to Minn. R. 8420.0520, Subp. 3(C)(4).

13. Additionally, the LGU cited *Impact Minimization* pursuant to Minn. R. 8420.0520, Subp. 4 as an additional reason to deny the Application. Minn. R. 8420.0520, Subp. 4

requires that in reviewing an Application for impact minimization, the LGU **must** consider: “A) the spatial requirements of the project; B) the location of existing structural or natural features that may dictate the placement or configuration of the project; C) the purpose of the project and how the purpose relates to placement, configuration, or density; D) the sensitivity of the site design to the natural features of the site, including topography, hydrology, and existing vegetation; E) the value, function, and spatial distribution of the wetlands on the site; F) individual and cumulative impacts; and G) an applicant's efforts to 1) modify the size, scope, configuration, or density of the project; 2) remove or accommodate site constraints including zoning, infrastructure, access, or natural features; 3) confine impacts to the fringe or periphery of the wetland; and 4) otherwise minimize impacts.” Minn. R. 8420.0520, Subp. 4.

14. In an attempt to support the denial of the Application under Minn. R. 8420.0520, Subp. 4, the LGU states that Pacific Education Partners and Duluth Public Schools Academy have not followed the suggested changes of the LGU and that the site is not generally suitable for the project of the planned scope. Neither of these conclusory statements is a basis supported by Rule to deny the Application. There is no evidence that the LGU even considered the essential factors identified by Minn. R. 8420.0520, Subp. 4. For these reasons, the denial of the Application was improper. Moreover, the applicant provided in the Application adequate evidence that the applicant considered and minimized wetland impacts pursuant to Minn. R. 8420.0520, Subp. 4.

15. Petitioner will submit evidence supporting this appeal at a City of Duluth Planning Commission meeting at a date to be determined.

16. Attached as **Exhibit C** is the Authorization of Pacific Education Partners permitting Attorney Gary R. Leistico, to act their agent and to sign on their behalf for all matters

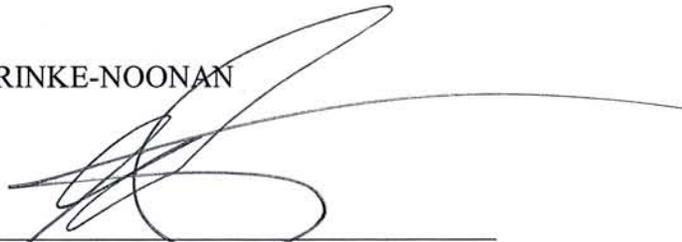
having to do with the appeal of the Decision dated May 18, 2016, and all matters associated with any issues on their property in the City of Duluth, State of Minnesota.

17. Attached as **Exhibit D** is the Authorization of Duluth Pubic Schools Academy permitting Attorney Gary R. Leistico, to act their agent and to sign on their behalf for all matters having to do with the appeal of the Decision dated May 18, 2016, and all matters associated with any issues on their property in the City of Duluth, State of Minnesota.

18. Attached as **Exhibit E** is David Chmielowski's Authorization permitting Attorney Gary R. Leistico, to act as his agent and sign on his behalf for all matters having to do with the appeal of the Decision dated May 18, 2016, and all matters associated with any issues on the above-referenced property in the City of Duluth, State of Minnesota.

Dated: June 15, 2016

RINKE-NOONAN



Gary R. Leistico, #24448X
1015 W. St. Germain St., Ste. 300
P.O. Box 1497
St. Cloud, MN 56302
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ATTORNEYS FOR PETITIONER PACIFIC
EDUCATION PARTNERS, DULUTH PUBLIC
SCHOOLS ACADEMY, AND DAVID
CHMIELEWSKI

PART ONE: Applicant Information

If applicant is an entity (company, government entity, partnership, etc.), an authorized contact person must be identified. If the applicant is using an agent (consultant, lawyer, or other third party) and has authorized them to act on their behalf, the agent's contact information must also be provided.

Applicant/Landowner Name: PACIFIC EDUCATION PARTNERS
Mailing Address: 430 E. State Street, Suite 100, Eagle, ID 83616
Phone: 208.908.4865
E-mail Address: calebr@tpchousing.com

Authorized Contact (do not complete if same as above): DULUTH PUBLIC SCHOOLS ACADEMY
#4020, Bonnie Jorgenson
Mailing Address: 3301 Technology Drive, Duluth, MN 55811
Phone: [\(218\) 728-9556](tel:2187289556)
E-mail Address: Bonnie.Jorgenson@duluthedison.com

Agent Name: David Chmielewski, Blackhoof
Mailing Address: 2020 14th Street, Cloquet, MN 55720
Phone: 218-384-9727
E-mail Address: dave@blackhoof.com

PART TWO: Site Location Information

County: ST LOUIS **City/Township:** DULUTH
Parcel ID and/or Address: 43XX Rice Lake Rd, Duluth, MN 55811
Legal Description (Section, Township, Range): NW1/4, SE1/4 Section 8, Township 50 Range 14 West
Lat/Long (decimal degrees): 48.828959 , -92.132511
Attach a map showing the location of the site in relation to local streets, roads, highways.
Approximate size of site (acres) or if a linear project, length (feet): 22 ACRES

If you know that your proposal will require an individual Permit from the U.S. Army Corps of Engineers, you must provide the names and addresses of all property owners adjacent to the project site. This information may be provided by attaching a list to your application or by using block 25 of the Application for Department of the Army permit which can be obtained at:

http://www.mvp.usace.army.mil/Portals/57/docs/regulatory/RegulatoryDocs/engform_4345_2012oct.pdf

PART THREE: General Project/Site Information

If this application is related to a delineation approval, exemption determination, jurisdictional determination, or other correspondence submitted *prior to* this application then describe that here and provide the Corps of Engineers project number.

Describe the project that is being proposed, the project purpose and need, and schedule for implementation and completion. The project description must fully describe the nature and scope of the proposed activity including a description of all project elements that effect aquatic resources (wetland, lake, tributary, etc.) and must also include plans and cross section or profile drawings showing the location, character, and dimensions of all proposed activities and aquatic resource impacts.

see attached

PART FOUR: Aquatic Resource Impact¹ Summary

If your proposed project involves a direct or indirect impact to an aquatic resource (wetland, lake, tributary, etc.) identify each impact in the table below. Include all anticipated impacts, including those expected to be temporary. Attach an overhead view map, aerial photo, and/or drawing showing all of the aquatic resources in the project area and the location(s) of the proposed impacts. Label each aquatic resource on the map with a reference number or letter and identify the impacts in the following table.

Aquatic Resource ID (as noted on overhead view)	Aquatic Resource Type (wetland, lake, tributary etc.)	Type of Impact (fill, excavate, drain, or remove vegetation)	Duration of Impact Permanent (P) or Temporary (T) ¹	Size of Impact ²	Overall Size of Aquatic Resource ³	Existing Plant Community Type(s) in Impact Area ⁴	County, Major Watershed #, and Bank Service Area # of Impact Area ⁵
3/4	WETLAND	FILL	P	53053	923472	PUB3	SEE BELOW
6/7	WETLAND	FILL	9	55884	923472	PF03B	SEE BELOW

¹If impacts are temporary; enter the duration of the impacts in days next to the "T". For example, a project with a temporary access fill that would be removed after 220 days would be entered "T (220)".

²Impacts less than 0.01 acre should be reported in square feet. Impacts 0.01 acre or greater should be reported as acres and rounded to the nearest 0.01 acre. Tributary impacts must be reported in linear feet of impact and an area of impact by indicating first the linear feet of impact along the flowline of the stream followed by the area impact in parentheses). For example, a project that impacts 50 feet of a stream that is 6 feet wide would be reported as 50 ft (300 square feet).

³This is generally only applicable if you are applying for a de minimis exemption under MN Rules 8420.0420 Subp. 8, otherwise enter "N/A".

⁴Use *Wetland Plants and Plant Community Types of Minnesota and Wisconsin* 3rd Ed. as modified in MN Rules 8420.0405 Subp. 2.

⁵Refer to Major Watershed and Bank Service Area maps in MN Rules 8420.0522 Subp. 7.

If any of the above identified impacts have already occurred, identify which impacts they are and the circumstances associated with each:

NONE: Wetland Bank #1532, 02- Lake Superior South, BSA 1

PART FIVE: Applicant Signature

Check here if you are requesting a pre-application consultation with the Corps and LGU based on the information you have provided. Regulatory entities will not initiate a formal application review if this box is checked.

By signature below, I attest that the information in this application is complete and accurate. I further attest that I possess the authority to undertake the work described herein.

Signature: _____

David M. Chmielewski

Date: 04-06-16

I hereby authorize DAVID CHMIELEWSKI to act on my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this application.

[Signature]

4/6/16

¹ The term "impact" as used in this joint application form is a generic term used for disclosure purposes to identify activities that may require approval from one or more regulatory agencies. For purposes of this form it is not meant to indicate whether or not those activities may require mitigation/replacement.

Attachment C

Avoidance and Minimization

Project Purpose, Need, and Requirements. Clearly state the purpose of your project and need for your project. Also include a description of any specific requirements of the project as they relate to project location, project footprint, water management, and any other applicable requirements. Attach an overhead plan sheet showing all relevant features of the project (buildings, roads, etc.), aquatic resource features (impact areas noted) and construction details (grading plans, storm water management plans, etc.), referencing these as necessary:

SEE ATTACHED

Avoidance. Both the CWA and the WCA require that impacts to aquatic resources be avoided if practicable alternatives exist. Clearly describe all on-site measures considered to avoid impacts to aquatic resources and discuss at least two project alternatives that avoid all impacts to aquatic resources on the site. These alternatives may include alternative site plans, alternate sites, and/or not doing the project. Alternatives should be feasible and prudent (see MN Rules 8420.0520 Subp. 2 C). Applicants are encouraged to attach drawings and plans to support their analysis:

SEE ATTACHED

Minimization. Both the CWA and the WCA require that all unavoidable impacts to aquatic resources be minimized to the greatest extent practicable. Discuss all features of the proposed project that have been modified to minimize the impacts to water resources (see MN Rules 8420.0520 Subp. 4):

SEE ATTACHED

Off-Site Alternatives. An off-site alternatives analysis is not required for all permit applications. If you know that your proposal will require an individual permit (standard permit or letter of permission) from the U.S. Army Corps of Engineers, you may be required to provide an off-site alternatives analysis. The alternatives analysis is not required for a complete application but must be provided during the review process in order for the Corps to complete the evaluation of your application and reach a final decision. Applicants with questions about when an off-site alternatives analysis is required should contact their Corps Project Manager.

SEE ATTACHED

Attachment D Replacement/Compensatory Mitigation

Complete this part *if* your application involves wetland replacement/compensatory mitigation not associated with the local road wetland replacement program. Applicants should consult Corps mitigation guidelines and WCA rules for requirements.

Replacement/Compensatory Mitigation via Wetland Banking. Complete this section if you are proposing to use credits from an existing wetland bank (with an account number in the State wetland banking system) for all or part of your replacement/compensatory mitigation requirements.

Wetland Bank Account #	County	Major Watershed #	Bank Service Area #	Credit Type (if applicable)	Number of Credits
1532	Lake	Lake Sup S	1		92864

Applicants should attach documentation indicating that they have contacted the wetland bank account owner and reached at least a tentative agreement to utilize the identified credits for the project. This documentation could be a signed purchase agreement, signed application for withdrawal of credits or some other correspondence indicating an agreement between the applicant and the bank owner. *However, applicants are advised not to enter into a binding agreement to purchase credits until the mitigation plan is approved by the Corps and LGU.*

Project-Specific Replacement/Permittee Responsible Mitigation. Complete this section if you are proposing to pursue actions (restoration, creation, preservation, etc.) to generate wetland replacement/compensatory mitigation credits for this proposed project.

WCA Action Eligible for Credit ¹	Corps Mitigation Compensation Technique ²	Acres	Credit % Requested	Credits Anticipated ³	County	Major Watershed #	Bank Service Area #

¹Refer to the name and subpart number in MN Rule 8420.0526.
²Refer to the technique listed in *St. Paul District Policy for Wetland Compensatory Mitigation in Minnesota*.
³If WCA and Corps crediting differs, then enter both numbers and distinguish which is Corps and which is WCA.

Explain how each proposed action or technique will be completed (e.g. wetland hydrology will be restored by breaking the tile.....) and how the proposal meets the crediting criteria associated with it. Applicants should refer to the Corps mitigation policy language, WCA rule language, and all associated Corps and WCA guidance related to the action or technique:

N/A

Attach a site location map, soils map, recent aerial photograph, and any other maps to show the location and other relevant features of each wetland replacement/mitigation site. Discuss in detail existing vegetation, existing landscape features, land use (on and surrounding the site), existing soils, drainage systems (if present), and water sources and movement. Include a topographic map showing key features related to hydrology and water flow (inlets, outlets, ditches, pumps, etc.):

N/A

Attach a map of the existing aquatic resources, associated delineation report, and any documentation of regulatory review or approval. Discuss as necessary:

SEE ATTACHED

For actions involving construction activities, attach construction plans and specifications with all relevant details. Discuss and provide documentation of a hydrologic and hydraulic analysis of the site to define existing conditions, predict project outcomes, identify specific project performance standards and avoid adverse offsite impacts. Plans and specifications should be prepared by a licensed engineer following standard engineering practices. Discuss anticipated construction sequence and timing:

EXISTING WETLANDS WILL BE PROTECTED BY PERIMETER CONTROL FOLLOWING BMPS OUTLINED IN NPDES AND MPCA GUIDELINES

For projects involving vegetation restoration, provide a vegetation establishment plan that includes information on site preparation, seed mixes and plant materials, seeding/planting plan (attach seeding/planting zone map), planting/seeding methods, vegetation maintenance, and an anticipated schedule of activities:

N/A

For projects involving construction or vegetation restoration, identify and discuss goals and specific outcomes that can be determined for credit allocation. Provide a proposed credit allocation table tied to outcomes:

N/A

Provide a five-year monitoring plan to address project outcomes and credit allocation:

N/A

Discuss and provide evidence of ownership or rights to conduct wetland replacement/mitigation on each site:

N/A

Quantify all proposed wetland credits and compare to wetland impacts to identify a proposed wetland replacement ratio. Discuss how this replacement ratio is consistent with Corps and WCA requirements:

In kind replacement ratio 1:1

By signature below, the applicant attests to the following (only required if application involves project-specific/permittee responsible replacement):

- All proposed replacement wetlands were not:
 - Previously restored or created under a prior approved replacement plan or permit
 - Drained or filled under an exemption during the previous 10 years
 - Restored with financial assistance from public conservation programs
 - Restored using private funds, other than landowner funds, unless the funds are paid back with interest to the individual or organization that funded the restoration and the individual or organization notifies the local government unit in writing that the restored wetland may be considered for replacement.
- The wetland will be replaced before or concurrent with the actual draining or filling of a wetland.
- An irrevocable bank letter of credit, performance bond, or other acceptable security will be provided to guarantee successful completion of the wetland replacement.
- Within 30 days of either receiving approval of this application or beginning work on the project, I will record the Declaration of Restrictions and Covenants on the deed for the property on which the replacement wetland(s) will be located and submit proof of such recording to the LGU and the Corps.

Applicant or Representative:

Title:

WCA AND 404 ADDITIONAL INFORMATION

WETLAND EVALUATION

The site was visited in the fall of 2014 and wetlands were delineated within the area of interest. A NOD dated December 9th, 2014 was issued by the LGU representative the SSSLWCD, on behalf of the City of Duluth for the Wetland Conservation Act. Site plan and architectural development led by the firm of Foundations Architecture has been underway since August of 2015. Those concepts have been included in this application as exhibits.

On December 10th, the applicant met with representatives from the LGU and the USACE.

EXISTING CONDITIONS (SETTING)

The DPSA 8-12 wetlands proposed for impact are as follows:

Wetland groups 1, 2 and 3 (proposed for impact) could be characterized as PUB3 (type 3) and PFO3B (type 7). Wetland 1 has been converted from prior wetlands noted as being PSS1 (type 6) and PFO3B in an LGU no net loss decision dated December 7th, 2001. See exhibit 1 and 1.1. This decision permitted a change in wetland type of 1.3 acres of wetland for the creation of a speed skating oval. Excavated material was hauled off site (source George Hovland).

Wetland 1 has maintained standing water since we began evaluating the site. A small part of wetland 3 is the wetland formed by the drainage to the wetlands along Rice Lake Road. This drainage is primarily forested and is a PF03B wetland.

Wetland 2 appears to be fed from surface runoff from the adjacent clearing which is used for a ski staging area in the winter and a recreational field in the summer. Flows from the hillside to the north also provide hydrology for this wetland entity.

The area surrounding the site is mostly wooded. To the north, there is forest comprised of relatively mature Aspen, Birch, White Pine, Ash, Balsam Fir and Maple. This forest is bisected by ski trails that make up the Snowflake Nordic Center, which is a non-profit ski organization that provides groomed ski trails for school events and members as well as camping and hiking in the summer months.

The immediate watershed feeding wetland 1 is 6.19 acres to the north; nearly all forested, with some turf, a small portion of the Chalet and a small portion of the ATC overflow parking area. This wetland appears to have minimal bounce in the water level and drains overland out of its southwest corner, eventually draining into the wetlands that bank into Rice Lake Road, then through a culvert under Rice Lake Road and into the wetland complex surrounding the headwaters of Chester Creek.

Wetland 2 is fed by approximately 6.04 acres of immediate watershed, which is almost entirely forested, with the exception of ski trails. There is no evidence of any bounce and minimal surface water in this wetland entity, which is a finger to a larger wetland entity.

Wetland 1 has been altered by human activity, lacks diversity of vegetation, contained little or no emergent or submergent vegetation at the time of the wetland delineation or during any subsequent visits. The most apparent value of this wetland appears to be storm water runoff detention.

Wetland 2 and 3 are of moderate value, as they contain a diverse plant community of hardwoods, softwoods and understory. Some ski trails bisect these wetland entities and there is land clearing immediately to the west of wetland 2 and to the north of wetland 3. To the east is

a large wetland complex, to the south are patches of forest and cleared areas, then Rice Lake Road. As mentioned earlier, to the north is the forested watershed. Wetland three accepts drainage from the north, including discharge from wetland 2. It is essentially wet due to presence of Rice Lake Road, which effectively dams flows moving south, forcing those flows through two culverts.

The total size of the wetland entity group that wetland 1, 2 and 3 are part of is 21.16 acres, not including hydraulic connections that pass under Rice Lake Road (not including wetlands on the other side of Rice Lake Road, which are significant).

There is no fish habitat potential in wetland 1, 2 and 3. Wetland 1 is very shallow and likely freezes out most winters. These wetlands do, however, eventually drain into Chester Creek which is a designated trout stream. This is not a direct connection, but about 1360 LF of straight line distance to reach the first semblance of tributary channel. See exhibit 2. Wetland 1 does not have an overstory of significant woody vegetation, but is ringed on the edges by Aspen and some Speckled Alder. Wetland 2 and 3 have a dominant overstory of Aspen and Black Ash.

Habitat Structure in wetlands 2 and 3 is moderate because the site does stay fairly saturated, runoff bounce is minimal, and there is some biodiversity in the native vegetation that exists. We observed no significant wildlife utilizing these wetland entities, probably due to the time of year. In the case of wetland 1, the lack of emergent and submergent vegetation and a lack of dark organic substrate may reduce its attractiveness as amphibian habitat. Catkins and buds on the Alder and Aspen are known to be a feed source for some herbivores. As well as the Ash seed and understory vegetation. Deer browsing was not evident, but the plant cover density could provide cover for a variety of game and non-game species.

In summary wetland 1 has a low functioning value and wetland 2 and 3 have a moderate value functioning wetlands. While they are regulated wetlands, no special circumstances appear to exist that would warrant preservation. Given that reality, and the proximity to the headwaters of Chester Creek, storm water attenuation functions of these wetland entities must be extended through any planned development.

PROJECT HISTORY

On May 6th, 2010 a Proposed Project Review and Comment document was submitted by Duluth Public Schools Academy (DPSA) Charter #4020 to the Minnesota Department of Education.

In the state of Minnesota, Charter Schools are public schools that are funded by lease aid payments from the Minnesota Department of Education. Charter schools are not constructed with funds levied from local property tax increases. The purpose of this study was to provide information regarding the condition of the existing facilities, both past and present, projected student enrollment, and why DPSA was making a case for a new facility.

In 2010, enrollment was at 984 students; enough to warrant a discussion about either renovating the buildings they were currently leasing at the Kenwood and Washburn sites, finding another facility that could be utilized, or constructing a new facility. The Raleigh facility would remain as a K-5 with 277 students. Technical evaluations of their existing facilities revealed that they were not cost effective to renovate, and therefore, a search for other facilities would be required. The other aspect of these sites was that the lease arrangements with ISD 709 were becoming increasingly untenable, although at the time, ISD 709 was allowing a lease

arrangement with a Public Charter School. In 2011, Northstar Academy, K-8 was constructed on a site formerly owned by George Hovland across Technology Drive from United Health Care, to replace the Kenwood and Washburn sites.

In 2014, a charter school developer by the name of Caleb Roope of Pacific Education Partners (PEP) was made aware of DPSA's desire to plan and construct a high school. Another site selection process commenced and numerous sites were once again presented by Atwater Group. Many of these sites had been vetted during the DPSA K-8 site search. In the State of Minnesota, Public Charter Schools cannot own their own facilities. The educational entity and the facility entity must be separate. It is often a private developer that will pull the physical development together to accommodate the educational entity. That developer may transfer ownership to another ownership entity that is closely tied to the educational entity. The bonding used to pay for construction is serviced by lease aid payments from the State.

Ultimately, George Hovland was again approached. This was not the first time that the Snowflake Nordic Center was evaluated for development. Before the great recession of 2009, this land had been evaluated for housing, but the economy was blamed for the retraction of construction plans.

Eventually, with other sites vetted, it was decided by PEP to purchase what is currently called the Snowflake Nordic Ski Center, a non-profit organization operating on the Hovland property. A wetland delineation was completed and a clause was added to the purchase agreement that Snowflake Nordic must operate in its current or near current state for at least the next five years. It was George Hovland's wish that the Ski Centers trails on the 160 acres of land be largely maintained, and the Chalet or the functions of the Chalet be preserved. Blackhoof Development was contracted by PEP to perform the wetland work on the site and tasked with assembling the design team that would be responsible for preliminary planning work on the site.

WORK PROPOSED

Public Charter High School, grades 8-12, approximately 100,610 SF (2 level), 320 parking stalls storm water treatment, track and field, access drives. See attached exhibits.

AVOIDANCE AND MINIMIZATION STATEMENT

Mitigation Requirements

The mitigation sequence spans the life of a project. Mitigation is a sequence of actions required by various regulatory efforts to protect and enhance wetlands and the environment that we live in. It involves understanding the affected environment and assessing the effects of actions throughout project planning, development, and construction. This concept is not limited to wetlands, but also involves the erosion/sediment control, storm water, transportation safety and other critical issues.

Project proposers are required to consider ways to make as little impact to wetlands as possible in all stages of the project. All unavoidable impacts to wetlands and other "waters" require compensatory mitigation. Any relevant and reasonable mitigation measures that could improve the project must be identified.

During every phase of project development through construction, each step in the mitigation sequence must be completed before proceeding to the next. This means

that opportunities to avoid an impact must be evaluated before compensation for the impact is considered.

COMPENSATORY MITIGATION

The total proposed impact is **108,937 SF.** Of this total, 14,050 SF is directly related to the mandated County Backage Road.

Attached is a purchase agreement for wetland credits within the watershed.

PROJECT PURPOSE AND NEED

Pursuant to M.S. 123B.71, Duluth Public Schools Academy (DPSA) and its Board of Directors has submitted a Review and Comment document for action by the Minnesota Department of Education.

DPSA began operating in August of 1997 as a public charter school and currently serves 1,380 students, grades K-8. After a two year task force study, and significant demand by the student families, they are adding a high school component to our program beginning in fall of 2017

Tischer Creek Duluth Building Company, the affiliated building company for DPSA, will finance this facility through bond financing underwritten by Piper Jaffray and Company. The total cost of the project is \$27 million.

The wetland delineation, airport clear zone mapping, current zoning, topography, DOE requirements, DPSA requirements, proximity to Rice Lake Road and Utilities and existing traffic considerations are the main layers of consideration for the proposed DPSA 8-12 campus location. Many questions have been posed, by a multitude of groups. Questions such as why are wetlands being impacted? Why is the campus not further into the site away from Rice Lake Road? Why is a connection being required by St. Louis County? Why is this high school being constructed at all? Why isn't the school constructed already? Why is it taking so long? The answers to these questions can shed some light into why this wetland replacement plan is being submitted.

Numerous site plans were developed by Blackhoof Development in concert with LHB. Both firms have extensive experience with site planning and wetland considerations. LHB has extensive experience with the design of public schools. Armed with a building program developed by DPSA, Blackhoof and LHB were tasked with doing a "fit" plan. That is, place the required program elements onto the site.

The program requirements developed by DPSA were broken down into "must haves" starting in November of 2014. Knowing that lease aid from the State of MN limits what can be done financially for a new educational facility, without the ability to levy funds from the local tax base, the "must have" items are a way of setting a threshold that cannot be compromised. The basis of this "must have" list is not a wish list, it is a list of mandatory fundamental items that through years of experience and observation, DPSA has identified as "must have" to provide an adequate High School educational facility.

The result of this program planning can be distilled into three programmatic areas:

1. A school building

2. A track and field

3. Parking (The "must have" list required 450 parking stalls. We immediately paired this down, and set a goal for 300 stalls.)

All of these items result in a quantifiable amount of land that is needed. Early drafts of the facility program attached exhibit 4. Later drafted by LHB, exhibit 5. The MN DOE emphasizes 25-35 acres of land for a facility with this program, site planning of the program elements had just begun.

Attached Exhibit 4.1 For those who do not work in the design and construction industry, this is how the process works. Fundamental questions are asked that result in different site plans being manifested. These site plans have resulting consequences, financially, socially and environmentally.

A multi-level school is discussed to reduce cost and impact to the site. Numerous concepts were explored but were rejected for a variety of reasons, including, but not limited to:

Access

- UDC restrictions to parking in "front yard"
- Protective covenants that do not allow excessive manipulation or destruction of Snowflake Nordic Operations
- Excessive bedrock
- Steep topography
- Site Program elements
- Access to Rice Lake Road
- Access to proposed County Road

OFF SITE LOCATIONS AND CONFIGUATIONS

An extensive search for land began in 2010 for DPSA North Star Academy. After that building was constructed in 2011, remaining parcels were re-evaluated for the High School Campus, and one new parcel was made available.

The sites evaluated must be:

Large enough to accommodate the site and building program
Located within the geographic core area for the student population
Contain adequate road access and infrastructure
Contain the appropriate zoning or could be rezoned without issues

The department of education advises that 25-35 acres of land be acquired to accommodate a typical high school campus.

Site 1

Duluth Armory Site: This site was considered as an available existing building with potential for re-use. The Duluth Armory site was evaluated and found to be unsuitable for a high school because it did not have adequate parking, had renovation and structural issues that added

significant concerns about budget overruns and safety issues. There are also no adjacent outdoor facility opportunities for a track and field.

Site 2

County Jail Site: This is in NE quadrant of Arrowhead Road and Haines Road: Not evaluated and immediately dismissed because it is adjacent to the County Jail. A school next to a jail is not an appropriate or compatible use. There are also wetlands on this site. It has been delineated in the past and there are far more wetlands than indicated on the NWI mapping. This site is not adjacent to the existing elementary school, which is a preferred option by DPSA and the DOE.

Site 3

Arrowhead Road, SW quadrant of the intersection of Arlington and Rice Lake Road: The site contains numerous wetlands. Estimates indicate that there would have been a minimum of 111,000 SF of wetland impacts with the proposed DPSA 8-12 building program. To our knowledge, this site has not been delineated and we expect that the actual wetland impacts would be higher. NWI mapping is generally a loose measure of wetlands present on sites, as field delineations generally reveal the presence of more wetlands. Early on in the evaluation of this site, access to Arlington and Arrowhead Roads was presented as a challenge by the County. This site is not adjacent to the existing elementary school, which is a preferred option by DPSA and the DOE. In addition to wetland impacts and restricted access, the market price for this land exceeded other options by nearly double.

Site 4

Arrowhead Road, next to Nortrax: This site has extensive wetlands immediately adjacent to a tributary of Chester Creek. Estimates indicate that there would have been a minimum of 122,500 SF of wetland impacts with the proposed DPSA 8-12 building program. To our knowledge, this site has been delineated at some point and we expect that the actual wetland impacts would be higher than we have indicated. Early on in the evaluation of this site, access to Arrowhead Road was presented as a challenge by the County. This site is not adjacent to the existing elementary school, which is a preferred option by DPSA and the DOE.

Site 5

Central School Site: This site was selected as a perfect site for the DPSA High School. It has adequate parking, the school building is adequate and is designed as a school, the athletic fields are already in place and there is adequate access to the site.

Previous discussions by Tischer Creek and ISD 709 had led to the conclusion that ISD 709 would not sell an existing facility to a "competing school". ISD 709 has adopted policies that bar them from selling any of their land or facilities to such competing schools, such as DPSA.

In March of 2016, Tischer Creek Duluth Building Company made a public offer of \$14.2 million for the Duluth Central High School Site, which has been closed for 5 years. The appraised value of the property was \$13.7 million. A prior offer of \$10 million by a private developer had been rejected.

A public comment session was held on March 28th, 2016 where the public could provide comment for or against ISD 709 waiving its policy to not sell to DPSA. On March 31st, 2016, a special session of the ISD 709 school board was held, and on a vote of 4 to 3, the school board voted to not sell the Duluth Central High School Site. As of 2:56 pm CST, a Duluth News

Tribune Poll with 723 respondents, 84% had disagreed with ISD 709 decision not to sell, with 16% agreeing with the decision.

ALTERNATIVES REQUIRING NO ACTION

Preserving the Site

The preservation alternative is not the best option for this site. Preservation works best for sites that do not have direct inputs from roads, farms, and residential neighborhoods. Preservation works best for wetlands that have limited access from the public, limited or single ownership and are of a size that can be effectively managed to exclude nonnative species.

The preservation alternative is to leave the site as it stands with no further development this has been referred to as the "no build alternative." This site lies in an undeveloped block of land that is served by significant infrastructure. The development site sits west of an existing sister school and a substantial commercial/industrial complex. Internally, the preservation aspect of this proposed development is not as much the impacting of two wetland entities noted herein; it is the sacrifice of these two wetland entities to reduce further impacts to the remaining 140 acres of land.

Of these criteria, only wetland 2 meets the criteria of single ownership. That is, the "finger" of wetland that is part of a larger wetland complex on land owned by the developer. Outside of ownership, both wetlands have direct inputs from ski and hiking trails. Adjacent cleared areas are mowed and the wetland entities are relatively close to Rice Lake Road. The proximity to mature development to the east and west, and existing infrastructure on the south means that management to exclude invasive species is not ideal.

Finally, preservation works best on wetlands that have not had significant disturbance. Wetland 1 has been altered by excavation. Wetland 2 and 3 is in relatively good condition, but for the ski trails the bisect it, and the clearing that has occurred to the west.

- Vegetative diversity, in wetland 1 is low. Vegetative diversity in wetland 2 and 3 is fair. The most prevalent species found within wetland 1 is speckled alder on the periphery. In wetland 2 and 3, *Fraxinus nigra* and *Populus tremula* comprises the majority of the biomass. Both of these species are moderate in preference for preserved wetland and wetland biodiversity.
- There is minimal storm water input from impervious surfaces, but the relatively dense till soils, steep slopes and shallow bedrock generate a measurable amount of runoff in a relatively short period of time.
- Pressure from future development; as stated above, this site lies adjacent to the existing Arrowhead Tennis Center and the Northstar Academy School. This land was sold to the developer by George Hovland who maintained the land for decades for the Snowflake Nordic Ski Center. It is also adjacent to Rice Lake Road, which is a major thoroughfare served by City sewer and water services. The proximity to Rice Lake Road and City utilities will put pressure on this land for development.
- Current and future disturbance; potential disturbances to the wetland include Ski trails and ski trail maintenance, construction single family or multifamily housing, commercial facilities and school facilities (proposed).

- Mineral rights; Mineral rights are not a consideration on this property.
- Recreational rights; Snowflake Nordic will exist on this site contractually for the next five years. Currently, the developer has no immediate or long term plans to impact more than 25 acres of the 140 acre tract. There are no current plans to change Snowflake Nordic beyond what is currently proposed.

Preservation value: Is the site worth the necessary inputs for preservation? This wetland is located in an area that will be developed whether a high school is constructed or homes and/or roads are placed directly on it or adjacent to it. The area is already degraded by its proximity Rice Lake Road and the more intensive programming around the Chalet for Nordic Skiing. There are currently no plans to enhance wetland 1 or preserve wetland 2 or 3 as it relates to the current use of the property as a Nordic Ski Center.

The preservation of these wetlands may extend the existence of low and moderate quality wetlands, with modest inputs required to maintain that level of quality. This assumes the current site use does not change. The highest and best use of this site is to proceed with development that is consistent with best management practices for the entire project area, and to utilize the existing infrastructure that makes this site one of the few sites in the entire region that is large enough to accommodate developments with large and intensive site programming, as well as those activities that generate traffic and require robust City utilities.

ALTERNATIVES CARRIED FORWARD IN ANALYSIS

Avoiding Impacts

The mitigation sequencing starts in the planning stage of the decision-making process with the development of alternatives. Unreasonable and otherwise reasonable options may be removed from further consideration at this stage because there are reasonable alternatives that avoid large wetland impacts. Early mitigation options should be considered if appropriate and available.

Project Scoping involves identifying and evaluating alternative solutions to find the most cost effective and overall environmentally acceptable solution to a transportation need.

Minimizing Impacts

Minimizing impacts must be considered whether or not the impacts are significant. Proposers are required to identify and include in the action all relevant and reasonable mitigation measures that could improve the action. Compensation must be included as an integral part of the alternatives development and analysis process. In considering all disciplines, the **least environmentally damaging practicable alternative** is selected.

The site has certain limitations that dictate the position of the various site program elements. Those elements are the school building, the parking, track and field and the access drive. Given the existing access to the High School, the required access to Rice Lake Road, the track and field, and the storm water requirements, the main variable is parking.

Concept Original

ALTERNATIVE 1

Now that the area of interest has been established, and a possible County backage road planned, mature program elements can be explored within this area. This alternative illustrates the school on the SW portion of the area of interest and the track and field to the SE.

The reasons this alternative is not preferred are:

- Access off of Rice Lake Road and distribution of traffic to at the intersection, to the school and to Arrowhead Tennis is awkward.
- Remote, parking along circulation is not favorable
- Parking and circulation are somewhat disjointed
- Very little space is left for storm water, forcing more treatment underground
- More of school is placed on deep fill over existing wetland, which is structurally not favorable.
- Wetland impacts not the least amount, at 108,952 SF, including the final projected County road impacts and the ultimate storm water pond impacts.

ALTERNATIVE 2

Track place to the NW and School to the SE.

The reasons this alternative is not preferred are:

- Access off of Rice Lake Road, then to school campus and Arrowhead Tennis is greatly improved
- Parking is consolidated
- School Building is placed mostly on solid ground
- Wetland impacts increase to make room for large storm water pond
- Site layout favorable, but not the least amount at 114,743 SF

PREFERRED ALTERNATIVE

This alternative is preferred for the following reasons:

All reasons stated in Alternative 2

The County Backage road impacts are included in this permit application. The County Backage Road is part of this project and is permitted as such.

Storm water ponds is pulled away from the wetland and more treatment is put underground.

Least impacts of all viable alternatives at **108,937 SF**

Exhibit 14 illustrates the overall backage road concept.

Exhibit 15 illustrates the current site plan that was approved by the DPSA School Board on February 4th, 2016.

Exhibit 16 illustrates the impact to Snowflake Nordic's overall ski trail system.

The proposed site plan satisfies the health, safety and welfare requirements of St. Louis County and will be constructed to City of Duluth specifications.

See exhibit 1.1. The site plan appears to meet most of the UDC requirements of the City of Duluth, but a zoning request must be made for the small amount of parking/drop off between the building façade and Rice Lake Road. The site plan and building plan have been approved by the DPSA School Board.

Wetland impacts are proposed for the preferred alternative to be offset by obtaining wetland credits from an approved wetland bank. The wetland purchase agreement is attached. Wetland impacts occur from two sources. The first is the proposed middle school building and

the second is the required parking and vehicular circulation areas. Parking has been reduced down from other concepts which has resulted in fewer wetlands proposed for impact.

Summary/Discussion

After numerous concepts and meetings, the site plan has evolved to include the following:

1. Geotechnical considerations
2. Grading considerations
3. Storm water management
4. Snowflake Nordic Operations
5. UDC restrictions on parking count
6. UDC restrictions on front setback parking
7. Traffic congestion on Technology Drive
8. Accurate program on building footprint
9. Accurate program on track and field
10. Accurate alignment of County backage road concept
 - The proposed DPSA High School is capable of being constructed from an engineering point of view. A design for the proposed high school has been produced by a Licensed (civil) engineer and registered Architect in the State of Minnesota.
 - The proposed high school has been designed in accordance with State of Minnesota Department of Education Standards which are required for Lease aid funding purposes. The site design and architectural components are designed to meet engineering standards and practices based on extensive data on proposed materials, soils and field constructability. All building and site programs are smaller than MN DOE averages and only one athletic field is proposed as synthetic turf to withstand the additional play time in lieu of more practice fields.
 - The proposed high school is consistent with reasonable requirements of the public health, safety, and welfare. Local and County government units have been consulted regarding the compliance of suggested land uses and accessibility to those land uses. The legitimacy of the proposed land uses and access to those uses has been confirmed by City Planning, and the local fire safety officials.
 - The high school is an environmentally preferable alternative based on a review of social, economic, and environmental impacts. In this case, the relatively moderate quality and value of the wetlands, the pattern of development adjacent to the site, the exploration of other alternatives that would result in additional environmental impacts, and the determination that the most feasible and prudent alternative has been proposed. The proposed high school and associated land uses are consistent with adjacent land uses in the area.
 - The proposed high school would create no truly unusual problems as long as access to Rice Lake Road can be enhanced. The proposed wetland impacts still leave a majority of the existing wetland entities on the development site in-tact. Wetland replacement will be required within the Wetland Bank Service Area. No unusual problems are evident and none are expected to be associated with the proposed high school during, or after construction.

PUBLIC INTEREST FACTORS

CONSERVATION

Efforts have been made to conserve wetland impacts in the site wherever possible. The off site selection process has determined that only one other site met the criteria for the proposed high school, and that was the Duluth Central High School site. After numerous offers from Tischer Creek Duluth Building Company, the ISD 709 school board voted to reject the offer on the basis that they would not sell to another school entity.

On the Snowflake site, putting the site program further up the hill would impact more high value wetland, impact more ski trails and fragment more woodland habitat. It would also require longer roads and utilities to reach the site from Rice Lake Road. Currently, the owner of Snowflake Nordic, Pacific Education Partners, is restricted from impacting Snowflake Nordic Operations for a period of 5 years. Pushing the site program further north into the site would disrupt the ski center to the point of rendering it non-functional. These comments have reiterated by the Nordic Center's operators throughout the site planning process. Disrupting the Snowflake operations is a covenant violation in the purchase agreement.

ECONOMICS

The current site selection is not a matter of economics. It really is a matter of selecting a site that has adequate size, and relative absence of wetlands. While wetland impacts do constitute a financial burden via wetland replacement, it is the avoidance and minimization process that has dictated the site selection process. Other than the Duluth Central High School site, no other sites had enough usable land to be viable from a permitting standpoint, let alone from the perspective of purchase price.

AESTHETICS

Property aesthetics will change dramatically, from a natural environment to a build environment. A very aggressive tree planting plan will accompany the development. This is not only a requirement for meeting the terms of the tree preservation ordinance, but also an aesthetic decision. The building school building will be an attractive architectural fenestration composed of precast concrete, some glass wall projections and an outdoor classroom.

GENERAL ENVIRONMENTAL CONCERNS

Perhaps the more pressing concern is the hydraulic performance of the remaining wetlands. The storm water system has been design to be a detention system. That is, the existing soils very little ability to infiltrate storm water at an acceptable rate. Storm water that enters the system is stabilized so that suspended solids can precipitate and the water can move slowly through a sand filter and be discharged into the natural water course. We have requested that where storm water pond containment berms are adjacent to wetlands, segments of washed sand be installed to allow the lateral movement of storm water directly into the surface of the wetland in an effort to mimic the natural flow of predevelopment surface water. The storm water is treated for Total Suspended Solids (TSS) and thermal pollution before it is discharged outside of the treatment basin.

WETLANDS

The type and quality of the wetlands are described earlier in this report under compensatory mitigation.

The total proposed impact is **108,937** or 12% of the wetland group.

Vegetative diversity and habitat structure are considered to be low to moderate. The proposed County Sawyer Avenue backage road, and associated wetland impacts, are included in this total. To this date, this County road has been a mandate of the City of Duluth.

Given that reality, the wetlands impacted as part of the County road must be included in the total project with the wetland impacts associated with the High School construction.

HISTORIC PROPERTIES

The Snowflake Nordic center is a very important part of the community. With over 700 members, it resides in a unique geographic area that receives and retains snow such that it is a preferred location for Cross Country skiing when other areas have little or no snow. It is the host of numerous ski events for high schools and other organizations. DPSA, Tischer Creek and Pacific Education Partners have endeavored to maintain this tradition by minimizing impacts to ski trails, moving the chalet to a more suitable location and offering to assist with the location of trails that will be impacted by development.

FISH AND WILDLIFE VALUES

There are no fish values associated with wetlands on this project. The principal value to the wetland habitat is water quality for downstream resources, generalist mammals and amphibians. We expect that most of the generalist mammal habitat will be degraded on the remaining wetlands, but the amphibian habitat and the water quality characteristics of remaining wetlands will be left largely intact.

FLOOD HAZARDS

Strict stormwater standards must be met, as the portion of the site proposed for development currently does not contain impervious surfaces. In order to reduce wetland impacts, the amount of surface ponds for storm water treatment must be reduced and storm water must be treated below the surface of parking lots. This is a far more expensive storm water treatment method than surface treatment, but is being done in an effort to reduce wetland impacts by conserving space. The City of Duluth requires that 125% of pre-development flows must be detained on site. In addition, provisions for underground storm water detention and sand filtration reduce the Total Suspended Solids (TSS) and cool the discharge water, reducing the effects of thermal pollution.

FLOODPLAIN VALUES

There are no direct floodplain values being affected by this project. Storm water treatment will mitigate the downstream affects of storm water on Chester Creek and the Lake Superior Basin basin, which is the receiving water for this proposed development.

LAND USE

The proposed project is not in conflict with the existing land use, which is currently a High School next to an elementary school, with commercial development to the east and west. The proposed DPSA High School will be constructed directly adjacent and west of the existing elementary school.

NAVIGATION

There are no navigable waters within the area of interest nor are there any being impacted in any way.

SHORE EROSION AND ACCRETION

The project does not occur in a shoreland overlay district and any potential downstream impacts have been mitigated by storm water controls. An erosion control plan is included in this submittal.

RECREATION

Cross Country skiing is a very important recreational activity on the site. Efforts are being made to preserve this activity.

WATER SUPPLY AND CONSERVATION

As noted in prior sections, the surface water that feeds existing wetlands will be maintained and distributed through the planned storm water detention systems that have been proposed. It is expected that the existing ground water recharge of surface water runoff be maintained or enhanced. Enhancement is only possible, in this case by way of increased detention time within each of the storm water basins. It is intended that the storm water detention replace the natural detention that is already being performed by existing wetlands.

WATER QUALITY

Water quality will be maintained to the extent that storm water from impervious surfaces will be treated and released at the appropriate rates. Inputs from parking areas will increase the possibility of diminished water quality due to warm water and TSS discharges. These inputs will be mitigated by the storm water system that has been proposed, which includes underground storm water detention. Water quality, as measured thermally or by TSS, is expected to be maintained as part of this project.

ENERGY NEEDS

Additional energy will be required to support the infrastructure on this project, which is principally site lighting and the electrical needs of the new High School Building. This includes, but is not limited to internal lighting, HVAC systems, appliances, and computerized devices. If the Duluth Central High School site were utilized, there would be only a slight increase in energy inputs, as the building is currently being heated and maintained at a cost of \$170,000 per year.

The new high school will include energy efficient mechanical systems and lighting that will minimize the energy inputs beyond what would be possible in an older facility.

SAFETY

Safety is one of the principal drivers of the proposed DPSA High School site program. The two site program elements that attempt to mitigate safety concerns are access to Rice Lake Road and to Technology Drive. Traffic is a documented problem on Technology Drive. Elements of this project are intended to alleviate that condition.

FOOD AND FIBER PRODUCTION

No food production is affected by the proposed project or the proposed wetland impacts. Timber from the site will be sold for biomass. This site is not considered a timber production area and the fiber being produced from clearing the site is a one time occurrence.

The following is a sample of a possible Purchase Agreement for the sale of Wetland Banking Credits. This Purchase Agreement does not necessarily cover all of the issues that would be important to Sellers and Buyers, nor does it address the terms that would be appropriate for any particular transaction. Sellers and Buyers should obtain the services of qualified legal counsel to adapt this Purchase Agreement to meet their specific needs.

**PURCHASE AGREEMENT
FOR
WETLAND BANKING CREDITS**

THIS AGREEMENT is made this 5th day of April, 2016 between
Dan Zeimet (Seller) and Pacific Education Partners (Buyer).

1. Seller agrees to sell to Buyer, and Buyer agrees to buy from Seller, the wetland banking credits (Credits) listed below:

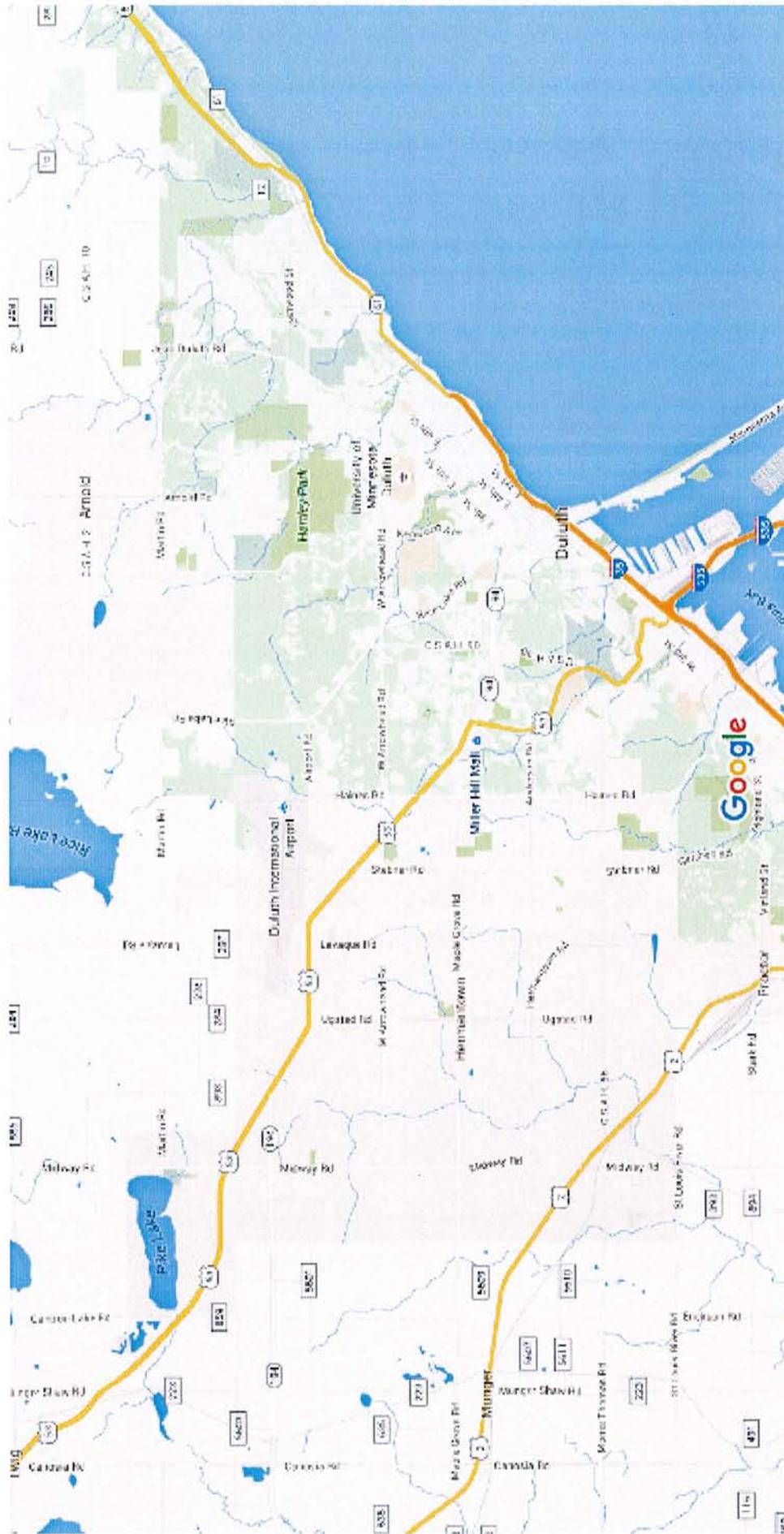
CREDITS TO BE SOLD						
Credit Sub-Group ¹	Acres or Sq. Ft.	Wetland Circ. 39 Type ²	Plant Community Type ³	Cost per Acre or Sq. Foot	State Fee 6.5%	Fee Estimate
A.	1.2505	2	Fresh(wet) Meadow	87,120-	0.065	797.81
B.	1.2505	6	Shrub-Carr/Alder Thicket	87,120-	0.065	797.81
C.					0.065	
D.					0.065	
E.					0.065	
Totals	2.501					1595.62

Check here if additional credit sub-groups are part of this account and are listed on an attachment to this document.
¹A separate credit sub-group shall be established for each wetland or wetland area that has different wetland characteristics.
²Circular 39 types: 1, 1L, 2, 3, 4, 5, 6, 7, 8, B, U.
³Wetland plant community type: shallow open water, deep marsh, shallow marsh, sedge meadow, fresh meadow, wet to wet-mesic prairie, calcareous fen, open bog or coniferous bog, shrub-carr/alder thicket, hardwood swamp or coniferous swamp, floodplain forest, seasonally flooded basin. See *Wetland Plants and Plant Communities of Minnesota and Wisconsin (Eggers and Reed, 1997)* as modified by the Board of Water and Soil Resources, United States Army Corps of Engineers..

2. Seller represents and warrants as follows:

- a) The Credits are deposited in an account in the Minnesota Wetland Bank administered by the Minnesota Board of Water and Soil Resources (BWSR) pursuant to Minn. Rules Chapter 8420.0700-.0760.
- b) Seller owns the Credits and has the right to sell the Credits to Buyer.

Google Maps DPSA 8-12 HIGH SCHOOL



Map data ©2016 Google 1 mi

FOUNDATIONS
ARCHITECTS & ENGINEERS

CONSULTANTS
AROLA
ARCHITECTS & ENGINEERS

EAPC
ARCHITECTS & ENGINEERS

Northland
CONSULTING ENGINEERS LLP

OWNER: PROPOSED BUILDING FOR: **DCS 8-12 SCHOOL**
DULUTH, MINNESOTA 55811

REVISIONS

ISSUED DATE: XX-XX-XXXX

PROJECT NO.: 15-504-C

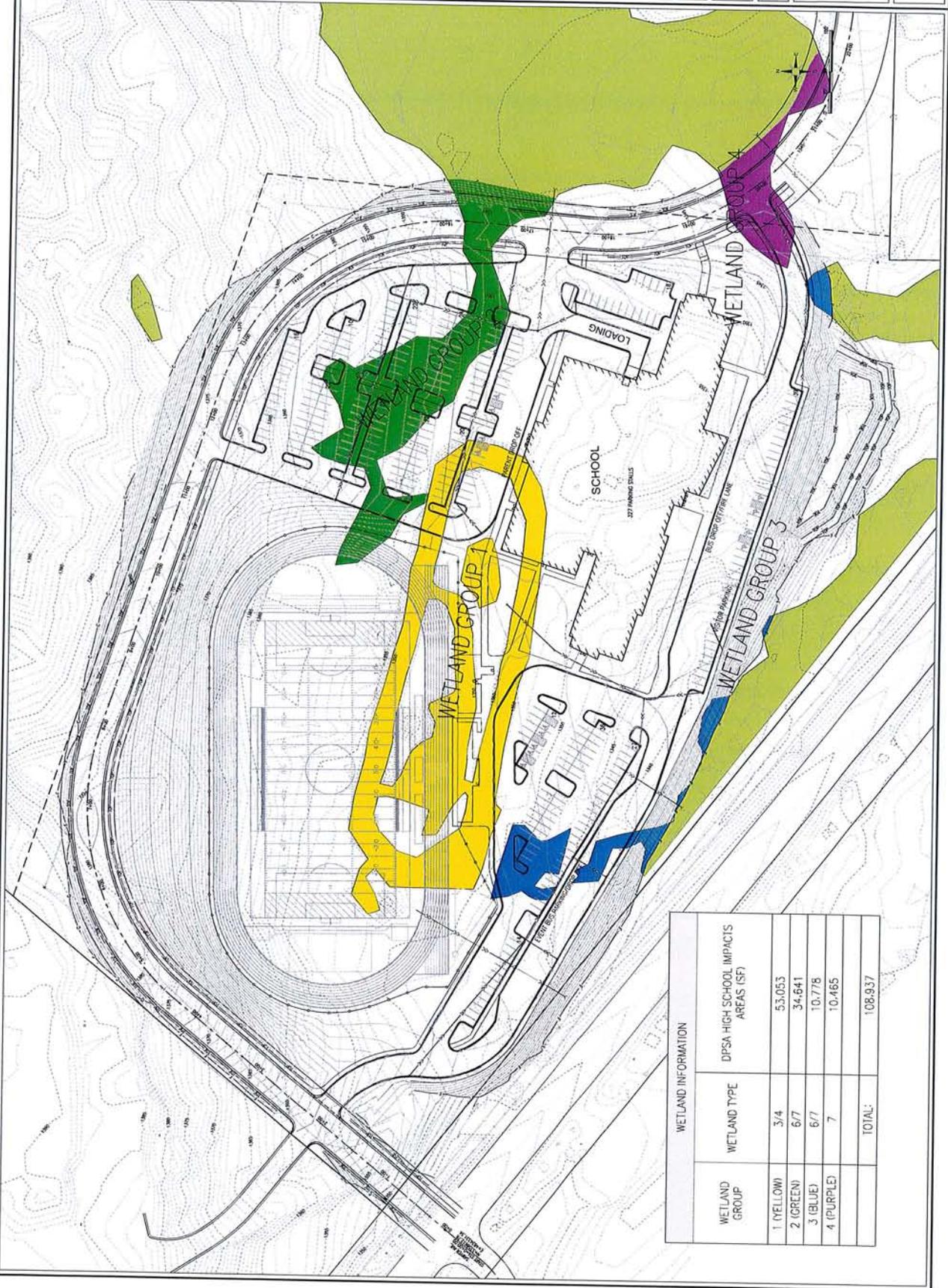
DRAWN BY: JDO

APPROVED BY: ABZ

SCALE: 1" = 10' AT FULL SCALE

KEY

SHEET NO. C4.0 SITE PLAN



WETLAND INFORMATION		DPSA HIGH SCHOOL IMPACTS AREAS (SF)
WETLAND GROUP	WETLAND TYPE	
1 (YELLOW)	3/4	53,053
2 (GREEN)	6/7	34,641
3 (BLUE)	6/7	10,778
4 (PURPLE)	7	10,465
TOTAL:		108,937

City of Duluth, Room 402 City Hall, Duluth, Mn 55802 (218) 723-3328

NOTICE OF WETLAND CONSERVATION ACT DECISION

Name of Applicant: George Hovland 218-626-1550
Snowflake Nordic Ski Facility 218-724-9022
4348 Rice Lake Road
Duluth, MN 55811

File Number: 01161

Type of Application: Certificate of No Loss

Findings: The project converts 1.3 acres of type 6/7 wetlands to type 3 wetlands.

Date of Decision: December 7, 2001

List of Addressees:

Applicant

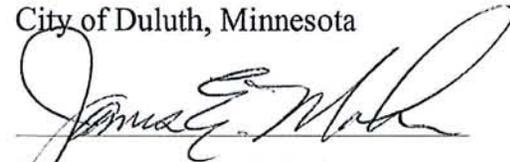
Robin Payne, So. St. Louis SWCD, 4850 Miller Trunk Hwy., Suite 2B, Duluth, MN 55811
Tim Peterson, USACOE, 1568 Highway 2, Two Harbors, MN 55616
Corps of Engineer Project Manager, USACOE, ATTN:CO-R, 190 5th St. E. St. Paul, MN 55101-1638
Mark Nelson, BWSR, 394 South Lake Avenue, Room 403, Duluth, MN, 55812
Department of Natural Resources Regional Office, 1201 East Highway 2, Grand Rapids, MN 55744
DNR Wetlands Coordinator , Ecological Services Section, 500 Lafayette Road, Box 25, St. Paul, MN 55155

You are hereby notified that the decision of the Local Government Unit on the above-referenced application was made on the date stated above. A copy of the Local Government Unit's Findings and Conclusions is attached. Pursuant to Minn. R. 8420.0250 any appeal of the decision must be commenced by mailing a petition for appeal to the Minnesota Board of Water and Soil Resources within fifteen (15) days of the date of the mailing of this Notice.

Date of mailing of this Notice:

December 7, 2001

City of Duluth, Minnesota



By: James E. Mohn

Title: Senior Planner

NA-02620-02

2/16/01

Minnesota Local/State/Federal Application Forms for Water/Wetland Projects

FOR INTERNAL USE ONLY

Application No. _____ and Office Code _____ Districtal Application No. _____ Districtal Application Districtal Code _____

DEC 04 2001

PART 1:
BASIC APPLICATION

Planning and Development

"See HELP" directs you to important additional information and assistance in Instructions, page 1.

1. APPLICANT CONTACT INFORMATION (See HELP 1):

Name: GEORGE HOVLAND

Complete mailing address: 600 HOVLAND
SNOWFLAKE DULUTH
4348 RICE LAKE RD. 55811

Residential phone: (218) 724-9022

Business phone: (218) 726-1550

Fax (if available): () _____

e-mail (if available): _____

1A. AUTHORIZED AGENT (See HELP 1A.)
(only if applicable; an agent is not required)

Name: _____

Title: _____

Mailing address: _____

Residential phone: () _____

Business phone: () _____

Fax (if available): () _____

e-mail (if available): _____

I hereby authorize _____
to act in my behalf as an agent in the processing of
this application and to furnish, upon request, supple-
mental information in support of this application.

Applicant signature _____ Date _____

2. PROJECT NAME OR TITLE (if applicable):

SNOWFLAKE OVAL

3. NAME OR I.D. # OF WATER BODY/BODIES IMPACTED**

(if applicable; if known): WATER HEAD
HEAD WATER - CHESTER CREEK

4a. ANY WETLANDS IMPACTED? (circle one) YES NO

4b. IF YES, what type (if known; circle all that apply):

1 1L 2 3 4 5 6 7 8 R unknown

4c. If YES, indicate size of entire wetland (check one):

Less than 10 acres (indicate size: 3 1/2 - 4)

10 to 40 acres

Greater than 40 acres

5. PROJECT LOCATION (information can be found on property tax statement, property title or title insurance):**

1/4 section: _____ Section: N 1/2 8 Township: 50 Range: 14 W

County: St. Louis Lot #: _____ Block: _____ Subdivision: _____

6. ADDITIONAL LOCATION DESCRIPTIONS (if applicable; if known):** Parcel ID #/Geocode: _____

UTM coordinates: easterly _____ northerly _____

Project street address: 4348 RICE LAKE ROAD Fire #: _____

**For multiple water bodies or locations, attach additional sheets labeled ADDITIONAL WATER BODIES IMPACTED, ADDITIONAL PROJECT LOCATIONS, or ADDITIONAL LOCATION DESCRIPTIONS.

7. HOW TO GET TO THE SITE: Attach a simple site locator map. If needed, include on the map written directions to the site from a known location or landmark. Include highway and street names and numbers. Also provide distances from known locations and any other information that would assist in locating the site. Label the sheet SITE LOCATOR MAP.

8. PURPOSE OF PROJECT: What do you propose to do, and why is it needed? Please be brief. (See HELP 8 before completing this section.) REMOVAL OF SAIL TO APPROX 1.5 - 2 FT BELOW STATIC H₂O LEVEL IN OVAL POND FOR USE AS ICE SPEED SKATING OVAL AND RECREATIONAL SKATING.

9. PROPOSED TIMELINE: Approximate project start date: 12-01 Projected end date: 1-02

10. PROJECT DESCRIPTION: Describe in detail what you plan to do and how you plan to do it. This is the most important part of your application. See HELP 10 before completing this section; see also What To Include on Plans (Instructions, page 2). If space below is not adequate, attach separate sheet labeled PROJECT DESCRIPTION.

EXCAVATE 1500 FT. X 25 FT. OVAL AND IRREGULAR 25000 FT² POND TO A DEPTH APPROX 1.5 - 2 FT. BELOW STATIC GROUND WATER LEVEL, REMOVING SEVERAL INCHES OF ORGANIC MATERIAL AND BALANCE OF SANDY/GRAVEL LOAM TO PROPOSED DEPTH. HAUL AWAY MATERIAL BY TRUCK TO THE CORNER OF RICE LAKE ROAD AND MARTIN ROAD INTERSECTION TO REUNITED FILL SITE - OTHER OWNERSHIP. EXCAVATION BY BACKHOE, TRUCK HAULING ON FROZEN SURFACE TO PAVED ROAD.

11. FOOTPRINT OF IMPACT (if applicable): Indicate total amount (in acres or square feet) of wetland(s) or water body area(s) to be filled, drained, inundated or excavated; and/or indicate length of stream or river affected (in linear feet).

1/3 acres or _____ square feet and/or _____ linear feet

12. TYPE AND ESTIMATED AMOUNT OF MATERIAL(S) TO BE PLACED INTO OR EXCAVATED FROM THE WETLAND OR WATER BODY (if applicable): List each type of material (such as rock, sand, clay, concrete) to be filled or excavated, and estimate amount in cubic yards.

FILLING

EXCAVATING

Type(s) of material	Estimated amount in cubic yards	Type(s) of material	Estimated amount in cubic yards
ORGANIC TOPSOIL	EST. - 500 CU. YDS	SANDY LOAM/CLAY	9000 CU. YDS

13. ESTIMATED PROJECT COST: 25,000 (for determination of DNR fees only, which are based on total project cost)

14. SEQUENCING CONSIDERATIONS: What alternatives to this proposed project have you considered that could have avoided or minimized impacts to wetlands or water? **List at least two alternatives** (one of which may be "no build" or "do nothing"), and explain why you chose to pursue the option described in this application over these alternatives.

1- NO BUILD
 2- WITHOUT NEGATIVELY IMPACTING EXISTING WETLAND THE PROPOSED PROJECT AND ULTIMATE USE BY THE PUBLIC WILL SERVE A USEFUL, CONSTRUCTIVE HEALTHY ACTIVITY VENUE FOR YOUNG AND OLD.

15. PORTION OF WORK ALREADY COMPLETED: Is any portion of the work already completed? _____ If yes, describe the completed work on a separate sheet of paper labeled *WORK ALREADY COMPLETED*. (See **HELP 15** before completing this section.)

NO PORTION OF AREA ONLY

16. ADJOINING PROPERTY OWNERS: For projects that impact more than 10,000 square feet of water or wetlands, list below complete names and mailing addresses of adjacent property owners whose property also adjoins the wetland or water body where the work is being proposed. (See **HELP 16**. If necessary, attach a separate sheet labeled *ADJOINING PROPERTY OWNERS*.)

Complete name(s) _____ Complete mailing address (including street address, city, state, zip code) _____

*RANDY NELSON - P.O. BOX 3303 - DULUTH,
 ARROWHEAD TRAILS & FITNESS - 4402 RICE LAKE RD, - DULUTH
 MINN. POWER - 3215 W. ARROWHEAD ROAD - DULUTH*

17. STATUS OF OTHER APPROVALS: List any other permits, reviews or approvals related to this proposed project that are either **pending** or **have already been approved or denied**. See **HELP 17**.

if already applied for

Agency _____ Type of approval _____ ID number _____ Date applied for _____ Date approved _____ Date denied _____

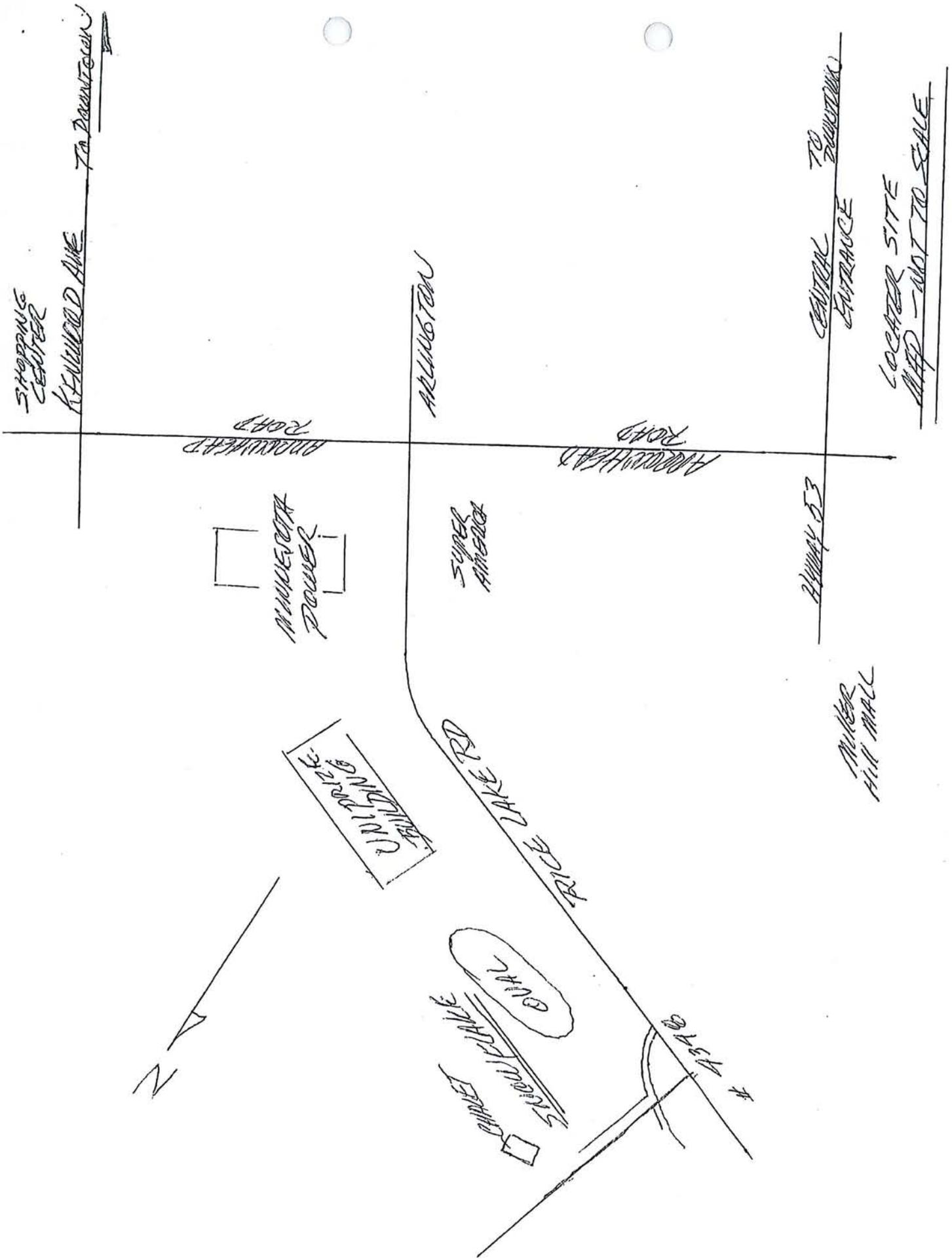
*CITY OF DULUTH SPECIAL USE PERMITS ONGOING SINCE 1993
 TO SEPT. 2000 - PERMIT # 93-0872*

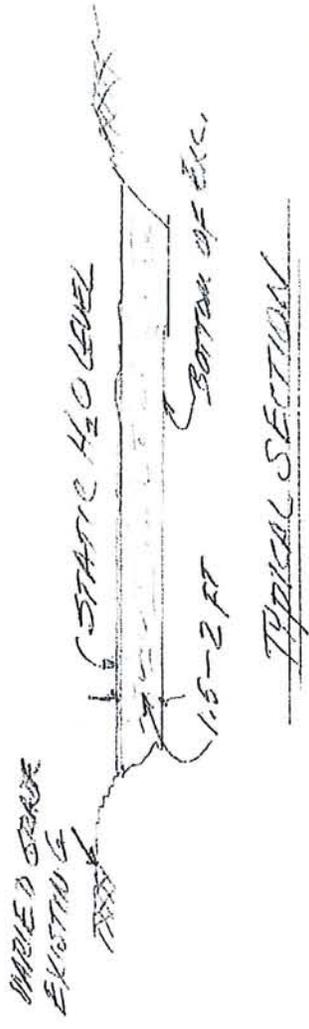
18. I am applying for state and local authorization to conduct the work described in this application. I am familiar with the information contained in this application. To the best of my knowledge and belief, all information in Part 1 is true, complete and accurate. I possess the authority to undertake the work described, or I am acting as the duly authorized agent of the applicant.

[Signature] _____ *12-5-01* _____
 Signature of applicant _____ Date _____ OR Signature of agent _____ Date _____

This block must be signed by the person who desires to undertake the proposed activity (the *applicant* in Section 1) **or** by the applicant's duly authorized *agent* (if the boxed Section 1A has been filled out and signed by the applicant).

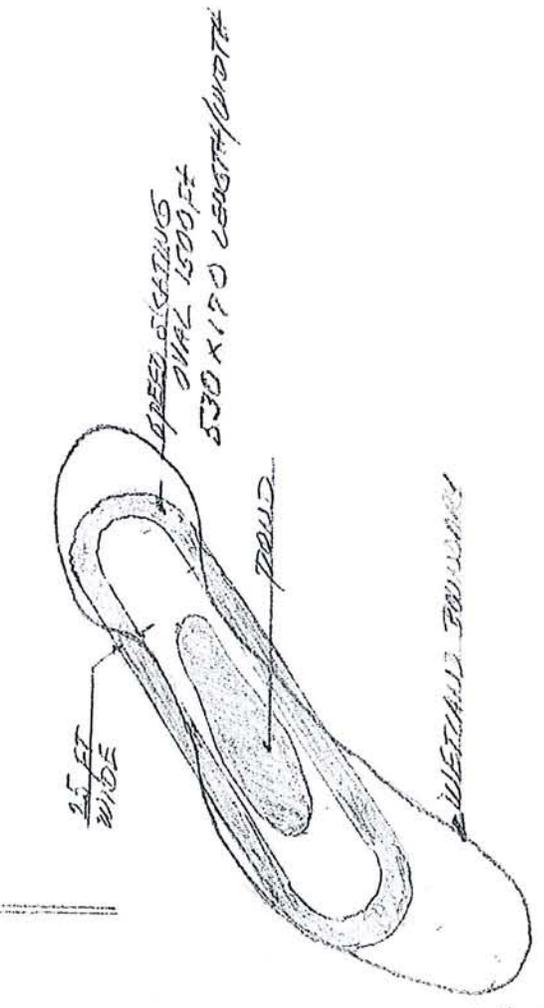
Federal authorization: Generally, in addition to state authorization, projects in wetland or water areas also require Federal authorization from the Corps of Engineers under Section 404 of the Clean Water Act. To apply to the Corps using this application package, the applicant/agent must complete the modified one-page Federal application form on page 4 and mail it to the Corps (address on Instructions, page 4) with a copy of the state application. Applicants may, if they wish, apply only for Corps authorization by using the unmodified Federal application form that is available from Corps offices or via the Internet at www.mvp.usace.army.mil



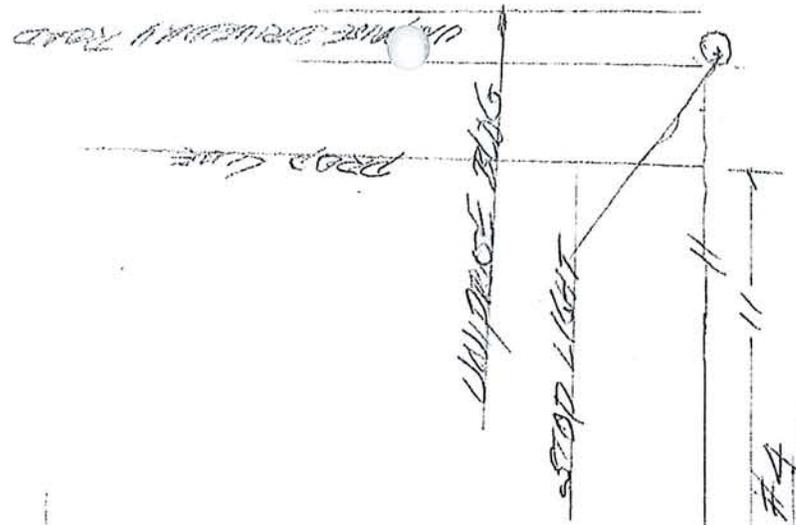


TYPICAL SECTION

SNOWFLAKE 192 ADJACENT XC SKI TRAILS



RICE LAKE ROAD COUNTY #4



AFFIDAVIT

EXEMPTION EVIDENCE FOR LOCAL GOVERNMENT UNITS (LGU)

I do hereby certify that the following statement of evidence or activity is true and may be used as evidence to support qualification for WCA exemptions.

The LGU may require additional affidavits or verification evidence before making an exemption determination.

Location: (County, Township, Range, Section 1/4, 1/4, 1/4)

City - St. Louis - Twp. #50 - Range 14W
SECTION N 1/2 - 8

Description of Evidence for Exemption: #

THERE WILL BE NO NET LOSS IN WETLAND AREA. PROPOSED TO CHANGE EXISTING TYPE 6/7 TO TYPE 3 WETLAND.

On penalty of perjury, I hereby swear under oath that the information above, made for the purpose of documenting qualification for an exemption from the WCA, is true to the best of my knowledge.

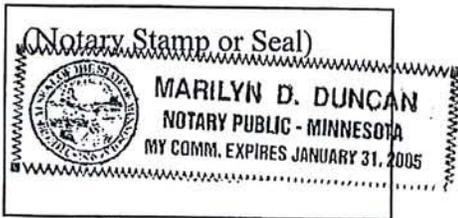
Signature [Handwritten Signature] Date

Social Sec. No. 475-20-3839

ACKNOWLEDGEMENT

The foregoing instrument was subscribed and sworn to before me on:

3rd (day), 12th (month), 2001 (year), by Marilyn D. Duncan



Minnesota Wetland Conservation Act
**APPLICATION FOR
 CERTIFICATE OF NO LOSS OR EXEMPTION***

APPLICANT AND PROJECT LOCATION INFORMATION

Name(s) of Applicant <u>GEORGE HOWLAND</u>	LGU: _____
Street Address <u>9378 RICE LAKE RD</u>	Project Location: T ___ R ___ S ___ 1/4 ___ 1/4 ___ 1/4 ___
City, State, Zip Code <u>DULUTH, MN, 55811</u>	UTM Coordinates: X: _____ Y: _____
Telephone (Day) (Evening) <u>218 7261550 - 7299022</u>	County Name/Number: _____
	Minor Watershed Name/Number: _____
	Size of entire wetland: _____ acres
	Wetland type: Circular 39 _____; NWI _____
	Check one: <input type="checkbox"/> <50% <input type="checkbox"/> 50%-80% or <input type="checkbox"/> > 80%
	Check one: <input type="checkbox"/> Agricultural land; <input type="checkbox"/> Non-ag. land

PROPOSED PROJECT DESCRIPTION

Describe the nature and purpose of the proposed project: TO CREATE A SPEED SKATING
ONAL AND RECREATIONAL SKATING AREA.

(attach additional pages if needed)

Timetable: project will begin on 12-01 (mo/day/yr) and will be completed by 1-02

The wetland activity at the above site qualifies for the following under the Wetland Conservation Act (WCA) (check one):

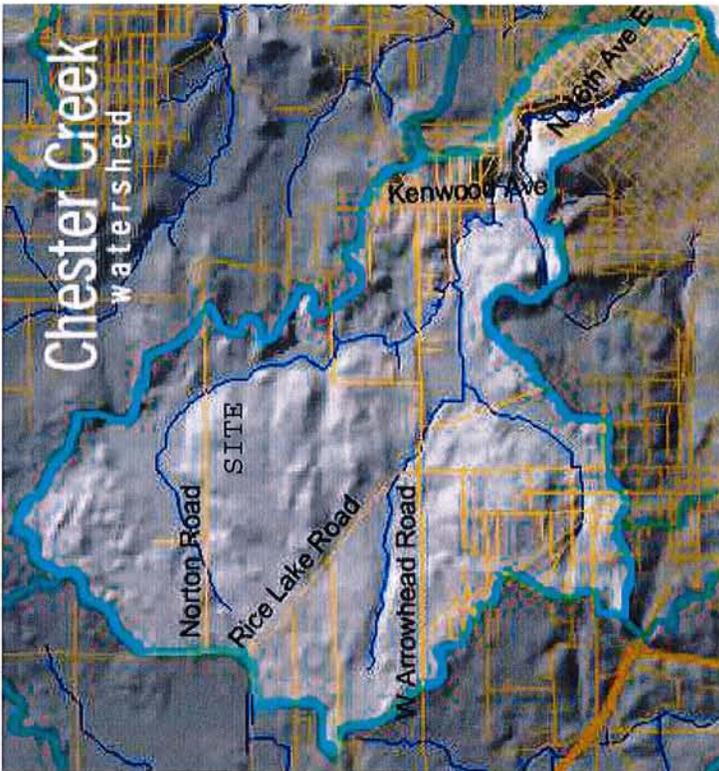
- No Loss Determination** (attach plans)
- Exemption # _____** (per MN Rule Chapter 8420.0122) (Note: Applicant is responsible for submitting the proof necessary to show qualification for the exemption claimed.)

Description of Exemption Claimed:
NO NET LOSS IN WETLAND AREA.
CHANGE EXISTING TYPE 0/7 TO TYPE 3

APPLICANT SIGNATURE

The information provided for this determination is truthful and accurate to the best of my knowledge. I ensure that, in draining or filling the subject wetland under an exemption noted above, appropriate erosion control measures will be taken to prevent sedimentation of the water, the drain or fill will not block fish passage, and the drain or fill will be conducted in compliance with all other applicable federal, state and local requirements, including best management practices and water resource protection requirements established under Minnesota Statutes, Chapter 103H.

[Signature] 12-3-01
 (Signature of Applicant) (Date)





County Land Explorer

St. Louis County, Minnesota



St. Louis County MN



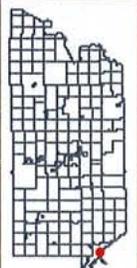
County Land Explorer

St. Louis County www.stlouiscountymn.gov/CountyLandExplorer Minnesota

Disclaimer

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ARMORY

OFF SITE ALTERNATIVE 1

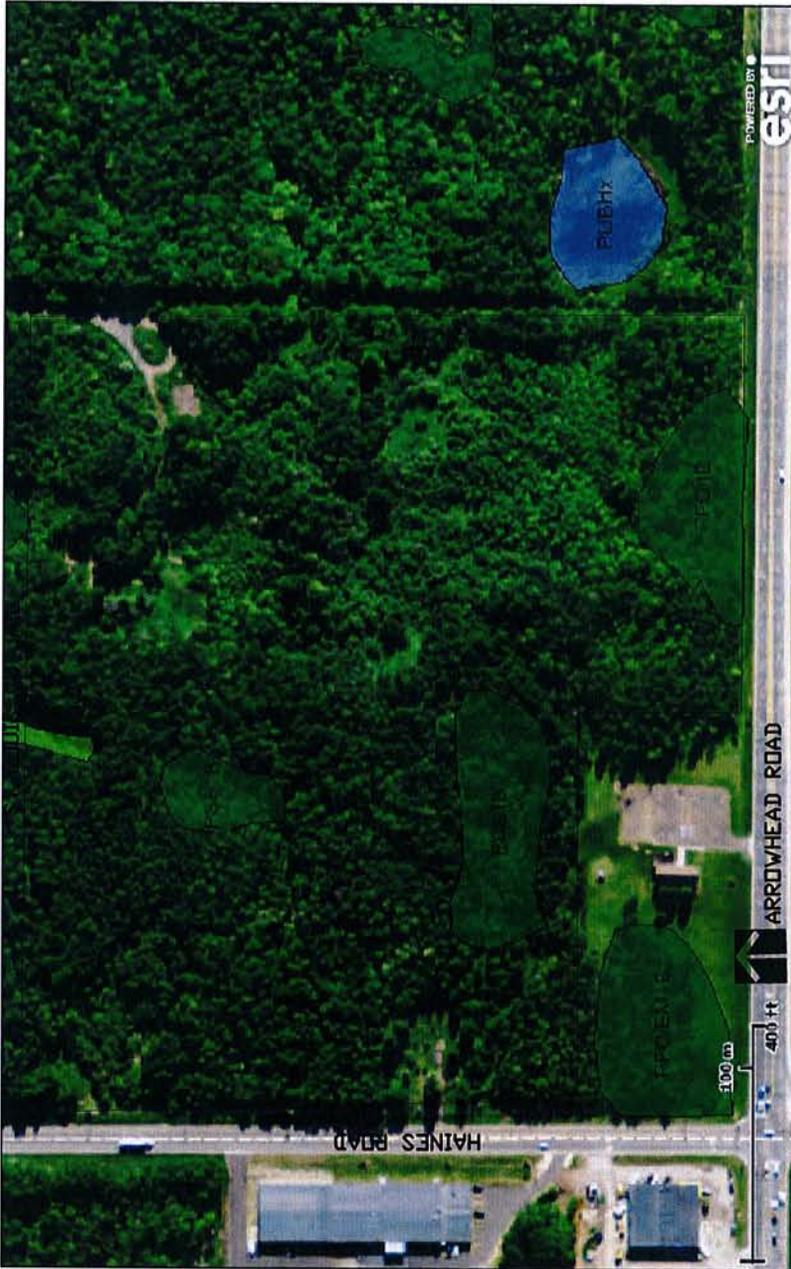
Map created using County Land Explorer
gis.stlouiscountymn.gov/CountyLandExplorer



U.S. Fish and Wildlife Service
National Wetlands Inventory

JAIL

Apr 5, 2016



This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:

Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

OFF SITE ALTERNATIVE 2



BLACKHOOF

DATE:

PACIFIC
EDUCATION
PARTNERS

PROJECT NAME:

SNOWFLAKE
HIGH SCHOOL

DATE FILED:

OFF SITE 2

FILE:

DATE BY:
PROJECT NO.:
FILE NO.:
DRAWING NO.



National Wetlands Inventory

U.S. Fish and Wildlife Service

SW QUADRANT

Apr 5, 2016



This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or completeness of any data or information contained in wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:

Wetlands

- Freshwater Emergent
 - Freshwater Forested/Shrub
 - Estuarine and Marine Deepwater
 - Estuarine and Marine
 - Freshwater Pond
 - Lake
 - Riverine
 - Other
 - EST. WETLAND IMPACTS
- ESTIMATED 110,894 SF
WETLAND IMPACTS MINIMUM
OFF SITE ALTERNATIVE 3



PACIFIC EDUCATION PARTNERS

PROJECT NAME: SNOWFLAKE HIGH SCHOOL

DATE: OFF SITE 3

FILE: SNOWFLAKE_HHS_030316.mxd

U.S. Fish and Wildlife Service
National Wetlands Inventory



Apr 5, 2016

NW SITE

- Wetlands**
- Freshwater Emergent
 - Freshwater Forested/Shrub
 - Estuarine and Marine Deepwater
 - Estuarine and Marine
 - Freshwater Pond
 - Lake
 - Riverine
 - Other
 - EST. WETLAND IMPACTS
- ESTIMATED 122,500 SF
 WETLAND IMPACTS MINIMUM
 OFF SITE ALTERNATIVE 4**



This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currency of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



User Remarks:

CLIENT:
 PACIFIC
 EDUCATION
 PARTNERS

PROJECT NAME:
 SNOWFLAKE
 HIGH SCHOOL

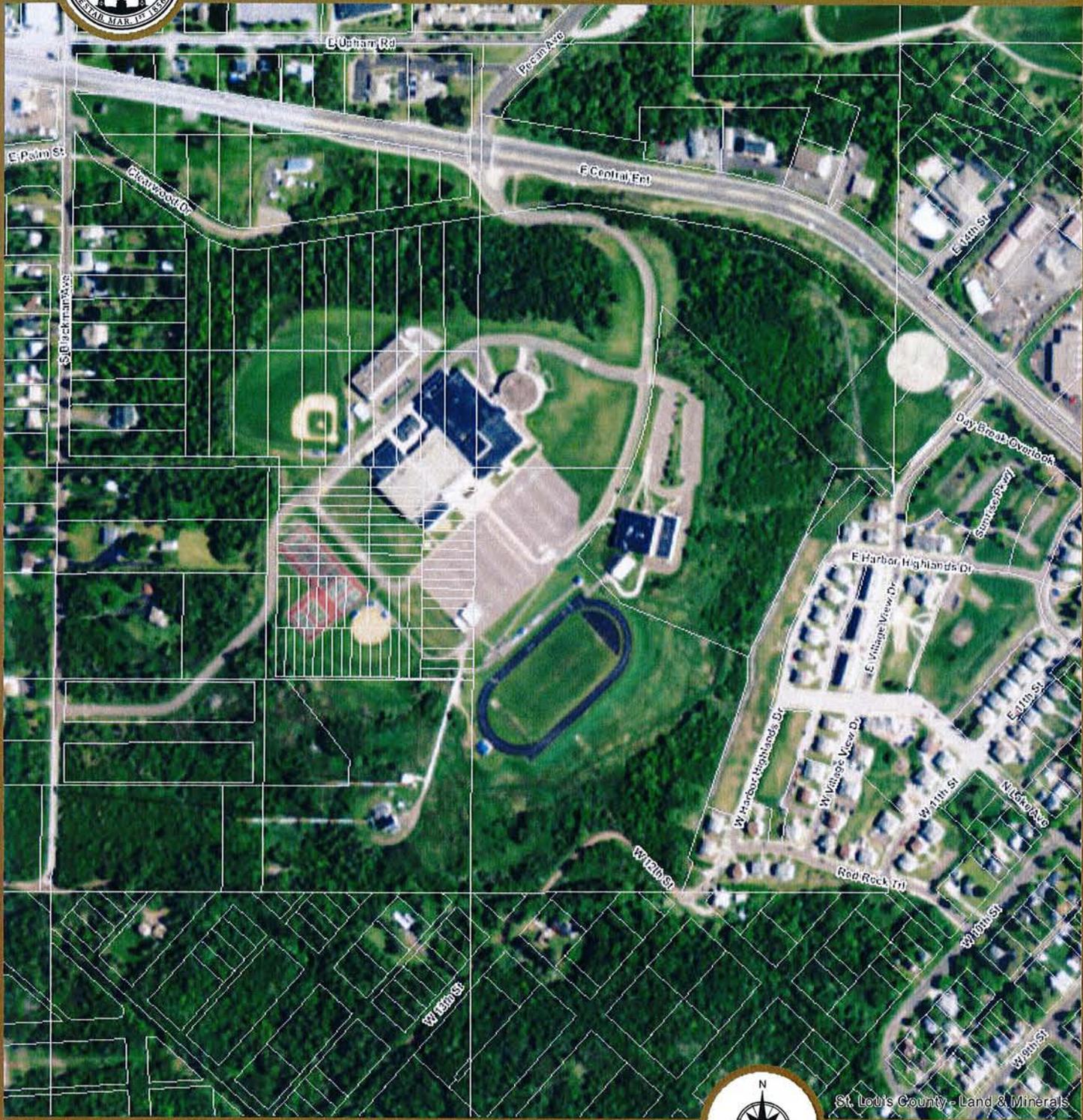
OWNER TITLE:
 OFF SITE 4

FILE:
 DRAWN BY:
 CHECKED BY:
 PROJ. NO. -
 DRAWING NO.



County Land Explorer

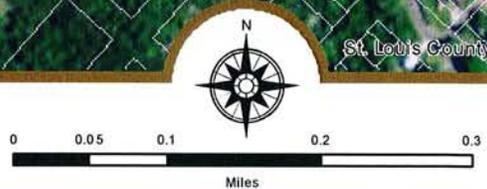
St. Louis County, Minnesota



St. Louis County - Land & Minerals

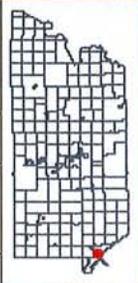
CENTRAL HIGH SCHOOL

OFF SITE ALT 5



County Land Explorer
St. Louis County www.stlouiscountymn.gov/CountyLandExplorer Minnesota

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Map created using County Land Explorer
gis.stlouiscountymn.gov/CountyLandExplorer

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New High School Building Must Have List

for 8th grade -- 6 classrooms, one a science lab

specialist programs, for music room attention paid to acoustical needs outlined in Wenger information

- band room

- instrument storage outside of the band room

- choir room w/ piano

- practice rooms

- classroom world languages 2

- 2 gyms, one full size for varsity sports and the other smaller

- weight room

- locker room

- 2 art rooms, one with kiln*

academic program high school

- 15 classrooms -- big enough for 32

- 4 science labs - big enough for 32

- 7 special education rooms -- resource, classroom testing, some could be smaller, two of the classrooms that are suites similar to JA suite at North Star Room A322 and 323

offices

principal, registrar, front office for two secretaries, 2 social workers, 2 counselors, school psychologist, evaluation coordinator, sped coordinator, 3 offices for tech staff, two offices for district staff, Dean of Students office – with reception area, office for dean, ISS rooms

nurse's office -- big enough for three-four cots for high school students

cafeteria

auditorium that minimally has capacity for 400

full kitchen (open to the idea of a serving kitchen if food service folks think that would work)

storage and receiving needs for building with about 900 students (8th grade and high school)

"commons" area

- display cases for awards, pictures, etc.

field for soccer initially (and in a few years football) with track around it

bathrooms to accommodate staff and 800 students

softball and baseball field(s)

additional parking area for 300 students and staff (beyond what is already available 126 or so at North Star) so total 425 spaces

staff lounge area

copy room and mailbox room

wireless access throughout the building

Technology Support

- (1) Adequately-sized equipment rooms with storage space
- (2) Centrally-located and easily accessed main hub room
- (3) Dedicated wiring (POE) for wireless access points
- (4) Sufficient electrical drops in classrooms, offices & labs (more than 2)
- (5) Integrated AV wiring in classroom for Smart board, audio and / or projector support
- (6) Integrated air-filtration system for hub room(s)
- (7) Integrated UPS (Uninterruptable Power Supply) for main network infrastructure & servers.
- (8) Digital PBX / Phone system with wiring to support system
- (9) One stationary computer lab with room for other tech and STEM equipment

Other Important Factors

- Safe connection to Rice Lake road with two ways in/out of campus
- Outdoor play area for North Star PE classes and recess near North Star

GUIDE FOR PLANNING SCHOOL CONSTRUCTION PROJECTS IN MINNESOTA

Below are selected excerpts from the Minnesota Department of Education guide related to school construction projects that pertain to charter school facilities challenges.

Part 1.02 Financing School Construction Projects

The State of Minnesota underwrites the bonds for all school district construction projects; helps fund most projects through debt service equalization payments, and funds on average 90% of the cost of programs and operations in state public school district facilities. Construction costs typically represent 10-20% of the lifetime cost of a school facility.

School districts have access to a variety of financing options for school construction projects. Determining what financing option is best for any project will depend on a variety of factors and will vary from project to project and school district to school district.

- General Obligation Bonds
- Alternative Facilities Bonding and Levy
- Building Bonds for Calamities/Emergency Management
- Bonds for Certain Capital Facilities
- Debt Service Equalization
- Disabled Access and Fire Safety Improvements
- Down Payment Levy
- Health and Safety
- Lease-Purchase Agreement and Lease-Levy
- Operating Capital Revenue
- Operating Referendum

Part 1.03 Loans, Grants, and Cooperative Agreements for School Construction Projects

- Capital Loan
- Cooperative Secondary Facilities Grant
- Energy Investment Loan
- Joint Powers Agreements for Facilities
- School Building Accessibility Capital Improvement Grant
- Technology and Telecommunications Grants
- State Grants

Part 2.05 Projecting Educational Program and Service Space Needs

Projecting what new or expanded programs and services need to be accommodated in school facilities can be a very difficult task. Few school facilities are constructed with space set aside for growth, and many lack adequate storage, office, and conference room spaces. Many new or renovated schools report that they are in need of additional spaces within two years of occupying new/renovated facilities.

What is clear is that schools need spaces for program and service as well as student enrollment growth. Listed below are a sample of school programs and services that have been added or

expanded in scope since publishing the 1988 Guide:

Part 2.07 Selecting a School Site

Adequate school site size is an important consideration in the commissioner's review and comment on any new/renovation

Site Selection Considerations

The selection of an adequate school site with expansion space will accommodate current and future educational programs and services, expanding student enrollments, increase community use of schools, and promote school-community partnerships.

Allow for current site size needs and future expansion possibilities. The basis of the following school site size guidelines are the experiences of school districts, school architects, and school facility planners in Minnesota and other states. **School site size guidelines refer to usable acres. Do not include wetlands or land for on-site water, sewer, or zoning setbacks as usable land for calculating acreage to meet the school site guidelines. The school site size ranges specified below allow for schools planning different grade organizations, student enrollment capacities, and current and future program, support, community use/partnership, and program expansion spaces for the school site and school.**

**TABLE I
SCHOOL SITE SIZE GUIDELINES**

SCHOOL LEVEL	SITE SIZE
ELEMENTARY SCHOOL	10-15 ACRES +
K-8 OR MIDDLE LEVEL SCHOOL	25-35 ACRES +

SECTION III. DESIGNING SCHOOL FACILITY SPACES

The purpose of Section III is to highlight important considerations in planning and designing school facilities, cite gross square footage, general space, and square footage guidelines, and identify the essential elements to consider in designing learning, school support, and community use/partnership spaces in elementary, middle level, and high schools. School districts and school facilities planning committees need to use this information to help understand the design parameters for school facilities that will be a part of a school facilities project proposal. Architects and other consultants working with school district staff must subsequently develop detailed specifications for each space. **Research studies are increasingly documenting the positive effect of quality school facilities, lighting, acoustics, and indoor air quality and ventilation on student achievement and health, so any efforts that support quality school facilities will pay important dividends for learners, school staff, and the parents that work with them.**

Part 3.04 Gross Square Footage and General Space Guidelines for Elementary, Middle Level, and High Schools

This part provides an overview of the gross square footage guidelines for elementary, middle level, and high schools of different student enrollments, and general space guidelines that apply to all school construction projects.

A frequent question is: "how many square feet do we need for an elementary/middle level/high school?" **Adequate square footage, flexible and adaptable school spaces, and spaces for program expansion are the keys to the long-term and cost efficient use of school facilities.** Without adequate school sites and school facilities square footage, space renovations and expansions are costly and perhaps impossible to make. Space inadequacies will continue and probably compound over time, and it will be difficult to meet student needs as desired or required. Too often, in an effort to reduce school facilities project costs, school boards reduce school learning and support space square footages that results in a lack of adequate storage and program expansion spaces. In reality, this approach will cost a school district and local taxpayers more money in the long run because ongoing maintenance costs will be greater in school facilities under stress, and any renovations or additions will only be more costly if not completed as originally planned. Within two years of project completion, many new or renovated schools report shortages of storage, support, and expandable learning and community use/partnership program spaces. **School districts are strongly encouraged to make adequate site size, space square footages, flexible/adaptable spaces, and spaces for program expansion a high priority, even if it means completing the project or fully equipping facilities at a later date.**

**TABLE III
GROSS SQUARE FOOTAGE
PER STUDENT GUIDELINES**

SCHOOL STUDENT ENROLLMENT	ELEMENTARY SF	MIDDLE SF	HIGH SCHOOL SF
LESS THAN 500	125 - 155	170 - 200	200 - 320
500 - 999	110 - 135	160 - 190	190 - 220
1000-1500	100 - 135	150 - 180	180 - 200
1500-2000			140 - 170

Part 4.08 Charter Schools and Private Schools

Charter schools are public schools under M.S. 124D.10, subd. 7, exempt from many laws and rules applicable to a school district, unless a charter school chooses to participate in programs that require compliance. Regarding school facilities, under M.S. 124D.11, charter schools may lease a building or land, use general and total capital operating revenues to maintain, repair, and renovate school facilities, but may not use money received from the State to purchase land or buildings. Charter schools and private schools must meet all state and local requirements relating to building codes or health and safety. If planning a comprehensive school program, charter and private schools should consider using the guidelines relating to school site, learning, and support spaces as contained in this Guide.

(<http://education.state.mn.us/mdeprod/groups/Finance/documents/Publication/003979.pdf>)

**Edison
High School
Initiated 11/4/2013
LHB #**

Students 900+
Updated March 17th

New				
Space/Group	QTY	SF	Subtotal	Comments
General Classroom Area				
8th Grade	6	900	5,400	Based on 40 students, min size rec 6 are recommended 6 are recommended
Math	4	900	3,600	
Social Studies	4	900	3,600	
Language Arts	4	900	3,600	
Foreign Language	2	900	1,800	
Growth Classroom	0	900	0	
Staff Planning	0	60	0	
Storage	4	300	1,200	
Small group	0	160	0	
Group Learning	0	1,500	0	
Subtotal			19,200	
Sciences				
Science (Physics, Bio, Chem)	5	1,800	9,000	Lecture lab combo, 40 students
Science Prep	3	100	300	
Science Storage	2	100	200	
Chemical Storage	1	100	100	
Subtotal			9,600	
Family & Consumer Science				
Foods Lab	0	1,500	0	
Multi-Purpose (Share w/ foods)			0	
Subtotal			0	
Industrial Tech				
Woods Shop	0	2,000	0	
Metals / Engines Shop	0	2,000	0	
Fab Lab	0	2,000	0	
Classroom	0	875	0	
Computer Lab	0	1,000	0	
Staff and Storage (Included in above shops)			0	
Subtotal			0	
Art				
Labs	2	1,400	2,800	Sized for 40
Staff and Storage	1	300	300	
Kiln Room	1	200	200	
Subtotal			3,300	
Music				
Instrumental Rehearsal Room	1	2,600	2,600	Sized for 80
Orchestra Rehearsal Room	0	2,000	0	Shared with instrument room
Vocal Rehearsal Room	1	1,600	1,600	Sized for 80
Office	1	150	150	
Library	1	150	150	
Practice Rooms	1	200	200	
Practice Rooms	2	75	150	
Uniforms Storage	1	150	150	
Instrument Storage	1	300	300	Recommend including in band room
Subtotal			5,300	

Computer Labs / Business

Business Education	0	900	0	
School Store	0	250	0	
Storage (Store)	0	100	0	
Computer Labs	0	1,000	0	
Technology Director (office/storaç	0	250	0	
Subtotal				0

Media/Library

Circ./Stacks/Seating	1	3,000	3,000	If not a media center, a resource commons is rec.
Small Group / Multimedia	2	150	300	
Workroom/Office/Periodicals	1	300	300	
Computer Lab	1	900	900	
Media Directors Office	0	150	0	
Subtotal			4,500	

Auditorium

400 Seats	0	5,000	0	Use locker rooms
Stage	1	2,400	2,400	
Scene Storage	1	400	400	
Dressing Rooms	0	200	0	
Makeup Rooms	1	100	100	
Toilets	0	60	0	
Ticket	0	80	0	
Control Room	1	120	120	
Costume Storage	1	200	200	
Subtotal			3,220	

Special Needs

Rooms	6	600	3,600	
Specialty Room	1	1,100	1,100	
Conference Room	1	150	150	
Subtotal			4,850	

Phy Ed

Health Classroom	0	1,000	0	Bleacher Seating for 400
Weight/Fitness Room	1	1,600	1,600	
Phy Ed/Athletic Storage	1	800	800	
Gym (2 Station)	1	12,000	12,000	
Multi Purpose	0	1,800	0	
Training Room	1	250	250	
Concession Stand	1	180	180	
Subtotal			14,830	

Locker Rooms

Boy's Physical Education Locker Rooms				
Boys Lockers	1	900	900	
Staff	1	120	120	
Toilet/Shower Area	1	350	350	
Boy's Team Locker Rooms				
Lockers	0	750	0	
Staff	0	250	0	
Girl's Physical Education Locker Rooms				
Lockers	1	900	900	
Staff	1	120	120	
Toilet/Shower Area	1	350	350	
Girl's Team Locker Rooms				
Lockers	0	750	0	
Staff	0	250	0	
Subtotal				2,740

School Administration

Administrator / Principal	1	200	200	
Dean	1	150	150	
Secretary/Receptionists/Waiting	1	400	400	
Workroom	1	150	150	
Records Storage / Vault	1	150	150	
Conference Room	1	150	150	
Toilets	1	80	80	
Registrar	1	120	120	
Athletic Director	0	120	0	
Social workers	2	120	240	
Counselors	2	120	240	
Evaluation Coordinator	1	120	120	
SPED Coordinator	1	120	120	
Tech Staff	3	120	360	
District Staff	2	120	240	
ISS	1	150	150	
Nurse's Office	1	150	150	
Waiting	1	80	80	
Toilets	1	80	80	
Cot room	1	180	180	
Storage	1	80	80	
Psychologist Office	1	120	120	
Subtotal			3,560	

Food Services

Cafeteria (300 Kids @15 SF Ea)	1	4,500	4,500	
Serving	1	900	900	
Food Prep	1	1,800	1,800	
Dry Food Storage	1	400	400	
Freezer	1	280	280	
Cooler	1	140	140	
Dishwasher	1	180	180	
Office	1	100	100	
Toilets/Lockers	1	150	150	
Staff Dining	1	500	500	
Subtotal			8,950	

Building Services

Recycle Room	1	200	200	
Laundry	0	200	0	
Custodial Closets	2	100	200	
Custodian Office	1	100	100	
Toilet	1	80	80	
Building Storage	2	400	800	
Receiving	1	250	250	
Toilets (Pair)	3	500	1,500	
Subtotal			3,130	

Total Programmed SF	83,180
25% circulation	20,795
Total SF	103,975

Site Elements

Parking for 300	90,000 SF	Includes UDC required islands
Bus loop for 15 (event parking for 120)	36,000 SF	
Outdoor Classrooms	2 1,800 SF	
HS Soccer Field (190x300)	67,200 SF	Includes 10' safety zone
400 M Track	80,000 SF	around the soccer field
	275,000 SF	
	6 Acres	



BLACKHOOF



DATE:

PACIFIC
EDUCATION
PARTNERS

PROJECT NAME:

SNOWFLAKE
HIGH SCHOOL

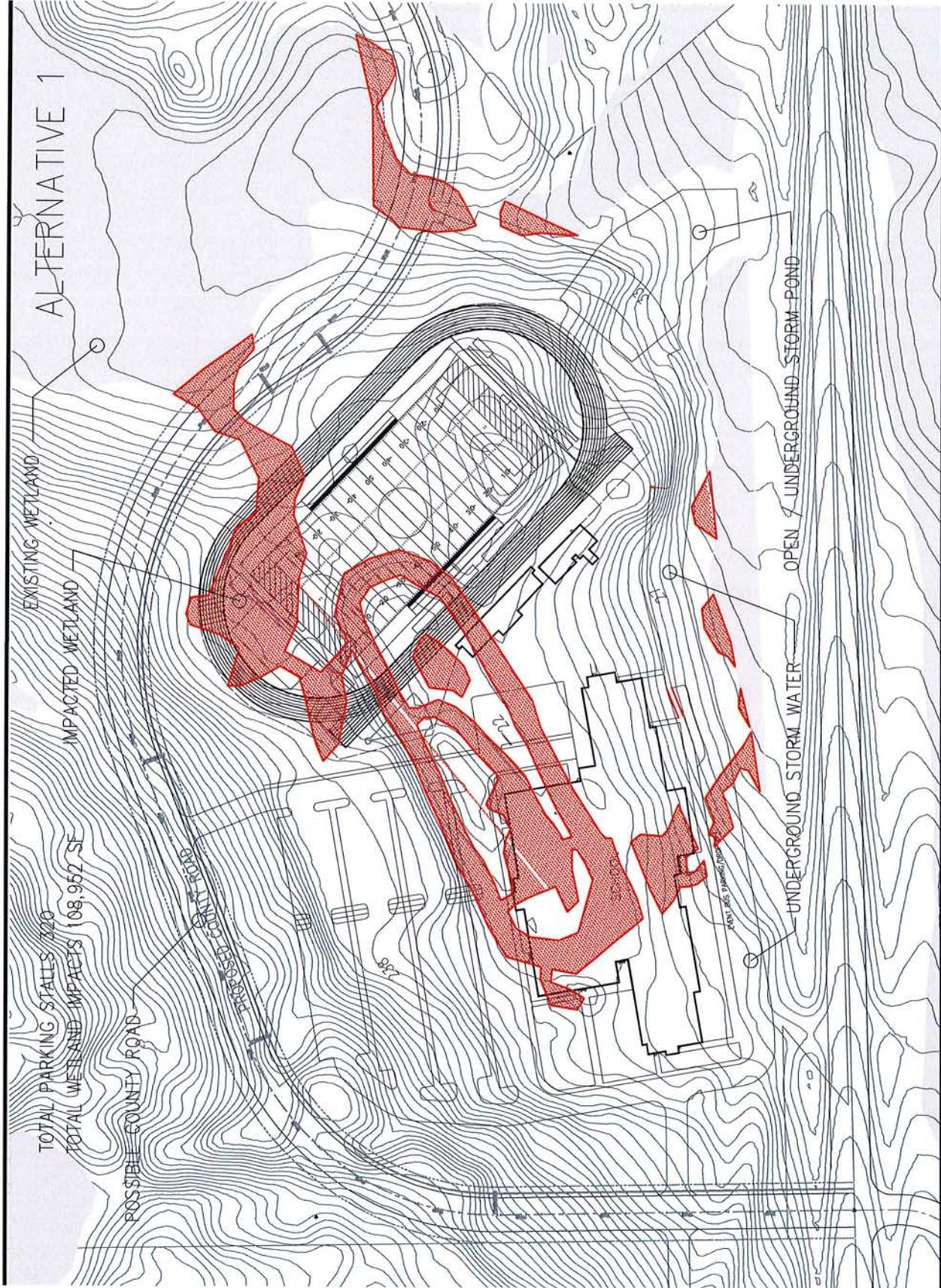
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DPSA 8-12
ALTERNATIVE 1

FILE:

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CHECKED BY:
PROJECT NO. -
DATE:

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DATE:

PACIFIC
EDUCATION
PARTNERS

PROJECT NAME:

SNOWFLAKE
HIGH SCHOOL

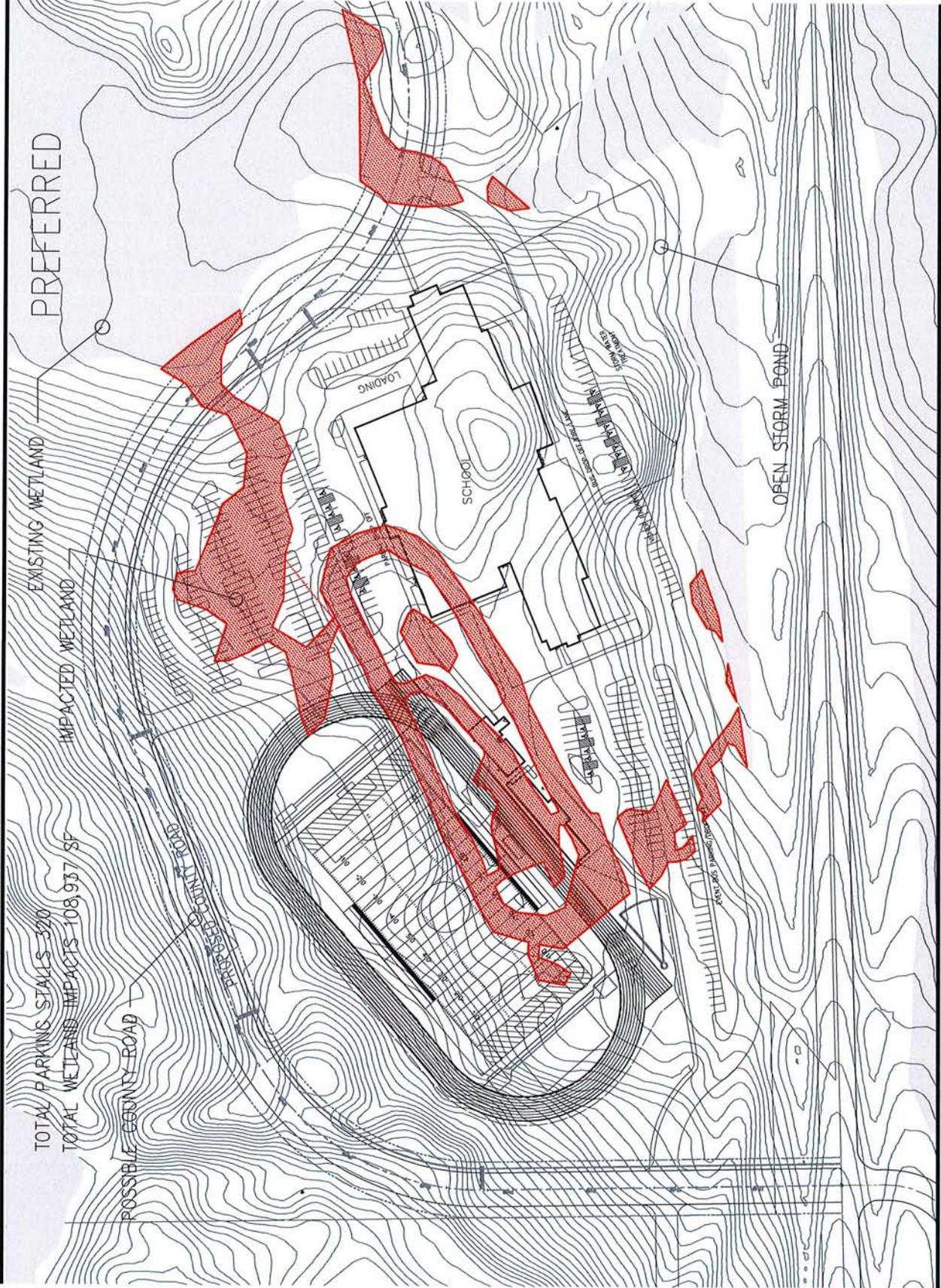
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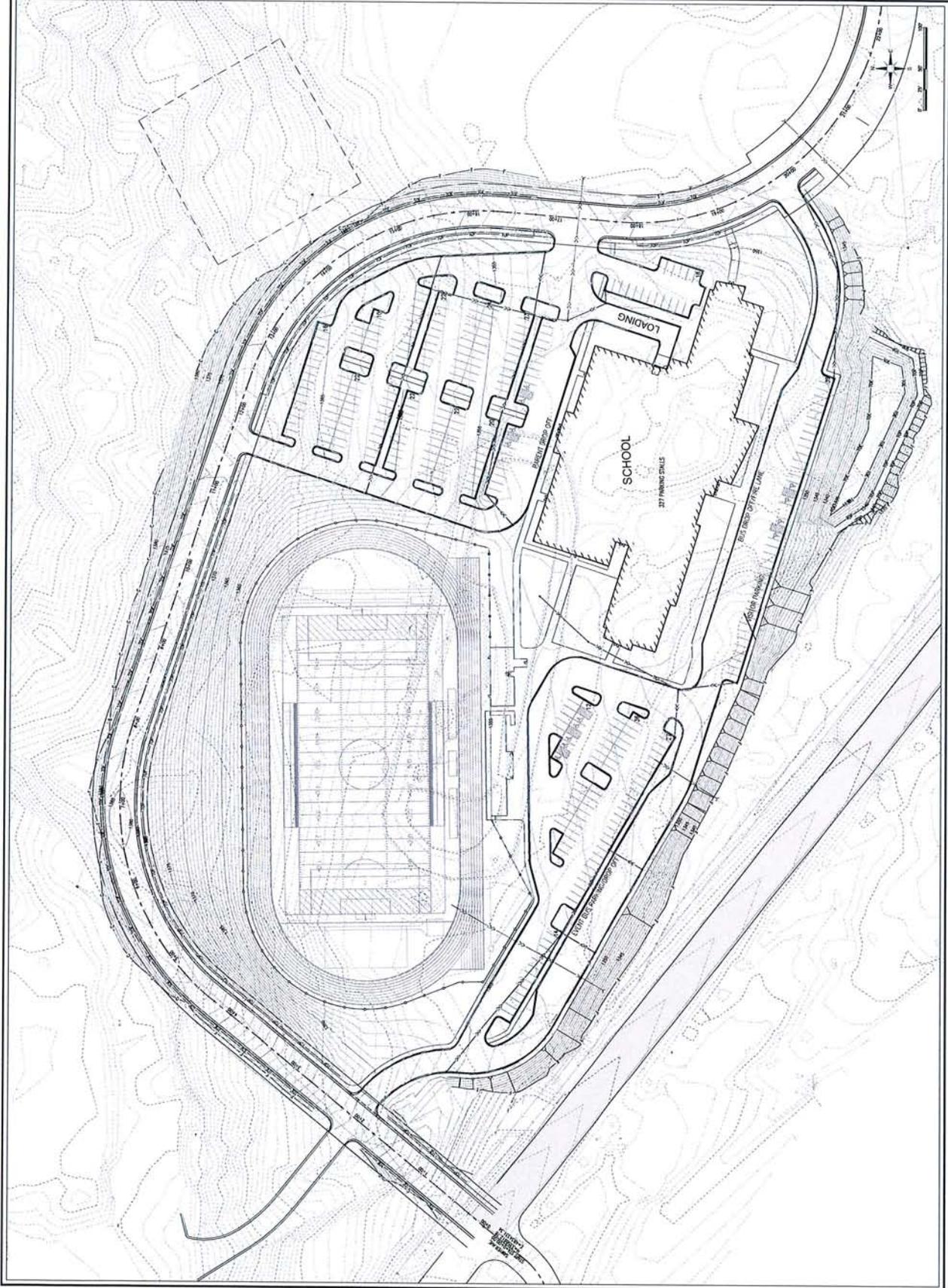
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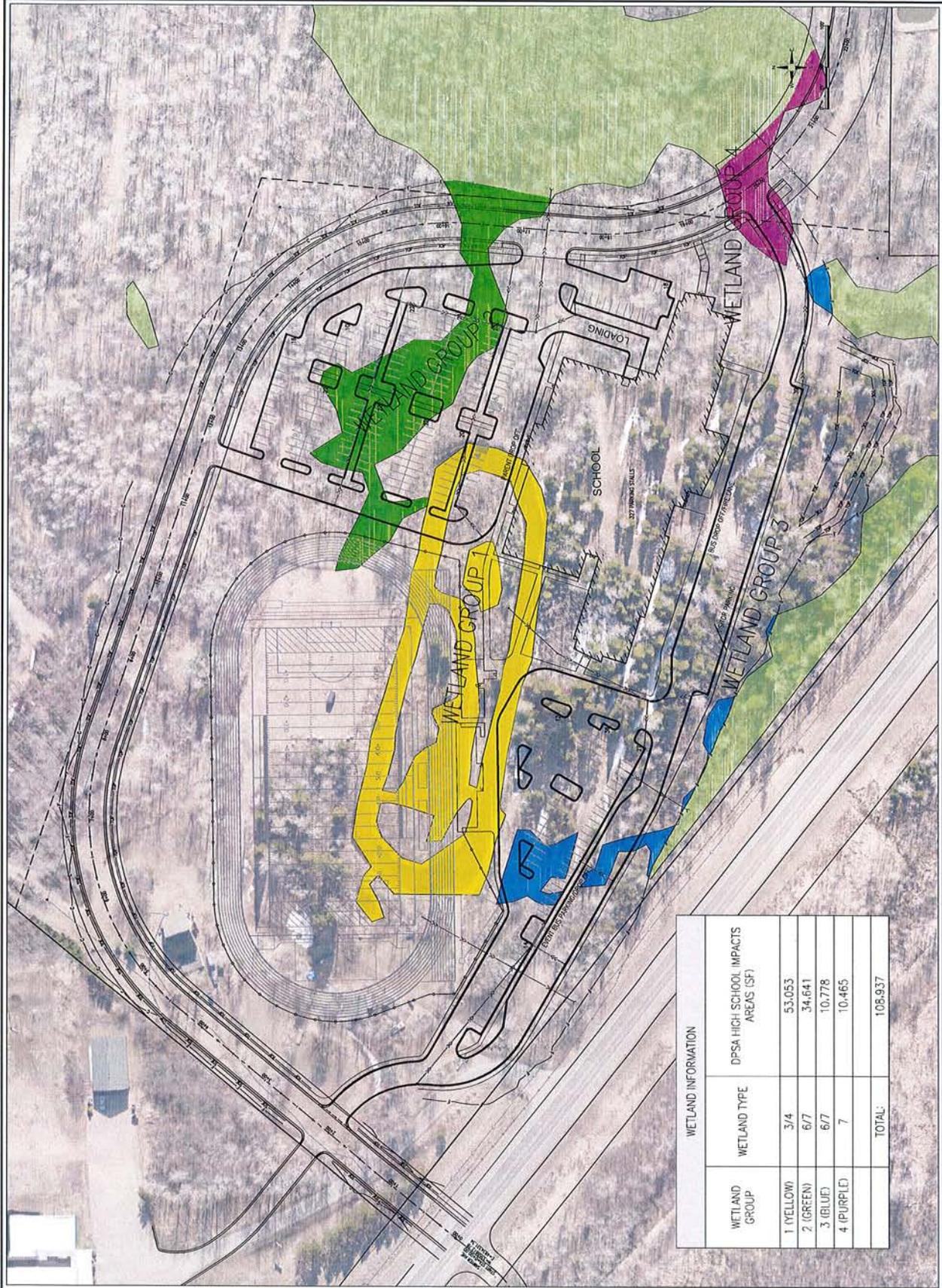
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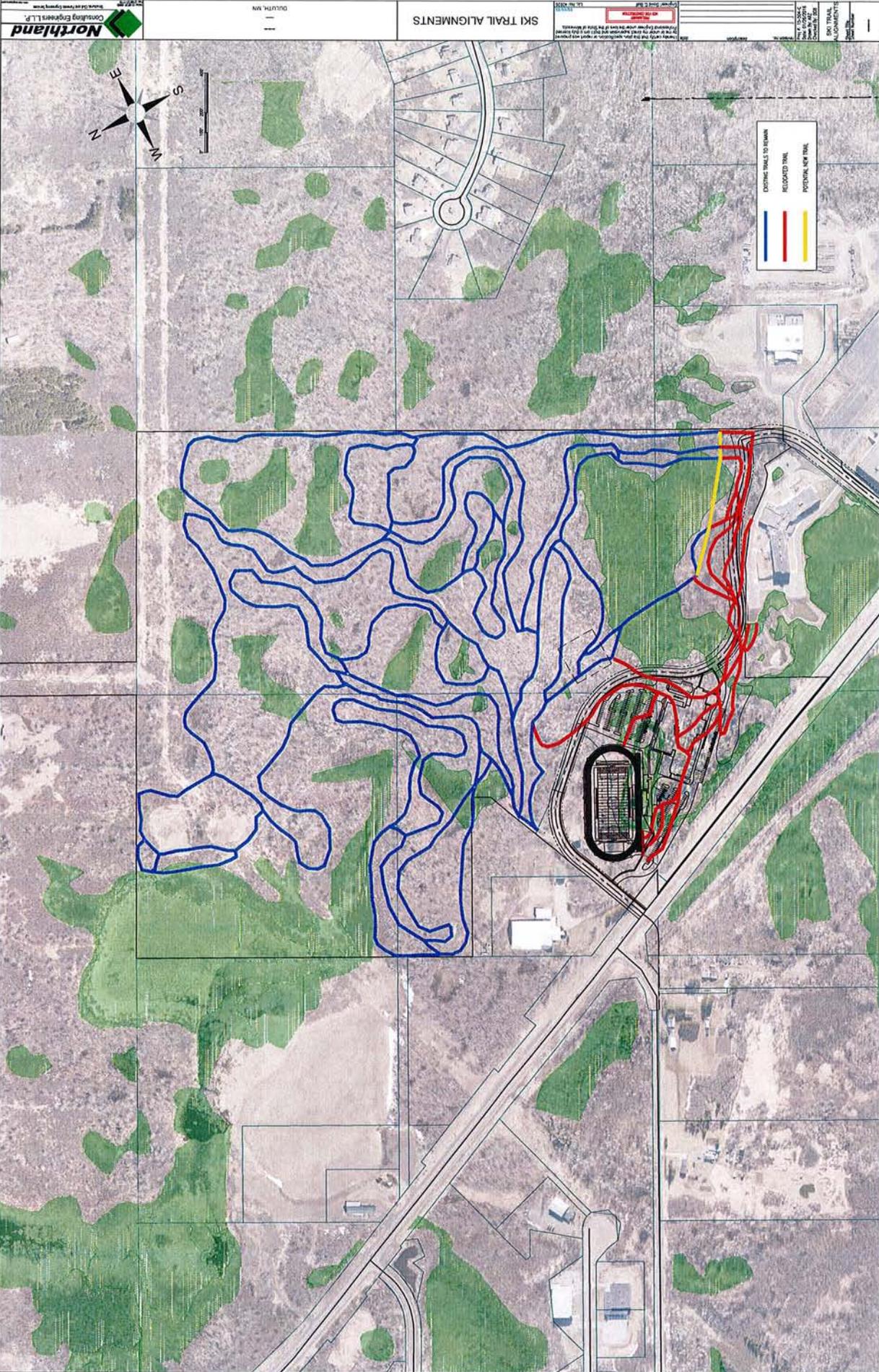
				<small>THIS SET OF DRAWINGS AND ALL SPECIFICATIONS OR NOTICES WAS PREPARED BY AN ARCHITECT OR ENGINEER REGISTERED UNDER THE LAWS OF THE STATE OF MINNESOTA. <small>DATE OF PREPARATION: 04/03/2016</small></small>	<small>OWNER: PROJECT OWNER: DULUTH, MINNESOTA 55811</small>	<small>REVISED</small>	<small>ISSUED DATE: 04/03/2016</small>	<small>PROJECT NO.: 15-504-C</small>	<small>DRAWN BY: JDO</small>	<small>APPROVED BY: ARZ</small>	<small>SCALE = 1" = 2' AT FULL SCALE</small>	<small>KEY</small>	<small>SHEET NO. C5.0</small>



					<p>PROPOSED BUILDING FOR: DECS 8-12 SCHOOL 43XX RICE LAKE ROAD DULUTH, MINNESOTA 55811</p>	PROJECT OWNER:
						REVISIONS:
ISSUED DATE: XX-XX-XXXX						
PROJECT NO: 15-004-C						
DRAWN BY: JDO						
APPROVED BY: ARE						
SCALE: 2" AT FULL SCALE						
REF:						
SHEET NO.:						



WETLAND INFORMATION		
WETLAND GROUP	WETLAND TYPE	DPSA HIGH SCHOOL IMPACTS AREAS (SF)
1 (YELLOW)	3/4	53,053
2 (GREEN)	6/7	34,641
3 (BLUE)	6/7	10,778
4 (PURPLE)	7	10,465
TOTAL:		108,937



Minnesota Wetland Conservation Act

Notice of Decision

Local Government Unit (LGU) City of Duluth	Address Planning Division, 208 City Hall Duluth, MN 55802
--	--

1. PROJECT INFORMATION

Applicant Name Duluth Public Schools Academy (Landowner: Pacific Education Partners)	Project Name DPSA High School	Date of Application April 8, 2016	Application Number PL 16-018
<input type="checkbox"/> Attach site locator map. Application attached.			

Type of Decision:

<input type="checkbox"/> Wetland Boundary or Type	<input type="checkbox"/> No-Loss	<input type="checkbox"/> Exemption	<input type="checkbox"/> Sequencing
<input checked="" type="checkbox"/> Replacement Plan		<input type="checkbox"/> Banking Plan	

Technical Evaluation Panel Findings and Recommendation (if any):

<input type="checkbox"/> Approve	<input type="checkbox"/> Approve with conditions	<input checked="" type="checkbox"/> Deny
----------------------------------	--	--

Summary (or attach): Information reviewed for TEP recommendation: amended Wetland Replacement Plan (Received April 8, 2016), Response to TEP Questions on May 2, 2016 (Received May 9, 2016), USACE Correspondence, Bois Forte Tribal Government and US EPA Region 5 (Received May 16, 2016).

2. LOCAL GOVERNMENT UNIT DECISION

Date of Decision: May 18, 2016	
<input type="checkbox"/> Approved	<input type="checkbox"/> Approved with conditions (include below) <input checked="" type="checkbox"/> Denied

The Wetland Replacement Plan is Denied based on 8420.0520 SEQUENCING. Subpart 1. Requirement. The local government unit must not approve a wetland replacement plan unless the local government unit finds that the applicant has demonstrated that the activity impacting a wetland complies with all of the following principles in descending order or priority:

- A. avoids direct or indirect impacts that may destroy or diminish the wetland
- B. minimizes impacts by limiting the degree or magnitude of the wetland activity

8420.0520 Subp. 3. Impact avoidance (2) The local government unit must determine whether any proposed feasible and prudent alternatives are available that would avoid impacts to wetlands.

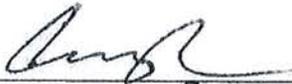
The Wetland Replacement Plan did not adequately provide off- site alternatives or alternate project configurations. Off- site alternatives provided in the plan were not seriously considered as alternatives and rejected out of hand according to the application (sites 1 and 2, Armory and County Jail), or project elements were not designed to fit around the wetlands identified (sites 3 and 4, Arlington Road or Arrowhead Road). The applicant did not demonstrate to the LGU's

AUTHORIZATION

Pacific Education Partners, authorizes Attorney Gary R. Leistico and the law firm of Rinke Noonan, to act as its agent and sign on its behalf for all matters having to do with the Wetland Application dated April 6, 2016, and submitted April 8, 2016, the Minnesota Wetland Conservation Act Notice of Decision dated May 18, 2016, to be appealed to the Duluth Planning Commission, the Local Government Unit administering the Wetland Conservation Act, Minnesota Statutes Chapter 103G, Rules Part 8420, the Minnesota Board of Water and Soil Resources, any judicial courts, or any other government agencies, and all documents to perfect said appeal and all associated matters or appeals relating to the property located at 43XX Rice Lake Road, in the City of Duluth, State of Minnesota.

Pacific Education Partners

Dated: 6/14/2016

By 
Its CALEB ZOIPE, PRESIDENT

AUTHORIZATION

Duluth Public Schools Academy, authorizes Attorney Gary R. Leistico and the law firm of Rinke Noonan, to act as its agent and sign on its behalf for all matters having to do with the Wetland Application dated April 6, 2016, and submitted April 8, 2016, the Minnesota Wetland Conservation Act Notice of Decision dated May 18, 2016, to be appealed to the Duluth Planning Commission, the Local Government Unit administering the Wetland Conservation Act, Minnesota Statutes Chapter 103G, Rules Part 8420, the Minnesota Board of Water and Soil Resources, any judicial courts, or any other government agencies, and all documents to perfect said appeal and all associated matters or appeals relating to the property located at 43XX Rice Lake Road, in the City of Duluth, State of Minnesota.

Duluth Public Schools Academy

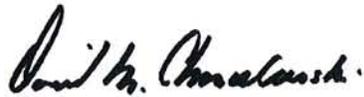
Dated: June 15, 2016

By Cynthia A. Palmer
Its President

AUTHORIZATION

I, David Chmielewski, authorize Attorney Gary R. Leistico and the law firm of Rinke Noonan, to act as his agent and sign on his behalf for all matters having to do with the Wetland Application dated April 6, 2016, and submitted April 8, 2016, the Minnesota Wetland Conservation Act Notice of Decision dated May 18, 2016, to be appealed to the Duluth Planning Commission, the Local Government Unit administering the Wetland Conservation Act, Minnesota Statutes Chapter 103G, Rules Part 8420, the Minnesota Board of Water and Soil Resources, any judicial courts, or any other government agencies, and all documents to perfect said appeal and all associated matters or appeals relating to the property located at 43XX Rice Lake Road, in the City of Duluth, State of Minnesota.

Dated: 6-14-16



David Chmielewski

CITY OF DULUTH – WCA TEP

Friday, December 10, 2015, at 2:30 PM

Room 207 located on the Second Floor, Duluth City Hall

MINUTES

Attendance: Steven Robertson (City of Duluth), R.C. Boheim (South St. Louis SWCD), Daryl Wiezbinski (USACE), David Chmielewski (Blackhoof), Greg Strom (GPS Foundations), and David Bolf (NCE)

1. Wetland Impacts for Proposed Edison Project on Rice Lake Road.

Chmielewski, Strom, and Bolf discussed potential scope and impacts of Edison High School project. Robertson talked about application deadlines for variances (parking) and special use permit (high school in a RR-1 zone). Wiezbinski talked about the need for off-site alternatives; applicant should not just assume that this is the only location that will work for their project. Off-site evaluation would be part of the alternative analysis under NEPA and the 404 guidelines; a project with significant environmental impacts would need to be presented to the public and related agencies for review and comments.

2. Other Business

None. Adjourned 3:30 PM.

CITY OF DULUTH - TEP REVIEW

Tuesday, March 8, 2016, at 9:00 AM

City Hall Room 207

MINUTES

Attendance: R.C. Boheim (SWCD), Steven Robertson (City of Duluth), Daryl Wiezbinski (USACE), Dale Krystosek (BWSR), David Chmielewski (Blackhoof/Applicant's Representative), Ray Higgins (Minnesota Timber Producers Association)

1. Duluth Public Schools Academy Wetland Replacement Plan

David C shared rules from the US Fish and Wildlife Services, that restrict tree removal of a bat occupied roost tree, or any tree within 150 feet of a known roost tree, between June 1 and July 31, or removing any trees within .25 miles of a bat hibernaculum at any time of the year.

Daryl W reminded the group that we have not yet received a complete application.

David C stated that his client is interested in removing trees from the site, preferably for a new high school, but if for nothing possibly for additional parking spaces or recreation or athletic field.

Steven R explained that the City's tree preservation plan requires, once approved, replacement of a certain amount of tree DBH (Diameter at Breast Height) based on the size of trees removed. If trees are not replaced on site, then there must be a fee paid in lieu of to allow the city to plant trees on other sites.

Darryl W stated that cutting trees is one thing, but grubbing trees, blading wetlands, depositing fill in wetlands, etc, is not allowed without the proper approvals.

David C stated that the site is 160 acres, but only a small portion, about 18 acres, is buildable. The rest of the site has wetland or slope challenges, and there is a restrictive covenant on a portion of the lot. R.C. added that he understands that there are some challenges with the site, but that doesn't excuse the property owner from meeting the WCA requirements, and they could have chosen other sites.

Darryl W stated that he needs a lot more information on alternatives before he can agree that this site is a preferred alternative. The application is incomplete until more, detailed, information is provided. Darryl W added that this project may actually work on other sites that have fewer wetland impacts; through sequencing a successful project shows layouts and concept plans that clearly indicate that other sites were seriously considered.

R.C. gave some background information to the group on the 2010 elementary school project. Dale K wanted to make sure he understands that the applicant's preferred alternative impacts about 2 acres of wetlands. R.C stated the wetland has been modified by the previous property owner, by excavation in the wetland to create a speed skating track.

Darryl W stated that a complete application would show that at least 3 other sites were seriously considered prior to assuming that this is the preferred site. It was noted that some of the information on alternative sites was from the 2010 elementary school selection process. Darryl W highlighted that this will be a public process and that other reviewers will need as much good and complete application as can be submitted. Dale K added that the alternative sites need to be honest and good faith efforts, not an exercise in paperwork.

Steven R stated that to the best of his knowledge that the zoning approval (special use permit) will require a second access and road to handle all the additional, and existing, traffic from the schools. Darryl W suggested that the entire length of proposed road should be included in the plan as part of the project. Steven R stated that he believed a portion of the road should be included, but the second/eastern "leg" of the road (behind Involta and MN Power) is a distinctive and different part of the road project, and would prefer to not include it in the wetland impacts for the high school. The second leg has a legitimate purpose in serving the area, even if the high school is never built.

R.C. summed up that the application needs to be submitted with complete and accurate information, especially information fully exploring the alternative locations that were looked at for this 2016 high school project.

Meeting conclude at 10:30

PART ONE: Applicant Information

If applicant is an entity (company, government entity, partnership, etc.), an authorized contact person must be identified. If the applicant is using an agent (consultant, lawyer, or other third party) and has authorized them to act on their behalf, the agent's contact information must also be provided.

Applicant/Landowner Name: PACIFIC EDUCATION PARTNERS
Mailing Address: 430 E. State Street, Suite 100, Eagle, ID 83616
Phone: 208.908.4865
E-mail Address: calebr@tpchousing.com

Authorized Contact (do not complete if same as above): DULUTH PUBLIC SCHOOLS ACADEMY
#4020, Bonnie Jorgenson
Mailing Address: 3301 Technology Drive, Duluth, MN 55811
Phone: (218) 728-9556
E-mail Address: Bonnie.Jorgenson@duluthedison.com

Agent Name: David Chmielewski, Blackhoof
Mailing Address: 2020 14th Street, Cloquet, MN 55720
Phone: 218-384-9727
E-mail Address: dave@blackhoof.com

PART TWO: Site Location Information

County: ST LOUIS **City/Township:** DULUTH
Parcel ID and/or Address: 43XX Rice Lake Rd, Duluth, MN 55811
Legal Description (Section, Township, Range): NW1/4, SE1/4 Section 8, Township 50 Range 14 West
Lat/Long (decimal degrees): 48.828959 , -92.132511
Attach a map showing the location of the site in relation to local streets, roads, highways.
Approximate size of site (acres) or if a linear project, length (feet): 22 ACRES

If you know that your proposal will require an individual Permit from the U.S. Army Corps of Engineers, you must provide the names and addresses of all property owners adjacent to the project site. This information may be provided by attaching a list to your application or by using block 25 of the Application for Department of the Army permit which can be obtained at:

http://www.mvp.usace.army.mil/Portals/57/docs/regulatory/RegulatoryDocs/engform_4345_2012oct.pdf

PART THREE: General Project/Site Information

If this application is related to a delineation approval, exemption determination, jurisdictional determination, or other correspondence submitted *prior to* this application then describe that here and provide the Corps of Engineers project number.

Describe the project that is being proposed, the project purpose and need, and schedule for implementation and completion. The project description must fully describe the nature and scope of the proposed activity including a description of all project elements that effect aquatic resources (wetland, lake, tributary, etc.) and must also include plans and cross section or profile drawings showing the location, character, and dimensions of all proposed activities and aquatic resource impacts.

see attached

PART FOUR: Aquatic Resource Impact¹ Summary

If your proposed project involves a direct or indirect impact to an aquatic resource (wetland, lake, tributary, etc.) identify each impact in the table below. Include all anticipated impacts, including those expected to be temporary. Attach an overhead view map, aerial photo, and/or drawing showing all of the aquatic resources in the project area and the location(s) of the proposed impacts. Label each aquatic resource on the map with a reference number or letter and identify the impacts in the following table.

Aquatic Resource ID (as noted on overhead view)	Aquatic Resource Type (wetland, lake, tributary etc.)	Type of Impact (fill, excavate, drain, or remove vegetation)	Duration of Impact Permanent (P) or Temporary (T) ¹	Size of Impact ²	Overall Size of Aquatic Resource ³	Existing Plant Community Type(s) in Impact Area ⁴	County, Major Watershed #, and Bank Service Area # of Impact Area ⁵
3/4	WETLAND	FILL	P	53053	923472	PUB3	SEE BELOW
6/7	WETLAND	FILL	9	55884	923472	PF03B	SEE BELOW

¹If impacts are temporary; enter the duration of the impacts in days next to the "T". For example, a project with a temporary access fill that would be removed after 220 days would be entered "T (220)".

²Impacts less than 0.01 acre should be reported in square feet. Impacts 0.01 acre or greater should be reported as acres and rounded to the nearest 0.01 acre. Tributary impacts must be reported in linear feet of impact and an area of impact by indicating first the linear feet of impact along the flowline of the stream followed by the area impact in parentheses). For example, a project that impacts 50 feet of a stream that is 6 feet wide would be reported as 50 ft (300 square feet).

³This is generally only applicable if you are applying for a de minimis exemption under MN Rules 8420.0420 Subp. 8, otherwise enter "N/A".

⁴Use *Wetland Plants and Plant Community Types of Minnesota and Wisconsin* 3rd Ed. as modified in MN Rules 8420.0405 Subp. 2.

⁵Refer to Major Watershed and Bank Service Area maps in MN Rules 8420.0522 Subp. 7.

If any of the above identified impacts have already occurred, identify which impacts they are and the circumstances associated with each:

NONE: Wetland Bank #1532, 02- Lake Superior South, BSA 1

PART FIVE: Applicant Signature

Check here if you are requesting a pre-application consultation with the Corps and LGU based on the information you have provided. Regulatory entities will not initiate a formal application review if this box is checked.

By signature below, I attest that the information in this application is complete and accurate. I further attest that I possess the authority to undertake the work described herein.

Signature: David M. Chmielewski Date: 04-06-16

I hereby authorize DAVID CHMIELEWSKI to act on my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this application.

David M. Chmielewski

4/6/16

¹ The term "impact" as used in this joint application form is a generic term used for disclosure purposes to identify activities that may require approval from one or more regulatory agencies. For purposes of this form it is not meant to indicate whether or not those activities may require mitigation/replacement.

Attachment C

Avoidance and Minimization

Project Purpose, Need, and Requirements. Clearly state the purpose of your project and need for your project. Also include a description of any specific requirements of the project as they relate to project location, project footprint, water management, and any other applicable requirements. Attach an overhead plan sheet showing all relevant features of the project (buildings, roads, etc.), aquatic resource features (impact areas noted) and construction details (grading plans, storm water management plans, etc.), referencing these as necessary:

SEE ATTACHED

Avoidance. Both the CWA and the WCA require that impacts to aquatic resources be avoided if practicable alternatives exist. Clearly describe all on-site measures considered to avoid impacts to aquatic resources and discuss at least two project alternatives that avoid all impacts to aquatic resources on the site. These alternatives may include alternative site plans, alternate sites, and/or not doing the project. Alternatives should be feasible and prudent (see MN Rules 8420.0520 Subp. 2 C). Applicants are encouraged to attach drawings and plans to support their analysis:

SEE ATTACHED

Minimization. Both the CWA and the WCA require that all unavoidable impacts to aquatic resources be minimized to the greatest extent practicable. Discuss all features of the proposed project that have been modified to minimize the impacts to water resources (see MN Rules 8420.0520 Subp. 4):

SEE ATTACHED

Off-Site Alternatives. An off-site alternatives analysis is not required for all permit applications. If you know that your proposal will require an individual permit (standard permit or letter of permission) from the U.S. Army Corps of Engineers, you may be required to provide an off-site alternatives analysis. The alternatives analysis is not required for a complete application but must be provided during the review process in order for the Corps to complete the evaluation of your application and reach a final decision. Applicants with questions about when an off-site alternatives analysis is required should contact their Corps Project Manager.

SEE ATTACHED

Attachment D Replacement/Compensatory Mitigation

Complete this part *if* your application involves wetland replacement/compensatory mitigation not associated with the local road wetland replacement program. Applicants should consult Corps mitigation guidelines and WCA rules for requirements.

Replacement/Compensatory Mitigation via Wetland Banking. Complete this section if you are proposing to use credits from an existing wetland bank (with an account number in the State wetland banking system) for all or part of your replacement/compensatory mitigation requirements.

Wetland Bank Account #	County	Major Watershed #	Bank Service Area #	Credit Type (if applicable)	Number of Credits
1532	Lake	Lake Sup S	1		92864

Applicants should attach documentation indicating that they have contacted the wetland bank account owner and reached at least a tentative agreement to utilize the identified credits for the project. This documentation could be a signed purchase agreement, signed application for withdrawal of credits or some other correspondence indicating an agreement between the applicant and the bank owner. *However, applicants are advised not to enter into a binding agreement to purchase credits until the mitigation plan is approved by the Corps and LGU.*

Project-Specific Replacement/Permittee Responsible Mitigation. Complete this section if you are proposing to pursue actions (restoration, creation, preservation, etc.) to generate wetland replacement/compensatory mitigation credits for this proposed project.

WCA Action Eligible for Credit ¹	Corps Mitigation Compensation Technique ²	Acres	Credit % Requested	Credits Anticipated ³	County	Major Watershed #	Bank Service Area #

¹Refer to the name and subpart number in MN Rule 8420.0526.

²Refer to the technique listed in *St. Paul District Policy for Wetland Compensatory Mitigation in Minnesota*.

³If WCA and Corps crediting differs, then enter both numbers and distinguish which is Corps and which is WCA.

Explain how each proposed action or technique will be completed (e.g. wetland hydrology will be restored by breaking the tile.....) and how the proposal meets the crediting criteria associated with it. Applicants should refer to the Corps mitigation policy language, WCA rule language, and all associated Corps and WCA guidance related to the action or technique:

N/A

Attach a site location map, soils map, recent aerial photograph, and any other maps to show the location and other relevant features of each wetland replacement/mitigation site. Discuss in detail existing vegetation, existing landscape features, land use (on and surrounding the site), existing soils, drainage systems (if present), and water sources and movement. Include a topographic map showing key features related to hydrology and water flow (inlets, outlets, ditches, pumps, etc.):

N/A

Attach a map of the existing aquatic resources, associated delineation report, and any documentation of regulatory review or approval. Discuss as necessary:

SEE ATTACHED

For actions involving construction activities, attach construction plans and specifications with all relevant details. Discuss and provide documentation of a hydrologic and hydraulic analysis of the site to define existing conditions, predict project outcomes, identify specific project performance standards and avoid adverse offsite impacts. Plans and specifications should be prepared by a licensed engineer following standard engineering practices. Discuss anticipated construction sequence and timing:

EXISTING WETLANDS WILL BE PROTECTED BY PERIMETER CONTROL FOLLOWING BMPS OUTLINED IN NPDES AND MPCA GUIDELINES

For projects involving vegetation restoration, provide a vegetation establishment plan that includes information on site preparation, seed mixes and plant materials, seeding/planting plan (attach seeding/planting zone map), planting/seeding methods, vegetation maintenance, and an anticipated schedule of activities:

N/A

For projects involving construction or vegetation restoration, identify and discuss goals and specific outcomes that can be determined for credit allocation. Provide a proposed credit allocation table tied to outcomes:

N/A

Provide a five-year monitoring plan to address project outcomes and credit allocation:

N/A

Discuss and provide evidence of ownership or rights to conduct wetland replacement/mitigation on each site:

N/A

Quantify all proposed wetland credits and compare to wetland impacts to identify a proposed wetland replacement ratio. Discuss how this replacement ratio is consistent with Corps and WCA requirements:

In kind replacement ratio 1:1

By signature below, the applicant attests to the following (only required if application involves project-specific/permittee responsible replacement):

- All proposed replacement wetlands were not:
 - Previously restored or created under a prior approved replacement plan or permit
 - Drained or filled under an exemption during the previous 10 years
 - Restored with financial assistance from public conservation programs
 - Restored using private funds, other than landowner funds, unless the funds are paid back with interest to the individual or organization that funded the restoration and the individual or organization notifies the local government unit in writing that the restored wetland may be considered for replacement.
- The wetland will be replaced before or concurrent with the actual draining or filling of a wetland.
- An irrevocable bank letter of credit, performance bond, or other acceptable security will be provided to guarantee successful completion of the wetland replacement.
- Within 30 days of either receiving approval of this application or beginning work on the project, I will record the Declaration of Restrictions and Covenants on the deed for the property on which the replacement wetland(s) will be located and submit proof of such recording to the LGU and the Corps.

Applicant or Representative:

Title:

WCA AND 404 ADDITIONAL INFORMATION

WETLAND EVALUATION

The site was visited in the fall of 2014 and wetlands were delineated within the area of interest. A NOD dated December 9th, 2014 was issued by the LGU representative the SSLSWCD, on behalf of the City of Duluth for the Wetland Conservation Act.

Site plan and architectural development led by the firm of Foundations Architecture has been underway since August of 2015. Those concepts have been included in this application as exhibits.

On December 10th, the applicant met with representatives from the LGU and the USACE.

EXISTING CONDITIONS (SETTING)

The DPSA 8-12 wetlands proposed for impact are as follows:

Wetland groups 1, 2 and 3 (proposed for impact) could be characterized as PUB3 (type 3) and PFO3B (type 7). Wetland 1 has been converted from prior wetlands noted as being PSS1 (type 6) and PFO3B in an LGU no net loss decision dated December 7th, 2001. See exhibit 1 and 1.1. This decision permitted a change in wetland type of 1.3 acres of wetland for the creation of a speed skating oval. Excavated material was hauled off site (source George Hovland).

Wetland 1 has maintained standing water since we began evaluating the site. A small part of wetland 3 is the wetland formed by the drainage to the wetlands along Rice Lake Road. This drainage is primarily forested and is a PF03B wetland.

Wetland 2 appears to be fed from surface runoff from the adjacent clearing which is used for a ski staging area in the winter and a recreational field in the summer. Flows from the hillside to the north also provide hydrology for this wetland entity.

The area surrounding the site is mostly wooded. To the north, there is forest comprised of relatively mature Aspen, Birch, White Pine, Ash, Balsam Fir and Maple. This forest is bisected by ski trails that make up the Snowflake Nordic Center, which is a non-profit ski organization that provides groomed ski trails for school events and members as well as camping and hiking in the summer months.

The immediate watershed feeding wetland 1 is 6.19 acres to the north; nearly all forested, with some turf, a small portion of the Chalet and a small portion of the ATC overflow parking area. This wetland appears to have minimal bounce in the water level and drains overland out of its southwest corner, eventually draining into the wetlands that bank into Rice Lake Road, then through a culvert under Rice Lake Road and into the wetland complex surrounding the headwaters of Chester Creek.

Wetland 2 is fed by approximately 6.04 acres of immediate watershed, which is almost entirely forested, with the exception of ski trails. There is no evidence of any bounce and minimal surface water in this wetland entity, which is a finger to a larger wetland entity.

Wetland 1 has been altered by human activity, lacks diversity of vegetation, contained little or no emergent or submergent vegetation at the time of the wetland delineation or during any subsequent visits. The most apparent value of this wetland appears to be storm water runoff detention.

Wetland 2 and 3 are of moderate value, as they contain a diverse plant community of hardwoods, softwoods and understory. Some ski trails bisect these wetland entities and there is land clearing immediately to the west of wetland 2 and to the north of wetland 3. To the east is

a large wetland complex, to the south are patches of forest and cleared areas, then Rice Lake Road. As mentioned earlier, to the north is the forested watershed. Wetland three accepts drainage from the north, including discharge from wetland 2. It is essentially wet due to presence of Rice Lake Road, which effectively dams flows moving south, forcing those flows through two culverts.

The total size of the wetland entity group that wetland 1, 2 and 3 are part of is 21.16 acres, not including hydraulic connections that pass under Rice Lake Road (not including wetlands on the other side of Rice Lake Road, which are significant).

There is no fish habitat potential in wetland 1,2 and 3. Wetland 1 is very shallow and likely freezes out most winters. These wetlands do, however, eventually drain into Chester Creek which is a designated trout stream. This is not a direct connection, but about 1360 LF of straight line distance to reach the first semblance of tributary channel. See exhibit 2. Wetland 1 does not have an overstory of significant woody vegetation, but is ringed on the edges by Aspen and some Speckled Alder. Wetland 2 and 3 have a dominant overstory of Aspen and Black Ash.

Habitat Structure in wetlands 2 and 3 is moderate because the site does stay fairly saturated, runoff bounce is minimal, and there is some biodiversity in the native vegetation that exists. We observed no significant wildlife utilizing these wetland entities, probably due to the time of year. In the case of wetland 1, the lack of emergent and submergent vegetation and a lack of dark organic substrate may reduce its attractiveness as amphibian habitat. Catkins and buds on the Alder and Aspen are known to be a feed source for some herbivores. As well as the Ash seed and understory vegetation. Deer browsing was not evident, but the plant cover density could provide cover for a variety of game and non-game species.

In summary wetland 1 has a low functioning value and wetland 2 and 3 have a moderate value functioning wetlands. While they are regulated wetlands, no special circumstances appear to exist that would warrant preservation. Given that reality, and the proximity to the headwaters of Chester Creek, storm water attenuation functions of these wetland entities must be extended through any planned development.

PROJECT HISTORY

On May 6th, 2010 a Proposed Project Review and Comment document was submitted by Duluth Public Schools Academy (DPSA) Charter #4020 to the Minnesota Department of Education.

In the state of Minnesota, Charter Schools are public schools that are funded by lease aid payments from the Minnesota Department of Education. Charter schools are not constructed with funds levied from local property tax increases. The purpose of this study was to provide information regarding the condition of the existing facilities, both past and present, projected student enrollment, and why DPSA was making a case for a new facility.

In 2010, enrollment was at 984 students; enough to warrant a discussion about either renovating the buildings they were currently leasing at the Kenwood and Washburn sites, finding another facility that could be utilized, or constructing a new facility. The Raleigh facility would remain as a K-5 with 277 students. Technical evaluations of their existing facilities revealed that they were not cost effective to renovate, and therefore, a search for other facilities would be required. The other aspect of these sites was that the lease arrangements with ISD 709 were becoming increasingly untenable, although at the time, ISD 709 was allowing a lease

arrangement with a Public Charter School. In 2011, Northstar Academy, K-8 was constructed on a site formerly owned by George Hovland across Technology Drive from United Health Care, to replace the Kenwood and Washburn sites.

In 2014, a charter school developer by the name of Caleb Roope of Pacific Education Partners (PEP) was made aware of DPSSA's desire to plan and construct a high school. Another site selection process commenced and numerous sites were once again presented by Atwater Group. Many of these sites had been vetted during the DPSSA K-8 site search. In the State of Minnesota, Public Charter Schools cannot own their own facilities. The educational entity and the facility entity must be separate. It is often a private developer that will pull the physical development together to accommodate the educational entity. That developer may transfer ownership to another ownership entity that is closely tied to the educational entity. The bonding used to pay for construction is serviced by lease aid payments from the State.

Ultimately, George Hovland was again approached. This was not the first time that the Snowflake Nordic Center was evaluated for development. Before the great recession of 2009, this land had been evaluated for housing, but the economy was blamed for the retraction of construction plans.

Eventually, with other sites vetted, it was decided by PEP to purchase what is currently called the Snowflake Nordic Ski Center, a non-profit organization operating on the Hovland property. A wetland delineation was completed and a clause was added to the purchase agreement that Snowflake Nordic must operate in its current or near current state for at least the next five years. It was George Hovland's wish that the Ski Centers trails on the 160 acres of land be largely maintained, and the Chalet or the functions of the Chalet be preserved. Blackhoof Development was contracted by PEP to perform the wetland work on the site and tasked with assembling the design team that would be responsible for preliminary planning work on the site.

WORK PROPOSED

Public Charter High School, grades 8-12, approximately 100,610 SF (2 level), 320 parking stalls storm water treatment, track and field, access drives. See attached exhibits.

AVOIDANCE AND MINIMIZATION STATEMENT

Mitigation Requirements

The mitigation sequence spans the life of a project. Mitigation is a sequence of actions required by various regulatory efforts to protect and enhance wetlands and the environment that we live in. It involves understanding the affected environment and assessing the effects of actions throughout project planning, development, and construction. This concept is not limited to wetlands, but also involves the erosion/sediment control, storm water, transportation safety and other critical issues.

Project proposers are required to consider ways to make as little impact to wetlands as possible in all stages of the project. All unavoidable impacts to wetlands and other "waters" require compensatory mitigation. Any relevant and reasonable mitigation measures that could improve the project must be identified.

During every phase of project development through construction, each step in the mitigation sequence must be completed before proceeding to the next. This means

that opportunities to avoid an impact must be evaluated before compensation for the impact is considered.

COMPENSATORY MITIGATION

The total proposed impact is **108,937 SF**. Of this total, 14,050 SF is directly related to the mandated County Backage Road.

Attached is a purchase agreement for wetland credits within the watershed.

PROJECT PURPOSE AND NEED

Pursuant to M.S. 123B.71, Duluth Public Schools Academy (DPSA) and its Board of Directors has submitted a Review and Comment document for action by the Minnesota Department of Education.

DPSA began operating in August of 1997 as a public charter school and currently serves 1,380 students, grades K-8. After a two year task force study, and significant demand by the student families, they are adding a high school component to our program beginning in fall of 2017

Tischer Creek Duluth Building Company, the affiliated building company for DPSA, will finance this facility through bond financing underwritten by Piper Jaffray and Company. The total cost of the project is \$27 million.

The wetland delineation, airport clear zone mapping, current zoning, topography, DOE requirements, DPSA requirements, proximity to Rice Lake Road and Utilities and existing traffic considerations are the main layers of consideration for the proposed DPSA 8-12 campus location. Many questions have been posed, by a multitude of groups. Questions such as why are wetlands being impacted? Why is the campus not further into the site away from Rice Lake Road? Why is a connection being required by St. Louis County? Why is this high school being constructed at all? Why isn't the school constructed already? Why is it taking so long? The answers to these questions can shed some light into why this wetland replacement plan is being submitted.

Numerous site plans were developed by Blackhoof Development in concert with LHB. Both firms have extensive experience with site planning and wetland considerations. LHB has extensive experience with the design of public schools. Armed with a building program developed by DPSA, Blackhoof and LHB were tasked with doing a "fit" plan. That is, place the required program elements onto the site.

The program requirements developed by DPSA were broken down into "must haves" starting in November of 2014. Knowing that lease aid from the State of MN limits what can be done financially for a new educational facility, without the ability to levy funds from the local tax base, the "must have" items are a way of setting a threshold that cannot be compromised. The basis of this "must have" list is not a wish list, it is a list of mandatory fundamental items that through years of experience and observation, DPSA has identified as "must have" to provide an adequate High School educational facility.

The result of this program planning can be distilled into three programmatic areas:

1. A school building

2. A track and field
3. Parking (The "must have" list required 450 parking stalls. We immediately paired this down, and set a goal for 300 stalls.)

All of these items result in a quantifiable amount of land that is needed. Early drafts of the facility program attached exhibit 4. Later drafted by LHB, exhibit 5. The MN DOE emphasizes 25-35 acres of land for a facility with this program, site planning of the program elements had just begun.

Attached Exhibit 4.1 For those who do not work in the design and construction industry, this is how the process works. Fundamental questions are asked that result in different site plans being manifested. These site plans have resulting consequences, financially, socially and environmentally.

A multi-level school is discussed to reduce cost and impact to the site. Numerous concepts were explored but were rejected for a variety of reasons, including, but not limited to:

Access

- UDC restrictions to parking in "front yard"
- Protective covenants that do not allow excessive manipulation or destruction of Snowflake Nordic Operations
- Excessive bedrock
- Steep topography
- Site Program elements
- Access to Rice Lake Road
- Access to proposed County Road

OFF SITE LOCATIONS AND CONFIGURATIONS

An extensive search for land began in 2010 for DPSA North Star Academy. After that building was constructed in 2011, remaining parcels were re-evaluated for the High School Campus, and one new parcel was made available.

The sites evaluated must be:

Large enough to accommodate the site and building program
Located within the geographic core area for the student population
Contain adequate road access and infrastructure
Contain the appropriate zoning or could be rezoned without issues

The department of education advises that 25-35 acres of land be acquired to accommodate a typical high school campus.

Site 1

Duluth Armory Site: This site was considered as an available existing building with potential for re-use. The Duluth Armory site was evaluated and found to be unsuitable for a high school because it did not have adequate parking, had renovation and structural issues that added

significant concerns about budget overruns and safety issues. There are also no adjacent outdoor facility opportunities for a track and field.

Site 2

County Jail Site: This is in NE quadrant of Arrowhead Road and Haines Road: Not evaluated and immediately dismissed because it is adjacent to the County Jail. A school next to a jail is not an appropriate or compatible use. There are also wetlands on this site. It has been delineated in the past and there are far more wetlands than indicated on the NWI mapping. This site is not adjacent to the existing elementary school, which is a preferred option by DPSA and the DOE.

Site 3

Arrowhead Road, SW quadrant of the intersection of Arlington and Rice Lake Road: The site contains numerous wetlands. Estimates indicate that there would have been a minimum of 111,000 SF of wetland impacts with the proposed DPSA 8-12 building program. To our knowledge, this site has not been delineated and we expect that the actual wetland impacts would be higher. NWI mapping is generally a loose measure of wetlands present on sites, as field delineations generally reveal the presence of more wetlands. Early on in the evaluation of this site, access to Arlington and Arrowhead Roads was presented as a challenge by the County. This site is not adjacent to the existing elementary school, which is a preferred option by DPSA and the DOE. In addition to wetland impacts and restricted access, the market price for this land exceeded other options by nearly double.

Site 4

Arrowhead Road, next to Nortrax: This site has extensive wetlands immediately adjacent to a tributary of Chester Creek. Estimates indicate that there would have been a minimum of 122,500 SF of wetland impacts with the proposed DPSA 8-12 building program. To our knowledge, this site has been delineated at some point and we expect that the actual wetland impacts would be higher than we have indicated. Early on in the evaluation of this site, access to Arrowhead Road was presented as a challenge by the County. This site is not adjacent to the existing elementary school, which is a preferred option by DPSA and the DOE.

Site 5

Central School Site: This site was selected as a perfect site for the DPSA High School. It has adequate parking, the school building is adequate and is designed as a school, the athletic fields are already in place and there is adequate access to the site.

Previous discussions by Tischer Creek and ISD 709 had led to the conclusion that ISD 709 would not sell an existing facility to a "competing school". ISD 709 has adopted policies that bar them from selling any of their land or facilities to such competing schools, such as DPSA.

In March of 2016, Tischer Creek Duluth Building Company made a public offer of \$14.2 million for the Duluth Central High School Site, which has been closed for 5 years. The appraised value of the property was \$13.7 million. A prior offer of \$10 million by a private developer had been rejected.

A public comment session was held on March 28th, 2016 where the public could provide comment for or against ISD 709 waiving its policy to not sell to DPSA. On March 31st, 2016, a special session of the ISD 709 school board was held, and on a vote of 4 to 3, the school board voted to not sell the Duluth Central High School Site. As of 2:56 pm CST, a Duluth News

Tribune Poll with 723 respondents, 84% had disagreed with ISD 709 decision not to sell, with 16% agreeing with the decision.

ALTERNATIVES REQUIRING NO ACTION

Preserving the Site

The preservation alternative is not the best option for this site. Preservation works best for sites that do not have direct inputs from roads, farms, and residential neighborhoods. Preservation works best for wetlands that have limited access from the public, limited or single ownership and are of a size that can be effectively managed to exclude nonnative species.

The preservation alternative is to leave the site as it stands with no further development this has been referred to as the "no build alternative." This site lies in an undeveloped block of land that is served by significant infrastructure. The development site sits west of an existing sister school and a substantial commercial/industrial complex. Internally, the preservation aspect of this proposed development is not as much the impacting of two wetland entities noted herein; it is the sacrifice of these two wetland entities to reduce further impacts to the remaining 140 acres of land.

Of these criteria, only wetland 2 meets the criteria of single ownership. That is, the "finger" of wetland that is part of a larger wetland complex on land owned by the developer. Outside of ownership, both wetlands have direct inputs from ski and hiking trails. Adjacent cleared areas are mowed and the wetland entities are relatively close to Rice Lake Road. The proximity to mature development to the east and west, and existing infrastructure on the south means that management to exclude invasive species is not ideal.

Finally, preservation works best on wetlands that have not had significant disturbance. Wetland 1 has been altered by excavation. Wetland 2 and 3 is in relatively good condition, but for the ski trails the bisect it, and the clearing that has occurred to the west.

- Vegetative diversity, in wetland 1 is low. Vegetative diversity in wetland 2 and 3 is fair. The most prevalent species found within wetland 1 is speckled alder on the periphery. In wetland 2 and 3, *Fraxinus nigra* and *Populus tremula* comprises the majority of the biomass. Both of these species are moderate in preference for preserved wetland and wetland biodiversity.
- There is minimal storm water input from impervious surfaces, but the relatively dense till soils, steep slopes and shallow bedrock generate a measurable amount of runoff in a relatively short period of time.
- Pressure from future development; as stated above, this site lies adjacent to the existing Arrowhead Tennis Center and the Northstar Academy School. This land was sold to the developer by George Hovland who maintained the land for decades for the Snowflake Nordic Ski Center. It is also adjacent to Rice Lake Road, which is a major thoroughfare served by City sewer and water services. The proximity to Rice Lake Road and City utilities will put pressure on this land for development.
- Current and future disturbance; potential disturbances to the wetland include Ski trails and ski trail maintenance, construction single family or multifamily housing, commercial facilities and school facilities (proposed).

- Mineral rights; Mineral rights are not a consideration on this property.
- Recreational rights; Snowflake Nordic will exist on this site contractually for the next five years. Currently, the developer has no immediate or long term plans to impact more than 25 acres of the 140 acre tract. There are no current plans to change Snowflake Nordic beyond what is currently proposed.

Preservation value: Is the site worth the necessary inputs for preservation? This wetland is located in an area that will be developed whether a high school is constructed or homes and/or roads are placed directly on it or adjacent to it. The area is already degraded by its proximity Rice Lake Road and the more intensive programming around the Chalet for Nordic Skiing. There are currently no plans to enhance wetland 1 or preserve wetland 2 or 3 as it relates to the current use of the property as a Nordic Ski Center.

The preservation of these wetlands may extend the existence of low and moderate quality wetlands, with modest inputs required to maintain that level of quality. This assumes the current site use does not change. The highest and best use of this site is to proceed with development that is consistent with best management practices for the entire project area, and to utilize the existing infrastructure that makes this site one of the few sites in the entire region that is large enough to accommodate developments with large and intensive site programming, as well as those activities that generate traffic and require robust City utilities.

ALTERNATIVES CARRIED FORWARD IN ANALYSIS

Avoiding Impacts

The mitigation sequencing starts in the planning stage of the decision-making process with the development of alternatives. Unreasonable and otherwise reasonable options may be removed from further consideration at this stage because there are reasonable alternatives that avoid large wetland impacts. Early mitigation options should be considered if appropriate and available.

Project Scoping involves identifying and evaluating alternative solutions to find the most cost effective and overall environmentally acceptable solution to a transportation need.

Minimizing Impacts

Minimizing impacts must be considered whether or not the impacts are significant. Proposers are required to identify and include in the action all relevant and reasonable mitigation measures that could improve the action. Compensation must be included as an integral part of the alternatives development and analysis process. In considering all disciplines, the **least environmentally damaging practicable alternative** is selected.

The site has certain limitations that dictate the position of the various site program elements. Those elements are the school building, the parking, track and field and the access drive. Given the existing access to the High School, the required access to Rice Lake Road, the track and field, and the storm water requirements, the main variable is parking.

Concept Original

ALTERNATIVE 1

Now that the area of interest has been established, and a possible County backage road planned, mature program elements can be explored within this area. This alternative illustrates the school on the SW portion of the area of interest and the track and field to the SE.

The reasons this alternative is not preferred are:

- Access off of Rice Lake Road and distribution of traffic to at the intersection, to the school and to Arrowhead Tennis is awkward.
- Remote, parking along circulation is not favorable
- Parking and circulation are somewhat disjointed
- Very little space is left for storm water, forcing more treatment underground
- More of school is placed on deep fill over existing wetland, which is structurally not favorable.
- Wetland impacts not the least amount, at 108,952 SF, including the final projected County road impacts and the ultimate storm water pond impacts.

ALTERNATIVE 2

Track place to the NW and School to the SE.

The reasons this alternative is not preferred are:

- Access off of Rice Lake Road, then to school campus and Arrowhead Tennis is greatly improved
- Parking is consolidated
- School Building is placed mostly on solid ground
- Wetland impacts increase to make room for large storm water pond
- Site layout favorable, but not the least amount at 114,743 SF

PREFERRED ALTERNATIVE

This alternative is preferred for the following reasons:

All reasons stated in Alternative 2

The County Backage road impacts are included in this permit application. The County Backage Road is part of this project and is permitted as such.

Storm water ponds is pulled away from the wetland and more treatment is put underground.

Least impacts of all viable alternatives at **108,937 SF**

Exhibit 14 illustrates the overall backage road concept.

Exhibit 15 illustrates the current site plan that was approved by the DPSA School Board on February 4th, 2016.

Exhibit 16 illustrates the impact to Snowflake Nordic's overall ski trail system.

The proposed site plan satisfies the health, safety and welfare requirements of St. Louis County and will be constructed to City of Duluth specifications.

See exhibit 1.1. The site plan appears to meet most of the UDC requirements of the City of Duluth, but a zoning request must be made for the small amount of parking/drop off between the building façade and Rice Lake Road. The site plan and building plan have been approved by the DPSA School Board.

Wetland impacts are proposed for the preferred alternative to be offset by obtaining wetland credits from an approved wetland bank. The wetland purchase agreement is attached. Wetland impacts occur from two sources. The first is the proposed middle school building and

the second is the required parking and vehicular circulation areas. Parking has been reduced down from other concepts which has resulted in fewer wetlands proposed for impact.

Summary/Discussion

After numerous concepts and meetings, the site plan has evolved to include the following:

1. Geotechnical considerations
2. Grading considerations
3. Storm water management
4. Snowflake Nordic Operations
5. UDC restrictions on parking count
6. UDC restrictions on front setback parking
7. Traffic congestion on Technology Drive
8. Accurate program on building footprint
9. Accurate program on track and field
10. Accurate alignment of County backage road concept
 - The proposed DPSA High School is capable of being constructed from an engineering point of view. A design for the proposed high school has been produced by a Licensed (civil) engineer and registered Architect in the State of Minnesota.
 - The proposed high school has been designed in accordance with State of Minnesota Department of Education Standards which are required for Lease aid funding purposes. The site design and architectural components are designed to meet engineering standards and practices based on extensive data on proposed materials, soils and field constructability. All building and site programs are smaller than MN DOE averages and only one athletic field is proposed as synthetic turf to withstand the additional play time in lieu of more practice fields.
 - The proposed high school is consistent with reasonable requirements of the public health, safety, and welfare. Local and County government units have been consulted regarding the compliance of suggested land uses and accessibility to those land uses. The legitimacy of the proposed land uses and access to those uses has been confirmed by City Planning, and the local fire safety officials.
 - The high school is an environmentally preferable alternative based on a review of social, economic, and environmental impacts. In this case, the relatively moderate quality and value of the wetlands, the pattern of development adjacent to the site, the exploration of other alternatives that would result in additional environmental impacts, and the determination that the most feasible and prudent alternative has been proposed. The proposed high school and associated land uses are consistent with adjacent land uses in the area.
 - The proposed high school would create no truly unusual problems as long as access to Rice Lake Road can be enhanced. The proposed wetland impacts still leave a majority of the existing wetland entities on the development site in-tact. Wetland replacement will be required within the Wetland Bank Service Area. No unusual problems are evident and none are expected to be associated with the proposed high school during, or after construction.

PUBLIC INTEREST FACTORS

CONSERVATION

Efforts have been made to conserve wetland impacts in the site wherever possible. The off site selection process has determined that only one other site met the criteria for the proposed high school, and that was the Duluth Central High School site. After numerous offers from Tischer Creek Duluth Building Company, the ISD 709 school board voted to reject the offer on the basis that they would not sell to another school entity.

On the Snowflake site, putting the site program further up the hill would impact more high value wetland, impact more ski trails and fragment more woodland habitat. It would also require longer roads and utilities to reach the site from Rice Lake Road. Currently, the owner of Snowflake Nordic, Pacific Education Partners, is restricted from impacting Snowflake Nordic Operations for a period of 5 years. Pushing the site program further north into the site would disrupt the ski center to the point of rendering it non-functional. These comments have reiterated by the Nordic Center's operators throughout the site planning process. Disrupting the Snowflake operations is a covenant violation in the purchase agreement.

ECONOMICS

The current site selection is not a matter of economics. It really is a matter of selecting a site that has adequate size, and relative absence of wetlands. While wetland impacts do constitute a financial burden via wetland replacement, it is the avoidance and minimization process that has dictated the site selection process. Other than the Duluth Central High School site, no other sites had enough usable land to be viable from a permitting standpoint, let alone from the perspective of purchase price.

AESTHETICS

Property aesthetics will change dramatically, from a natural environment to a build environment. A very aggressive tree planting plan will accompany the development. This is not only a requirement for meeting the terms of the tree preservation ordinance, but also an aesthetic decision. The building school building will be an attractive architectural fenestration composed of precast concrete, some glass wall projections and an outdoor classroom.

GENERAL ENVIRONMENTAL CONCERNS

Perhaps the more pressing concern is the hydraulic performance of the remaining wetlands. The storm water system has been design to be a detention system. That is, the existing soils very little ability to infiltrate storm water at an acceptable rate. Storm water that enters the system is stabilized so that suspended solids can precipitate and the water can move slowly through a sand filter and be discharged into the natural water course. We have requested that where storm water pond containment berms are adjacent to wetlands, segments of washed sand be installed to allow the lateral movement of storm water directly into the surface of the wetland in an effort to mimic the natural flow of predevelopment surface water. The storm water is treated for Total Suspended Solids (TSS) and thermal pollution before it is discharged outside of the treatment basin.

WETLANDS

The type and quality of the wetlands are described earlier in this report under compensatory mitigation.

The total proposed impact is **108,937** or 12% of the wetland group.

Vegetative diversity and habitat structure are considered to be low to moderate. The proposed County Sawyer Avenue backage road, and associated wetland impacts, are included in this total. To this date, this County road has been a mandate of the City of Duluth.

Given that reality, the wetlands impacted as part of the County road must be included in the total project with the wetland impacts associated with the High School construction.

HISTORIC PROPERTIES

The Snowflake Nordic center is a very important part of the community. With over 700 members, it resides in a unique geographic area that receives and retains snow such that it is a preferred location for Cross Country skiing when other areas have little or no snow. It is the host of numerous ski events for high schools and other organizations. DPSA, Tischer Creek and Pacific Education Partners have endeavored to maintain this tradition by minimizing impacts to ski trails, moving the chalet to a more suitable location and offering to assist with the location of trails that will be impacted by development.

FISH AND WILDLIFE VALUES

There are no fish values associated with wetlands on this project. The principal value to the wetland habitat is water quality for downstream resources, generalist mammals and amphibians. We expect that most of the generalist mammal habitat will be degraded on the remaining wetlands, but the amphibian habitat and the water quality characteristics of remaining wetlands will be left largely intact.

FLOOD HAZARDS

Strict stormwater standards must be met, as the portion of the site proposed for development currently does not contain impervious surfaces. In order to reduce wetland impacts, the amount of surface ponds for storm water treatment must be reduced and storm water must be treated below the surface of parking lots. This is a far more expensive storm water treatment method than surface treatment, but is being done in an effort to reduce wetland impacts by conserving space. The City of Duluth requires that 125% of pre-development flows must be detained on site. In addition, provisions for underground storm water detention and sand filtration reduce the Total Suspended Solids (TSS) and cool the discharge water, reducing the effects of thermal pollution.

FLOODPLAIN VALUES

There are no direct floodplain values being affected by this project. Storm water treatment will mitigate the downstream affects of storm water on Chester Creek and the Lake Superior Basin basin, which is the receiving water for this proposed development.

LAND USE

The proposed project is not in conflict with the existing land use, which is currently a High School next to an elementary school, with commercial development to the east and west. The proposed DPSA High School will be constructed directly adjacent and west of the existing elementary school.

NAVIGATION

There are no navigable waters within the area of interest nor are there any being impacted in any way.

SHORE EROSION AND ACCRETION

The project does not occur in a shoreland overlay district and any potential downstream impacts have been mitigated by storm water controls. An erosion control plan is included in this submittal.

RECREATION

Cross Country skiing is a very important recreational activity on the site. Efforts are being made to preserve this activity.

WATER SUPPLY AND CONSERVATION

As noted in prior sections, the surface water that feeds existing wetlands will be maintained and distributed through the planned storm water detention systems that have been proposed. It is expected that the existing ground water recharge of surface water runoff be maintained or enhanced. Enhancement is only possible, in this case by way of increased detention time within each of the storm water basins. It is intended that the storm water detention replace the natural detention that is already being performed by existing wetlands.

WATER QUALITY

Water quality will be maintained to the extent that storm water from impervious surfaces will be treated and released at the appropriate rates. Inputs from parking areas will increase the possibility of diminished water quality due to warm water and TSS discharges. These inputs will be mitigated by the storm water system that has been proposed, which includes underground storm water detention. Water quality, as measured thermally or by TSS, is expected to be maintained as part of this project.

ENERGY NEEDS

Additional energy will be required to support the infrastructure on this project, which is principally site lighting and the electrical needs of the new High School Building. This includes, but is not limited to internal lighting, HVAC systems, appliances, and computerized devices. If the Duluth Central High School site were utilized, there would be only a slight increase in energy inputs, as the building is currently being heated and maintained at a cost of \$170,000 per year.

The new high school will include energy efficient mechanical systems and lighting that will minimize the energy inputs beyond what would be possible in an older facility.

SAFETY

Safety is one of the principal drivers of the proposed DPSA High School site program. The two site program elements that attempt to mitigate safety concerns are access to Rice Lake Road and to Technology Drive. Traffic is a documented problem on Technology Drive. Elements of this project are intended to alleviate that condition.

FOOD AND FIBER PRODUCTION

No food production is affected by the proposed project or the proposed wetland impacts. Timber from the site will be sold for biomass. This site is not considered a timber production area and the fiber being produced from clearing the site is a one time occurrence.

FOUNDATIONS
CONSULTANTS

FAROLA
CONSULTANTS

EAPC
ENGINEERS ARCHITECTS PLANNERS

12150 Highway 100, Suite 100, Park Lake, WI 53091
TEL: 715.443.7272 FAX: 715.443.7222
WWW.FAROLA.COM WWW.EAPC.COM

31101A, PONDON
10000 WISCONSIN
10000 WISCONSIN
10000 WISCONSIN
10000 WISCONSIN

Northland
Consulting Engineers LLC
10000 WISCONSIN
10000 WISCONSIN
10000 WISCONSIN

PLEASE VERIFY THE PLAN INDICATIONS OF WETLANDS ARE ACCURATE AND CORRECT. THE ENGINEER HAS CONDUCTED VISUAL INSPECTIONS AND HAS CONDUCTED SURVEYS UNDER THE LAWS OF THE STATE OF WISCONSIN.

DATE: _____ SHEET NO. 401A

PROJECT OWNER: DULUTH, MINNESOTA 55811

PROPOSED BUILDING FOR: DECS 8-12 SCHOOL

43XX RICE LAKE ROAD

ISSUED DATE: XX-XX-XXXX

PROJECT NO.: 15-004-C

DRAWN BY: JDO

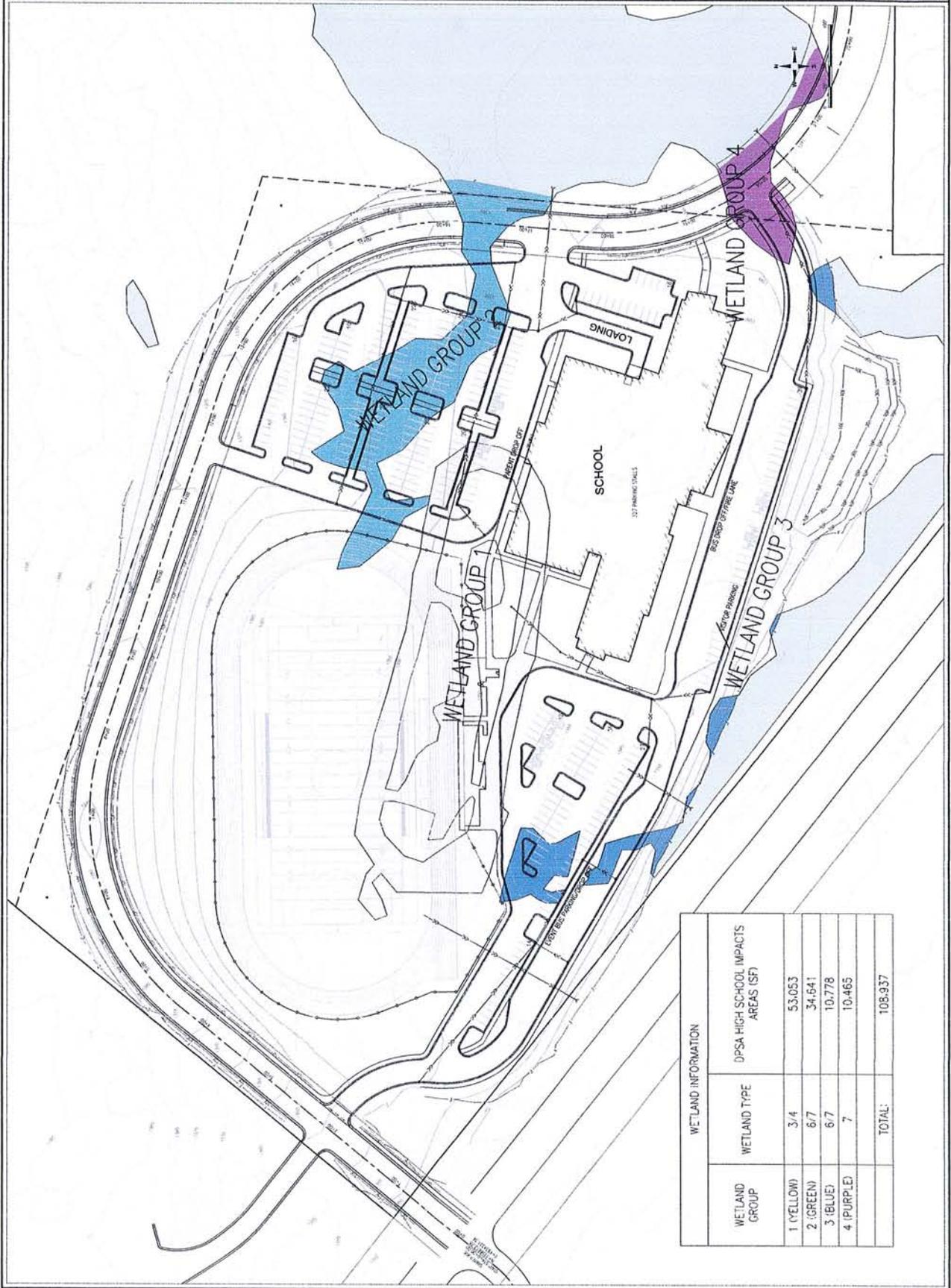
APPROVED BY: ABE

SCALE = 1" = 20' AT FULL SCALE

KEY

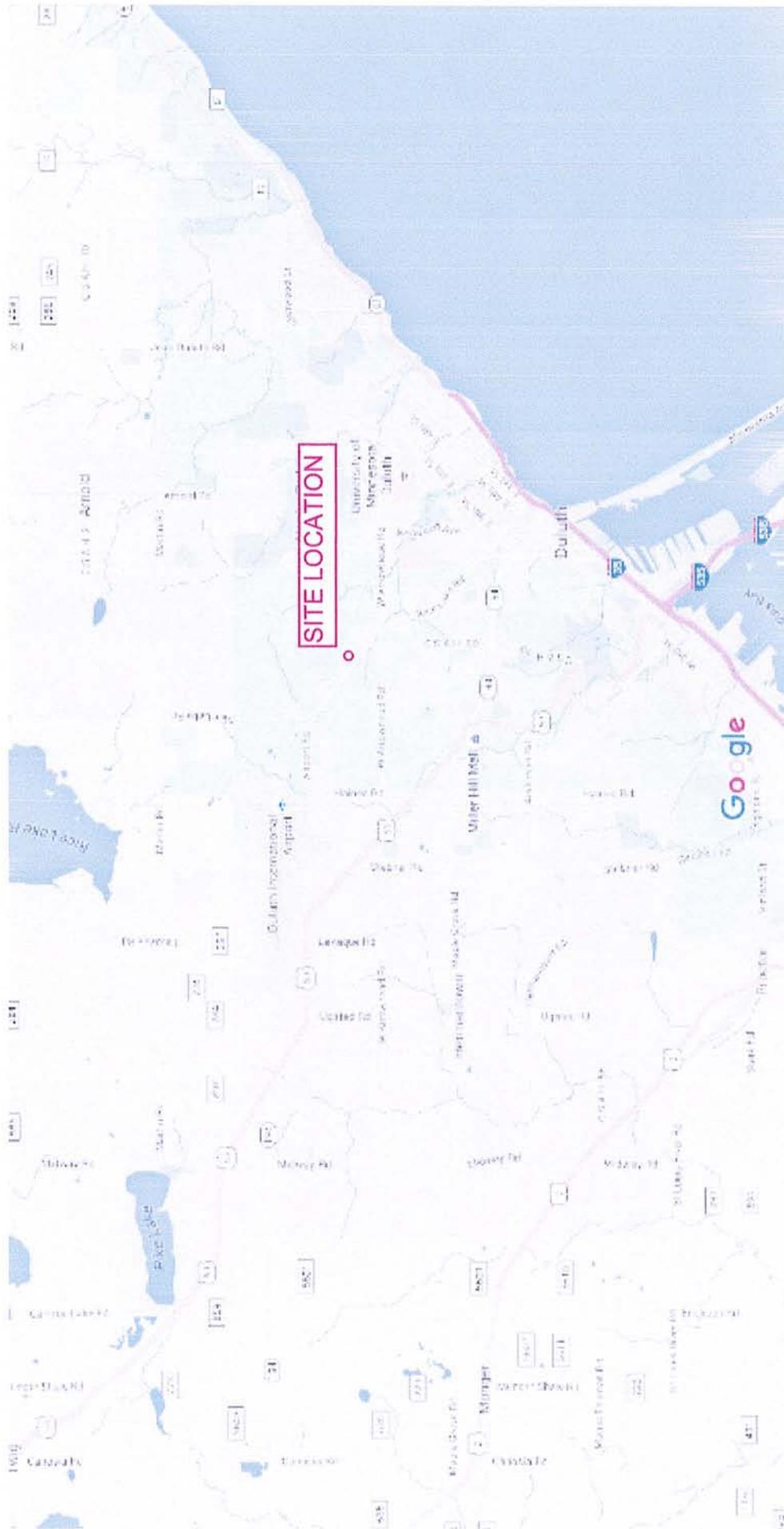
SHEET NO.

C4.0 SITE PLAN



WETLAND INFORMATION		DPSA HIGH SCHOOL IMPACTS AREAS (SF)
WETLAND GROUP	WETLAND TYPE	
1 (YELLOW)	3/4	53,053
2 (GREEN)	6/7	34,641
3 (BLUE)	6/7	10,778
4 (PURPLE)	7	10,465
TOTAL:		108,937

Google Maps DPSA 8-12 HIGH SCHOOL



The following is a sample of a possible Purchase Agreement for the sale of Wetland Banking Credits. This Purchase Agreement does not necessarily cover all of the issues that would be important to Sellers and Buyers, nor does it address the terms that would be appropriate for any particular transaction. Sellers and Buyers should obtain the services of qualified legal counsel to adapt this Purchase Agreement to meet their specific needs.

**PURCHASE AGREEMENT
FOR
WETLAND BANKING CREDITS**

THIS AGREEMENT is made this 5th day of April, 2016 between
Dan Zeimet (Seller) and Pacific Education Partners (Buyer).

1. Seller agrees to sell to Buyer, and Buyer agrees to buy from Seller, the wetland banking credits (Credits) listed below:

CREDITS TO BE SOLD						
Credit Sub-Group ¹	Acres or Sq. Ft.	Wetland Circ. 39 Type ²	Plant Community Type ³	Cost per Acre or Sq. Foot	State Fee 6.5%	Fee Estimate
A.	1.2505	2	Fresh(wet) Meadow	87,120-	0.065	797.81
B.	1.2505	6	Shrub - Carr/Alder Thicket	87,120-	0.065	797.81
C.					0.065	
D.					0.065	
E.					0.065	
Totals	2.501					1595.62

Check here if additional credit sub-groups are part of this account and are listed on an attachment to this document.

¹A separate credit sub-group shall be established for each wetland or wetland area that has different wetland characteristics.
²Circular 39 types: 1, 1L, 2, 3, 4, 5, 6, 7, 8, B, U.
³Wetland plant community type: shallow open water, deep marsh, shallow marsh, sedge meadow, fresh meadow, wet to wet-mesic prairie, calcareous fen, open bog or coniferous bog, shrub-carr/alder thicket, hardwood swamp or coniferous swamp, floodplain forest, seasonally flooded basin. See *Wetland Plants and Plant Communities of Minnesota and Wisconsin (Eggers and Reed, 1997)* as modified by the Board of Water and Soil Resources, United States Army Corps of Engineers..

2. Seller represents and warrants as follows:
- a) The Credits are deposited in an account in the Minnesota Wetland Bank administered by the Minnesota Board of Water and Soil Resources (BWSR) pursuant to Minn. Rules Chapter 8420.0700-.0760.
 - b) Seller owns the Credits and has the right to sell the Credits to Buyer.

7. HOW TO GET TO THE SITE: Attach a simple site locator map. If needed, include on the map written directions to the site from a known location or landmark. Include highway and street names and numbers. Also provide distances from known locations and any other information that would assist in locating the site. Label the sheet SITE LOCATOR MAP.

8. PURPOSE OF PROJECT: What do you propose to do, and why is it needed? Please be brief. (See HELP 8 before completing this section.) REMOVAL OF SOIL TO APPROX 1.5 - 2 FT BELOW STATIC H₂O LEVEL IN OVAL AND POND FOR USE AS ICE SPEED SKATING OVAL AND RECREATIONAL SKATING.

9. PROPOSED TIMELINE: Approximate project start date: 12-01 Projected end date: 1-02

10. PROJECT DESCRIPTION: Describe in detail what you plan to do and how you plan to do it. This is the most important part of your application. See HELP 10 before completing this section; see also What To Include on Plans (Instructions, page 2). If space below is not adequate, attach separate sheet labeled PROJECT DESCRIPTION.

EXCAVATE 1500 FT. X 25 FT. OVAL AND IRREGULAR 25000 FT² POND TO A DEPTH APPROX 1.5 - 2 FT. BELOW STATIC GROUND WATER LEVEL, REMOVING SEVERAL INCHES OF ORGANIC MATERIAL AND BALANCE OF SANDY/ GRAVEL LOAM TO PROPOSED DEPTH. HAUL ALL MATERIAL BY TRUCK TO THE CORNER OF RICE LAKE ROAD AND MARTIN ROAD INTERSECTION TO PERMITTED FILL SITE - OTHER OWNERSHIP. EXCAVATION BY BACKHOE, TRUCK HAULING ON FROZEN SURFACE TO PAVED ROAD.

11. FOOTPRINT OF IMPACT (if applicable): Indicate total amount (in acres or square feet) of wetland(s) or water body area(s) to be filled, drained, inundated or excavated; and/or indicate length of stream or river affected (in linear feet).

1/3 acres or _____ square feet and/or _____ linear feet

12. TYPE AND ESTIMATED AMOUNT OF MATERIAL(S) TO BE PLACED INTO OR EXCAVATED FROM THE WETLAND OR WATER BODY (if applicable): List each type of material (such as rock, sand, clay, concrete) to be filled or excavated and estimate amount in cubic yards.

FILLING

EXCAVATING

Type(s) of material	Estimated amount in cubic yards	Type(s) of material	Estimated amount in cubic yards
ORGANIC TOPSOIL	EST. - 500 CU. YDS	SANDY LOAM/CLAY	9000 CU. YDS

13. ESTIMATED PROJECT COST: 25,000 (for determination of DNR fees only, which are based on total project cost)

C

NA-02620-02

2/16/01

Minnesota Local/State/Federal Application forms for Water/Wetland Projects

FOR INTERNAL USE ONLY

Applicant's No. _____ Fund/Office Code _____ Date Initial Application Received _____ Date (final) Application Received/Completed _____

DEC 04 2001

PART 1:
BASIC APPLICATION

Planning and Development

"See HELP" directs you to important additional information and assistance in Instructions, page 1.

1. APPLICANT CONTACT INFORMATION (See HELP 1):

Name: GEORGE HOVLAND

Complete mailing address: GEORGE HOVLAND
SNOWFLAKE PLACE DULUTH
9348 RICE LAKE RD. 55811

Residential phone: (218) 724-9022

Business phone: (218) 726-1550

Fax (if available): () _____

e-mail (if available): _____

1A. AUTHORIZED AGENT (See HELP 1A.)
(only if applicable; an agent is not required)

Name: _____

Title: _____

Mailing address: _____

Residential phone: () _____

Business phone: () _____

Fax (if available): () _____

e-mail (if available): _____

I hereby authorize _____
to act in my behalf as an agent in the processing of
this application and to furnish, upon request, supple-
mental information in support of this application.

Applicant signature _____ Date _____

2. PROJECT NAME OR TITLE (if applicable):

SNOWFLAKE OVAL

3. NAME OR I.D. # OF WATER BODY/BODIES IMPACTED**
(if applicable; if known):

WATER HEAD
HEADWATER-CHESTER CREEK

4a. ANY WETLANDS IMPACTED? (circle one) YES NO

4b. If YES, what type (if known; circle all that apply):

1 1L 2 3 4 5 6 7 8 R unknown

4c. If YES, indicate size of entire wetland (check one):

Less than 10 acres (indicate size: 3 1/2 - 4)

10 to 40 acres

Greater than 40 acres

5. PROJECT LOCATION** *(information can be found on property tax statement, property title or title insurance):*

1/4 section: _____ Section: N 1/2 8 Township: 50 Range: 14W

County: St. Louis Lot #: _____ Block: _____ Subdivision: _____

6. ADDITIONAL LOCATION DESCRIPTIONS** *(if applicable; if known):* Parcel ID #/Geocode: _____

UTM coordinates: easterly _____ northerly _____

Project street address: 9348 RICE LAKE ROAD Fire #: _____

**For multiple water bodies or locations, attach additional sheets labeled ADDITIONAL WATER BODIES IMPACTED, ADDITIONAL PROJECT LOCATIONS, or ADDITIONAL LOCATION DESCRIPTIONS.

City of Duluth, Room 402 City Hall, Duluth, Mn 55802 (218) 723-3328

NOTICE OF WETLAND CONSERVATION ACT DECISION

Name of Applicant: George Hovland 218-626-1550
Snowflake Nordic Ski Facility 218-724-9022
4348 Rice Lake Road
Duluth, MN 55811

File Number: 01161

Type of Application: Certificate of No Loss

Findings: The project converts 1.3 acres of type 6/7 wetlands to type 3 wetlands.

Date of Decision: December 7, 2001

List of Addressees:

Applicant

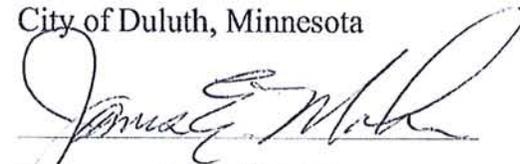
- Robin Payne, So. St. Louis SWCD, 4850 Miller Trunk Hwy., Suite 2B, Duluth, MN 55811
- Tim Peterson, USACOE, 1568 Highway 2, Two Harbors, MN 55616
- Corps of Engineer Project Manager, USACOE, ATTN:CO-R, 190 5th St. E. St. Paul, MN 55101-1638
- Mark Nelson, BWSR, 394 South Lake Avenue, Room 403, Duluth, MN, 55812
- Department of Natural Resources Regional Office, 1201 East Highway 2, Grand Rapids, MN 55744
- DNR Wetlands Coordinator , Ecological Services Section, 500 Lafayette Road, Box 25, St. Paul, MN 55155

You are hereby notified that the decision of the Local Government Unit on the above-referenced application was made on the date stated above. A copy of the Local Government Unit's Findings and Conclusions is attached. Pursuant to Minn. R. 8420.0250 any appeal of the decision must be commenced by mailing a petition for appeal to the Minnesota Board of Water and Soil Resources within fifteen (15) days of the date of the mailing of this Notice.

Date of mailing of this Notice:

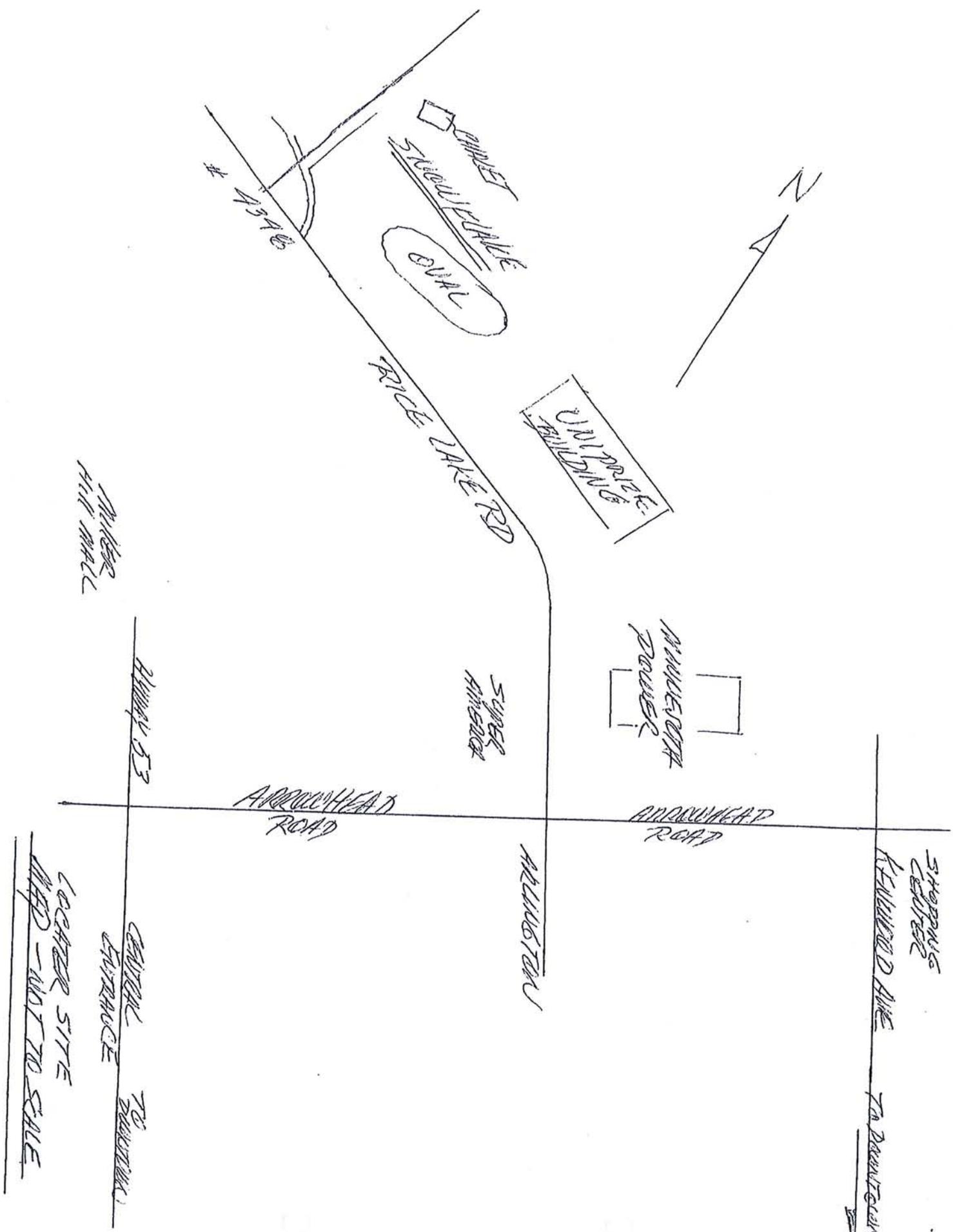
December 7, 2001

City of Duluth, Minnesota



By: James E. Mohn

Title: Senior Planner

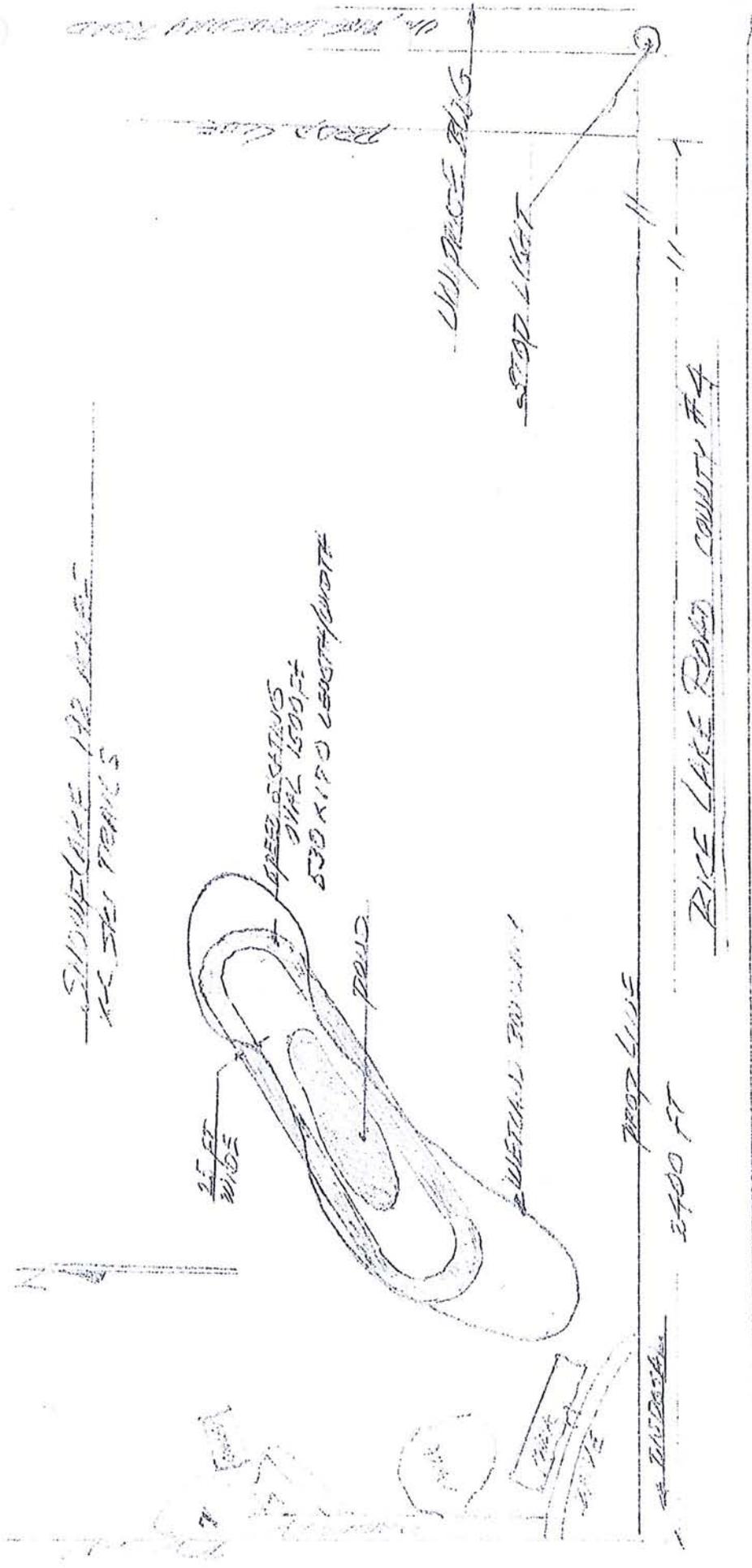


WATER GRADE
ELEVATION
22.2

STATIC HO LEVEL

1.5-2 FT
BOTTOM OF P.C.

TYPICAL SECTION



AFFIDAVIT

EXEMPTION EVIDENCE FOR LOCAL GOVERNMENT UNITS (LGU)

I do hereby certify that the following statement of evidence or activity is true and may be used as evidence to support qualification for WCA exemptions.

The LGU may require additional affidavits or verification evidence before making an exemption determination.

Location: (County, Township, Range, Section 1/4, 1/4, 1/4)

City - St. Louis - Twp. #50 - Range 17W
SECTION N 1/2 - 8

Description of Evidence for Exemption: #

THERE WILL BE NO NET LOSS IN WETLAND AREA. PROPOSED TO CHANGE EXISTING TYPE 6/7 TO TYPE 3 WETLAND.

On penalty of perjury, I hereby swear under oath that the information above, made for the purpose of documenting qualification for an exemption from the WCA, is true to the best of my knowledge.

[Handwritten Signature]

Signature

Date

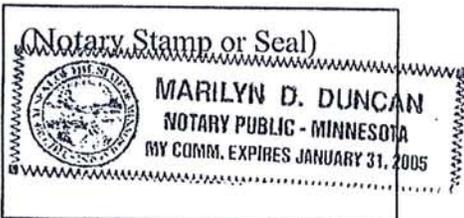
475-20-3839

Social Sec. No.

ACKNOWLEDGEMENT

The foregoing instrument was subscribed and sworn to before me on:

3rd (day), 12th (month), 2001 (year), by Marilyn D. Duncan



**Minnesota Wetland Conservation Act
APPLICATION FOR
CERTIFICATE OF NO LOSS OR EXEMPTION***

APPLICANT AND PROJECT LOCATION INFORMATION

Name(s) of Applicant <u>GEORGE HOWLAND</u>	LGU: _____
Street Address <u>7398 RICE LAKE RD</u>	Project Location: T ___ R ___ S ___ 1/4 ___ 1/4 ___ 1/4 ___
City, State, Zip Code <u>DULUTH, MINN, 55811</u>	UTM Coordinates: X: _____ Y: _____
Telephone (Day) (Evening) <u>218 7261550 - 7249022</u>	County Name/Number: _____
	Minor Watershed Name/Number: _____
	Size of entire wetland: _____ acres
	Wetland type: Circular 39 _____; NWI _____
	Check one: <input type="checkbox"/> <50% <input type="checkbox"/> 50%-80% or <input type="checkbox"/> > 80%
	Check one: <input type="checkbox"/> Agricultural land; <input type="checkbox"/> Non-ag. land

PROPOSED PROJECT DESCRIPTION

Describe the nature and purpose of the proposed project: TO CREATE A SPEED SKATING DUAL AND RECREATIONAL SKATING AREA

(attach additional pages if needed)

Timetable: project will begin on 12-01 (mo/day/yr) and will be completed by 1-02

The wetland activity at the above site qualifies for the following under the Wetland Conservation Act (WCA) (check one):

- No Loss Determination** (attach plans)
- Exemption # _____** (per MN Rule Chapter 8420.0122) (Note: Applicant is responsible for submitting the proof necessary to show qualification for the exemption claimed.)

Description of Exemption Claimed:

NO NET LOSS IN WETLAND AREA.
CHANGE EXISTING TYPE 1/7 TO TYPE 3

APPLICANT SIGNATURE

The information provided for this determination is truthful and accurate to the best of my knowledge. I ensure that, in draining or filling the subject wetland under an exemption noted above, appropriate erosion control measures will be taken to prevent sedimentation of the water, the drain or fill will not block fish passage, and the drain or fill will be conducted in compliance with all other applicable federal, state and local requirements, including best management practices and water resource protection requirements established under Minnesota Statutes, Chapter 103H.

[Signature] 12-3-01
(Signature of Applicant) (Date)

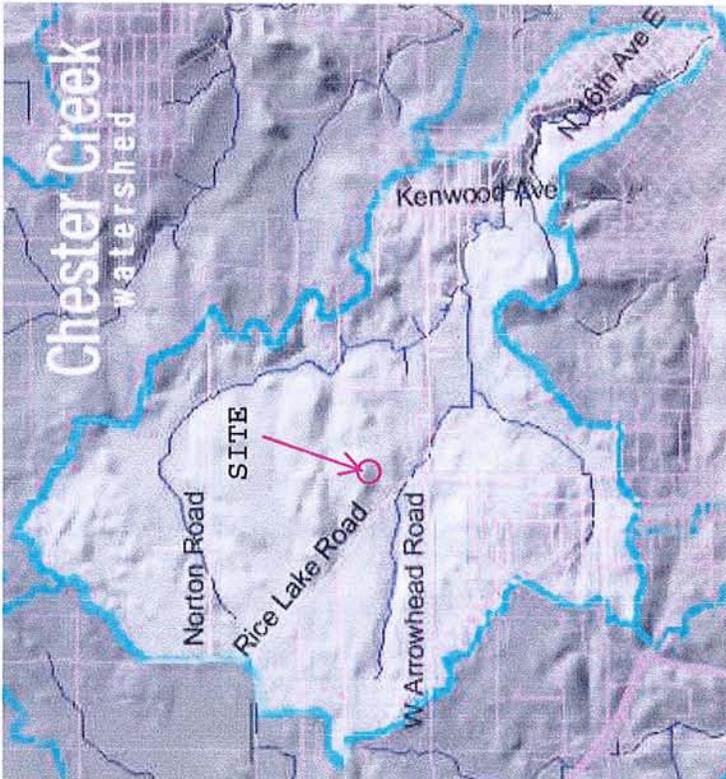


EXHIBIT 1 CHESTER CREEK
WATERSHED
SOURCE:
DULUTHSTREAMS.ORG

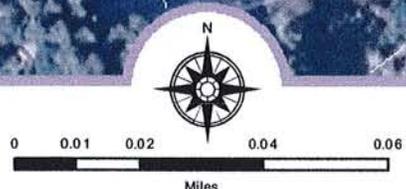


County Land Explorer

St. Louis County, Minnesota



ARMORY
OFF SITE ALTERNATIVE 1



County Land Explorer
St. Louis County www.stlouiscountymn.gov/CountyLandExplorer Minnesota

Disclaimer
This is a compilation of records as they appear in the Saint Louis County Offices affecting the area shown. This drawing is to be used only for reference purposes and the County is not responsible for any inaccuracies herein

Map created using County Land Explorer
gis.stlouiscountymn.gov/CountyLandExplorer

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U.S. Fish and Wildlife Service
National Wetlands Inventory

JAL

Apr 5, 2016



Wetlands

- Freshwater Emergent
- Freshwater Forest/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- River/Stream
- Other

OFF SITE ALTERNATIVE 2

User Remarks:

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



PACIFIC
 EDUCATION
 PARTNERS

PROJECT NAME:
 SNOWFLAKE
 HIGH SCHOOL

OWNER TITLE:
 OFF SITE 2

FILE
 DRAWN BY:
 CHECKED BY:
 MOVED BY:
 DATE: 06/16/16



U.S. Fish and Wildlife Service

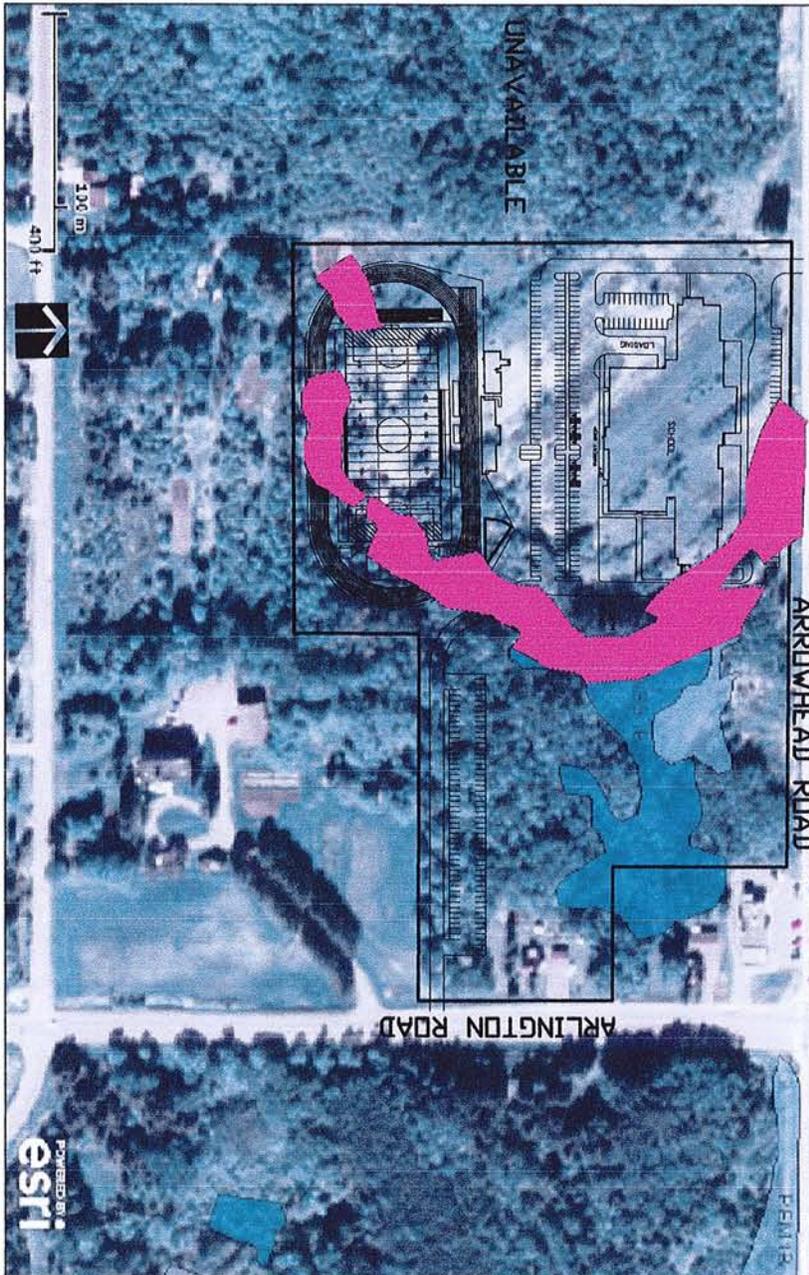
National Wetlands Inventory

SW QUADRANT

Apr. 5, 2016

Wetlands

- Freshwater Emergent
- Freshwater Forest/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lakes
- Riverine
- Other
- EST. WETLAND IMPACTS
- ESTIMATED 110,894 SF**
- WETLAND IMPACTS MINIMUM**
- OFF SITE ALTERNATIVE 3**



User Remarks:

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or completeness of the data used shown on this map. All wetlands include data shown on base in accordance with the layer metadata found on the Wetlands Mapper web site.



PACIFIC
EDUCATION
PARTNERS

PROJECT NAME:
SNOWFLAKE
HIGH SCHOOL

DRAWN TITLE:
OFF SITE 3

TITLE:
DATE:
DRAWN BY:
CHECKED BY:
DESIGNED BY:

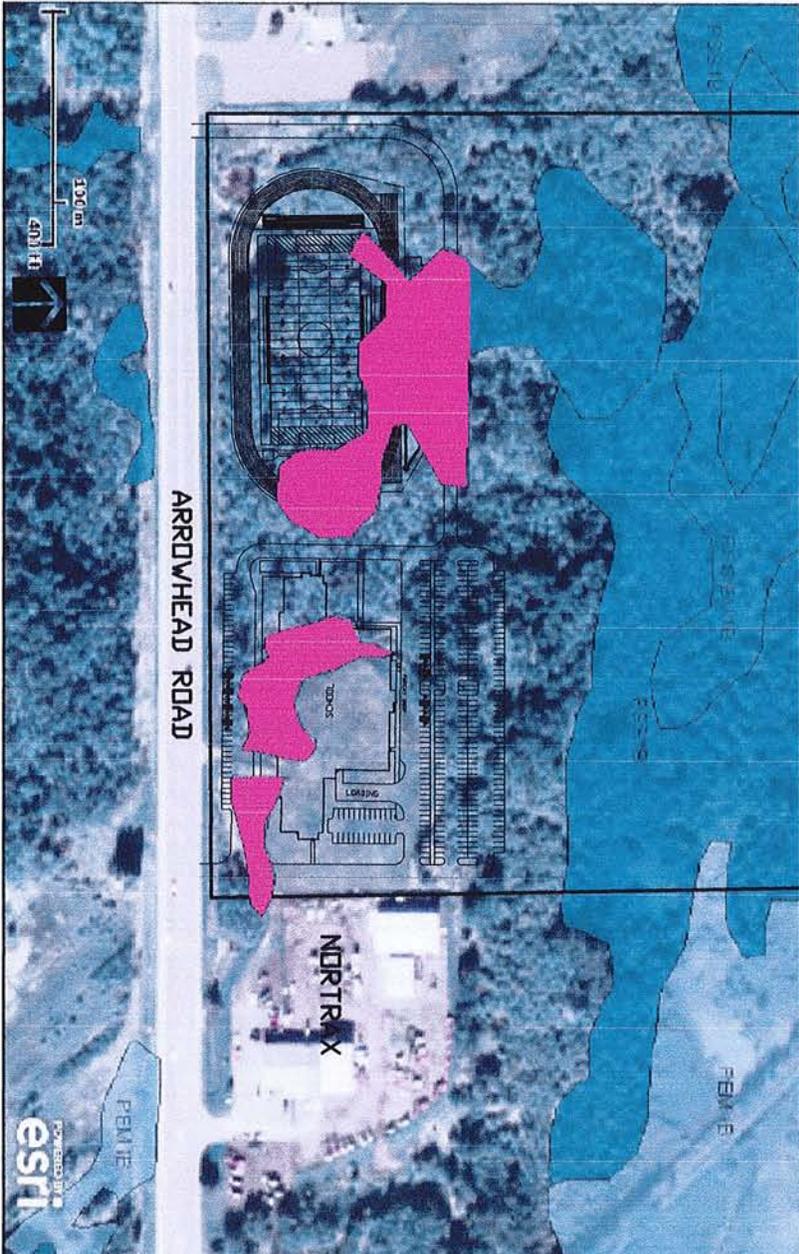


U.S. Fish and Wildlife Service

National Wetlands Inventory

NW SITE

Apr 5, 2016



User Remarks:

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or completeness of the data sets shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper Web site.

Wetlands

- Freshwater Emergent
- Freshwater Forest/Shrub
- Estuarine and Marina Deepwater
- Estuarine and Marina
- Freshwater Pond
- Lakes
- Rivers/In
- Other

- EST. WETLAND IMPACTS
- ESTIMATED 122,500 SF
- WETLAND IMPACTS MINIMUM
- OFF SITE ALTERNATIVE 4

PACIFIC EDUCATION PARTNERS

PROJECT NAME:
SNOWFLAKE HIGH SCHOOL

OWNER TITLE:
OFF SITE 4

DATE:
DATE IN:
COORD BY:
FILED BY:
DRAWN BY:



New High School Building Must Have List

for 8th grade -- 6 classrooms, one a science lab

specialist programs, for music room attention paid to acoustical needs outlined in Wenger information

- band room

- instrument storage outside of the band room

- choir room w/ piano

- practice rooms

- classroom world languages 2

- 2 gyms, one full size for varsity sports and the other smaller

- weight room

- locker room

- 2 art rooms, one with kiln*

academic program high school

- 15 classrooms -- big enough for 32

- 4 science labs - big enough for 32

- 7 special education rooms -- resource, classroom testing, some could be smaller, two of the classrooms that are suites similar to JA suite at North Star Room A322 and 323

offices

- principal, registrar, front office for two secretaries, 2 social workers, 2 counselors, school psychologist, evaluation coordinator, sped coordinator, 3 offices for tech staff, two offices for district staff, Dean of Students office – with reception area, office for dean, ISS rooms

nurse's office -- big enough for three-four cots for high school students

cafeteria

auditorium that minimally has capacity for 400

full kitchen (open to the idea of a serving kitchen if food service folks think that would work)

storage and receiving needs for building with about 900 students (8th grade and high school)

"commons" area

- display cases for awards, pictures, etc.

field for soccer initially (and in a few years football) with track around it

bathrooms to accommodate staff and 800 students

softball and baseball field(s)

additional parking area for 300 students and staff (beyond what is already available 126 or so at North Star) so total 425 spaces

staff lounge area

copy room and mailbox room

wireless access throughout the building

Technology Support

- (1) Adequately-sized equipment rooms with storage space
- (2) Centrally-located and easily accessed main hub room
- (3) Dedicated wiring (POE) for wireless access points
- (4) Sufficient electrical drops in classrooms, offices & labs (more than 2)
- (5) Integrated AV wiring in classroom for Smart board, audio and / or projector support
- (6) Integrated air-filtration system for hub room(s)
- (7) Integrated UPS (Uninterruptable Power Supply) for main network infrastructure & servers.
- (8) Digital PBX / Phone system with wiring to support system
- (9) One stationary computer lab with room for other tech and STEM equipment

Other Important Factors

- Safe connection to Rice Lake road with two ways in/out of campus
- Outdoor play area for North Star PE classes and recess near North Star

GUIDE FOR PLANNING SCHOOL CONSTRUCTION PROJECTS IN MINNESOTA

Below are selected excerpts from the Minnesota Department of Education guide related to school construction projects that pertain to charter school facilities challenges.

Part 1.02 Financing School Construction Projects

The State of Minnesota underwrites the bonds for all school district construction projects; helps fund most projects through debt service equalization payments, and funds on average 90% of the cost of programs and operations in state public school district facilities. Construction costs typically represent 10-20% of the lifetime cost of a school facility.

School districts have access to a variety of financing options for school construction projects. Determining what financing option is best for any project will depend on a variety of factors and will vary from project to project and school district to school district.

- General Obligation Bonds
- Alternative Facilities Bonding and Levy
- Building Bonds for Calamities/Emergency Management
- Bonds for Certain Capital Facilities
- Debt Service Equalization
- Disabled Access and Fire Safety Improvements
- Down Payment Levy
- Health and Safety
- Lease-Purchase Agreement and Lease-Levy
- Operating Capital Revenue
- Operating Referendum

Part 1.03 Loans, Grants, and Cooperative Agreements for School Construction Projects

- Capital Loan
- Cooperative Secondary Facilities Grant
- Energy Investment Loan
- Joint Powers Agreements for Facilities
- School Building Accessibility Capital Improvement Grant
- Technology and Telecommunications Grants
- State Grants

Part 2.05 Projecting Educational Program and Service Space Needs

Projecting what new or expanded programs and services need to be accommodated in school facilities can be a very difficult task. Few school facilities are constructed with space set aside for growth, and many lack adequate storage, office, and conference room spaces. Many new or renovated schools report that they are in need of additional spaces within two years of occupying new/renovated facilities.

What is clear is that schools need spaces for program and service as well as student enrollment growth. Listed below are a sample of school programs and services that have been added or

expanded in scope since publishing the 1988 Guide:

Part 2.07 Selecting a School Site

Adequate school site size is an important consideration in the commissioner's review and comment on any new/renovation

Site Selection Considerations

The selection of an adequate school site with expansion space will accommodate current and future educational programs and services, expanding student enrollments, increase community use of schools, and promote school-community partnerships.

Allow for current site size needs and future expansion possibilities. The basis of the following school site size guidelines are the experiences of school districts, school architects, and school facility planners in Minnesota and other states. **School site size guidelines refer to usable acres. Do not include wetlands or land for on-site water, sewer, or zoning setbacks as usable land for calculating acreage to meet the school site guidelines. The school site size ranges specified below allow for schools planning different grade organizations, student enrollment capacities, and current and future program, support, community use/partnership, and program expansion spaces for the school site and school.**

**TABLE I
SCHOOL SITE SIZE GUIDELINES**

SCHOOL LEVEL	SITE SIZE
ELEMENTARY SCHOOL	10-15 ACRES +
K-8 OR MIDDLE LEVEL SCHOOL	25-35 ACRES +

SECTION III. DESIGNING SCHOOL FACILITY SPACES

The purpose of Section III is to highlight important considerations in planning and designing school facilities, cite gross square footage, general space, and square footage guidelines, and identify the essential elements to consider in designing learning, school support, and community use/partnership spaces in elementary, middle level, and high schools. School districts and school facilities planning committees need to use this information to help understand the design parameters for school facilities that will be a part of a school facilities project proposal. Architects and other consultants working with school district staff must subsequently develop detailed specifications for each space. **Research studies are increasingly documenting the positive effect of quality school facilities, lighting, acoustics, and indoor air quality and ventilation on student achievement and health, so any efforts that support quality school facilities will pay important dividends for learners, school staff, and the parents that work with them.**

Part 3.04 Gross Square Footage and General Space Guidelines for Elementary, Middle Level, and High Schools

This part provides an overview of the gross square footage guidelines for elementary, middle level, and high schools of different student enrollments, and general space guidelines that apply to all school construction projects.

A frequent question is: "how many square feet do we need for an elementary/middle level/high school?" **Adequate square footage, flexible and adaptable school spaces, and spaces for program expansion are the keys to the long-term and cost efficient use of school facilities.** Without adequate school sites and school facilities square footage, space renovations and expansions are costly and perhaps impossible to make. Space inadequacies will continue and probably compound over time, and it will be difficult to meet student needs as desired or required. Too often, in an effort to reduce school facilities project costs, school boards reduce school learning and support space square footages that results in a lack of adequate storage and program expansion spaces. In reality, this approach will cost a school district and local taxpayers more money in the long run because ongoing maintenance costs will be greater in school facilities under stress, and any renovations or additions will only be more costly if not completed as originally planned. Within two years of project completion, many new or renovated schools report shortages of storage, support, and expandable learning and community use/partnership program spaces. **School districts are strongly encouraged to make adequate site size, space square footages, flexible/adaptable spaces, and spaces for program expansion a high priority, even if it means completing the project or fully equipping facilities at a later date.**

**TABLE III
GROSS SQUARE FOOTAGE
PER STUDENT GUIDELINES**

SCHOOL STUDENT ENROLLMENT	ELEMENTARY SF	MIDDLE SF	HIGH SCHOOL SF
LESS THAN 500	125 - 155	170 - 200	200 - 320
500 - 999	110 - 135	160 - 190	190 - 220
1000-1500	100 - 135	150 - 180	180 - 200
1500-2000			140 - 170

Part 4.08 Charter Schools and Private Schools

Charter schools are public schools under M.S. 124D.10, subd. 7, exempt from many laws and rules applicable to a school district, unless a charter school chooses to participate in programs that require compliance. Regarding school facilities, under M.S. 124D.11, charter schools may lease a building or land, use general and total capital operating revenues to maintain, repair, and renovate school facilities, but may not use money received from the State to purchase land or buildings. Charter schools and private schools must meet all state and local requirements relating to building codes or health and safety. If planning a comprehensive school program, charter and private schools should consider using the guidelines relating to school site, learning, and support spaces as contained in this Guide.

(<http://education.state.mn.us/mdeprod/groups/Finance/documents/Publication/003979.pdf>)

EXHIBIT 5

**Edison
High School
Initiated 11/4/2013
LHB #**

Students 900+
Updated March 17th

New				
Space/Group	QTY	SF	Subtotal	Comments
General Classroom Area				
8th Grade	6	900	5,400	Based on 40 students, min size rec 6 are recommended 6 are recommended
Math	4	900	3,600	
Social Studies	4	900	3,600	
Language Arts	4	900	3,600	
Foreign Language	2	900	1,800	
Growth Classroom	0	900	0	
Staff Planning	0	60	0	
Storage	4	300	1,200	
Small group	0	160	0	
Group Learning	0	1,500	0	
Subtotal			19,200	
Sciences				
Science (Physics, Bio, Chem)	5	1,800	9,000	Lecture lab combo, 40 students
Science Prep	3	100	300	
Science Storage	2	100	200	
Chemical Storage	1	100	100	
Subtotal			9,600	
Family & Consumer Science				
Foods Lab	0	1,500	0	
Multi-Purpose (Share w/ foods)			0	
Subtotal			0	
Industrial Tech				
Woods Shop	0	2,000	0	
Metals / Engines Shop	0	2,000	0	
Fab Lab	0	2,000	0	
Classroom	0	875	0	
Computer Lab	0	1,000	0	
Staff and Storage (Included in above shops)			0	
Subtotal			0	
Art				
Labs	2	1,400	2,800	Sized for 40
Staff and Storage	1	300	300	
Kiln Room	1	200	200	
Subtotal			3,300	
Music				
Instrumental Rehearsal Room	1	2,600	2,600	Sized for 80 Shared with instrument room Sized for 80 Recommend including in band room
Orchestra Rehearsal Room	0	2,000	0	
Vocal Rehearsal Room	1	1,600	1,600	
Office	1	150	150	
Library	1	150	150	
Practice Rooms	1	200	200	
Practice Rooms	2	75	150	
Uniforms Storage	1	150	150	
Instrument Storage	1	300	300	
Subtotal			5,300	

Computer Labs / Business

Business Education	0	900	0	
School Store	0	250	0	
Storage (Store)	0	100	0	
Computer Labs	0	1,000	0	
Technology Director (office/storag	0	250	0	
Subtotal				0

Media/Library

Circ./Stacks/Seating	1	3,000	3,000	If not a media center, a resource commons is rec.
Small Group / Multimedia	2	150	300	
Workroom/Office/Periodicals	1	300	300	
Computer Lab	1	900	900	
Media Directors Office	0	150	0	
Subtotal			4,500	

Auditorium

400 Seats	0	5,000	0	Use locker rooms
Stage	1	2,400	2,400	
Scene Storage	1	400	400	
Dressing Rooms	0	200	0	
Makeup Rooms	1	100	100	
Toilets	0	60	0	
Ticket	0	80	0	
Control Room	1	120	120	
Costume Storage	1	200	200	
Subtotal			3,220	

Special Needs

Rooms	6	600	3,600	
Specialty Room	1	1,100	1,100	
Conference Room	1	150	150	
Subtotal			4,850	

Phy Ed

Health Classroom	0	1,000	0	Bleacher Seating for 400
Weight/Fitness Room	1	1,600	1,600	
Phy Ed/Athletic Storage	1	800	800	
Gym (2 Station)	1	12,000	12,000	
Multi Purpose	0	1,800	0	
Training Room	1	250	250	
Concession Stand	1	180	180	
Subtotal			14,830	

Locker Rooms

Boy's Physical Education Locker Rooms				
Boys Lockers	1	900	900	
Staff	1	120	120	
Toilet/Shower Area	1	350	350	
Boy's Team Locker Rooms				
Lockers	0	750	0	
Staff	0	250	0	
Girl's Physical Education Locker Rooms				
Lockers	1	900	900	
Staff	1	120	120	
Toilet/Shower Area	1	350	350	
Girl's Team Locker Rooms				
Lockers	0	750	0	
Staff	0	250	0	
Subtotal			2,740	

School Administration

Administrator / Principal	1	200	200
Dean	1	150	150
Secretary/Receptionists/Waiting	1	400	400
Workroom	1	150	150
Records Storage / Vault	1	150	150
Conference Room	1	150	150
Toilets	1	80	80
Registrar	1	120	120
Athletic Director	0	120	0
Social workers	2	120	240
Counselors	2	120	240
Evaluation Coordinator	1	120	120
SPED Coordinator	1	120	120
Tech Staff	3	120	360
District Staff	2	120	240
ISS	1	150	150
Nurse's Office	1	150	150
Waiting	1	80	80
Toilets	1	80	80
Cot room	1	180	180
Storage	1	80	80
Psychologist Office	1	120	120
Subtotal			3,560

Food Services

Cafeteria (300 Kids @15 SF Ea)	1	4,500	4,500
Serving	1	900	900
Food Prep	1	1,800	1,800
Dry Food Storage	1	400	400
Freezer	1	280	280
Cooler	1	140	140
Dishwasher	1	180	180
Office	1	100	100
Toilets/Lockers	1	150	150
Staff Dining	1	500	500
Subtotal			8,950

Building Services

Recycle Room	1	200	200
Laundry	0	200	0
Custodial Closets	2	100	200
Custodian Office	1	100	100
Toilet	1	80	80
Building Storage	2	400	800
Receiving	1	250	250
Toilets (Pair)	3	500	1,500
Subtotal			3,130

Total Programmed SF	83,180
25% circulation	20,795
Total SF	103,975

Site Elements

Parking for 300	90,000 SF	Includes UDC required islands
Bus loop for 15 (event parking for 120)	36,000 SF	
Outdoor Classrooms	2 1,800 SF	
HS Soccer Field (190x300)	67,200 SF	Includes 10' safety zone
400 M Track	80,000 SF	around the soccer field
	275,000 SF	
	6 Acres	



BLACKHOOF



CLEAR

PACIFIC
EDUCATION
PARTNERS

PROJECT NAME

SNOWFLAKE
HIGH SCHOOL

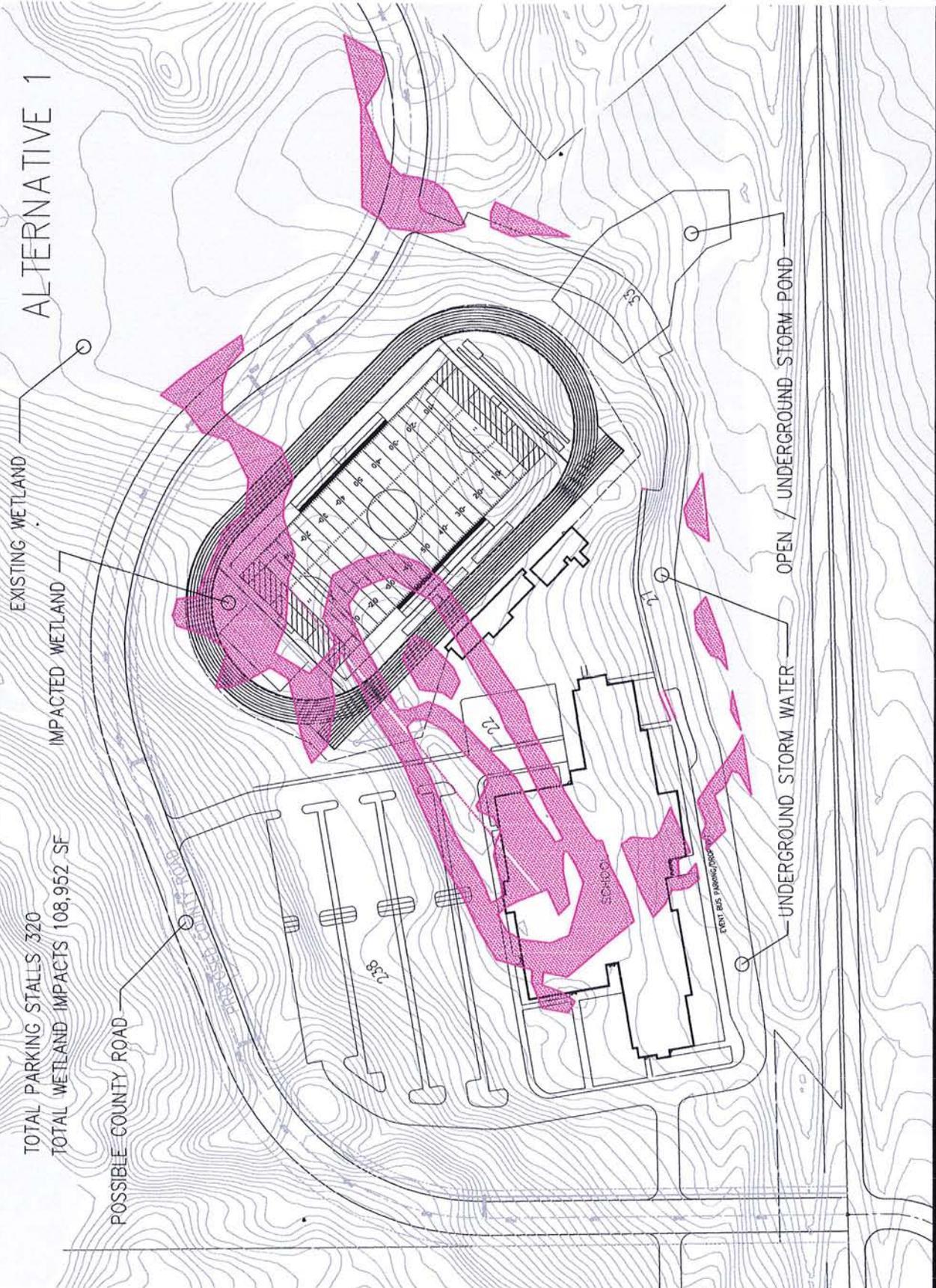
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DPSA 8-12
ALTERNATIVE 1

FILE NO. -
DESIGNED BY -
PROJECT NO. -
DRAWING NO. -

A1

ALTERNATIVE 1



ALTERNATIVE 2

TOTAL PARKING STALLS 320
TOTAL WETLAND IMPACTS 114,743 SF

EXISTING WETLAND

IMPACTED WETLAND

POSSIBLE COUNTY ROAD

LOADING

SCHOOL

OPEN STORM POND



BLACKHOOF



COURT

PACIFIC
EDUCATION
PARTNERS

PROJECT NAME

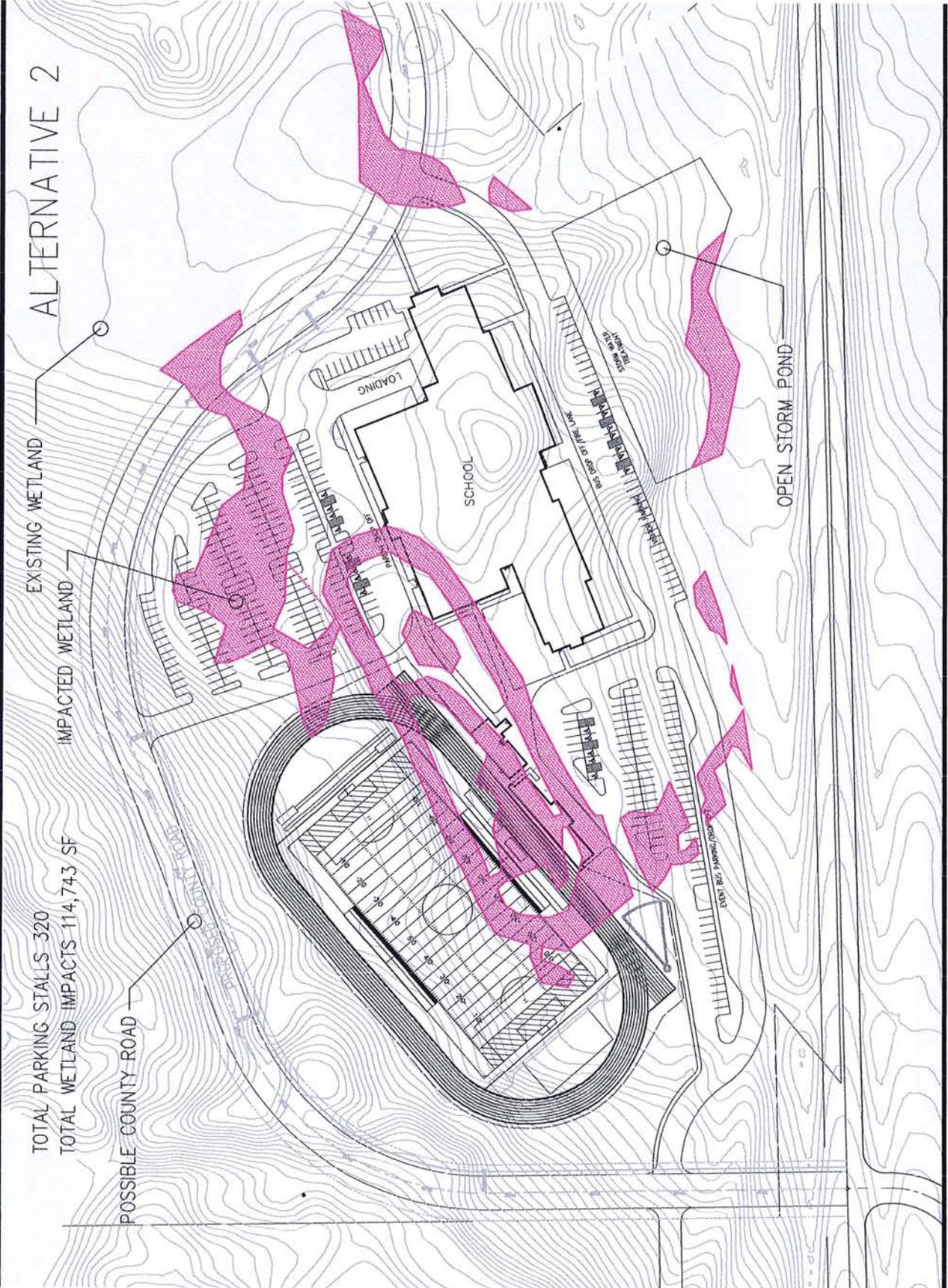
SNOWFLAKE
HIGH SCHOOL

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DPSA 8-12
ALTERNATIVE 2

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CHECKED BY:
DATE PLOTTED:
PLOT DATE:

A2



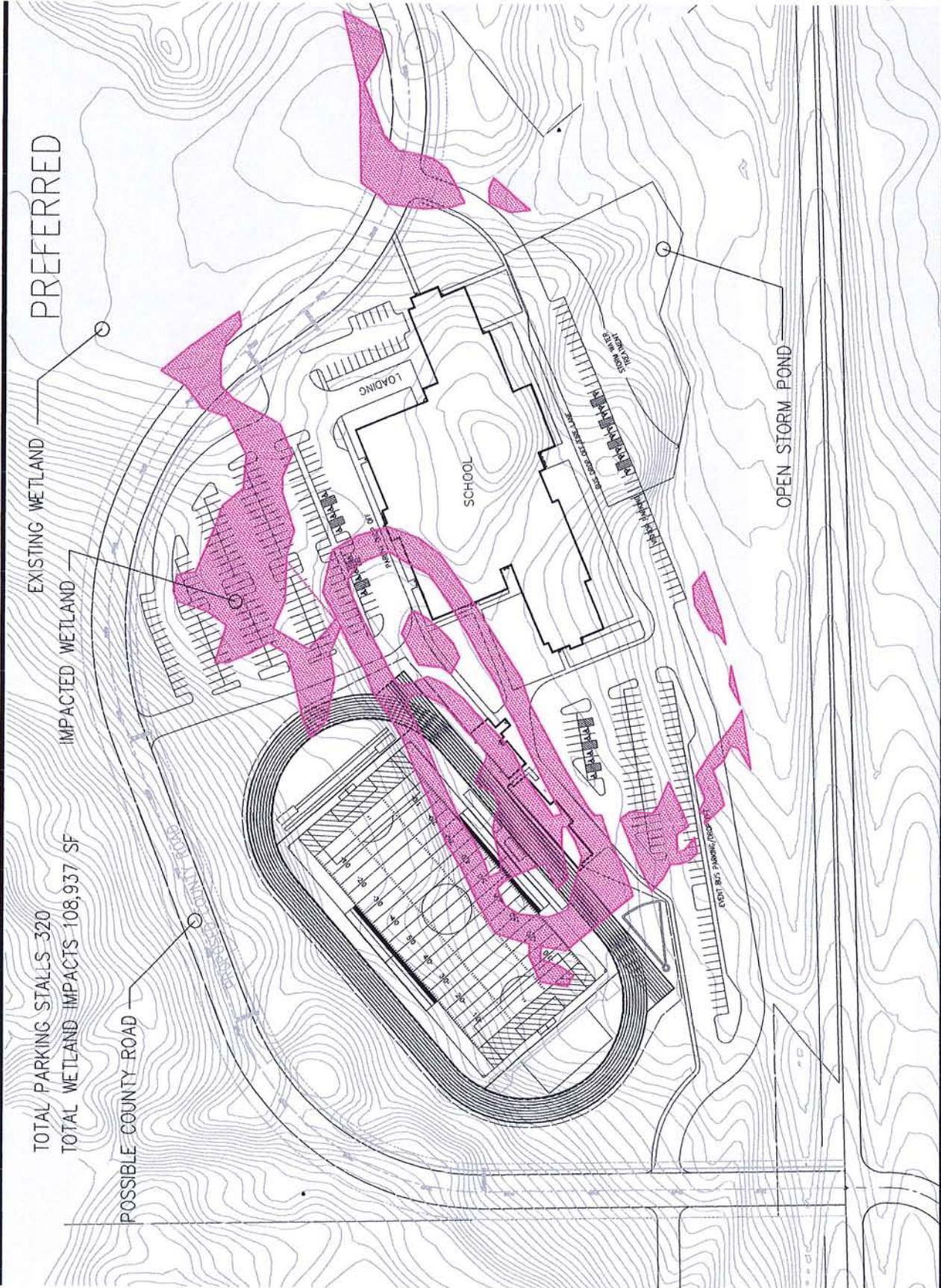
PREFERRED

EXISTING WETLAND

IMPACTED WETLAND

TOTAL PARKING STALLS 320
TOTAL WETLAND IMPACTS 108,937 SF

POSSIBLE COUNTY ROAD



BLACKHOOF



OWNER

PACIFIC
EDUCATION
PARTNERS

PROJECT NAME

SNOWFLAKE
HIGH SCHOOL

DRAWING TITLE

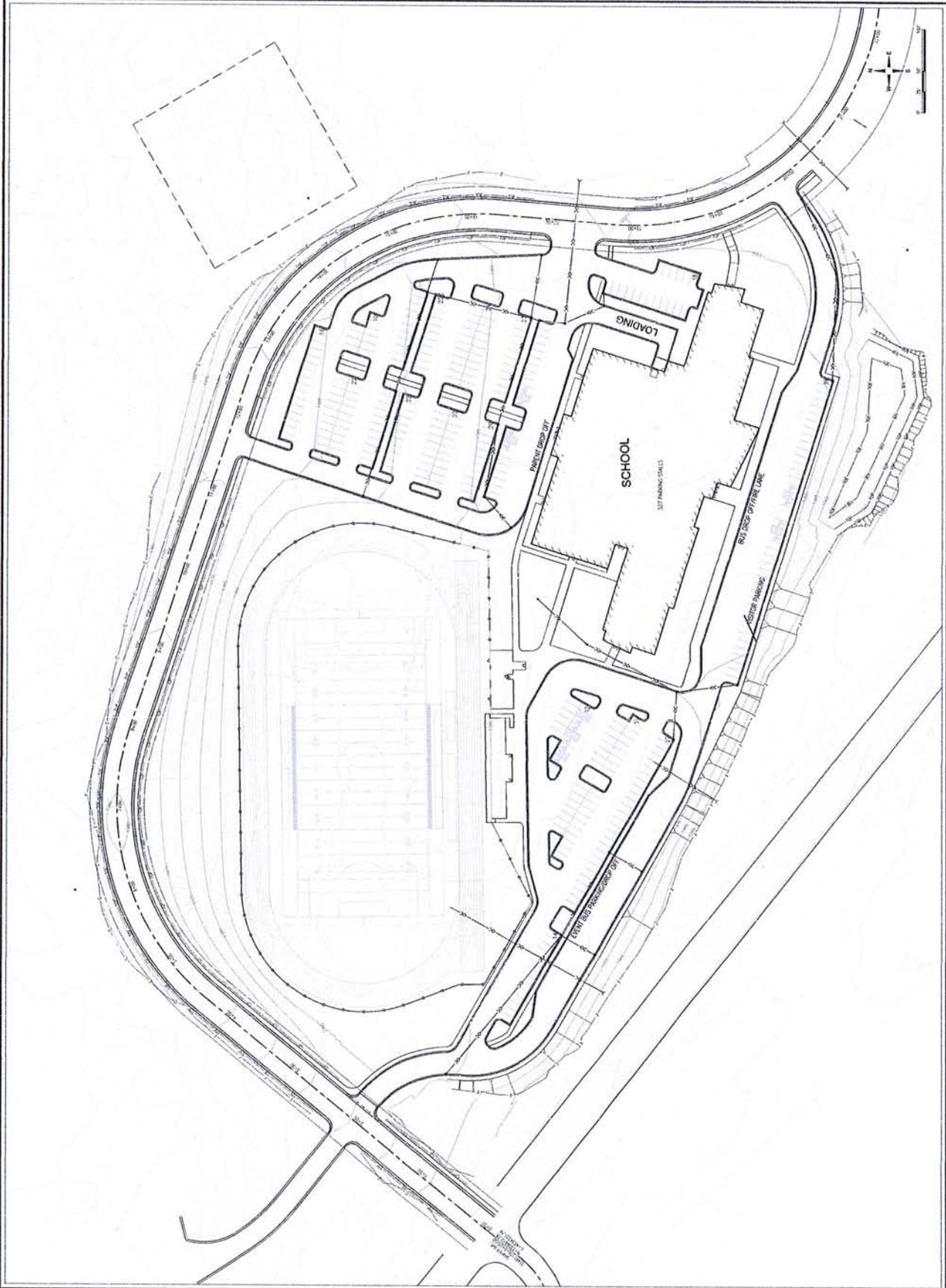
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CHECKED BY:
PROJECT NO. -
DATE: 02/14/12

PREF

				<p>WE ARE CERTIFIED FOR THE FOLLOWING SPECIFICATIONS:</p> <p>AS PER THE MINNESOTA PROFESSIONAL ENGINEERING ACT AND RULES AND REGULATIONS, WE ARE NOT PROVIDING ANY DIRECT SUPERVISION AND SEAL FOR ANY WORK PERFORMED UNDER THE LICENSE OF ANY OTHER PROFESSIONAL ENGINEER.</p> <p>DATE: 03/03/2016</p>	<p>PROJECT OWNER:</p> <p>DUWIT, MINNESOTA 55811</p>	<p>REVISIONS</p>	<p>ISSUED DATE:</p> <p>04/03/2016</p>	<p>PROJECT NO.:</p> <p>15-504-C</p>	<p>DRAWN BY:</p> <p>JOO</p>	<p>APPROVED BY:</p> <p>AJZ</p>	<p>SCALE: 1/2" = 1' AT FULL SCALE</p>	<p>SHEET NO.:</p> <p>C5.0</p>
						<p>SCALE: 1/2" = 1' AT FULL SCALE</p>	<p>KEY</p>					



FOUNDATIONS
CONSULTANTS

ANOLA
ANOLA CONSULTANTS

EAPC
EARTH AND PLANNING CONSULTANTS

Northland
Consulting Engineers LLP

PROPOSED BUILDING FOR:
DECS 8-12 SCHOOL
43X RICE LAKE ROAD
DULUTH, MINNESOTA 55811

PROJECT OWNER:
DULUTH, MINNESOTA 55811

ISSUED DATE:
XX-XX-XXXX

PROJECT NO.:
15-584-C

DRAWN BY:
JOO

APPROVED BY:
AKZ

SCALE: 1" = 20' AT FULL SCALE

KEY

REVISIONS

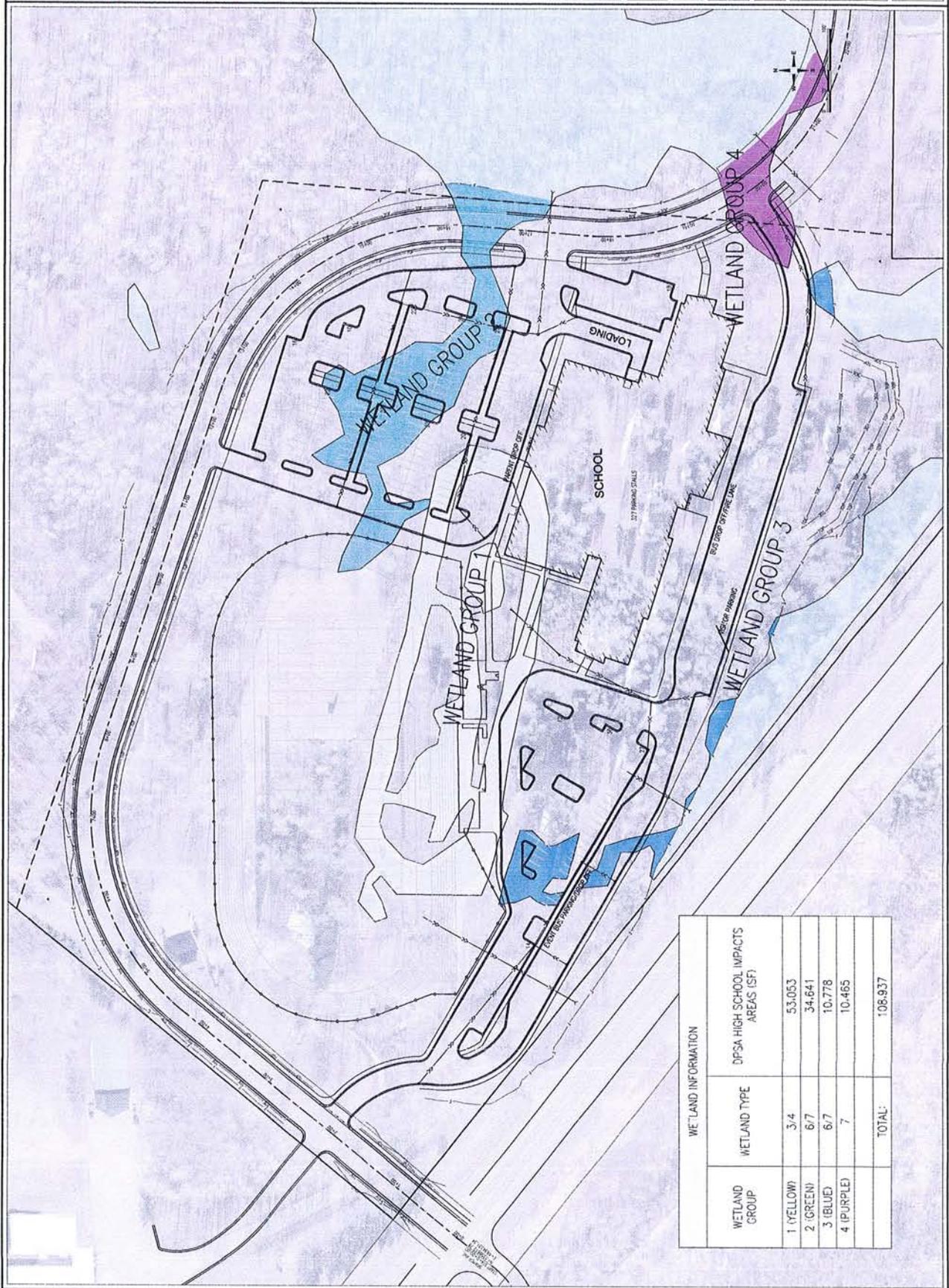
DATE: _____
DRAWN: _____
CHECKED: _____
DATE: _____
LIC. NO. IN MN: 4754

FOR THE CITY OF DULUTH, MINNESOTA
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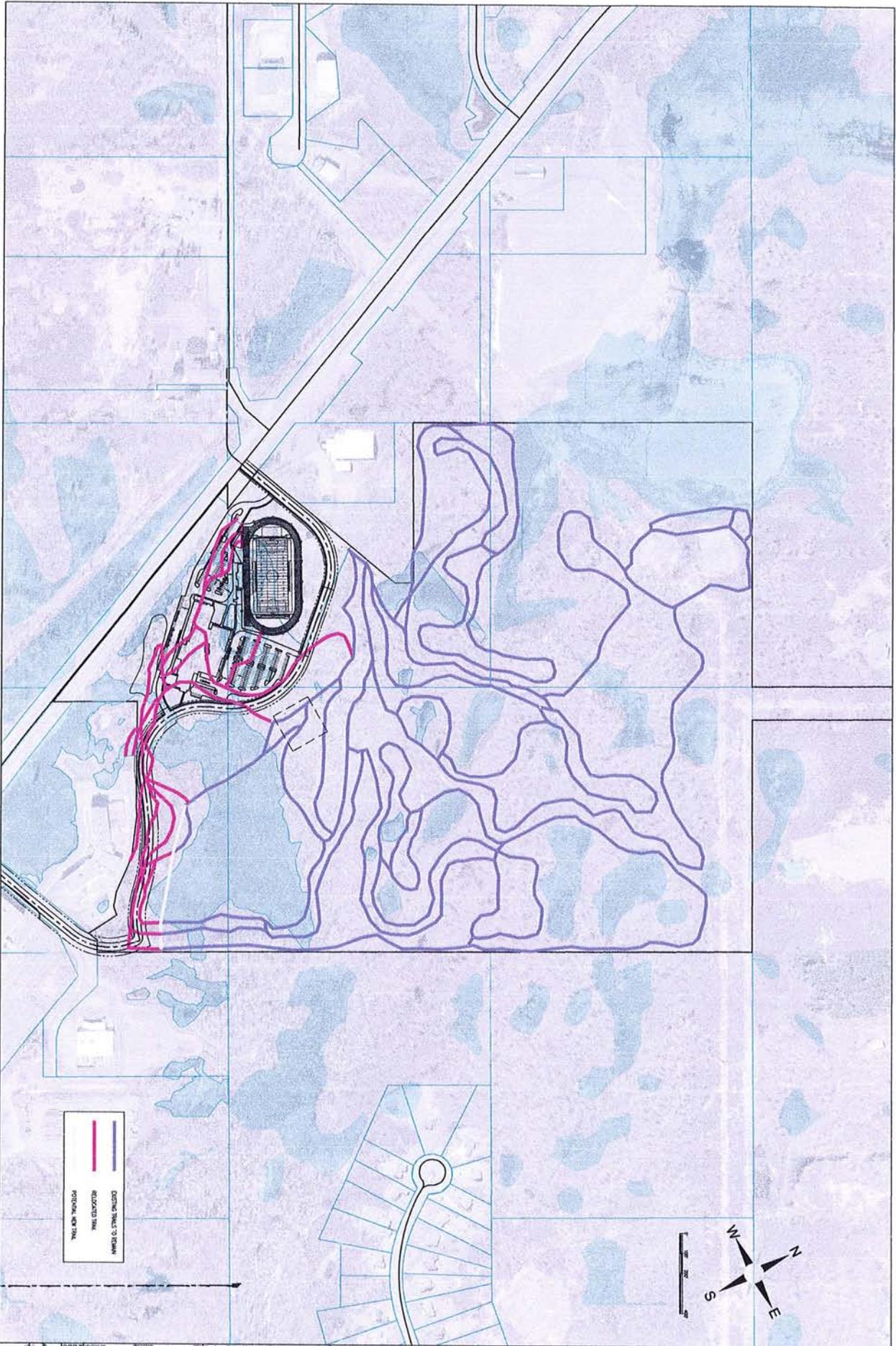
FOUNDER: _____
DATE: _____
LIC. NO. IN MN: 4754

SHEET NO. _____

C4.1 SITE PLAN



WETLAND INFORMATION		
WETLAND GROUP	WETLAND TYPE	DPSA HIGH SCHOOL IMPACTS AREAS (SF)
1 (YELLOW)	3/4	53,053
2 (GREEN)	6/7	34,641
3 (BLUE)	6/7	10,778
4 (PURPLE)	7	10,465
TOTAL:		108,937



PROJECT NO. _____
 SHEET NO. _____
 DATE _____
 SCALE _____
 DRAWN BY _____
 CHECKED BY _____
 APPROVED BY _____
 PROJECT TITLE _____
 CLIENT _____
 LOCATION _____
 PROJECT NO. _____
 SHEET NO. _____
 DATE _____
 SCALE _____
 DRAWN BY _____
 CHECKED BY _____
 APPROVED BY _____
 PROJECT TITLE _____
 CLIENT _____
 LOCATION _____

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
 PROJECT NO. _____
 SHEET NO. _____
 DATE _____
 SCALE _____
 DRAWN BY _____
 CHECKED BY _____
 APPROVED BY _____
 PROJECT TITLE _____
 CLIENT _____
 LOCATION _____

SKI TRAIL ALIGNMENTS

 DULUTH, MN

Northland
 Consulting Engineers L.L.P.
 Medical District Building, Engineering Center
 1000 University Avenue
 Duluth, MN 55812

Information for File # 2014-03734-DWW

Applicant Pacific Education Partners

Corps Contact Daryl W. Wierzbinski

Address 600 South Lake Avenue, Suite 211
Duluth, Minnesota 55802

E-Mail daryl.w.wierzbinski@usace.army.mil

Phone 218-720-5291 EXT 35401

Primary County St. Louis

Section 8

Township 50 N.

Range 14 W.

Information Complete On April 22, 2016

Posting Expires On May 13, 2016

Authorization Type LOP-05-MN

This application is being reviewed in accordance with current practices for documenting Corps jurisdiction under Section 404 of the Clean Water Act.

We have made a preliminary determination that the aquatic resources that would be impacted by the proposed project are subject to Corps of Engineers jurisdiction under Section 404 of the Clean Water Act. If an approved jurisdictional determination is completed as part of the review process for this application, a copy will be posted on the St. Paul District web page at the following link: <http://www.mvp.usace.army.mil/Missions/Regulatory.aspx>.

Project

The Pacific Education Partners is proposing to construct a two level public charter high school, grades 8-12, 320 parking stalls, storm water treatment area, track and field areas and access roads.

Project Description

The proposed project would result in the discharge of dredged and fill materials into 2.5 acres of wetlands that are adjacent to Chester Creek that is a tributary to Lake Superior.

Name, Area and Types of Waters (including wetlands) Subject to Loss

The proposed wetland impact types consist of approximately 1.22 acres of shallow/deep marsh wetlands and 1.28 acres of scrub-carr/forested wetlands.

Alternatives Considered

A no build alternative was considered but rejected because the applicant determined that the no-build would not fulfill the purpose and need of the project.

Alternative 1 – Duluth Armory Site was considered as a possible re-utilization of an existing building but was rejected due to inadequate parking area as well as structural issues which would increase the budget.

Alternative 2 – County Jail Site was dismissed due to the fact that it is adjacent to a County Jail.

Alternative 3 – The Southwest quadrant of Arlington and Rice Lake Road was considered but dismissed because the proposed wetland impacts would be approximately 2.55 acres and the purchase price would be cost prohibitive.

Alternative 4 – Arrowhead Road next to Nortrax was considered and dismissed because the proposed wetland impacts would be approximately 2.81 acres and there are extensive wetlands on the property.

Alternative 5 – Central High School was considered, but dismissed because the Duluth Public School District (ISD 709) rejected an offer as it would go against their policy of selling to another competing school.

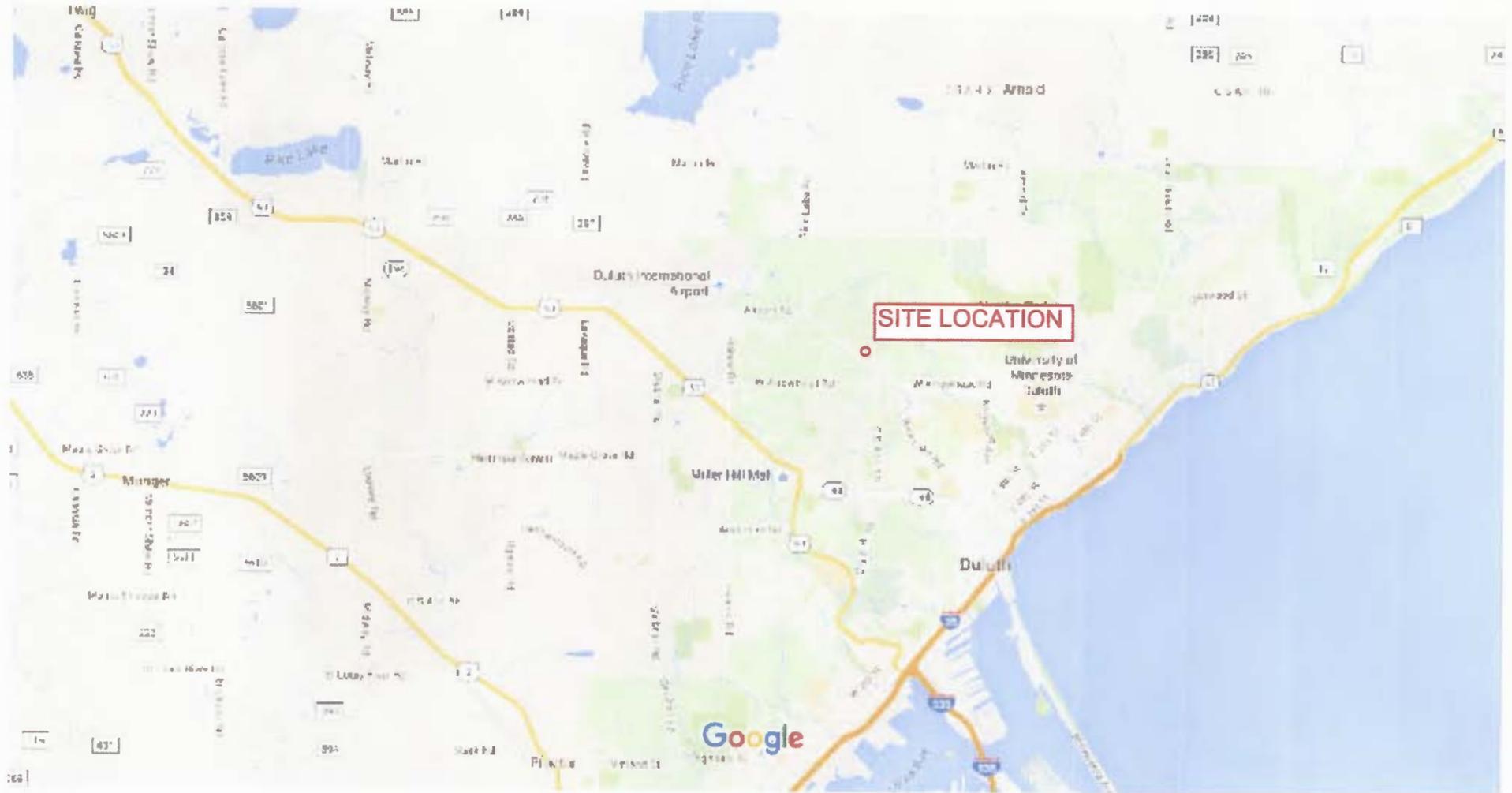
Preferred Alternative – Snowflake Nordic Ski Center was chosen as the preferred alternative because of its proximity to the current elementary school, and would meet the State of Minnesota Department of Education Standards.

Compensatory Mitigation

The applicant proposes to compensate for the loss of wetlands associated with this project by purchasing 1.25 acres of Type 2, fresh wet meadow wetland credits and 1.25 acres of Type 6, shrub-carr/alder thicket credits to be debited from the Zeimet/Peterson Preserve Wetland Mitigation Bank (Account 1532) in Bank Service Area 1.

Drawings See attached.

Google Maps DPSA 8-12 HIGH SCHOOL



Map data ©2016 Google 1 mi

2014-03734-DWW
Drawing 1 of 7



WETLAND INFORMATION		
WETLAND GROUP	WETLAND TYPE	DPSA HIGH SCHOOL IMPACTS AREAS (SF)
1 (YELLOW)	3/4	53,053
2 (GREEN)	6/7	34,641
3 (BLUE)	6/7	10,778
4 (PURPLE)	7	10,465
TOTAL:		108,937

FOUNDATIONS
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 TEL: 763.461.7200 FAX: 763.461.7201
 1515 W. 15TH ST. SUITE 200 TORO, MN 55389

JILL SELA-JOHNSON
 CONSULTING ENGINEER
 LICENSE: PE 15450005
 REGISTERED PROFESSIONAL ENGINEER
 STATE OF MINNESOTA

Northland
 Consulting Engineers L.P.
 5515 15th Ave. S., Minneapolis, MN 55412
 612-338-8800

HEREBY CERTIFY THE PLAN, SPECIFICATIONS, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A duly LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

SIGNATURE: DAVID SOLTY PE
 DATE: _____ LICENSE No. 49258

PROPOSED BUILDING FOR:
DECS 8-12 SCHOOL
 4300 RICE LAKE ROAD
 DULUTH, MINNESOTA 55811

REVISIONS

ISSUED DATE
 XX-XX-XXXX

PROJECT NO. 15-504-C
 DRAWN BY JDO
 APPROVED BY ARZ

SCALE = 2" AT FULL SCALE

KEY

SHEET NO.



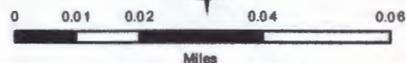
County Land Explorer

St. Louis County, Minnesota



ARMORY
OFF SITE ALTERNATIVE 1

2014-03734-DWW
Drawing 3 of 7



County Land Explorer

St. Louis County www.stlouiscountymn.gov/CourtyLandExplorer Minnesota

Disclaimer

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U.S. Fish and Wildlife Service

National Wetlands Inventory

JAL



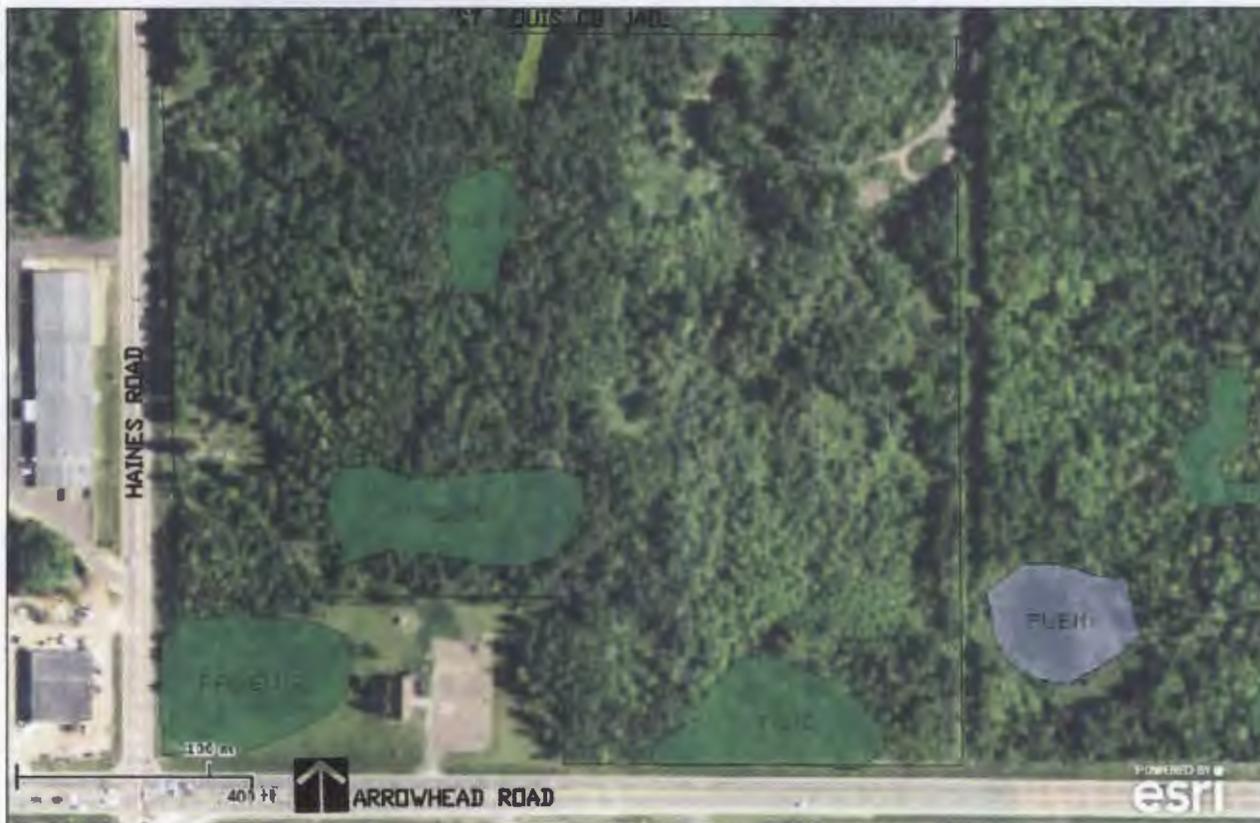
BLACKHOOF

Apr 5, 2016

Wetlands

-  Freshwater Emergent
-  Freshwater Forested/Shrub
-  Estuarine and Marine Deepwater
-  Estuarine and Marine
-  Freshwater Pond
-  Lake
-  Riverine
-  Other

OFF SITE ALTERNATIVE 2



This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or correctness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:

DATE:

PACIFIC
EDUCATION
PARTNERS

PROJECT NAME:
SNOWFLAKE
HIGH SCHOOL

DRAWING TITLE:
OFF SITE 2

FILED:
DRAWN BY:
CHECKED BY:
PROJECT NO. -
ISSUE NO.

2014-03734-DWW

Drawing 4 of 7
Page 131 of 244



U.S. Fish and Wildlife Service

National Wetlands Inventory

SW QUADRANT



Apr 5, 2016



Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

EST. WETLAND IMPACTS

ESTIMATED 110,894 SF
WETLAND IMPACTS MINIMUM

OFF SITE ALTERNATIVE 3

CLIENT
**PACIFIC
EDUCATION
PARTNERS**

PROJECT NAME
**SNOWFLAKE
HIGH SCHOOL**

DRAWING TITLE
OFF SITE 3

FILED
DRAWN BY
CHECKED BY
PROJECT NO.
DRAWING NO.

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or completeness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:



U.S. Fish and Wildlife Service
National Wetlands Inventory

NW SITE



Apr 5, 2016

Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

EST. WETLAND IMPACTS

ESTIMATED 122,500 SF
 WETLAND IMPACTS MINIMUM
 OFF SITE ALTERNATIVE 4



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User Remarks:

CDM
 PACIFIC
 EDUCATION
 PARTNERS

PROJECT NAME:
 SNOWFLAKE
 HIGH SCHOOL

DRAWING TITLE:
 OFF SITE 4

FILE:
 DRAWN BY:
 CHECKED BY:
 PROJ. NO. -
 DRAWING NO.



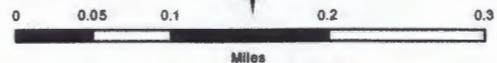
County Land Explorer

St. Louis County, Minnesota



CENTRAL HIGH SCHOOL

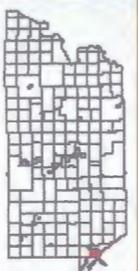
OFF SITE ALT 5



County Land Explorer
St. Louis County www.stlouiscountymn.gov/CountyLandExplorer Minnesota

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CITY OF DULUTH - TEP REVIEW

Monday, May 2, 2016, at 10:00 AM

City Council Chambers

MINUTES

Attendance: R.C. Boheim (SWCD), Keith Hamre, Kyle Deming, and Steven Robertson (City of Duluth), Daryl Wiezbinski (USACE), Lynda Peterson (BWSR), David Chmielewski, Greg Strom, David Bolf (Applicant's Representatives)

1. Duluth Public Schools Academy Wetland Replacement Plan

David Chmielewski gave a brief review of the wetland replacement plan. He stated that the plan shows the wetland impacts on the alternative sites, and that the impact would be greater than the impact on what is proposed for this site. He added that preserving the trails is an important aspect to the applicant.

Steven Robertson asked about alternative site design considerations, such as parking ramps that would reduce the size of the parking lot wetland impact. David Chmielewski stated that the budget is tight and there is no money for that type of item; at 30 cents to the dollar, there is no budgetary room for that and Department of Education would not allow that type of thing. Lynda Peterson asked for clarification on what "lease aid" payments means. David Chmielewski clarified and added that a charter school would receive less funding than a traditional public school.

David Bolf and David Chmielewski talked about wetland groups 2 and 4, and the potential county road impact. They clarified that they would not prefer to have a county road, but it is a being a requirement of the SUP approval. David Bolf added that there would need to be grading for the road and school that would cause some impact to the wetlands even if there were no parking lot behind the school. David Chmielewski talked about the parking requirements of the UDC. David Chmielewski added that they have a purchase agreement with Snowflake Nordic that requires they minimize impacts to the trails for 5 years. David Chmielewski also added that the applicant, DPSA, did not want to put parking on the other side of the potential backage road due to potential safety concerns of people walking across the road. Steven Robertson asked for clarification. David Chmielewski added that this current area has the worst traffic areas in the city, and there are safety concerns that need to be addressed.

Lynda Peterson stated that very little of what David Chmielewski just stated to the TEP was included in the wetland replacement plan. She added that some

items, like other parking alternatives like a ramp, were not even touched upon in the application. She also asked about the 5 off-site alternatives, and you say that the impacts in all of them are greater than this site, but you don't mention the potential impacts of several of the sites, such as the Armory and Jail Site. David Chmielewski stated that those two sites were not found desirable or acceptable to the applicant. Lynda Peterson stated the alternatives should have shown the footprint of the potential school; if it wasn't treated by the applicant as legitimate alternative, it should not have been included in the plan as an alternative. Steven Robertson asked if the exclusion of the jail site was a personal choice or a Department of Education choice; David Chmielewski stated that it is a decision of the DPSA to not use this site. Lynda Peterson stated that more information should be in the application. David Bolf stated that they were looking at sites 20 acres or more that had access to city utilities; some sites that would work for wetland purposes were not desirable to the applicant's site selection criteria. David Chmielewski added that being next to the existing elementary school was in the applicant's site selection criteria/policy. Lynda Peterson stated that these are not written into the plan. Steven Robertson stated that for the city zoning purposes, if the city had a setback requirement from a school to a jail or similar use, it would be a clear setback number, such as 500 or 1000 feet, and the city not use the generic term near or close. Lynda Peterson added that if these 5 sites in your plan are the only sites in the city that are 20 acres and have access to utilities, that is fine, but clear information needs to be in the plan. R.C. clarified and stated that if an alternative is not a realistic alternative, it should not be stated as such in the plan. Daryl Wiezbinski said, that as far as the corps perspective, we do zoom out and ask what is reasonable. The plan should expand upon why these sites were excluded; more information on appropriate and compatible use.

Steven Robertson stated that he knows, based on past planning commission meetings, that stormwater will be a question that comes up; is shredded tires still planned to be used as part of the treatment system? David Chmielewski stated that all the stormwater will be treated underground, and they may use Tire Derived Aggregate. He added that he met with Ryan Anderson 7 weeks ago who is the construction stormwater manager for the PCA, and there are no restrictions to using this product for stormwater; a sand filter is used to reduce the zinc and iron levels released from the tires. The studies released on this (TDA) indicate that it can be used for this purpose. If kids are ingesting this type of material on a soccer field that might be a problem, but we need to look at the facts that we have. As of today, we haven't decided on a method of treating stormwater. Steven Robertson asked that David Chmielewski email that information to him or Tom Johnson; David Chmielewski said he would email the studies and fact sheets to the city. David Bolf said he met with Tom Johnson 3 times, and he is up to speed on the proposed treatment method. They are looking at two stormwater management methods; underground steel pipe and TDA. Right now they are doing a cost benefit analysis to see which one is cheaper, but they will probably get to a conclusion yet this week. He also added

that the zoning code requires that the property owner address volume control, to be contained at 3 different sites. They also need to treat for temperature and suspended solids. Lynda Peterson asked to be shown a grading plan. She also asked about controlling subsurface seeps; it was difficult to understand their plan for stormwater since it wasn't addressed clearly in the plan.

Daryl Wiezbinski said as far as on site alternatives, if the road could be located in a slightly different location on the site, it could have potentially less impacts. David Chmielewski stated that he would prefer if the Corps said they didn't have to build the road because of the wetland impacts. Daryl Wiezbinski stated that he would like to see what other alternatives for school placement on the site was considered that would have less wetland impacts, such as a different road location or configuration, or a smaller or no track, etc. David Chmielewski said the road has its own internal access; the road is a discussion they are having with the city and the county. Lynda Peterson asked why the building couldn't be located further north on the site. David Chmielewski said that don't want to impact the ski trails. He also stated that he removed proposed housing from the plan, but certain political entities are asking him to revisit that. He added that they don't have space to move the school because it may impact one of the 3 primary trails that they want to preserve on the site. They are considering a land swap with an adjacent property owner (Arrowhead Tennis) to move the chalet structure. These trails are an important source of revenue; additional impacts to the trails may impact the potential revenue they generate. They need to balance the proposed school with their obligations that they agreed to in the purchase agreement with Snowflake Nordic. There are also some topographic challenges on the site.

David Bolf stated that they have looked at other road configuration. They are different options, but there are vertical and horizontal design standards that must be met that pose challenges. They also want to redo the entrance to Arrowhead Tennis and Kruger Avenue. Lynda Peterson stated that the wetland application does not address any of the items just discussed. David Chmielewski didn't want to include too much information that wasn't relevant; he could include 10 inches of information if everyone wants. Lynda Peterson stated that a paragraph providing relevant information would be sufficient. Daryl Wiezbinski added that enough good information needs to be provided so that he and other persons that need to review this plan have an understanding of site alternatives and design choices.

Lynda Peterson stated that with the 5 year agreement and the choice to not develop on other areas of the site, that the applicant has created their own hardship and restriction. And now the applicant wants the TEP to say that business restriction makes sense and it should be a reason to impact wetlands. David Chmielewski stated that Snowflake Nordic isn't happy with the trails being sold, but it wasn't their decision to make. It was sold with the understanding that some of it would be developed, and part of the negotiation process was that

some of the trails wouldn't be impacted. It shouldn't be considered a self-imposed restriction, it is just a reality of a business development deal. David Chmielewski added that the TEP should understand that they are trying to keep the site small. Lynda Peterson stated that knowing some of those restrictions with developing this site, maybe the applicant should have looked harder at other sites with less restrictions. She added that it seems like the school really could have fit on the alternative sites if a better job was done with the layout. David Chmielewski stated that he felt he did do a good apples to apples comparison. He has been doing this for 18 years and he has never had to go to this length before. Lynda Peterson stated that she has seen projects like this on big sites, so she understands, but she felt that a good faith effort to avoid wetland impacts was not quite done and the application was not as clear as it should be.

Steven Robertson if height wasn't an issue, assuming this was rezoned to a different zone that allowed a height higher than 30 feet, could this building be designed to be taller with a smaller footprint and impact. David Chmielewski stated yes, if they had more money to redesign it. Greg Strom stated that there are some design difficulties with a 3 story design that a 2 story design wouldn't have. David Bolf stated that there are some issues with grading that would still have to be addressed even if the footprint was smaller. David Chmielewski added that the intent is to take 100 acres of land on the site put aside for non-development. He added looking at this from a global perspective, there already are some wetlands that are impacted, and if this had been developed for housing you probably wouldn't have incremental wetland impacts. He added that we use wetland banks to offset the wetland impacts, and that he doesn't know what else they can do. They are trying to develop this site with as low impact as possible.

David Bolf stated that for the backage road, called Sawyer Avenue, the county is taking the lead. The improvements will be under a county led road project, and when it is completed it will be turned over to the city. The timing and funding has still to be determined. He added that if the school isn't built, the county would not build this, but would still do some improvements. David Chmielewski added that he removed any reference to the county road project that wasn't on their property, since they don't have anything to do with what happens behind Involta and Minnesota Power.

Steven Robertson asked for final questions. Daryl Wiezbinski talked about publishing public notice of this project, and he added that he may be asking for additional information and clarification on this project based on what he gets during his public comment period. Lynda Peterson added that a lot of the information that Daryl is asking for is the same thing that she needs; there needs to be information on the site alternatives, road placement, stormwater control. David Bolf stated that there intent is to get the stormwater plan finalized. David Chmielewski stated that they don't expect to get a NPDES permit for some time yet. Lynda Peterson and Steven Robertson stated that they would like the additional information in an addendum. Daryl Wiezbinski asked that page number

be used in the addendum. Lynda Peterson added that the application stated that vegetative diversity is low; what is the statement based upon? David Chmielewski stated it is based on his opinion doing this for 18 years.

Lynda Peterson stated that under purpose and need, you stated that the school has 1200 students overall. What is the need for the high school? Greg Strom stated that they have 1200 students in their system at their two sites right now, K-8. There have been a lot of interest in their customers wanting to keep their kids in 7th and 8th grade in the Edison system. David Bolf stated that some of that information is in the traffic study that was included with the variance application. Lynda Peterson stated that she needs that information, the overall purpose and need, to understand the justification for this project. David Chmielewski stated that he doesn't want to get involved in the politics of this, but all he knows is that they currently have 1,200 kids in the system and they like it. Lynda Peterson stated that we need to know why this project is needed. David Chmielewski replied that he has that information and he will share it with the TEP. Lynda Peterson stated that she would ask a commercial business the same question; why is this needed here?

R.C. stated that the TEP has 60 days from notice, April 8, to make a decision on the wetland plan. Steven Robertson stated that he would hope that the TEP would have a recommendation sooner rather than later as this plan is very important to the pending zoning applications. He added that the additional information from the applicant addressing the questions raised today should be sufficient for the TEP to review and make a recommendation. David Chmielewski stated that he will get the information to the TEP by end of day tomorrow, at the latest.

Meeting conclude at approximately 11:17

Why don't on-site concepts show more development deeper into the site? You have 140 acres to work with.

There are several reasons for this:

1. Currently, the purchaser of land, dba Pacific Education Partners, is obligated to preserve as much of the current Snowflake Nordic operations as possible for a period of up to five years. Pushing the development into the core of the 140 acres and away from Rice Lake Road will impact more important ski trails than if the development is constructed closer to Rice Lake Road, as currently proposed. I initially had the perception that a ski trail was a ski trail. I was later informed by the leadership at Snowflake Nordic that each trail has a specific purpose and there are topographic and distance characteristics that make each trail unique. Without these unique characteristics, they will be less attractive as a ski center and they fear losing the funding that comes from different schools to use their site. In other words, if too many trails at Snowflake are destroyed, members and other schools will no longer use the facility.
2. The topography steepens dramatically as you move into the site. There is more exposed bedrock and more scattered high quality wetlands. While we have not determined exactly how many wetlands would be impacted if we moved the development deeper into the site, we know it would possible meet or exceed the current proposed impacts. In addition, the wetlands deeper into the site are the wetlands of higher quality compared to the wetlands proposed to be impacted as part of the existing proposal.
3. Habitat fragmentation would be exacerbated if we pushed the development further into the site. Roads would have to be lengthened to reach the development site, and there would be a forested edge on four sides of the development versus just three sides (Rice Lake Road is not a forested edge in terms of habitat). The more exposed forest edge, the more chance of non-native plant and animal intrusion. Such is the case with nest raiding cowbirds, which interfere with neotropical migrant hatchlings on disturbed forest edges.

Why not construct a parking ramp?

1. Charter schools receive per pupil financing from the Minnesota Department of Education. That funding amounts to about \$0.35 on the dollar to what levied schools receive. The projected number of students frames the amount of income, and therefore the bond amount that can be attained. The bond amount dictates the construction budget. Parking ramps are extremely expensive. Where a surface parking lot might cost \$700 per stall, a parking ramp can cost \$3000 per stall.
2. Even with a parking ramp, the space currently proposed for surface parking would have to be occupied by the ramp. After the first level of parking and part of the second level, the relative loss of the surface parking proposal would be equalized, then additional levels would be required to accommodate the remainder of the parking. The current zoning has a height

limitation of only 30', so the benefit to a parking ramp by attaining efficiency with greater height, cannot be realized.

Why not construct the school next to the jail?

1. The attached letter from the DPSA Head of Schools Bonnie Jorgenson notes the reason for not selecting a school site next to a jail.
2. None of the consulting team was willing to advocate for a school site next to a jail. Even though the chance of an issue between inmates and students is probably small, if there was an issue, it would be a monumental disaster. As a matter of self preservation and/or common sense, nobody with DPSA or the design team was willing to take any unnecessary chance with a child's well being, no matter how small the chance.

How is storm water going to be treated?

Attached is the most recent storm water plan with associated grading. All of the storm water will be treated below ground. An underground corrugated metal pipe storage system is proposed; although a tire derived aggregate system is being evaluated pursuant to MPCA input. In either case, the systems work in similar ways, storing volumes of storm water underground and releasing that water slowly.

How are you dealing with freshwater seeps from the hillside?

All subsurface and surface water that runs down the hill toward the track and field will be collected with subdrains that bi-pass storm water treatment and go directly back into the wetlands along Rice Lake Road. The rate of this discharge will be controlled by a bed of rock beneath the track and careful sizing of the subdrain outlet.

Storm water that runs into the proposed County backage road will be treated in much the same way, whether the County constructs the road or it remains a private enterprise. That has yet to be determined

Why is the County backage road located where it is and not closer to Rice Lake Road?

1. The County has directed the position of the road. The curve speeds and stacking distance against Rice Lake Road are two major considerations in the alignment of the road. If the road were located on the south side of the school, there would not be enough vehicle stacking ahead of Rice Lake Road. The current design runs that stacking up gradient to the north and perpendicular to Rice Lake Road.
2. A 30 mph curve, which is the County minimum for this application, is too large of a radius of curvature to come off of Rice Lake Road and arc east toward the school. There is also the complication of the existing driveway that leads to Arrowhead tennis.
3. Having a 30mph 36' wide public road run past the front of a new high school is not an ideal situation when busses are pulled of to the side loading children.

Where is the traffic study?

It is attached.

Why did you show the old Duluth Armory as a potential off site candidate if it is not a viable option?

We feel that it is important to frame the conversation about wetland impact. The subject of adaptive reuse comes from not only City planning but from citizens concerned about the impacts to wetlands and forest. The Duluth Armory is one of the first available sites re-evaluated as part of this process, even though it was quickly dismissed due to a lack of available programmable green space, lack of parking and potential for environmental remediation issues.



NORTH STAR ACADEMY: K-8

3301 Technology Drive
Duluth, MN 55811
Ph: (218) 728-9556
Fax: (218) 728-2075

RALEIGH ACADEMY: K-5

5905 Raleigh Street
Duluth, MN 55807
Ph: (218) 628-0697
Fax: (218) 628-2264

May 5, 2016

To Whom It May Concern:

It is the practice of the Duluth Public Schools Academy, Tischer Creek Duluth Building Company and school administration to put safety of students at the forefront of our decision making. We strive for academic excellence and the safety of our students.

Part of creating a safe learning environment is to seek out sites for our facilities that will have adjacent land uses that are compatible with school operations. Our administration has informed our site selection contractors, and also our participating design team, that locating a school next to a County Jail or other penal / correctional facilities is not a compatible land use with a high school or any of our educational facilities.

It is for this reason that we were not able to utilize the land that was available on the northeast corner of Haines Road and Arrowhead road in Duluth, MN. This land was shown as an off-site option on the wetland permit application because it was one of the sites we evaluated and members of the public must be informed of this process."

Sincerely,

Bonnie Jorgenson, Head of School
Crystal Palmer, School Board President
Paul Goossens, President, Tischer Creek Duluth Building Company

Preliminary Drainage Report Summary – Duluth Public Schools Academy (DPSA) 8-12

Amended (5/5/16)

DPSA is in the process of completing a design for a new high school on newly acquired property along Rice Lake Road. The existing property was home to Snowflake Nordic Ski Center with an extensive trail system, a chalet and a few storage buildings. Almost the entire site is wooded minus the areas used for skiing. The proposed location of the high school will be in the south west corner of the property east of the Arrowhead Tennis Center.

Existing Site Drainage Conditions

The proposed site layout sits on multiple lots. The future property line to accommodate the new school will be approximately 16.92 acres. This will act as our project area when comparing existing to proposed. On the existing site there is only 26,455 SF of impervious or 0.61 acres. As stated above, a vast majority of the site is wooded aside from the areas that have been cleared of trees for the cross country ski activities. All runoff from the site flows south towards Rice Lake Road. Topography across the site varies from steep hillsides to flat areas including wetlands. On the site there are multiple wetlands that collect runoff and allow storage. All flow from the wetlands continues south to the ditch along Rice Lake Road. Once it crosses Rice Lake road through various culverts, it reaches a tributary of Chester Creek and is carried to Lake Superior.

Post-Construction Site Drainage Conditions

The post-construction site will consist of new school building, various parking lots, track/field surface and (2) smaller structures to service the field venue. The topography of the site will change leaving the parking and building on a level area constructed into the hillside. The post construction site will have approximately 8.19 acres of impervious, which adds 7.58 acres of impervious area. It should be noted that the runoff from the county road surrounding the site has not been accounted for in this design. It is the responsibility of the county to design the storm water collection and treatment system.

Site Area Breakdown

	Pre-Development		Post-Development	
	Area (SF)	% of Total Site	Area (SF)	% of Total Site
<u>Total Site Area</u>	736,941	100%	736,941	100%
Impervious Area	26,445	4%	356,769	48%
-Bit./Conc.	5,000	1%	222,143	30%
-Gravel	17,515	2%	0	0%
-Roof	3,930	1%	69,260	9%
-Track Surface	0	0%	65,366	9%

Pervious Area	710,496	96%	380,172	52%
-Grass	0	0%	293,309	40%
-Athletic Turf	0	0%	86,863	12%
-Woods	710,496	96%	0	0%
Disturbed Area	0	0%	736,941	100%

The site and storm water design has been designed to meet the requirements of the City of Duluth UDC and Engineering Guidelines. Prior to the issuance of building permits, an MS4 Statement of Compliance will be issued when the storm water management plan is approved. The system will include discharge, sediment reduction, temperature and volume controls. The storm water conveyance and treatment system will be owned and operated privately. The Certificate of Occupancy will be issued after the record drawings for the storm water management BMPs has been delivered to the City. The owner will be required to inspect and maintain the system to ensure it is functioning properly and correct all deficiencies should there be any. A storm water BMP operations and maintenance manual will be included in the final storm water report. This will direct the owner of the property on how and when to inspect and clean the systems on site.

The site runoff will need to be attenuated and treated extensively, because of the nature of the existing site. With much of the existing site being wooded and wetlands, the addition of 7.5+ impervious acres will produce a significant increase on the amount of site runoff. The UDC states that for sites above the “Bluff Line” that post-construction flows are reduced to 90% of the existing flow for the 2 year storm and 75% of the existing flows for the 10 and 100 year storms. Substantial reductions in the time of concentrations are anticipated and will be accounted for in the design. The site runoff, especially from the parking lots and buildings, will be collected by various inlets across the site and piped to underground storage systems. Any runoff that flows toward the track will be collected in a perimeter drain. Rainfall directly on the track and field surface will be collected and attenuated in a sand/underdrain section beneath the turf surface. All the underdrains will then flow to a header pipe and be discharged into the hillside.

Preliminary Site Discharge Peak Flow Rates

Storm Event	Existing Runoff Rate (cfs)	Proposed Runoff Rate (cfs)	Reduction in Runoff Rate (cfs)	Reduction in Runoff Rate (%)
WQ Storm	0.02	0.98	+0.96	-
2-yr	5.63	5.07	0.56	10%
10-yr	15.12	10.75	4.37	29%
100-yr	42.70	27.58	15.12	35%

As shown on the attached exhibits, there will be two main treatment areas based on the grading of the site. The systems will be comprised of large diameter perforated CMP pipes with storage capacity on the porous bedding. The preliminary design has the south storage system designed with 96” diameter pipe

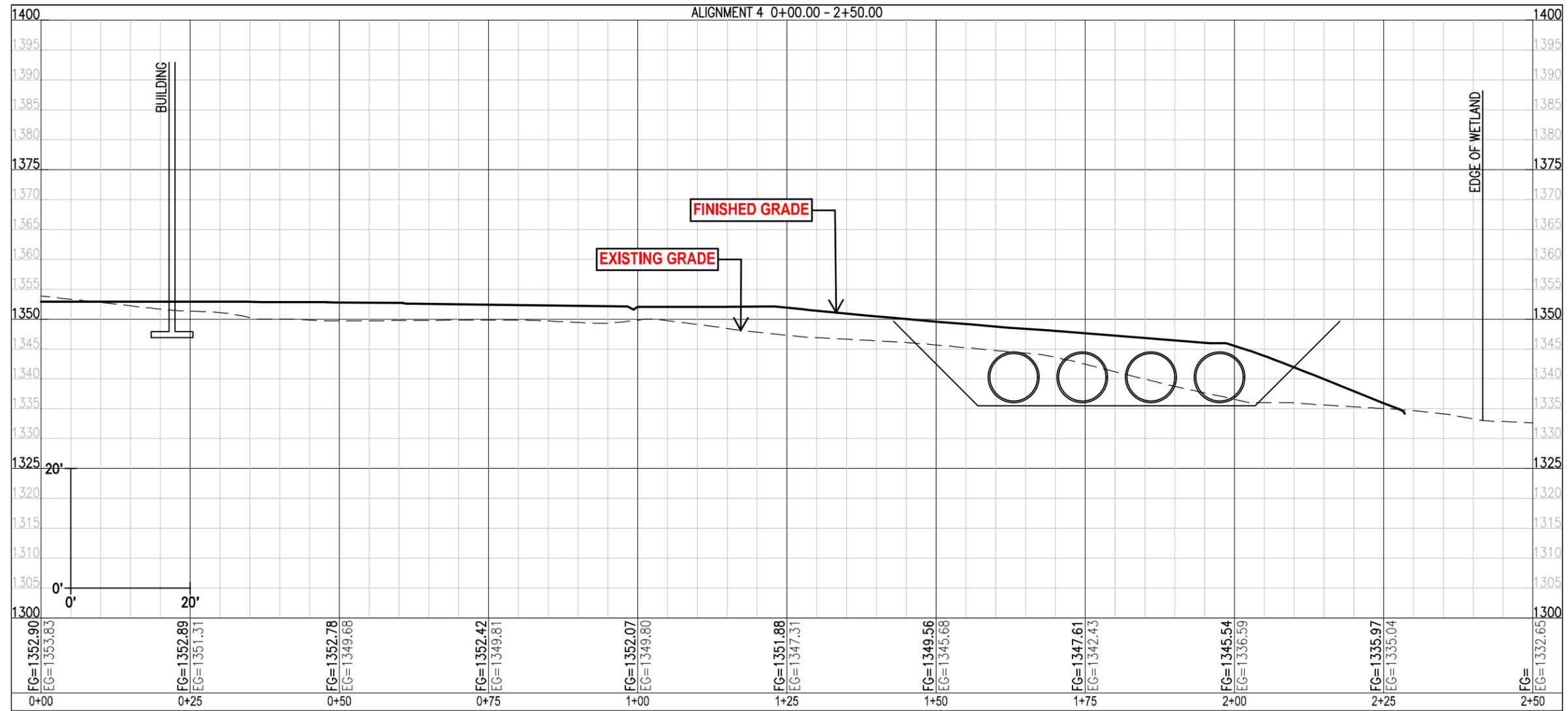
and the north system designed with 48" diameter pipe. All of the bituminous runoff will be conveyed through sediment treatment chambers to remove Total Suspended Solids (TSS) before entering the underground storage. The underground storage will allow the storm water to be attenuated and released at the reduced rates required by the City of Duluth's UDC.

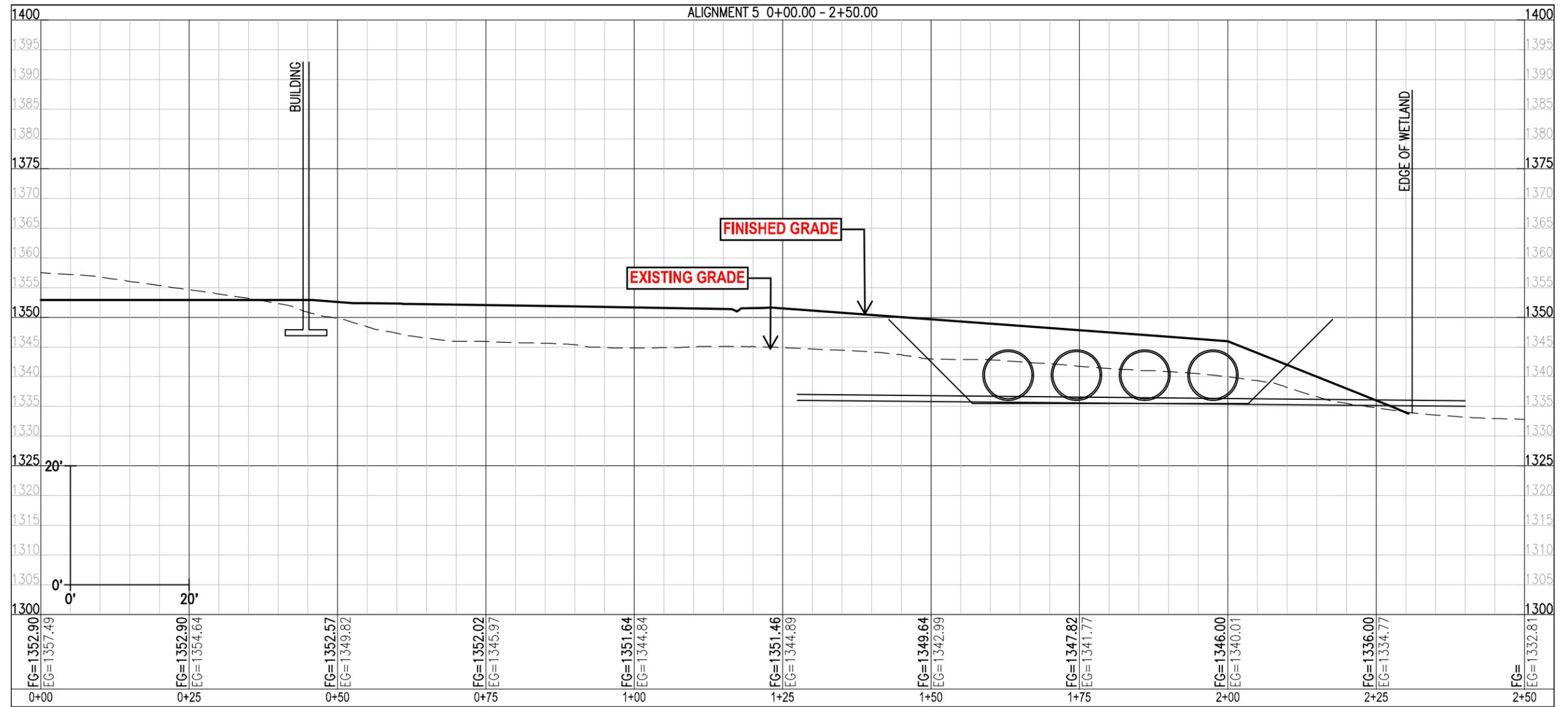
The developer reserves the right to explore other possible treatment and storage solutions that meet the requirements of the City of Duluth, MPCA, and the MNDNR.

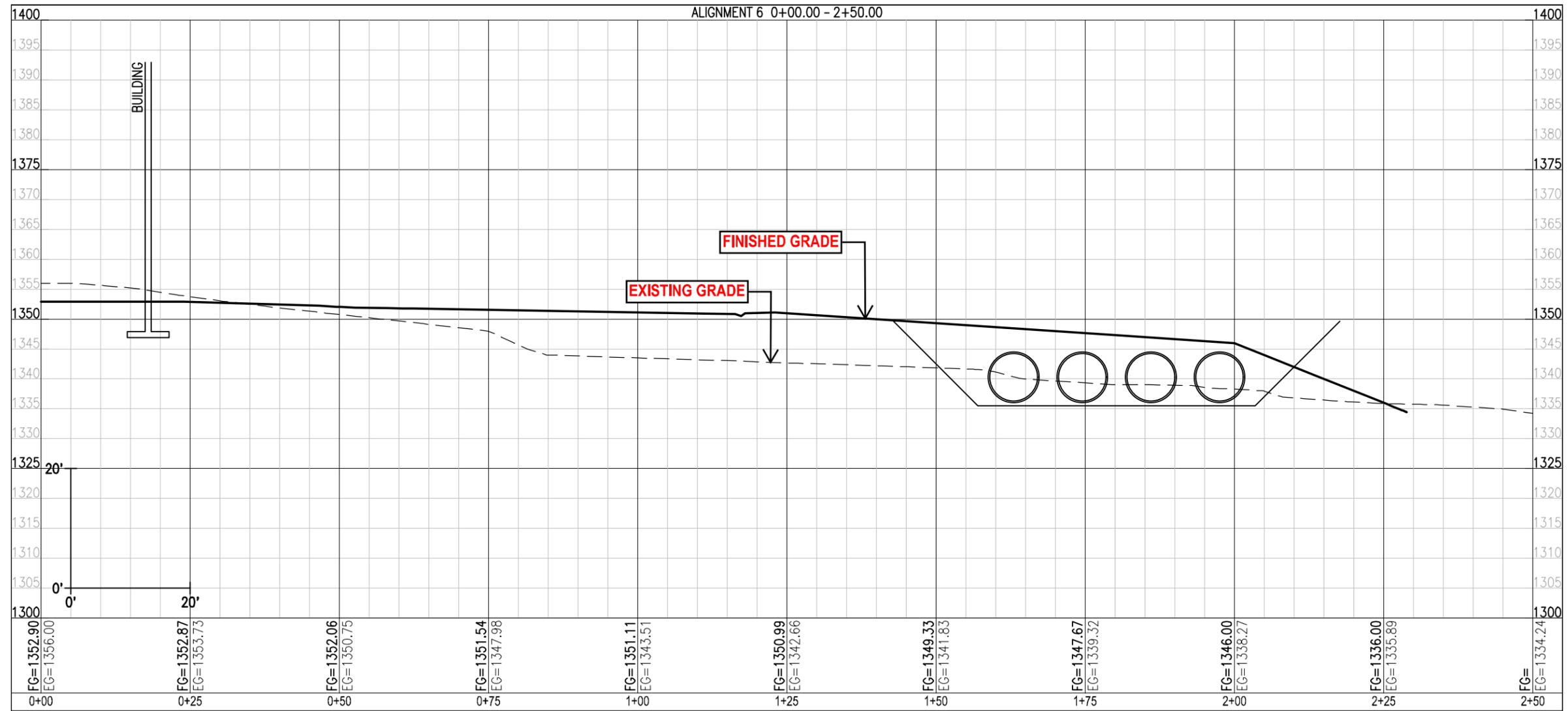
Discharging to wetlands and sensitive trout stream environments, such as tributaries of Chester Creek, require additional consideration for temperature controls. By treating and attenuating the site runoff underground, it will have a chance to cool before being released downstream.

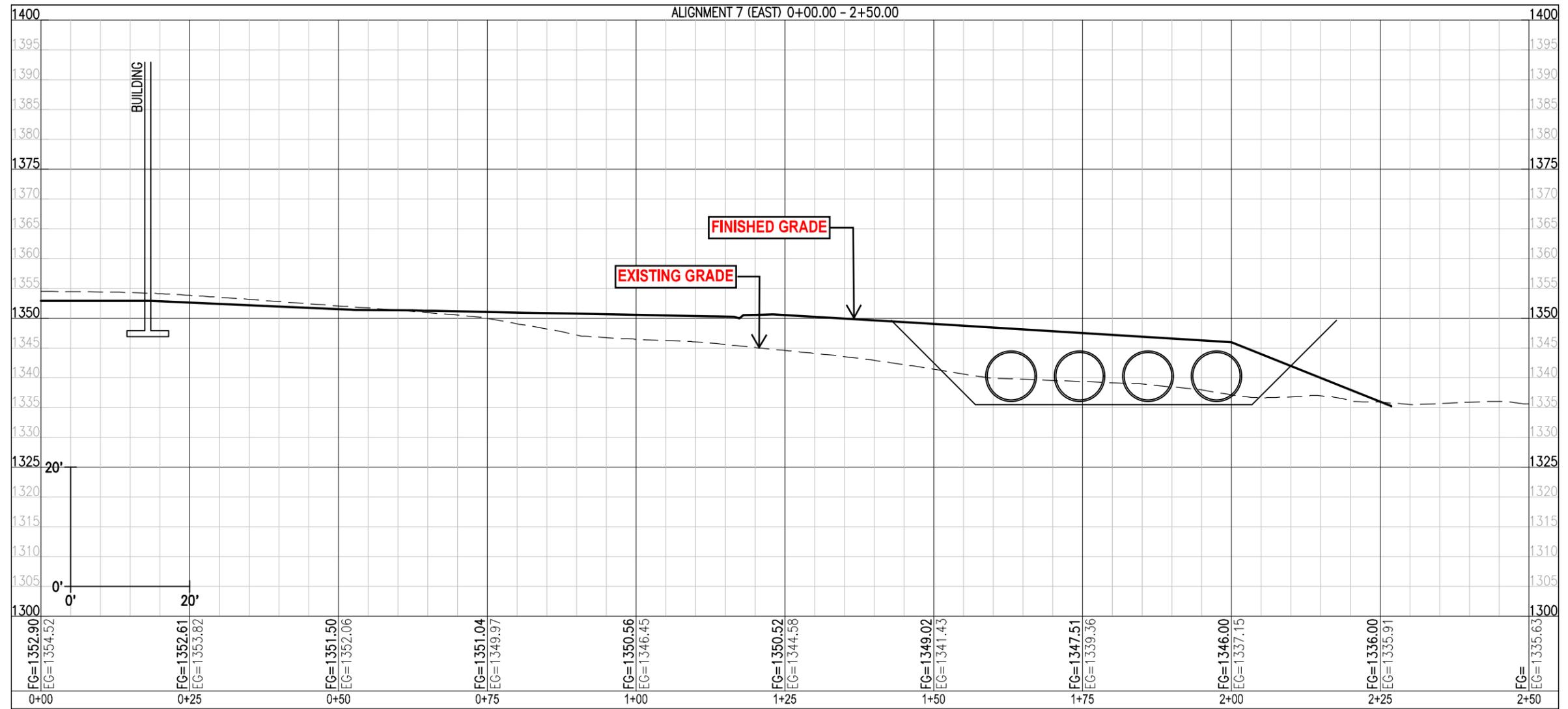
All runoff from the post construction site will continue to flow into the same Chester Creek tributary on the south side of Rice Lake Rd. The runoff rates will be reduced and the sediment will be removed to the levels required within the UDC. Once in Chester Creek it will flow downstream and discharge into Lake Superior.

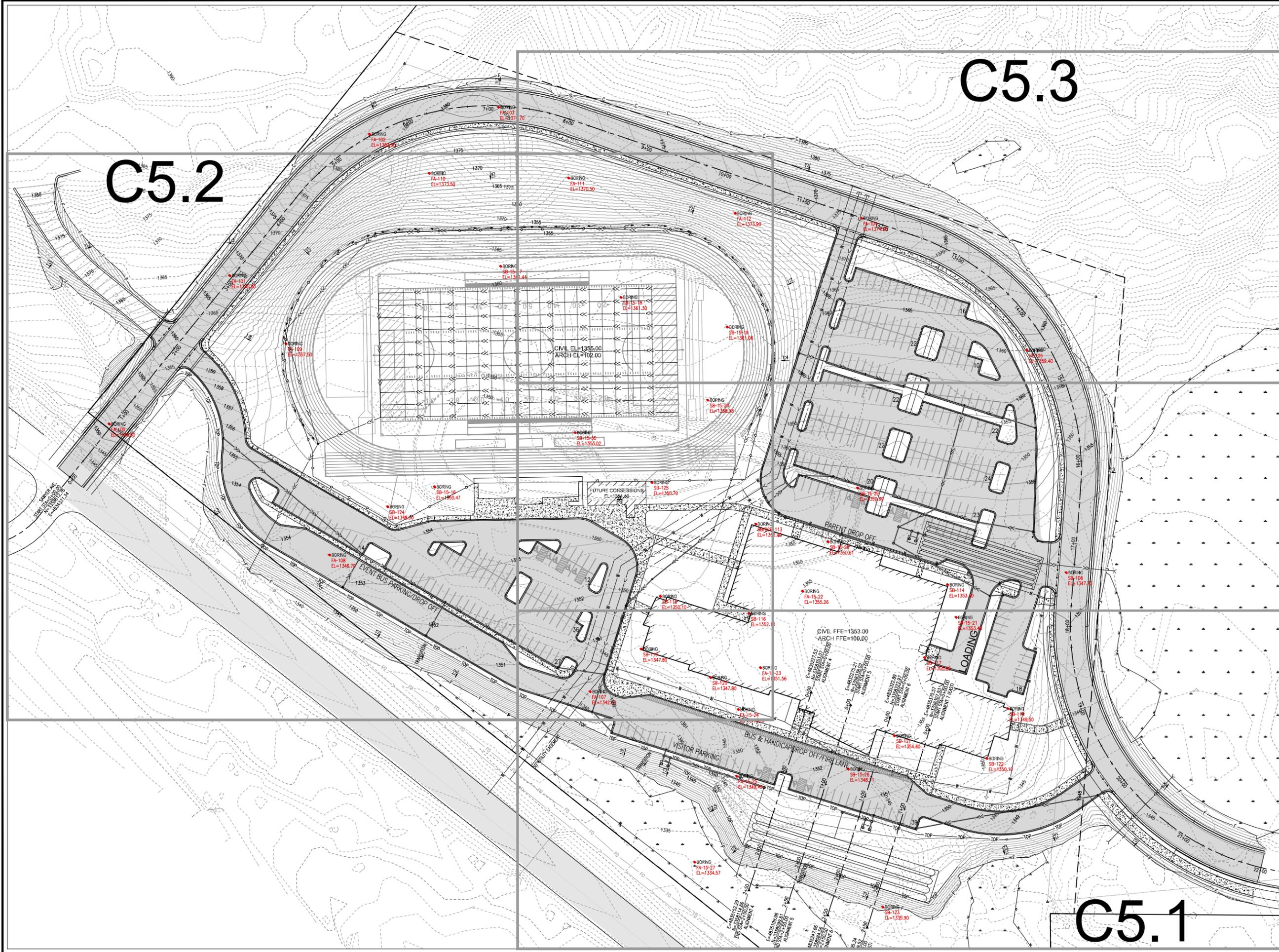












I HEREBY CERTIFY THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

SIGNATURE: DAVID BOLF, PE
DATE: XX/XX/XX LICENSE NO. 40926

PROPOSED BUILDING FOR:
DECS 8-12 SCHOOL
43XX RICE LAKE ROAD
DULUTH, MINNESOTA 55811

REVISIONS

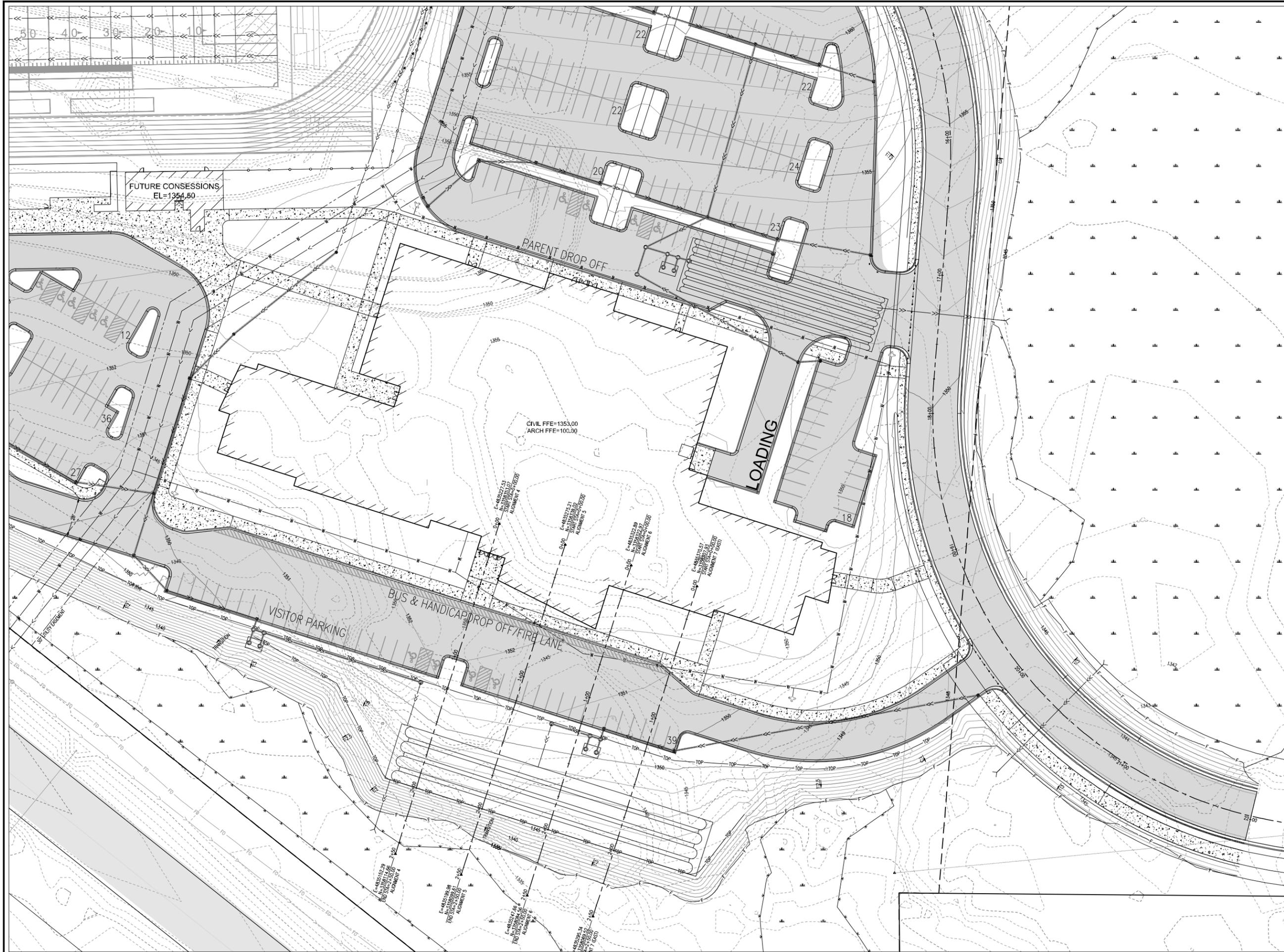
ISSUED DATE
05/06/2016

PROJECT NO. 15-504-C
DRAWN BY JDO
APPROVED BY ARZ

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OVERALL GRADING PLAN

SHEET NO.
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Page 152 of 244



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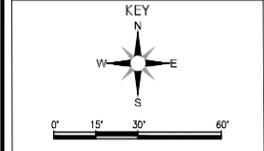
PROPOSED BUILDING FOR:
DECS 8-12 SCHOOL
43XX RICE LAKE ROAD
DULUTH, MINNESOTA 55811
OWNER: PROJECT OWNER

REVISIONS

ISSUED DATE
05/06/2016

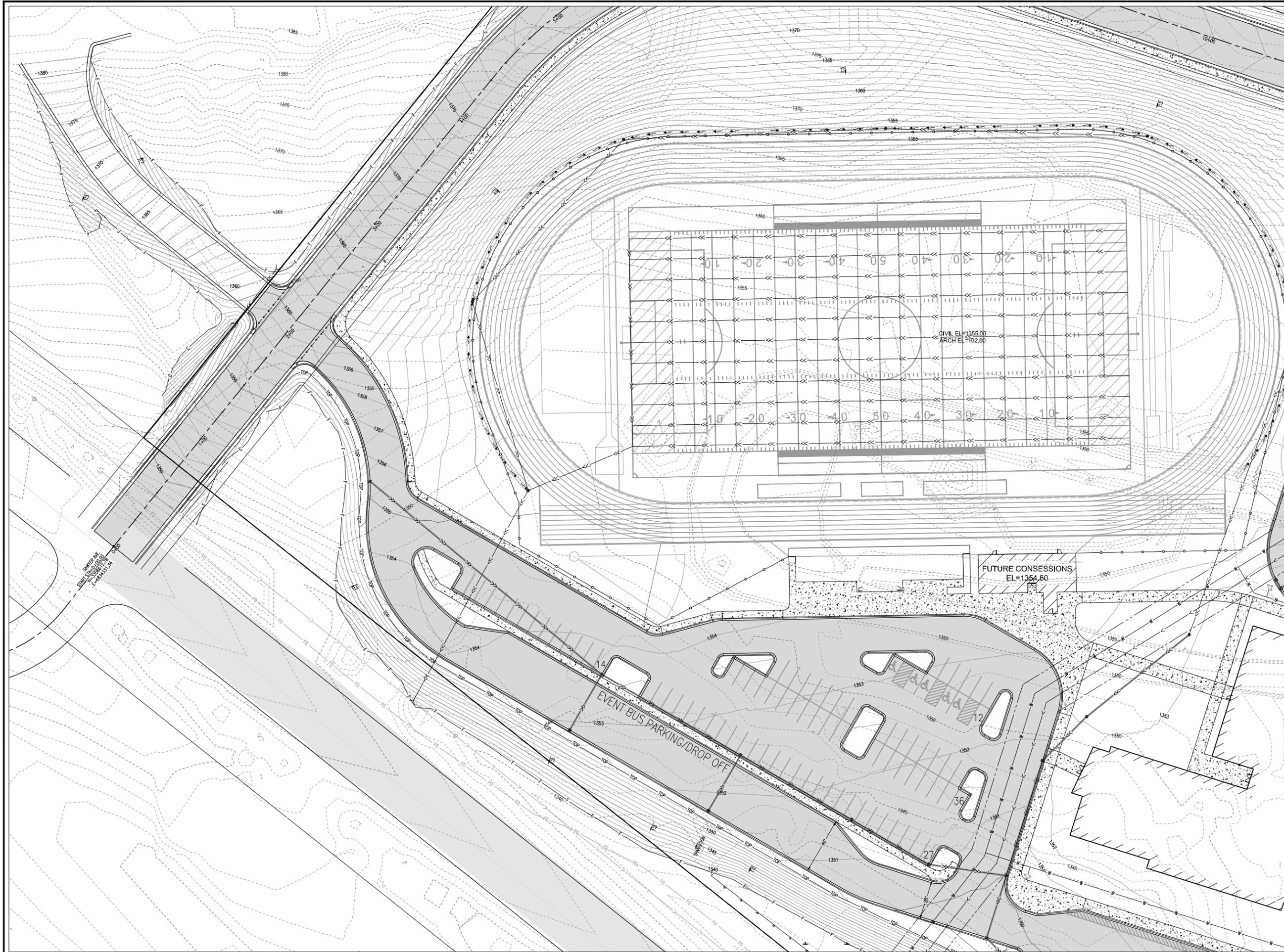
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DATE XX/XX/XX LICENSE No. 40926

PROPOSED BUILDING FOR:
DECS 8-12 SCHOOL
43xx RICE LAKE ROAD
DULUTH, MINNESOTA 55811
OWNER: PROJECT OWNER

REVISIONS

ISSUED DATE
05/06/2016

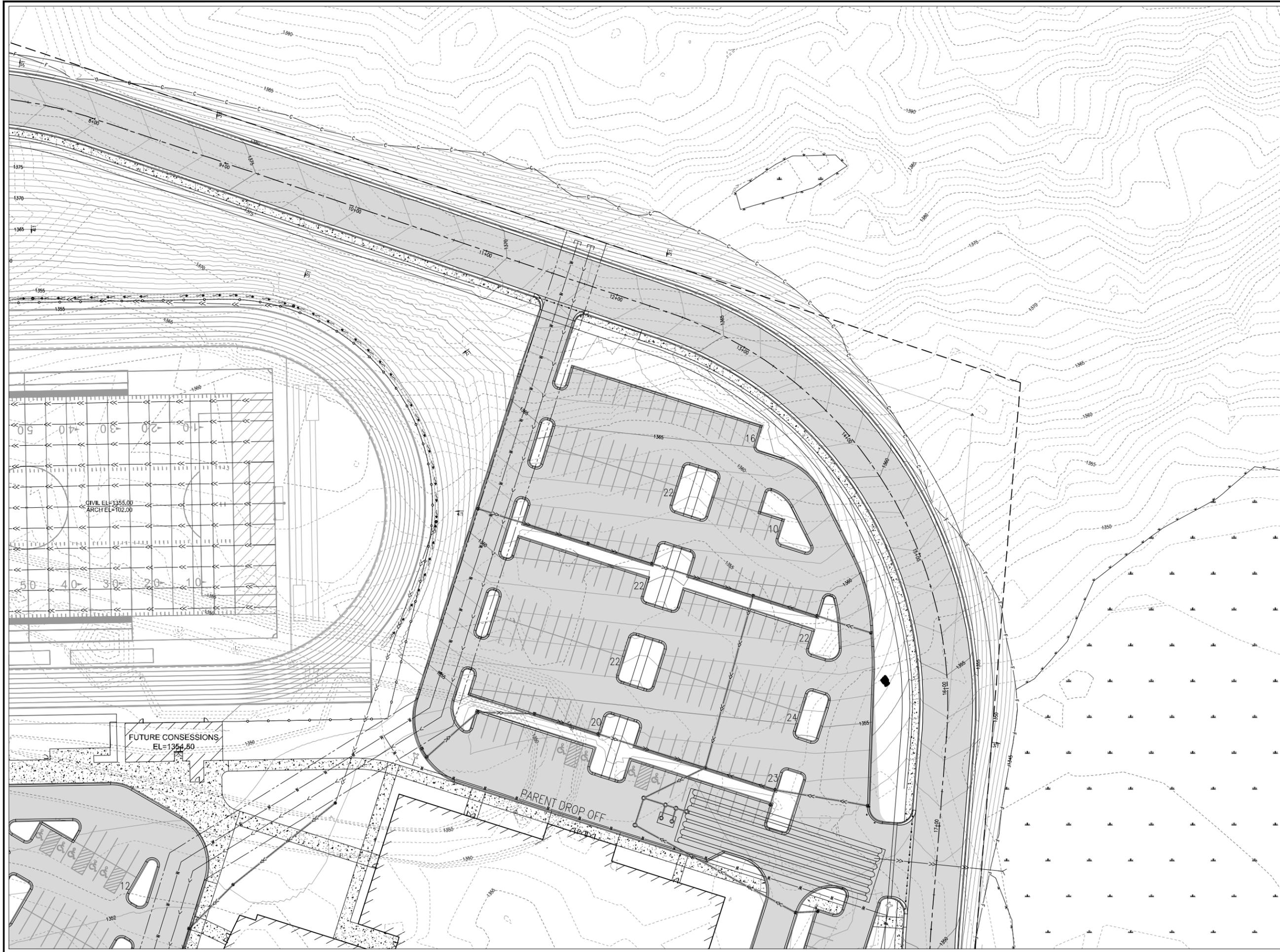
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GRADING PLAN

SHEET NO.
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Page 154 of 244



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PRELIMINARY
NOT FOR CONSTRUCTION
SIGNATURE DAVID BOLF, PE
DATE XX/XX/XX LICENSE No. 40926

PROPOSED BUILDING FOR:
DECS 8-12 SCHOOL
43xx RICE LAKE ROAD
DULUTH, MINNESOTA 55811
OWNER: PROJECT OWNER

REVISIONS

ISSUED DATE
05/06/2016

PROJECT NO. 15-504-C
DRAWN BY JDO
APPROVED BY ARZ

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Page 155 of 244

To: David Bolf, PE
Northland Consulting Engineers

From: Matt Pacyna, PE, Senior Associate
Tom Sachi, EIT, Engineer

Date: February 10, 2016

Subject: Duluth Edison High School Traffic Study

Introduction

SRF has completed a traffic study for the proposed Duluth Edison Charter High School and apartment complex located north of Rice Lake Road (CSAH 4) between Technology Drive and Krueger Road in the City of Duluth (see Figure 1: Project Location). The proposed high school will be located to the west of the existing Northstar Academy Charter School. The main objectives of this study are to review existing operations within the study area, evaluate traffic impacts to the adjacent roadway network, and recommend any necessary improvements to accommodate the proposed developments. The following sections provide the assumptions, analysis, and study conclusions/recommendations offered for consideration.

Existing Conditions

The existing conditions were reviewed to establish a baseline in order to identify any future impacts associated with the proposed development. The evaluation of existing conditions includes peak period intersection turning movement counts, field observations, and an intersection capacity analysis.

Data Collection

Peak period turning movement and pedestrian counts were collected by SRF during the week of October 5, 2015 at the following study intersections:

- CSAH 4 and Airport Road
- CSAH 4 and Technology Drive
- CSAH 4 and Airpark Boulevard
- CSAH 4 and Arlington Avenue/Arrowhead Road
- CSAH 4 and Krueger Road
- CSAH 4 and Sawyer Avenue/Arrowhead Road

In addition to the intersection turning movement counts, short-term pulse (i.e. 15-minute) counts were collected at driveways within the study area and at Persons Street in order to establish travel patterns. The traffic data focused on the a.m. (7:30 a.m. to 8:30 a.m.) and school afternoon/p.m. (4:00 p.m. to 5:00 p.m.) peak hours. It should be noted that the afternoon school and p.m. peak hour occurred at the same time, due to the current Northstar Academy Chart School hours (8:30 a.m. to 4:00 p.m.). Historical annual average daily traffic (AADT) volumes within the study area, provided by the Minnesota Department of Transportation (MnDOT), were also reviewed.

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Project Location

Duluth Edison Charter School Expansion Traffic Study
City of Duluth, MN

0159014
December 2015

Figure 1

In addition to the intersection turning movement counts, observations were completed to identify roadway characteristics within the study area (i.e. roadway geometry, posted speed limits, and traffic controls). Currently, CSAH 4 is a two-lane roadway with a posted speed limit of 55 miles per hour (mph) north of Arrowhead Road and 45 mph south of Arrowhead Road. Arrowhead Road is a four-lane roadway with a posted speed limit of 40 mph. Arlington Avenue is a two-lane roadway with a posted speed limit of 40 mph.

The CSAH 4 intersections with Technology Drive, Arlington Avenue, and Sawyer Avenue are currently controlled by traffic signals. All remaining intersections within the study area are side-street stop controlled. It should be noted that the CSAH 4/Airport Road intersection has been identified as an intersection that will be upgraded to a traffic signal in the near future. CSAH 4, Arrowhead Road, and Arlington Avenue are functionally classified as minor arterial facilities, while all other study roadways are functionally classified as local streets. Existing geometrics, traffic controls, and volumes within the study area are shown in Figure 2.

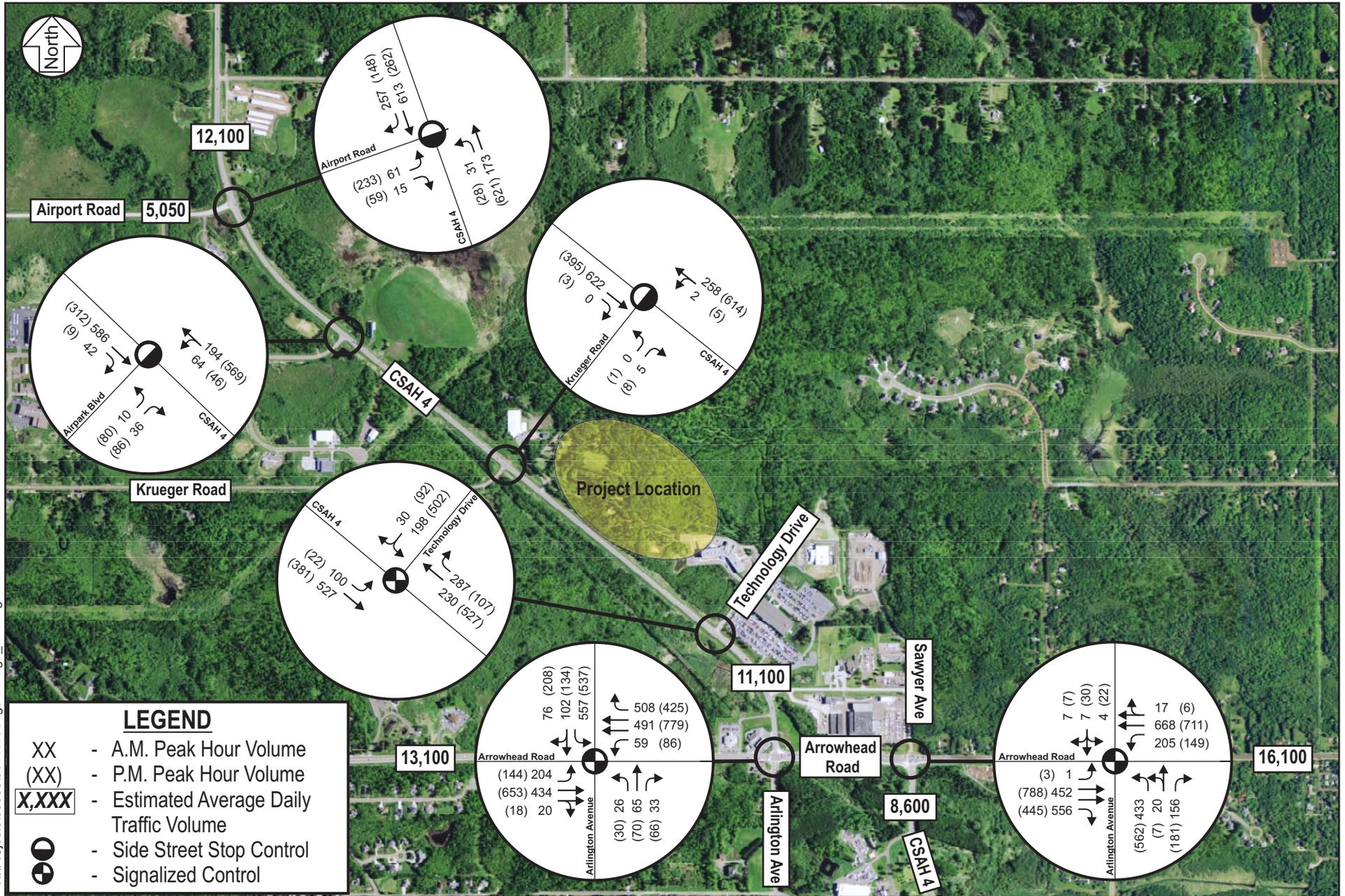
Existing Intersection Capacity Analysis

An existing intersection capacity analysis was completed using Synchro/SimTraffic software (V8.0) to establish a baseline condition to which future traffic operations could be compared. Capacity analysis results identify a Level of Service (LOS) which indicates how well an intersection is operating. Intersections are ranked from LOS A through LOS F. The LOS results are based on average delay per vehicle, which correspond to the delay threshold values shown in Table 1. LOS A indicates the best traffic operation, while LOS F indicates an intersection where demand exceeds capacity. Overall intersection LOS A through LOS C is generally considered acceptable in the Duluth area.

Table 1. Level of Service Criteria for Signalized and Unsignalized Intersections

LOS Designation	Signalized Intersection Average Delay/Vehicle (seconds)	Unsignalized Intersection Average Delay/Vehicle (seconds)
A	≤ 10	≤ 10
B	> 10 - 20	> 10 - 15
C	> 20 - 35	> 15 - 25
D	> 35 - 55	> 25 - 35
E	> 55 - 80	> 35 - 50
F	> 80	> 50

For side-street stop/yield controlled intersections, special emphasis is given to providing an estimate for the level of service of the side-street approach. Traffic operations at an unsignalized intersection with side-street stop/yield control can be described in two ways. First, consideration is given to the overall intersection level of service. This takes into account the total number of vehicles entering the intersection and the capability of the intersection to support these volumes.



Second, it is important to consider the delay on the minor approach. Since the mainline does not have to stop, the majority of delay is attributed to the side-street approaches. It is typical of intersections with higher mainline traffic volumes to experience high levels of delay (i.e. poor levels of service) on the side-street approaches, but an acceptable overall intersection level of service during peak hour conditions.

Due to the presence of the Northstar Academy Charter School, a separate analysis was completed for both the peak 15-minute interval as well as a full 60-minute interval (i.e. the peak hour). Since schools generally peak for shorter times (i.e. 15-minute intervals), the extra analysis was considered to ensure any improvements were not based solely on a 15-minute or 60-minute period of traffic.

Results of the existing intersection capacity analysis for the peak 15-minute interval shown in Table 2 indicates that the CSAH 4/Airport Road intersection operates at LOS D during the p.m. peak 15-minute period. Side-street left-turns were observed to be difficult from both Airport Road and Airpark Boulevard onto CSAH 4 during the p.m. peak 15-minute period. Additionally, southbound left-turns at the CSAH 4 and Arlington Avenue/Arrowhead Road intersection are difficult during both the a.m. and p.m. peak hours. During the a.m. peak hour, this queue was observed often extending beyond Persons Street and the right-in only turn lane into the Optum/United Health Group driveway.

Table 2. Existing Intersection Capacity Analysis – 15 Minute Interval

Intersection	A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay	LOS	Delay
CSAH 4 and Airport Road ⁽¹⁾	A/C	23 sec.	D/F	137 sec.
CSAH 4 and Airpark Boulevard ⁽¹⁾	A/C	19 sec.	A/E	45 sec.
CSAH 4 and Krueger Road ⁽¹⁾	A/B	14 sec.	A/B	14 sec.
CSAH 4 and Technology Drive	B	12 sec.	C	27 sec.
CSAH 4 and Arlington Avenue/Arrowhead Road	C	33 sec.	C	28 sec.
CSAH 4 and Sawyer Avenue/Arrowhead Road	C	20 sec.	C	26 sec.

(1) Indicates an unsignalized intersection with side-street stop control, where the overall LOS is shown followed by the worst approach LOS. The delay shown represents the worst side-street approach delay.

Additionally, internal queuing was present for the Northstar Academy Charter School and Optum/United Health Group driveways along Technology Drive during the school start and end times. This queuing and delay is a result of the operations at the CSAH 4/Technology Drive intersection, and the driveway density and configuration along Technology Drive. The queuing and delay observed at these intersections occur primarily only in the peak 15-minute period immediately before and after school.

Based on observations, traffic volumes in the study area remain steady over the course of the peak hour at several study intersections. Therefore, a full 60-minute (i.e. peak hour) analysis was completed to confirm the observations and quantify area traffic operations.

Results of the existing intersection capacity analysis for the 60-minute peak period shown in Table 3 indicates that all study intersections currently operate at an acceptable overall LOS C or better during the a.m. and p.m. peak hours. However, the significant side-street left-turning delay for motorists on Airport Road turning left onto CSAH 4 continues throughout the entire peak hour. It should be noted that a traffic signal is planned to be installed at this intersection, which is expected to alleviate the side-street delay and queuing noted. This signal was assumed to be constructed for the future intersection capacity analysis.

Table 3. Existing Intersection Capacity Analysis – 60 Minute Interval

Intersection	A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay	LOS	Delay
CSAH 4 and Airport Road ⁽¹⁾	A/C	17 sec.	B/F	55 sec.
CSAH 4 and Airpark Boulevard ⁽¹⁾	A/C	14 sec.	A/C	20 sec.
CSAH 4 and Krueger Road ⁽¹⁾	A/B	13 sec.	A/B	12 sec.
CSAH 4 and Technology Drive	B	11 sec.	C	26 sec.
CSAH 4 and Arlington Avenue/Arrowhead Road	C	29 sec.	C	28 sec.
CSAH 4 and Sawyer Avenue/Arrowhead Road	C	17 sec.	C	26 sec.

(1) Indicates an unsignalized intersection with side-street stop control, where the overall LOS is shown followed by the worst approach LOS. The delay shown represents the worst side-street approach delay.

Year 2020 No Build Conditions

Preliminary discussions with project stakeholders indicate several projects that are planned for the area. The majority of these are aimed at improving intersection operations, while the need for one is tied to the proposed development. The following improvements are planned to be constructed by the year 2020.

- 1) New traffic signal at CSAH 4 and Airport Road
- 2) Extension of Sawyer Avenue to Technology Drive
 - a. Includes modification of the north approach of the CSAH 4 and Sawyer Avenue/Arrowhead Road intersection to have a southbound left-turn lane and a shared thru/right-turn lane.
- 3) Realignment of Krueger Road to the south to align with the proposed development access.
 - a. Note this realignment is only needed if the proposed development is constructed.

To determine how these planned improvements would impact area operations, a detailed intersection capacity analysis was completed. To account for area travel pattern changes due to the extension of Sawyer Avenue, existing traffic volumes were modified to reflect future no build conditions based on estimated travel times and a route diversion analysis. These volumes were then grown at an annual growth rate of one percent to reflect year 2020 conditions, which is consistent with the *Duluth-Superior Transportation Plan*.

With the extension of Sawyer Avenue, approximately 3,500 additional vehicles per day will use the north approach of Sawyer Avenue at CSAH 4. These vehicles, originally traveling along CSAH 4 north of Arrowhead Road, are expected to divert from Arrowhead Road to Sawyer Avenue to reach their respective destinations. It should be noted that no high school volumes were included as part of the no build analysis. The year 2020 no build conditions are shown in Figure 3.

Results of the year 2020 no build intersection capacity analysis for the peak 15-minute interval shown in Table 4, indicates that all intersections are expected to operate at an acceptable overall LOS C or better during the a.m. and p.m. peak 15-minute periods. The side-street delay of the Airpark Boulevard is expected to be approximately 55 seconds (LOS F) during the p.m. peak 15-minute period. The queuing issues along Technology Drive and CSAH 4 are expected to improve due to the extension of Sawyer Avenue as motorists will have an alternative route to consider.

Table 4. Year 2020 No Build Intersection Capacity Analysis – 15 Minute Interval

Intersection	A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay	LOS	Delay
CSAH 4 and Airport Road	A	8 sec.	B	12 sec.
CSAH 4 and Airpark Boulevard ⁽¹⁾	A/C	21 sec.	B/F	55 sec.
CSAH 4 and Krueger Road ⁽¹⁾	A/C	15 sec.	A/B	14 sec.
CSAH 4 and Technology Drive	A	8 sec.	B	16 sec.
CSAH 4 and Arlington Avenue/Arrowhead Road	C	30 sec.	C	25 sec.
CSAH 4 and Sawyer Avenue/Arrowhead Road	C	25 sec.	C	35 sec.

(1) Indicates an unsignalized intersection with side-street stop control, where the overall LOS is shown followed by the worst approach LOS. The delay shown represents the worst side-street approach delay.

An additional intersection capacity analysis was completed to determine the impacts of the planned improvements over the course of the full 60-minute peak hour. Results of the year 2020 no build intersection capacity analysis for the 60-minute peak period shown in Table 5 indicates that all study intersections currently operate at an acceptable overall LOS C or better during the a.m. and p.m. peak hours. It should be noted that this includes the current north/south split phasing at the CSAH 4 and Sawyer Avenue/Arrowhead Road intersection.

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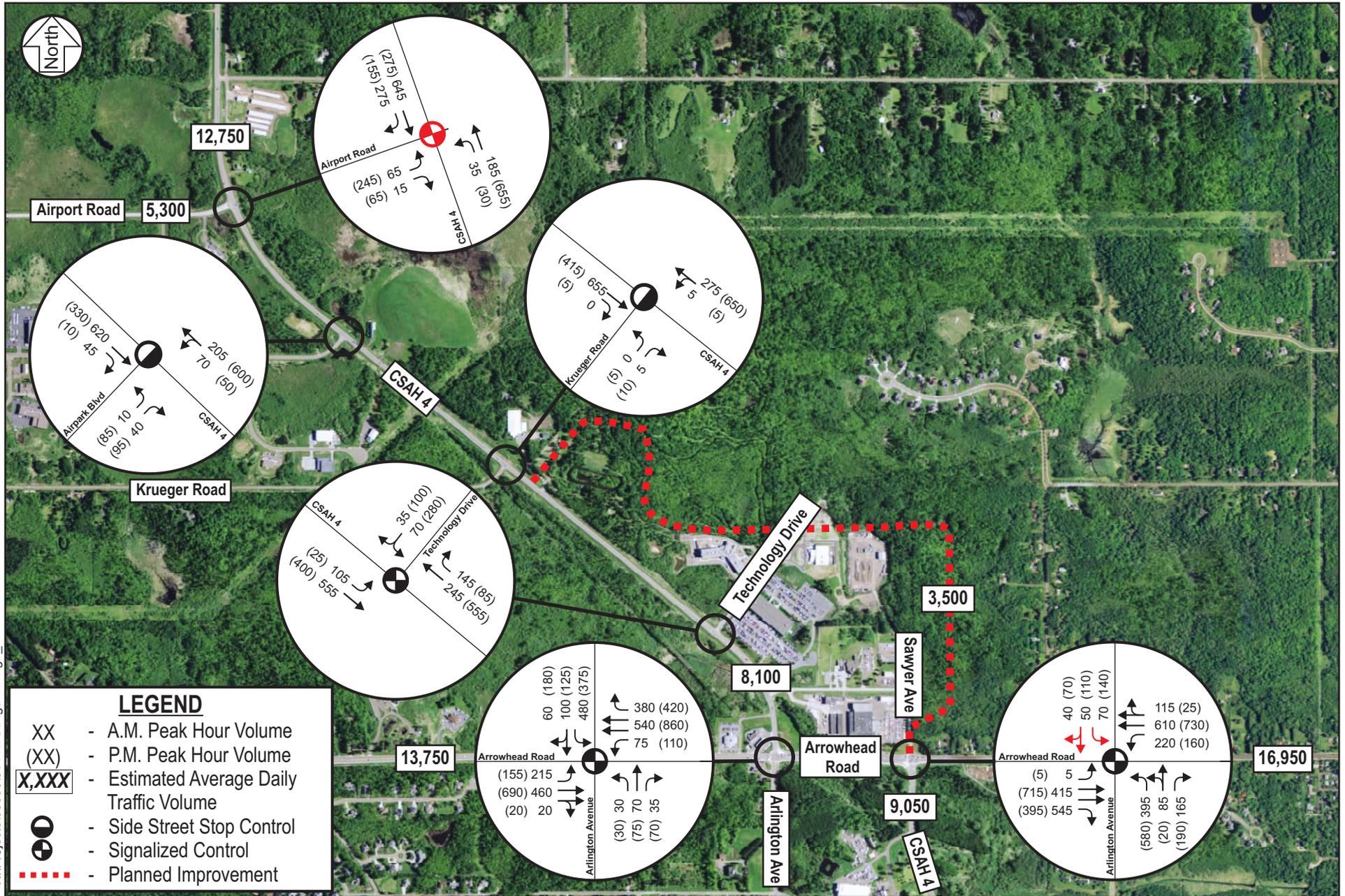


Table 5. No Build Intersection Capacity Analysis – 60 Minute Interval

Intersection	A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay	LOS	Delay
CSAH 4 and Airport Road	A	7 sec.	B	11 sec.
CSAH 4 and Airpark Boulevard ⁽¹⁾	A/C	15 sec.	A/C	23 sec.
CSAH 4 and Krueger Road ⁽¹⁾	A/B	13 sec.	A/B	12 sec.
CSAH 4 and Technology Drive	A	7 sec.	B	17 sec.
CSAH 4 and Arlington Avenue/Arrowhead Road	C	27 sec.	C	26 sec.
CSAH 4 and Sawyer Avenue/Arrowhead Road	C	25 sec.	C	34 sec.

(1) Indicates an unsignalized intersection with side-street stop control, where the overall LOS is shown followed by the worst approach LOS. The delay shown represents the worst side-street approach delay.

With the addition of the north leg of Sawyer Avenue at CSAH 4 and the need to modify the north approach to accommodate the additional traffic volumes, there is the opportunity to remove the north/south split phasing. This would provide some signal timing flexibility for the CSAH 4 and Sawyer Avenue/Arrowhead Road intersection. Therefore, a sensitivity test was completed to determine how the traffic signal at the CSAH 4 and Sawyer Avenue/Arrowhead Road intersection would operate without split phasing on the north and south approaches. To remove the split phasing, a restriping of the south approach to include dual left-turn lanes and a shared thru/right-turn lane would be needed. Results indicate that during the p.m. peak hour, removing the split phasing improves overall intersection operations, while similar operations are maintained during the a.m. peak hour.

Proposed Development

The proposed Edison Charter High School and apartment complex development is located along CSAH 4, west of the existing Northstar Academy Charter School (see Figure 4 – Site Plan) in the City of Duluth. Once fully completed, the proposed development is expected to consist of an 800 student charter high school and 400 apartment units. It should be noted that upon initial construction, opening is planned for the year 2017. However, full occupancy of the high school is not planned until year 2020.

Access to the proposed development is planned along CSAH 4 approximately 250 feet south of Krueger Road. However, if the proposed development is approved, Krueger Road would be realigned opposite of the development access, creating a four-legged intersection. Access to the site is also planned via the new Sawyer Avenue extension from Arrowhead Road to Krueger Road.

Year 2020 Build Conditions

To help determine impacts associated with the proposed development, traffic forecasts were developed for year 2020 build conditions. Year 2020 build conditions take into account the year 2020 no build condition and traffic generated by the proposed development. The evaluation of year 2020 build conditions includes a trip generation estimate for the proposed development and an intersection capacity analysis.

Trip Generation

To account for traffic impacts associated with the proposed development, a trip generation estimate for the proposed land use was developed for the a.m. and p.m. peak hours as well as a daily basis. These estimates, shown in Table 6, were developed using the *ITE Trip Generation Manual, Ninth Edition*.

Table 6. Trip Generation Estimates

Land Use Type (ITE Code)	Size	A.M. Peak Hour Trips		P.M. Peak Hour Trips		Daily Trips
		In	Out	In	Out	
Proposed Land Use						
Apartments (220)	400 Dwelling Units	41	163	161	87	2,660
High School (530)	800 Students	234	110	77	155	1,368
New System Trips		275	273	238	242	4,028

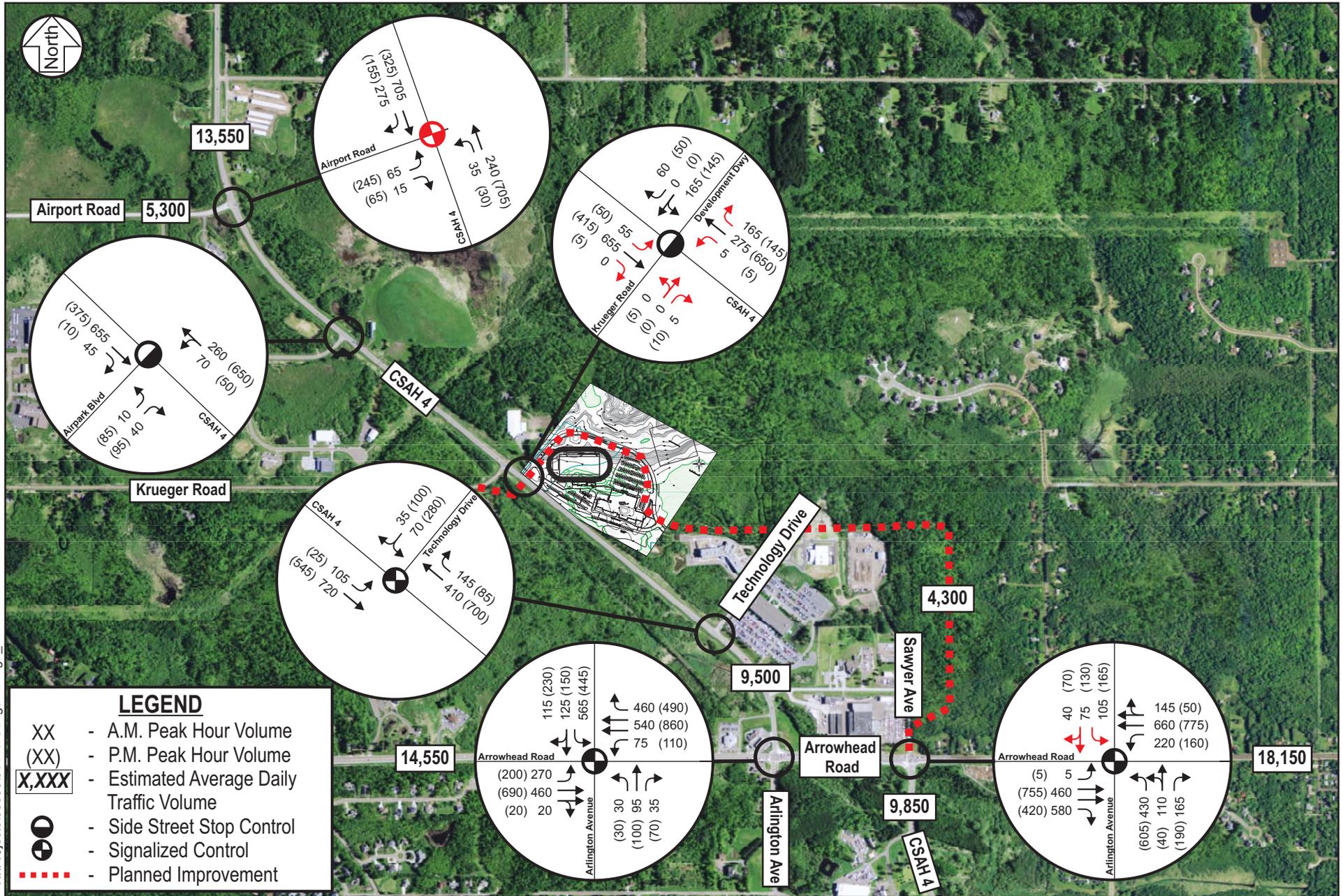
The proposed development is expected to generate approximately 548 a.m. peak hour, 480 p.m. peak hour and 4,028 daily trips. These trips were distributed throughout the area based on the directional distribution shown in Figure 5, which was developed based on existing area travel patterns and engineering judgment. It should be noted that an internal multi-use reduction was not applied for trips between the proposed apartments and high school. Since the proposed high school is expected to be a charter school, students living in the apartments are not likely to be destined to attend the school unless families enroll accordingly. Therefore to provide a conservative analysis, no multi-use internal reductions were applied. The resultant year 2020 conditions are shown in Figure 6.

Intersection Capacity Analysis

To determine how the planned roadway network will accommodate year 2020 build conditions, an intersection capacity analysis was completed using Synchro/SimTraffic software. In addition to the existing intersections, the proposed development driveway was reviewed to determine if any queuing or delay issues are expected under year 2020 build conditions. Once again, the analysis was completed for both the 15- and 60-minute time periods. The CSAH 4 and Sawyer Avenue/Arrowhead Road intersection was assumed to continue to have split phasing for the north/south approaches.

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Results of the year 2020 build intersection capacity analysis shown in Table 7 indicate that the CSAH 4 and Krueger Road/High School Access intersection is expected to operate at an overall LOS D during the p.m. peak 15-minute periods. During the p.m. peak 15-minute period, significant queuing and delays at the development access are expected. Side-street/driveway access is also expected to continue to be difficult at the CSAH 4/Airpark Boulevard intersection during the p.m. peak 15-minute period. Additionally, the CSAH 4 and Arlington Avenue/Arrowhead Road intersection is expected to operate at a LOS D during the a.m. peak hour.

Table 7. Year 2020 Build Intersection Capacity Analysis – 15 Minute Interval

Intersection	A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay	LOS	Delay
CSAH 4 and Airport Road	A	8 sec.	B	12 sec.
CSAH 4 and Airpark Boulevard ⁽¹⁾	A/C	22 sec.	B/F	76 sec.
CSAH 4 and Krueger Road/High School Access ⁽¹⁾	A/D	30 sec.	D/F	150 sec.
CSAH 4 and Technology Drive	B	10 sec.	C	18 sec.
CSAH 4 and Arlington Avenue/Arrowhead Road	D	38 sec.	C	31 sec.
CSAH 4 and Sawyer Avenue/Arrowhead Road	C	25 sec.	C	34 sec.

(1) Indicates an unsignalized intersection with side-street stop control, where the overall LOS is shown followed by the worst approach LOS. The delay shown represents the worst side-street approach delay.

Once again, a full peak hour intersection capacity analysis was completed to determine the impacts of the proposed development over the course of the full 60-minute peak hour. Results of the year 2020 build condition intersection capacity analysis for the 60-minute peak period shown in Table 8 indicate that all study intersections currently operate at an acceptable overall LOS C or better during the a.m. and p.m. peak hours. The significant side-street delay at the CSAH 4/Airpark Boulevard intersection is not expected to remain over the course of the full peak hour. However, the average side-street delay at the proposed development driveway is expected to extend over 30 seconds during the p.m. peak hour. Delays, queues, and safety at this location should be monitored to determine if signalization is warranted. Further discussion regarding potential mitigation is provided later in this memorandum.

Table 8. Year 2020 Build Intersection Capacity Analysis – 60 Minute Interval

Intersection	A.M. Peak		P.M. Peak	
	LOS	Delay	LOS	Delay
CSAH 4 and Airport Road	A	8 sec.	B	12 sec.
CSAH 4 and Airpark Boulevard ⁽¹⁾	A/C	16 sec.	A/D	27 sec.
CSAH 4 and Krueger Road/High School Access ⁽¹⁾	A/C	21 sec.	B/D	33 sec.
CSAH 4 and Technology Drive	A	8 sec.	B	17 sec.
CSAH 4 and Arlington Avenue/Arrowhead Road	C	31 sec.	C	31 sec.
CSAH 4 and Sawyer Avenue/Arrowhead Road	C	24 sec.	C	32 sec.

(1) Indicates an unsignalized intersection with side-street stop control, where the overall LOS is shown followed by the worst approach LOS. The delay shown represents the worst side-street approach delay.

Recommended Improvements

To address the operational issues identified, the following improvements are offered for consideration.

CSAH 4 and Krueger Road/High School Access

- 1) Add southbound and northbound left- and right-turn lanes on CSAH 4
- 2) Widen the Krueger Road and High School Driveway access to include right- and shared thru/left-turn lanes.
- 3) Monitor the intersection to determine if/when a traffic signal may be warranted and installed.
 - a. A traffic signal would provide acceptable overall operations (LOS B or better) during the a.m. and p.m. peak hours and improved access to CSAH 4.
 - b. Based on the traffic forecasts within this study, warrant three (Peak Hour Warrant) is expected to be met for the future build traffic volumes at this intersection.
 - i. This assumes full-enrollment capacity is reached by the year 2020, as well as the assumed apartment development being constructed and fully occupied.
 - ii. Based on discussions with Edison representatives, full-enrollment capacity is not likely expected until after year 2020.
 - iii. Given that there are some unknowns with respect to the development and enrollment timeframes, as well as how area travel patterns will ultimately change given the future extension of Sawyer Avenue, the traffic signal should not be installed until a signal warrant is met and travel patterns have normalized.
 - c. Based on traffic signal spacing guidelines from MnDOT, a one-quarter mile traffic signal spacing is recommended along minor arterial corridors. There is at least one-quarter mile distance between the proposed development access and both the signalized intersections along CSAH 4 at Technology Drive and Airport Road.

CSAH 4 and Arlington Avenue/Arrowhead Road

- 4) *Optional:* Restripe for an additional southbound left-turn.
 - a. This would reduce southbound queuing and delay at the study intersection and improve overall intersection operations to a LOS C during the peak 15-minute periods.

CSAH 4 and Sawyer Avenue/Arrowhead Road

- 5) Construct a southbound left-turn lane.
 - a) This is expected to improve intersection operations to an acceptable overall LOS C.
- 6) *Optional:* Remove the split timing at the north and south approaches of the intersection and replace with protected-only or flashing yellow arrow left-turn phasing.
 - a) Requires the restriping of the south approach to include dual left-turn lanes and a shared thru/right-turn lane.
- 7) *Optional:* Construct a westbound right-turn lane to reduce conflicts between through and turning vehicles.

Note: The need for the improvements at the CSAH 4 and Sawyer Avenue/Arrowhead Road intersection are the result of the extension of Sawyer Avenue rather than the proposed development.

Site Plan/Access Review

A review of the proposed site plans was completed to identify any issues and recommend potential improvements with regard to site access, traffic control, and circulation. Based on this review, the following issues were identified that should be discussed further and/or incorporated:

- 1) Internal traffic controls were not identified. However, traffic controls, signing, and striping should be incorporated based on the Manual on Uniform Traffic Control Devices (MUTCD). In particular, it is important to identify traffic controls at intersections between internal roadways/driveways to minimize vehicular conflicts and driver confusion.

It should be noted that several site plan improvements were already incorporated into the site plan as part of the development process.

Summary and Conclusions

The following study conclusions and recommendations are offered for your consideration:

1. Results of the existing intersection capacity analysis for the peak 15-minute interval indicates that the CSAH 4/Airport Road intersection operates at LOS D during the p.m. peak 15-minute period.
 - a) Side-street left-turns were observed to be difficult from both Airport Road and Airpark Boulevard onto CSAH 4 during the p.m. peak 15-minute period. Southbound left-turns at the CSAH 4 and Arlington Avenue/Arrowhead Road intersection are difficult during both the a.m. and p.m. peak hours.
 - b) Internal queuing was present for the Northstar Academy Charter School and Optum/United Health Group driveways along Technology Drive during the school start and end times. These operations occur primarily during the peak 15-minute period before and after school.
2. Results of the existing intersection capacity analysis for the 60-minute peak period indicates that all study intersections currently operate at an acceptable overall LOS C or better during the a.m. and p.m. peak hours.
 - a) The significant side-street left-turning delay for motorists on Airport Road turning left onto CSAH 4 continues throughout the entire peak hour. A traffic signal is planned to be installed at this intersection to address this issue.
3. The following improvements are planned to be constructed by the year 2020.
 - a) New traffic signal at CSAH 4 and Airport Road
 - b) Extension of Sawyer Avenue to Krueger Road
 - c) Realignment of Krueger Road to the south to align with the proposed development access.
 - Contingent upon construction of the proposed development.
4. Existing traffic volumes were modified to reflect year 2020 no build conditions, including an annual growth rate of one percent, which is consistent with area planning documents.
5. Approximately 3,500 vehicles per day are expected to utilize the extension of Sawyer Avenue under year 2020 no build conditions.
6. Results of the year 2020 no build intersection capacity analysis for the peak 15-minute interval indicates that all intersections are expected to operate at an acceptable overall LOS C or better during the a.m. and p.m. peak 15-minute periods.
 - a) Side-street delay at Airpark Boulevard is expected to be approximately 55 seconds (LOS F) during the p.m. peak 15-minute period.
 - b) The queuing issues along Technology Drive and CSAH 4 are expected to improve due to the extension of Sawyer Avenue as motorists will have an alternative route to consider.
7. Results of the year 2020 no build intersection capacity analysis for the 60-minute peak period indicates that all study intersections currently operate at an acceptable overall LOS C or better during the a.m. and p.m. peak hours. This includes the current north/south split phasing at the CSAH 4 and Sawyer Avenue/Arrowhead Road intersection.

- a) If split phasing were to be removed, the overall operations are improved in the p.m. peak hour and maintained during the a.m. peak hour. However, the south approach would need to be re-stripped to include dual left-turn lanes and share thru/right-turn lane.
8. The proposed development is expected to consist of an 800 student charter high school and 400 apartment units. This will generate approximately 548 a.m. peak hour, 480 p.m. peak hour and 4,028 daily trips.
9. Results of the year 2020 build intersection capacity analysis indicate that the CSAH 4 and Krueger Road/High School Access intersection is expected to operate at an overall LOS D during the p.m. peak 15-minute period.
 - a) Significant side-street queuing and delays over two and a half minutes are expected at the Krueger Road/High School Access.
10. Results of the year 2020 build condition intersection capacity analysis for the 60-minute peak period indicate that all study intersections currently operate at an acceptable overall LOS C or better during the a.m. and p.m. peak hours.
 - a) The average side-street delay at the proposed development driveway is expected to extend over 30 seconds during the p.m. peak hour.
11. To address the operational issues identified, the following improvements are offered for consideration.
 - a) CSAH 4 and Krueger Road/High School Access
 - Add southbound and northbound left- and right- turn lanes on CSAH 4.
 - Widen the Krueger Road/High School Driveway access to include a right- and shared thru/left-turn lanes.
 - Monitor the intersection to determine if/when a traffic signal may be warranted and installed (expected to be after year 2020).
 - b) CSAH 4 and Arlington Avenue/Arrowhead Road
 - *Optional* - Restripe to include an additional southbound left-turn.
 - c) CSAH 4 and Sawyer Avenue/Arrowhead Road
 - Construct a southbound left-turn lane.
 - *Optional* - Remove the split timing at the north and south approaches of the intersection and replace with protected-only or flashing yellow arrow left-turn phasing.
 - Requires the restriping of the south approach to include dual left-turn lanes and a shared thru/right-turn lane.
 - *Optional* - Construct a westbound right-turn lane.
 - d) Incorporate traffic controls, signing, and striping based on the Manual on Uniform Traffic Control Devices (MUTCD).

To: David Bolf, PE
Northland Consulting Engineers

From: Matt Pacyna, PE, Senior Associate
Tom Sachi, EIT, Engineer

Date: May 6, 2016

Subject: Addendum to the Duluth Edison High School Traffic Study

Introduction

Since completion of the *Duluth Edison High School Traffic Study* dated April 6, 2016, discussions with the project team indicate a desire to reduce the number of proposed apartment units. This stems from a combination of factors, including financial considerations, preserving ski trails, and other environmental considerations within the project area. Therefore, this addendum was developed to determine how the change in land use impacts the previous traffic study recommendations. The following sections provide the assumptions, analysis, and addendum conclusions.

Proposed Development Changes

The number of proposed apartment units is expected to decrease from 400 (previously assumed) to 100 apartment units. The high school enrollment, construction timeframe, and site access assumptions continue to be consistent with the previous traffic study. Other study changes include:

Trip Generation

To account for traffic impacts associated with the proposed development change, a trip generation estimate was developed for the a.m. and p.m. peak hours, as well as a daily basis. These estimates, shown in Table 1, were developed using the *ITE Trip Generation Manual, Ninth Edition*.

Table 1. Trip Generation Estimates

Land Use Type (ITE Code)	Size	A.M. Peak Hour Trips		P.M. Peak Hour Trips		Daily Trips
		In	Out	In	Out	
Proposed Land Use						
Apartments (220)	100 Dwelling Units	10	41	40	22	665
High School (530)	800 Students	234	110	77	155	1,368
New System Trips		244	151	117	177	2,033

The change from 400 to 100 apartment units represents a decrease of 153 a.m. peak hour, 186 p.m. peak hour, and 1,995 daily trips from the previously proposed development. The total site (high school and 100 apartments) is expected to generate 395 a.m. peak hour, 294 p.m. peak hour, and 2,033 daily trips once fully occupied.

Intersection Capacity Analysis

Given the expected decrease in the proposed development trip generation from the previous traffic study, the study area intersections are expected to operate at the same level of service or better under year 2020 peak hour conditions when compared to the previous traffic study. However, the reduction in the proposed development trip generation does not change the previously identified geometric and traffic control recommendations.

Signal Warrant Analysis

A review of the previous traffic signal warrant analysis indicates that even with the reduction in the number of apartment units (400 to 100), a traffic signal would still be warranted at the CSAH 4 and Krueger Road/High School Access intersection between year 2019 and year 2020. This timeframe assumes 100 apartment units are occupied and high school enrollment between 600 and 800 students.

Conclusions

Although the change from 400 to 100 apartment units is expected to reduce the overall trip generation for the proposed development, the previously recommended geometric and traffic control improvements remain valid.

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MEMORANDUM

To: Members of the Planning Commission

From: The Development Team for the Duluth Public Schools Academy High School Project

Re: Pending Applications for SUP and Variances

Upon review of the Staff Reports and in preparation for the hearings scheduled for May 10, 2016, the following information is respectfully submitted for consideration by the Commissioners. We discuss the Special Use Permit ("SUP") application first, and then the three variance requests.

I SPECIAL USE PERMIT APPLICATION

As a preface, we note that the Staff report relating to the SUP expresses a sole recommendation: that the matter be tabled to the June meeting, with this hearing seemingly to be used to absorb the Staff Report, allow for traffic and wetlands issues to be worked through and to consider what staff seemingly anticipates to be a considerable amount of public comment.

With all due respect, we believe that the four pending applications are ripe for decision at this meeting, and that the record taken as a whole supports issuance of the requested permit and variances. Experience throughout Duluth Public Schools Academy's ("DPSA's") existence teaches that its dealings before public bodies in Duluth- seemingly no matter the body or its charge- reliably devolve into debates over the broader question of charter schools themselves. Recent experience is that some within in the community certainly view this project through the lens of their own opinions regarding whether a new charter high school should be created in Duluth. With due respect, the State Legislature has long settled the question of whether, or how, charter schools should operate in Minnesota. The only questions before this body are the land use questions under the UDC regarding the appending of a high school to the current DPSA Northstar Academy campus on Rice Lake Rd.

With that introduction, our goal in this communication is to address the discussion of substantive planning questions within the SUP staff report on an issue-by-issue basis.

It should be noted at the outset that this very use of this very property figured prominently in the Comprehensive Plan amendments recommended by this Commission and adopted by the City Council just weeks ago. Planning's staff report to the Council in support of those amendments included the following: "While Edison can develop a high school with the existing RR-1 zoning, the Comprehensive Plan can better recognize the school use with a land designation of Institutional. " A copy of the resolution and staff report supporting it are attached.

Against that backdrop, the seeming reluctance to move forward with this SUP application is puzzling. As the Staff Report regarding the SUP acknowledges, the specifics of this project do not call for an EAW, and there was no citizen petition for one.

Staff's bases for its recommendation to table include:

Allowing time for the Council to consider UDC changes relative to parking. Parking is one of the pending variance requests. Acknowledgment that zoning will likely change in our favor in a manner parallel to the recent Comprehensive Plan is a reason to grant the requested variance, not to deny or table that requests and the SUP application.

Allowing for completion of the TEP review process with respect to wetlands. The current state of the TEP reporting and review process is provided with this submission, and does not require or support delaying the consideration of the pending SUP application.

Allowing time for completion of an agreement with the County relative to access for the back of the subject property. Discussions are ongoing regarding backage road access for the project and how it fits in with the County's considerations regarding this area (which includes the current school and the substantial UHC and Minnesota Power campuses). However, full and final completion of that process should not be a condition of the SUP approval by this body. That discussion can and will occur with the County, with the ultimate approval of City engineering and building safety staff as those discussions are completed such that an SUP requirement of backage access will be met.

The narrative portion of the Staff report then discusses the lack of an EAW requirement (discussed above); the status of stormwater planning review (which is identified as a building permit issue, and so not one that should delay consideration of the SUP or variances), the wetlands replacement plan (discussed above); the traffic study (discussed above); and the future land use and rezoning (discussed above) before getting into the additional analysis that is to guide an SUP issuance decisions.

As Staff notes and Commission is aware, an SUP is to be granted where:

1) The application is consistent with the Comprehensive Plan. As noted above, this very use was one of the bases for the very recent amendment of the Comprehensive Plan. That goes beyond mere consistency, and is clearly a basis to grant this SUP.

2) The application complies with all applicable provisions of this Chapter, including without limitation any use-specific standards applicable to the proposed use, development or redevelopment, and is consistent with any approved district plan for the area. The "Discussion" section of the Staff Report enumerates a number of applicable code provisions, without noting any areas of noncompliance other than parking (discussed above as in line with a pending Code amendment, and for which there is a variance request pending).

3) Without limiting the previous criteria, the commission may deny any application that would result in a random pattern of development with little contiguity to existing or programmed development or would cause anticipated negative fiscal or environmental impacts on the community.

Staff addresses this point by reference to the UDC's guiding principles noting Principles 2, 7 and 11 as favoring this application, and Principles 1, 5 and 12 as mitigating against it.

Principle 1: Reuse Previously Developed Land: The applicants have made extensive efforts to find a site that would result in the adaptive reuse of an existing facility. On two occasions, ISD 709 was approached about selling the Duluth Central School site to be used as the DPSA 8-12 high school site. In both cases, the ISD 709 school board rejected the motion to discuss the sale of the Duluth Central School site to Tischer Creek Duluth Building Company, which is DPSA's affiliated building company. All other sites, including the armory, were not suitable for adaptive re-use, due to size, lack of adjacent parking and programmable green space and/or cost prohibitive environmental remediation concerns. Our first choice was not to construct the facility on a green field site, but there were no other viable options available.

Principle 5: Strengthen Neighborhoods. The proposed high school is not physically in a traditional residential neighborhood, but it supports existing children and their families across the City. The construction of the high school constitutes a unique opportunity to create a K-12 campus, with large amounts of green space and a close relationship with a heritage site, which is Snowflake Nordic. There are many opportunities for enhanced outdoor recreation, education and synergy with more families if housing is realized on the site. The proximity to Arrowhead Tennis presents another opportunity for sharing athletic experiences and facilities. We believe this project strengthens and reinforces what its proximate area already is.

Principle 12: Creates Efficiencies in Delivery of Public Services. The proposed development utilizes existing infrastructure and consolidates elementary, middle and high schools on one campus. We do not see how this factor argues against this application.

While we agree that Principles 2 (Valuing Undeveloped Areas), 7 (Connectivity) and 11 (Consideration of Education Systems in Planning Actions) argue in favor of this application, we also believe that the following bear in our favor:

Principal 3: Support the Traditional Economic Base. The proposed development will create hundreds of construction jobs and permanent positions at the high school. It will also ensure the long term viability of Snowflake Nordic.

Principal 4: Support Emerging Economic Growth Sectors. DPSA 8-12 supports a broad and diverse student population. Their system currently serves over 1200 K-8 students. The construction of the high school will provide another quality education choice for these students.

Principal 6: Reinforce the Place Specific The proposed high school will be located next to an existing elementary school in the DPSA system and its use will integrate the Snowflake property.

Principal 8: Encourage a Mix of Uses and Densities. The addition of the high school would truly present a mixed use opportunity to the area, with existing education at North Star Academy, athletics at Arrowhead Tennis and Snowflake Nordic, business with United Health Care, Minnesota Power and Involta. The addition of multifamily housing would further diversity the mix of uses.

Principal 9: Support Private Actions that Contribute to the Public Realm. Once again, the construction of the high school ensures the long term viability of Snowflake Nordic, and will enrich the array of choices in public school education.

Principal 10: Encourage Sustainability. Preservation of 100 acres of land inherently reduces impacts to existing environmental resources.

In summary, application of the UDC to this application, especially in light of the recent Comprehensive Plan amendment that specifically envisioned this development, requires issuance now of the requested SUP.

II. VARIANCE REQUESTS

A. VARIANCE TO NUMBER OF PARKING STALLS

We discussed this topic at the April planning commission meeting. At that time, the presentation was for 6 cars per classroom. We contend that the formula for parking at the school should be 6 per classroom x 38 classrooms x 1.5 = 342 stalls. As noted in the staff report, the parking at North Star Academy is grossly inadequate. The current proposed parking has been deemed to be satisfactory, yet is still less than most comparable facilities in the State of Minnesota. The seeming recognition of the current Code's inadequacy with respect to school parking inherent in the Code amendment that's in process argues in favor of granting the variance, not making us wait until you fix the Code.

B. VARIANCE TO POSITION OF PARKING IN THE FRONT SETBACK

It is extremely important to have temporary pick up and drop off parking in the "front" of the building, that is, within the principal front setback between the front façade and Rice Lake Road. The front façade of the building is our main entrance. It is where new visitors, vendors, law enforcement, guests, etc. first enter the building. To not have any parking in the principal front setback may be an appropriate use for an enterprise in a high density urban setting where there is access to public transportation. The proposed project does not share those characteristics, and therefore, providing parking in the manner requested, for the type of facility being proposed, is a demonstrable hardship and a safety concern under the current zoning. The school use is clearly contemplated by the Comprehensive Plan as it now exists. This variance is sensible and consistent with that use.

C. VARIANCE TO BUILDING HEIGHT

A school typically has what is referred to a “tall wall”. That generally includes gymnasiums, cafeterias, auditoriums, etc. This school has a cafeteria and gymnasium. These rooms are large and have high ceilings. They are constructed in this manner across the United States and Canada. The request to extend the building height 3’ past the 30’ maximum for this zone district considering the proposed Special Use is absolutely necessary. Again, the clarity with which the school use is contemplated in the Comprehensive Plan mitigates in favor of a variance of this scope and nature that’s so inherent in that use.

III. CONCLUSION

City Staff, the Planning Commission and our development team have dedicated much time and effort during the past few months – separately as well as in collaboration with each other – to ensure that all aspects of this project have been carefully studied. The information contained in this memo reinforces the thoroughness of everyone’s work and confirms that everything the Planning Commission is considering is ready for approval on May 10.

Should you have questions prior to Tuesday’s meeting, please feel free to contact us ahead of time. Members of our team who are well versed in all aspects of this project will also be in attendance at your Commission meeting, in case you have questions at that time.

Thank you.

To: David Bolf, PE
Northland Consulting Engineers

From: Matt Pacyna, PE, Senior Associate
Tom Sachi, EIT, Engineer

Date: May 6, 2016

Subject: Addendum to the Duluth Edison High School Traffic Study

Introduction

Since completion of the *Duluth Edison High School Traffic Study* dated April 6, 2016, discussions with the project team indicate a desire to reduce the number of proposed apartment units. This stems from a combination of factors, including financial considerations, preserving ski trails, and other environmental considerations within the project area. Therefore, this addendum was developed to determine how the change in land use impacts the previous traffic study recommendations. The following sections provide the assumptions, analysis, and addendum conclusions.

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The number of proposed apartment units is expected to decrease from 400 (previously assumed) to 100 apartment units. The high school enrollment, construction timeframe, and site access assumptions continue to be consistent with the previous traffic study. Other study changes include:

Trip Generation

To account for traffic impacts associated with the proposed development change, a trip generation estimate was developed for the a.m. and p.m. peak hours, as well as a daily basis. These estimates, shown in Table 1, were developed using the *ITE Trip Generation Manual, Ninth Edition*.

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The change from 400 to 100 apartment units represents a decrease of 153 a.m. peak hour, 186 p.m. peak hour, and 1,995 daily trips from the previously proposed development. The total site (high school and 100 apartments) is expected to generate 395 a.m. peak hour, 294 p.m. peak hour, and 2,033 daily trips once fully occupied.

Intersection Capacity Analysis

Given the expected decrease in the proposed development trip generation from the previous traffic study, the study area intersections are expected to operate at the same level of service or better under year 2020 peak hour conditions when compared to the previous traffic study. However, the reduction in the proposed development trip generation does not change the previously identified geometric and traffic control recommendations.

Signal Warrant Analysis

A review of the previous traffic signal warrant analysis indicates that even with the reduction in the number of apartment units (400 to 100), a traffic signal would still be warranted at the CSAH 4 and Krueger Road/High School Access intersection between year 2019 and year 2020. This timeframe assumes 100 apartment units are occupied and high school enrollment between 600 and 800 students.

Conclusions

Although the change from 400 to 100 apartment units is expected to reduce the overall trip generation for the proposed development, the previously recommended geometric and traffic control improvements remain valid.

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Preliminary Drainage Report Summary – Duluth Public Schools Academy (DPSA) 8-12

Amended (5/5/16)

DPSA is in the process of completing a design for a new high school on newly acquired property along Rice Lake Road. The existing property was home to Snowflake Nordic Ski Center with an extensive trail system, a chalet and a few storage buildings. Almost the entire site is wooded minus the areas used for skiing. The proposed location of the high school will be in the south west corner of the property east of the Arrowhead Tennis Center.

Existing Site Drainage Conditions

The proposed site layout sits on multiple lots. The future property line to accommodate the new school will be approximately 16.92 acres. This will act as our project area when comparing existing to proposed. On the existing site there is only 26,455 SF of impervious or 0.61 acres. As stated above, a vast majority of the site is wooded aside from the areas that have been cleared of trees for the cross country ski activities. All runoff from the site flows south towards Rice Lake Road. Topography across the site varies from steep hillsides to flat areas including wetlands. On the site there are multiple wetlands that collect runoff and allow storage. All flow from the wetlands continues south to the ditch along Rice Lake Road. Once it crosses Rice Lake road through various culverts, it reaches a tributary of Chester Creek and is carried to Lake Superior.

Post-Construction Site Drainage Conditions

The post-construction site will consist of new school building, various parking lots, track/field surface and (2) smaller structures to service the field venue. The topography of the site will change leaving the parking and building on a level area constructed into the hillside. The post construction site will have approximately 8.19 acres of impervious, which adds 7.58 acres of impervious area. It should be noted that the runoff from the county road surrounding the site has not been accounted for in this design. It is the responsibility of the county to design the storm water collection and treatment system.

Site Area Breakdown

	Pre-Development		Post-Development	
	Area (SF)	% of Total Site	Area (SF)	% of Total Site
<u>Total Site Area</u>	736,941	100%	736,941	100%
Impervious Area	26,445	4%	356,769	48%
-Bit./Conc.	5,000	1%	222,143	30%
-Gravel	17,515	2%	0	0%
-Roof	3,930	1%	69,260	9%
-Track Surface	0	0%	65,366	9%

Pervious Area	710,496	96%	380,172	52%
-Grass	0	0%	293,309	40%
-Athletic Turf	0	0%	86,863	12%
-Woods	710,496	96%	0	0%
Disturbed Area	0	0%	736,941	100%

The site and storm water design has been designed to meet the requirements of the City of Duluth UDC and Engineering Guidelines. Prior to the issuance of building permits, an MS4 Statement of Compliance will be issued when the storm water management plan is approved. The system will include discharge, sediment reduction, temperature and volume controls. The storm water conveyance and treatment system will be owned and operated privately. The Certificate of Occupancy will be issued after the record drawings for the storm water management BMPs has been delivered to the City. The owner will be required to inspect and maintain the system to ensure it is functioning properly and correct all deficiencies should there be any. A storm water BMP operations and maintenance manual will be included in the final storm water report. This will direct the owner of the property on how and when to inspect and clean the systems on site.

The site runoff will need to be attenuated and treated extensively, because of the nature of the existing site. With much of the existing site being wooded and wetlands, the addition of 7.5+ impervious acres will produce a significant increase on the amount of site runoff. The UDC states that for sites above the “Bluff Line” that post-construction flows are reduced to 90% of the existing flow for the 2 year storm and 75% of the existing flows for the 10 and 100 year storms. Substantial reductions in the time of concentrations are anticipated and will be accounted for in the design. The site runoff, especially from the parking lots and buildings, will be collected by various inlets across the site and piped to underground storage systems. Any runoff that flows toward the track will be collected in a perimeter drain. Rainfall directly on the track and field surface will be collected and attenuated in a sand/underdrain section beneath the turf surface. All the underdrains will then flow to a header pipe and be discharged into the hillside.

Preliminary Site Discharge Peak Flow Rates

Storm Event	Existing Runoff Rate (cfs)	Proposed Runoff Rate (cfs)	Reduction in Runoff Rate (cfs)	Reduction in Runoff Rate (%)
WQ Storm	0.02	0.98	+0.96	-
2-yr	5.63	5.07	0.56	10%
10-yr	15.12	10.75	4.37	29%
100-yr	42.70	27.58	15.12	35%

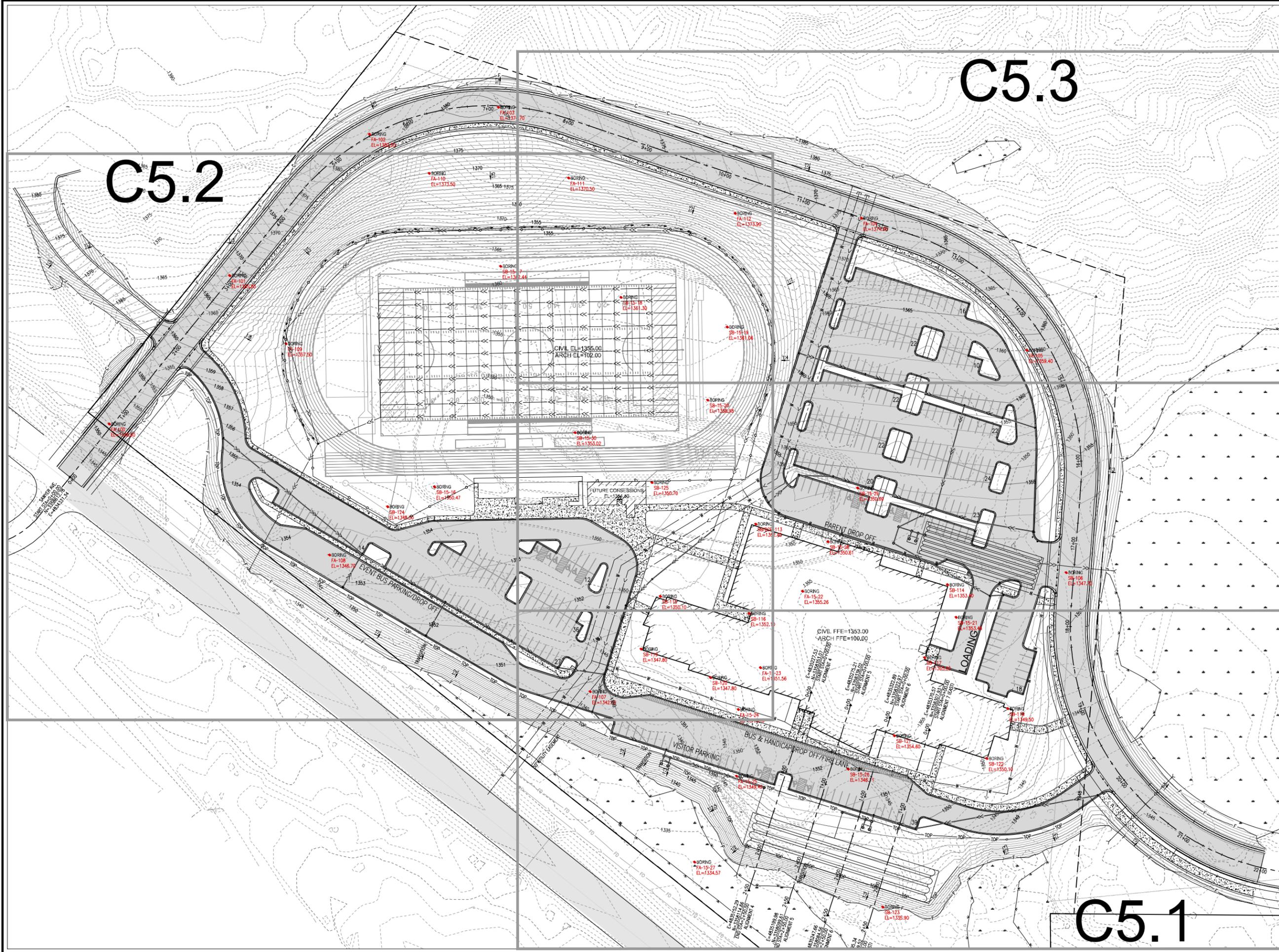
As shown on the attached exhibits, there will be two main treatment areas based on the grading of the site. The systems will be comprised of large diameter perforated CMP pipes with storage capacity on the porous bedding. The preliminary design has the south storage system designed with 96” diameter pipe

and the north system designed with 48" diameter pipe. All of the bituminous runoff will be conveyed through sediment treatment chambers to remove Total Suspended Solids (TSS) before entering the underground storage. The underground storage will allow the storm water to be attenuated and released at the reduced rates required by the City of Duluth's UDC.

The developer reserves the right to explore other possible treatment and storage solutions that meet the requirements of the City of Duluth, MPCA, and the MNDNR.

Discharging to wetlands and sensitive trout stream environments, such as tributaries of Chester Creek, require additional consideration for temperature controls. By treating and attenuating the site runoff underground, it will have a chance to cool before being released downstream.

All runoff from the post construction site will continue to flow into the same Chester Creek tributary on the south side of Rice Lake Rd. The runoff rates will be reduced and the sediment will be removed to the levels required within the UDC. Once in Chester Creek it will flow downstream and discharge into Lake Superior.



C5.2

C5.3

C5.1

I HEREBY CERTIFY THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

SIGNATURE: DAVID BOLF, PE
DATE: XX/XX/XX LICENSE NO. 40926

PROPOSED BUILDING FOR:
DECS 8-12 SCHOOL
43XX RICE LAKE ROAD
DULUTH, MINNESOTA 55811
OWNER: PROJECT OWNER

REVISIONS

ISSUED DATE
05/06/2016

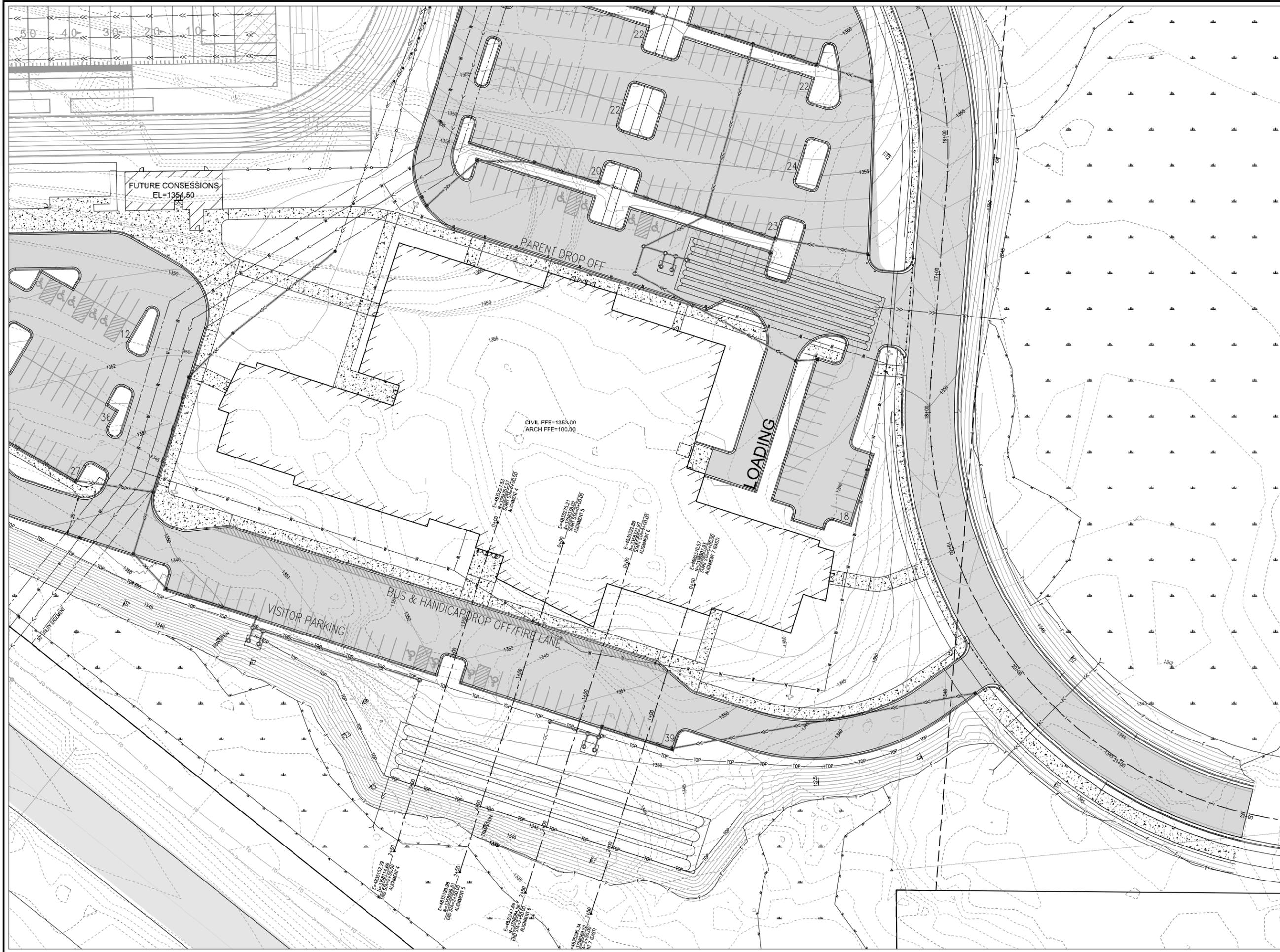
PROJECT NO. 15-504-C
DRAWN BY JDO
APPROVED BY ARZ

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SCALE = 2" AT FULL SCALE



OVERALL GRADING PLAN

SHEET NO.
C5.0
Page 186 of 244



I HEREBY CERTIFY THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRELIMINARY
NOT FOR CONSTRUCTION
SIGNATURE: DAVID BOLF, PE
DATE: XX/XX/XX LICENSE No. 40926

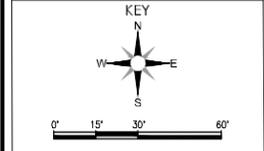
PROPOSED BUILDING FOR:
DECS 8-12 SCHOOL
43XX RICE LAKE ROAD
DULUTH, MINNESOTA 55811
OWNER: PROJECT OWNER

REVISIONS

ISSUED DATE
05/06/2016

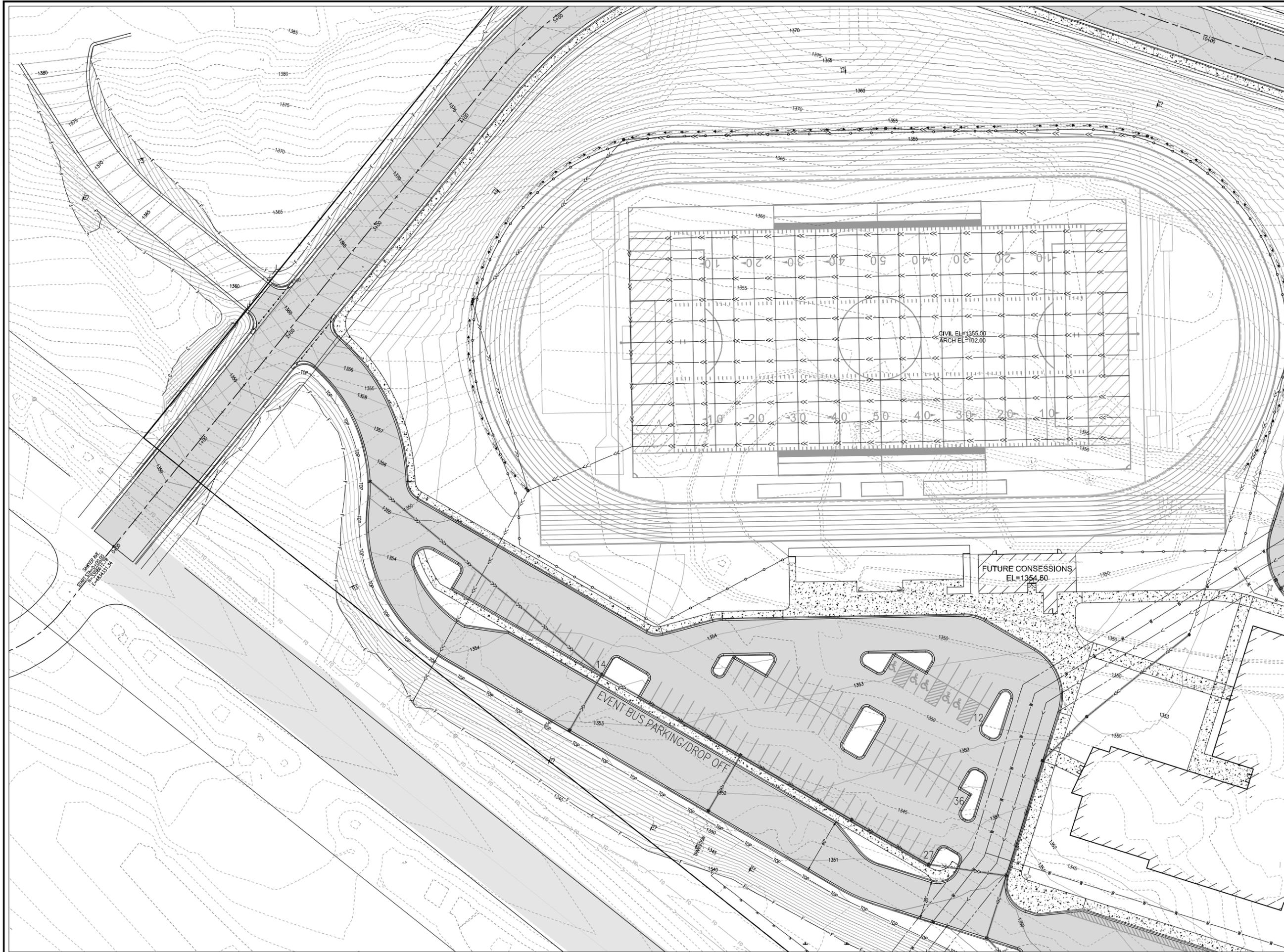
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DRAWN BY JDO
APPROVED BY ARZ

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SCALE = 2" AT FULL SCALE



GRADING PLAN

SHEET NO.
C5.1
Page 187 of 244



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SIGNATURE **DAVID BOLF, PE**
DATE XX/XX/XX LICENSE No. 40926

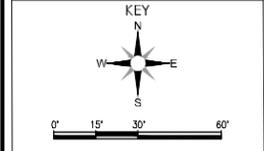
PROPOSED BUILDING FOR:
DECS 8-12 SCHOOL
43xx RICE LAKE ROAD
DULUTH, MINNESOTA 55811
OWNER: PROJECT OWNER

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ISSUED DATE
05/06/2016

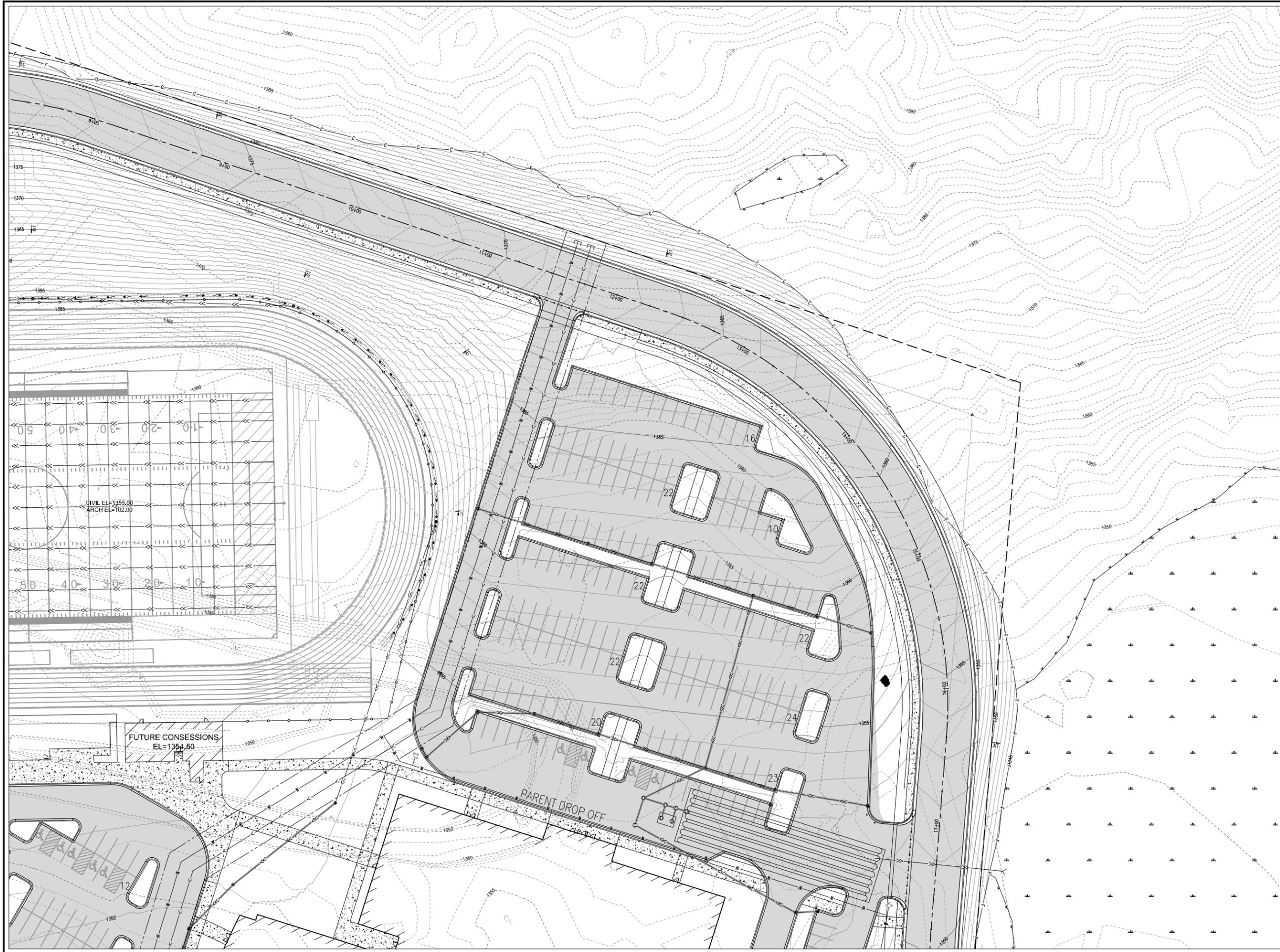
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APPROVED BY ARZ

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GRADING PLAN

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PROPOSED BUILDING FOR:
DECS 8-12 SCHOOL
43xx RICE LAKE ROAD
DULUTH, MINNESOTA 55811
OWNER: PROJECT OWNER

REVISIONS

ISSUED DATE
05/06/2016

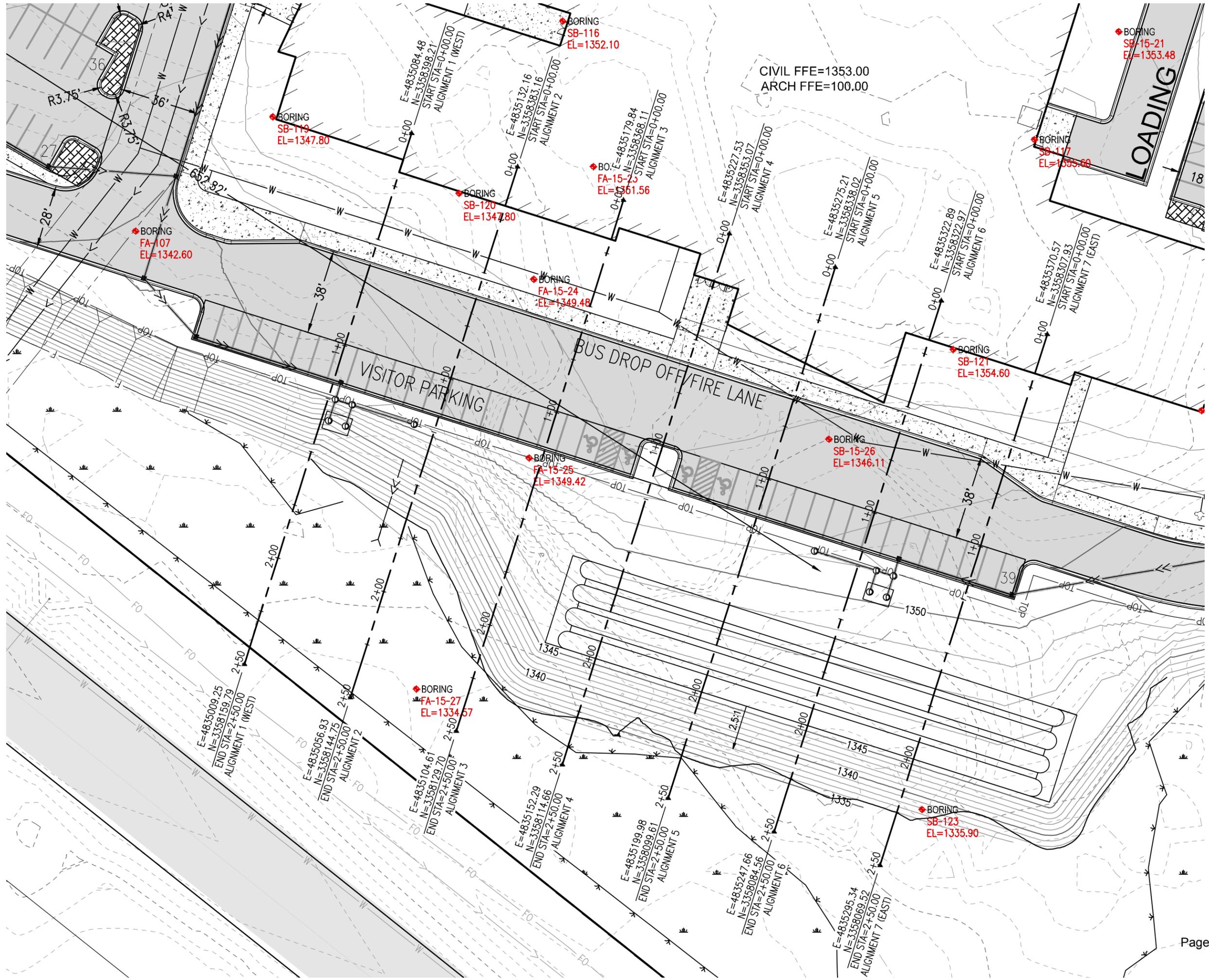
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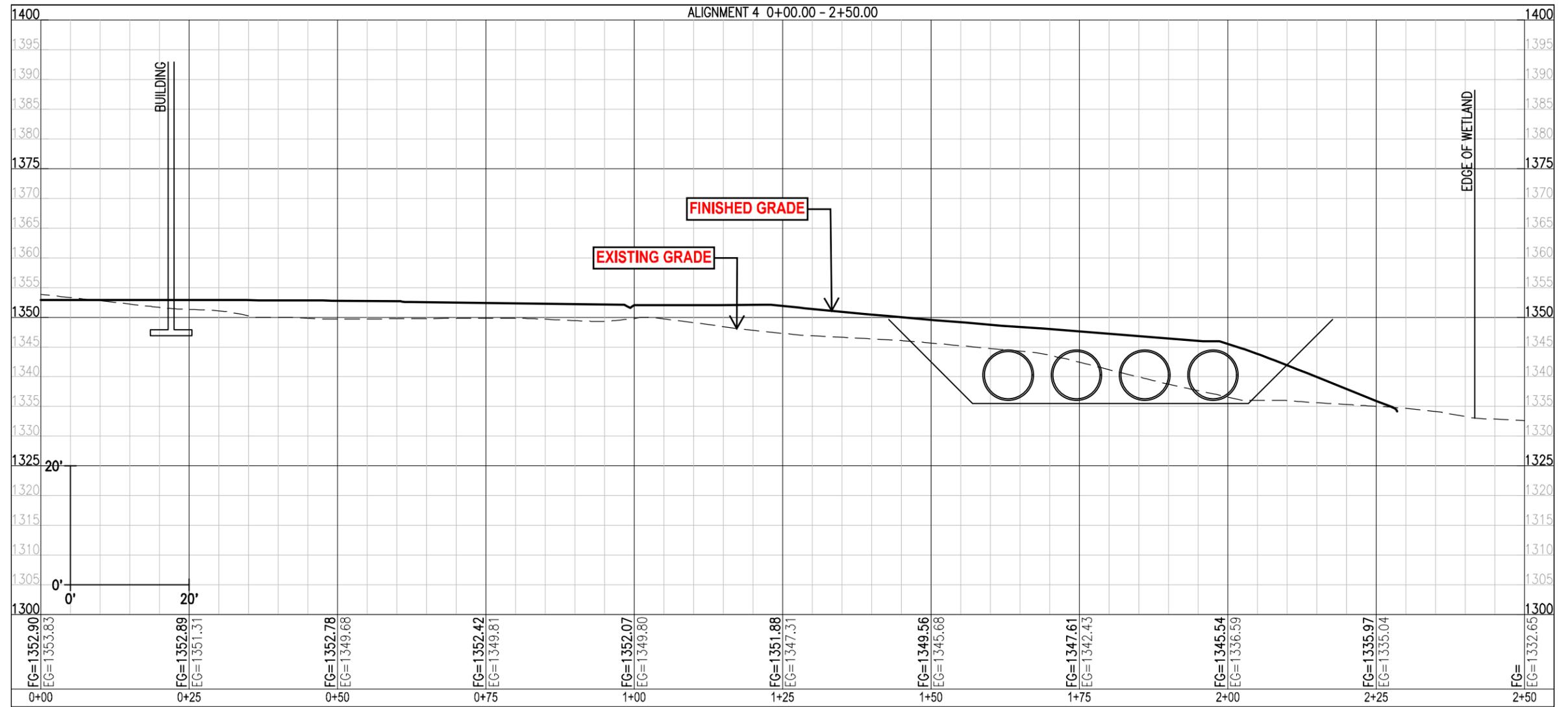
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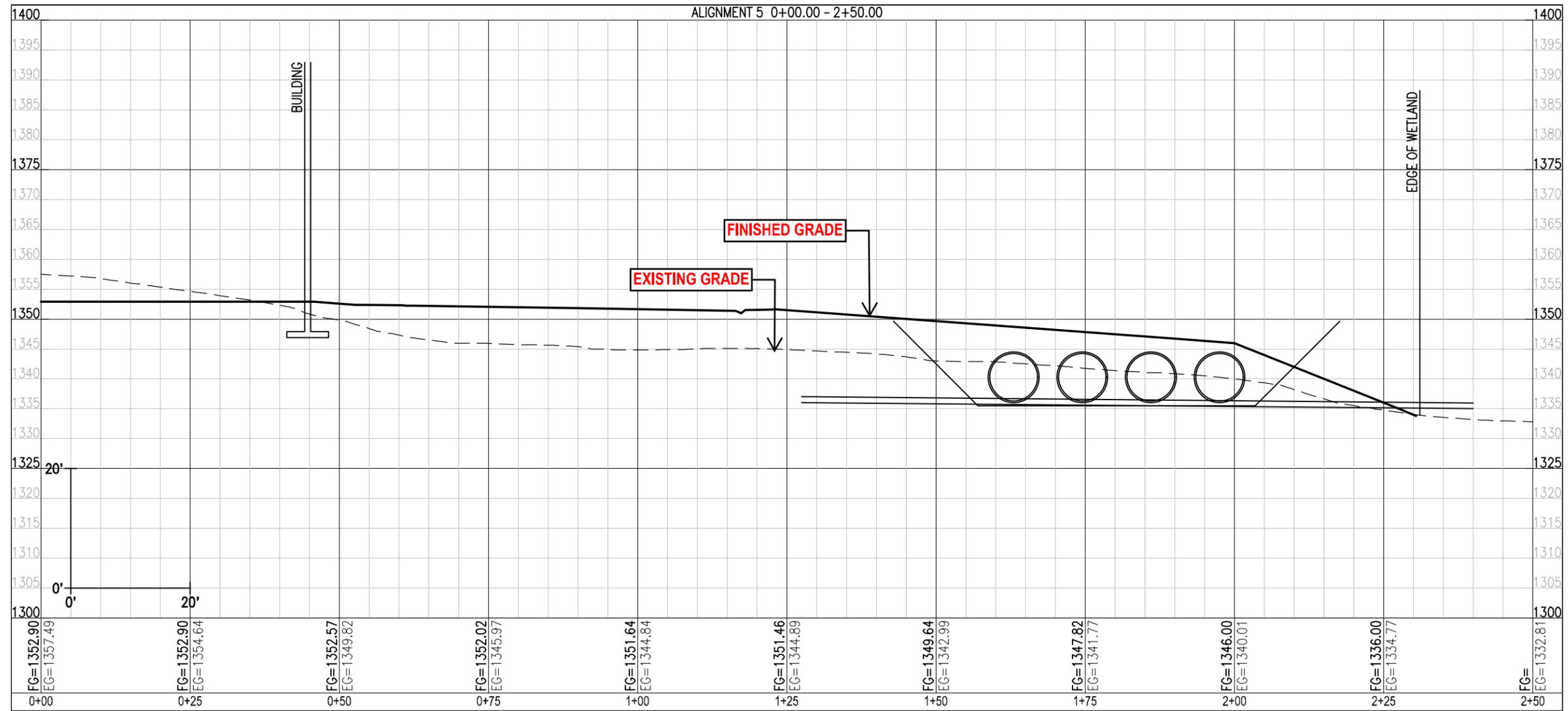
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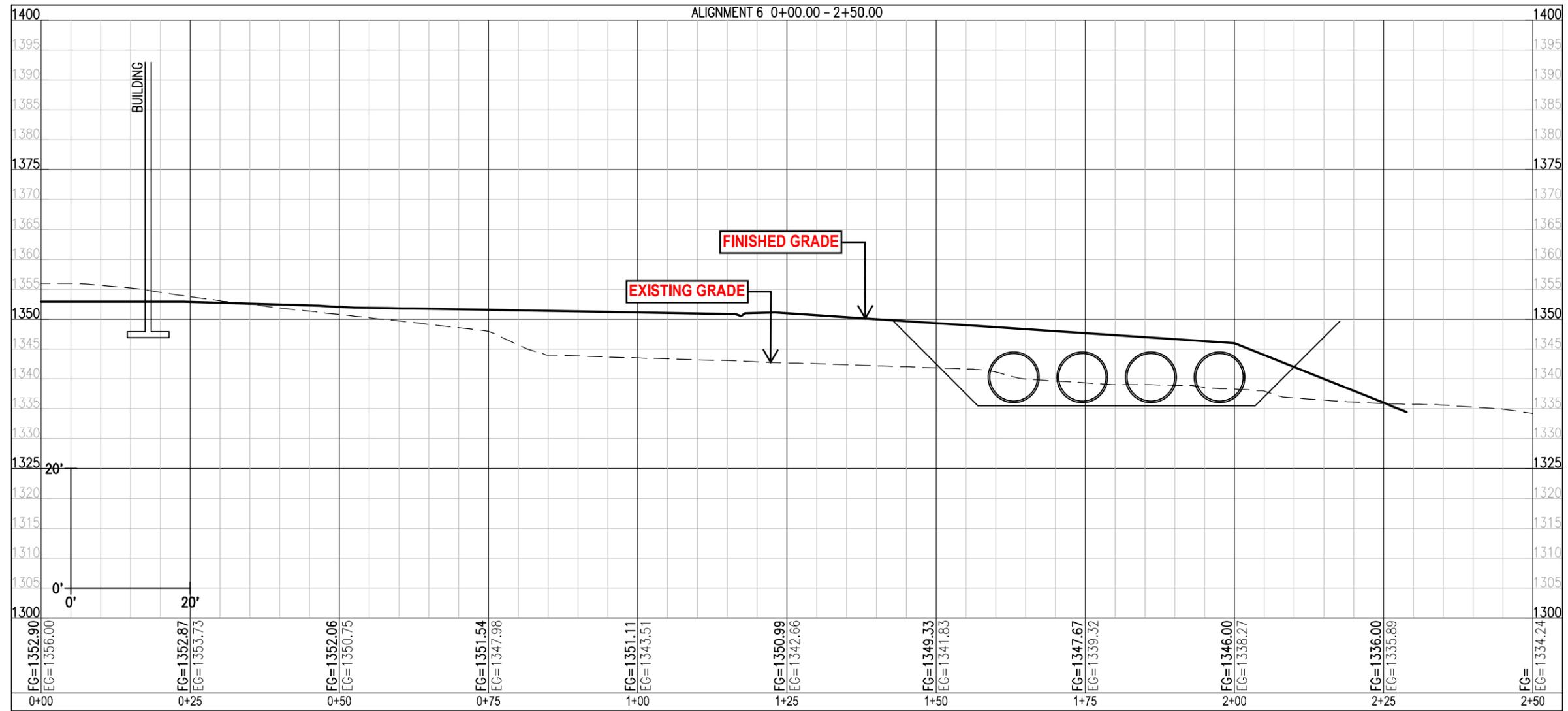
GRADING PLAN

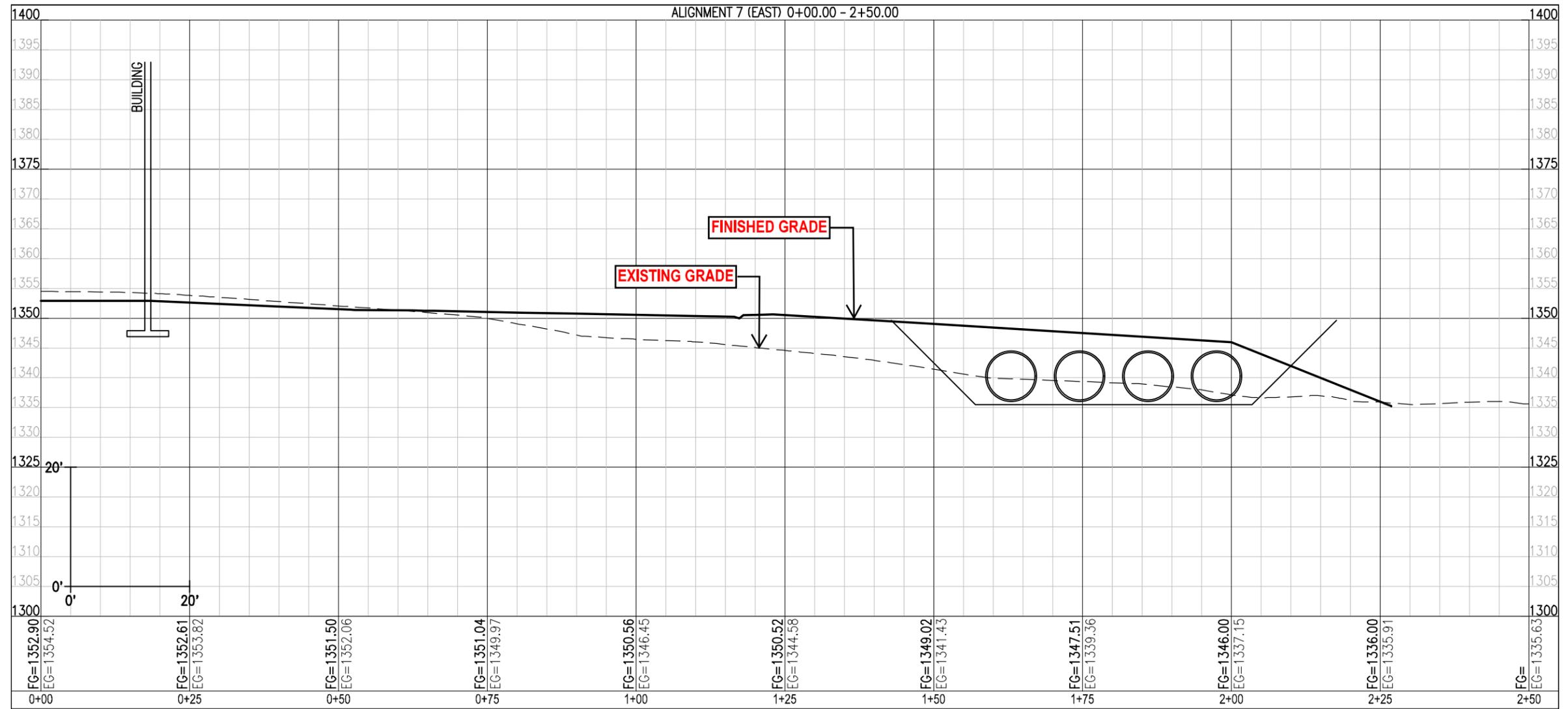
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C5.3
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Prepared 3/14/16

Variance Request for Additional Required Parking Spaces:

In reference to UDC Section 50-24.2, Required Parking Spaces, it is requested that the City of Duluth consider allowing a variance to increase the required amount of off-street parking. Based on Table 50-24-1, Off-Street Parking Spaces Required, the maximum allowable amount of off street parking is 167 spaces. Number of classrooms and auditorium seating were both considered, see below:

- UDC Off Street Parking Language: School, Middle or High: 1 parking space for each 8 seats in the main auditorium or 3 spaces for each classroom whichever is greater.

Allowable Parking Based on UDC	
Number of Classrooms:	37
3 Stalls Per Classroom:	111
Maximum Allowable Stalls (150%):	167
Number of Auditorium Seats:	518
1 Stall Per 8 Auditorium Seats:	65
Maximum Allowable Stalls (150%):	97

NCE has researched the parking conditions at other local high schools to compare the ratio of parking stalls per student. A traffic study was also conducted by SRF Consulting to study the impacts on the surrounding area. SRF based their estimates on the Institute of Traffic Engineer's formula, for a school of this size, found the peak parking demand of 285 spaces. One thing to note, this estimate has many factors used to estimate peak parking demand. Two of which this site does not have, having access to public transportation and the ability to walk to school. The lack of these transportation types increases the peak parking demand. The new high school will have about 85 staff and 825 students across 5 grades (165 students per grade). NCE has estimates the parking demand as follows, 1 stall for each staff (85), 75% of seniors drive $0.75 * 165 = (123)$, 50% of juniors drive $0.50 * 165 = (82)$ and 25% of sophomores drive $0.25 * 165 = (40)$ for a total of 330 parking spots.

See tables below showing the findings:

School Name	Parking Stall Count	Student Population	Stalls/Student
East High School	382	1345	0.28
Denfeld High School	373	1071	0.35
Proctor High School	289	500	0.58
Hermantown High School	630	626	1.01
Marshall High School	330	450	0.73
Central High School (closed)	506	853	0.59
Averages:	418.3	808	0.59

DPSA Parking Characteristics	Parking Stall Count	Student Population	Stalls/Student
UDC Maximum Allowable:	167	825	0.20
SRF Peak Demand (Traffic Study):	285	825	0.35
NCE Site Plan (dated 2/4/16):	330	825	0.40

The results show a major discrepancy on the amount of allowable parking. Today the area is a safety hazard for students and staff of the adjacent Northstar Academy. The adjacent North Star Academy has 117 striped parking stalls. There is an additional 114 cars that park on the lawn, on Technology Drive and leased spaces from Arrowhead Tennis Center and Involta. The staff parking in leased spaces, are shuttled to the school. Parents also wait along Rice Lake Road to pick up the students, again crating a major safety concern due to the lack of parking near on the Northstar site. It also should be noted that year 1 will have 8th and 9th graders and year 4 the school will be full 8-12. The first 3 years the new lot can be used for overflow parking by Northstar Academy.

Planning staff asked the question about on-street parking. At this time the new Sawyer Avenue, is planned to be 36' wide with (2) 12' driving lanes and (2) 6' shoulders with curb and gutter. This section currently does not support on-street parking. As the Sawyer Avenue project progresses, St. Louis County and the City will need to come to an agreement if on-street parking will be permitted. Therefore, we have proceeded as if on-street parking is not available at this time.

In summary, the UDC maximum allowable parking is only half the amount of parking that this project demands. Duluth East and Denfeld parking ratios of stalls/students are 0.28 and 0.35 respectively, which are both above the UDC allowable ratio of 0.20. Both of these schools have inadequate off-street parking, with overflow parking into the neighborhoods. We not only have an opportunity but an obligation to accommodate the traffic and parking demands of this new facility. Most importantly this project needs to create a safe traffic and pedestrian environment. Therefore we are requesting a variance to accommodate 330 new parking spaces.

Prepared 3/14/16

Variance Request for Front Yard Parking:

In reference to UDC Section 50-24.6B, Parking Location within the site, it is requested that the City of Duluth consider allowing a variance to allow parking in the front yard. The parking in the front yard will consist of visitor parking. This will separate the student parking and the visitor parking keeping the midday traffic mainly in the front of the building. Safe and controlled accesses to schools are a top priority on this nation. Edison will be providing a secure check point during school hours at the front of the building. It is for this reason the visitor parking needs to be located as shown, adjacent to the secure entrance point in the front of the building.

In discussions with planning staff, they stated it would be helpful to show previous parking configurations. Attached are snapshots of earlier site plans, in all there have been about 15 options to where we are today. As can be seen in the earlier versions, front yard parking has been reduced and internal circulation has been improved. Early discussions with planning staff determined that shifting all student/staff parking to side and rear yards would be a more desirable alternative, which we have achieved.

Prepared 5/5/16

County Road Alignment and Site Layout Coordination:

The question was asked why not move the road to the south side of the school, one of the design/user requirements was to create a free flowing roadway from Arrowhead to Rice Lake Road. If the roadway moves to the south side, this would create a “three-way” stop condition causing an additional spot for congestion to occur. It also directs traffic flow near the front door of the school. Both conditions are undesirable citing future safety and congestion concerns.

The road surrounding the high school campus will be designed to Municipal State Aid Standards (MSA). The horizontal curve and vertical curve geometry is designed to meet a 30 mile per hour roadway design. At 36 feet wide, the road will include (2) 12 foot driving lanes and (2) 6 foot shoulders. The configuration shown on the plans is minimized to satisfy the MSA design requirements while maintaining a logical and efficient design for the school campus. The road alignment also minimizes additional wetland impacts by crossing at shortest routes across the wetlands.

When considering the site layout, Edison officials indicated a protected campus was a requirement. Moving either the track or parking areas to the north side of the roadway breaks up the campus and poses a safety risk. Everyday a high amount of students and pedestrians will have to cross Sawyer Avenue. The high amount of traffic in the area will be partially distributed through this corridor. The whole reason for the road is to alleviate the safety concerns and congestion along Rice Lake Road. By requiring school users to cross Sawyer Avenue, the risk only becomes higher.



TO: Planning Commission
FROM: Jenn Reed Moses, Planner II
DATE: April 4, 2016
RE: Arrowhead Road Land Use Study, PL 16-030

Background

After several recent development inquiries and applications drew attention to the Arrowhead Road area, the Community Planning Division initiated a land use study to determine whether any recommendations to change the Comprehensive Plan were warranted. The development activities seen by staff included:

- Edison school purchasing the Snowflake property, and subsequent applications to build a new high school on the property.
- Eastridge Church plans to expand, and Duluth Gospel Tabernacle plans to build a new church in the area.
- A wildlife rehabilitation clinic ("veterinary clinic or animal hospital" per the UDC) relocating to the area.

The area was previously studied in the Duluth Northwest Corner Area Study (2000), with future land uses further amended in the Comprehensive Plan (2006). These plans had envisioned much of the area as Low-Density Neighborhood, Rural Residential, and Preservation, with commercial/light industrial concentrated mainly at the intersection of Rice Lake Road and Arrowhead Road. These land use designations, however, do not necessarily reflect the character of existing development on the corridor. The existing land uses are a mixture of residential and undeveloped properties, with church campuses and businesses such as the oral surgery clinic interspersed, and at least one commercial site ready for development that would not be supported by the existing comprehensive plan. In addition, the type of suburban single-family development suggested for the northern side of Arrowhead Road may not be supported given the relatively narrow space available between the busy roadway corridor and Chester Creek. All of these questions and considerations led staff to initiate this land use study.

Process

Staff began doing research on the study area in December. A public meeting was held on February 23, 2016, with over 100 attendees. This was an open house where staff shared information and asked for input from attendees; 46 comments were received at the meeting, with additional comments received via email in the weeks that followed. A second public meeting was held on March 29, 2016, with 53 people who signed in. After a presentation with three land use scenarios, attendees were asked to submit feedback on potential land uses for the area. A summary of comments from these meetings is including in the Findings below.

II. A

Findings

Existing Land Use

As noted above, the existing land uses are a mixture of residential, church campuses, commercial, industrial, and undeveloped properties (see attached *Existing Land Use* map). Developed properties are located on large lots creating an overall low-density, sprawling development pattern. The exception to this is the Crystal Village and Ponderosa Groves neighborhoods, which were platted on smaller lots with a greenway system to connect to potential future development.

Many of the existing uses do not correlate with the future land use designations in the Comprehensive Plan. This can be seen in the attached *Comprehensive Plan* map. Some of these are long-standing uses (such as Cummings greenhouse) and others are newer (such as Wildwoods Rehabilitation). If in the future the existing zone districts changed to align with the Comprehensive Plan, these uses would become nonconforming uses. They would be allowed to legally continue with grandfathering rights, although they wouldn't be allowed to expand.

Transportation

The two main thoroughfares in the area are Arrowhead Road and Rice Lake Road; both are County roads. Rice Lake Road is a managed access road; the County's policy limits access to this road, and the County is actively seeking solutions such as frontage and backage roads for existing and new development. Arrowhead Road is characterized by frequent, often wide access points, resulting in heavy turning movements and potential conflict points. To manage this, the County is willing to investigate adding a center turn lane on Arrowhead in part of the study area if any future development is proposed prior to final designs for reconstruction of the roadway (approximately 2018). Drivers on both of these roads experience congestion at peak traffic times.

Other roads in the area are local city streets, mainly residential in nature. Duluth Transit does not provide service in the area, but has a route just east of the study area.

Natural Resources

The streams and wetlands in the study area are the defining natural feature, and are critically important to the hydrology in the city (see *Natural Resources* map). A tributary of Miller Creek and its associated floodplain run north-south along the western boundary of the study area. Miller Creek is a coldwater (trout) stream that is impaired, and which caused severe flood damage in the 2012 flood, particularly in the mall area. The headwaters of Chester Creek begin just north of the study area, and then flow east-west through the study area. Chester Creek is also a coldwater (trout) stream that caused severe flood damage in the 2012 flood, particularly in the East Hillside. Large wetland complexes exist in conjunction with the two streams, and other wetlands lie throughout the remainder of the study area.

Research has shown that wetlands and stream headwaters are crucial areas of water retention and infiltration. As annual precipitation continues to increase, and periods of extreme rainfall become more frequent, communities will need to identify ways to minimize future flood damage. One way to do this is by preserving areas such as mature forests, intermittent stream channels, and depressions to promote infiltration in upstream areas.

Utilities

Existing water, gas, and sanitary sewer (including sanitary sewer basins) were mapped and are shown on the *Utilities* map. City Engineering has indicated that most of the area is served by utilities, and that those utilities could be expanded or upgraded as needed for any future development. The notable exception is the area from the western boundary of the study area to just east of Swan Lake Road, which has no sewer. The City has no plans to upgrade sewer in this area.

Community Input

Comments received at the two public meetings and via email demonstrate support for commercial development along the eastern portion of Arrowhead Road. Recognizing the high traffic volumes of the road, people feel that uses such as gas stations, apartments, coffee shops, small restaurants, churches, daycare, hair salons, and community centers are appropriate for the area immediately adjacent to the road – but in many instances, comments also indicated this development should not extend all the way to surrounding single-family neighborhoods. Some commenters indicated that apartments would “ruin the neighborhood feel.” Many of the attendees at both meetings were members of Eastridge Church and Duluth Gospel Tabernacle, so a large number of comments supported those churches’ developments; Eastridge would like to incorporate a fitness center, and Duluth Gospel Tabernacle would like to build a new church and potentially sell parts of the property for other development. Other entities that have indicated an interest to expand/build are McCarthy Manor, Northern Oral and Maxillofacial Surgeons, and Wildwoods Rehabilitation. There were no comments focusing exclusively on the area along Rice Lake Road.

A few comments recognized that the high traffic volumes on Arrowhead support additional development, but also cautioned that any new development should not worsen congestion. Instead, new development should “serve existing travelers.”

On the western portion of Arrowhead Road, the comments received supported maintenance of the large-lot residential character. Additional comments focused on the protection of natural resources and need for green space, desire for bike routes and sidewalks, and a desire to avoid big box retail, car dealerships, and any more industrial uses.

Land Use Scenarios

Based on the findings and comments, Staff developed three land use scenarios to share at the second public meeting (all three are attached). All three scenarios included a recommendation of Institutional land use in the area around Edison, with the remainder of that property being Rural Residential. All three scenarios also supported Urban Residential as a land use for McCarthy Manor.

- **Scenario 1:** This scenario focused on the area as being the headwaters of Chester Creek and home to numerous natural resources. The recommendations in this scenario reinforced the existing development pattern of large-lot residential along the western portion, north of Arrowhead Road, while maintaining the current Future Land Use of Low-Density neighborhood south of Arrowhead Road. It recommended “Urban Residential” over the area with existing churches and clinic, reflecting the mix of uses already in that area.
- **Scenario 2:** This provided a very different land use pattern than Scenario 1, focusing instead on the nature of heavily traveled Arrowhead Road being capable of supporting further development. It supports a larger area for potential suburban-style neighborhood development, as well as commercial and mixed use development along larger parcels along the east side of Arrowhead Road.
- **Scenario 3:** This “hybrid” recommends higher intensity commercial and mixed use development than Scenario 1, but focused mainly on areas immediately adjacent to Arrowhead Road. It also recommends large-lot residential on the north side of Arrowhead Road to maintain the existing character and provide increased infiltration areas near the streams and wetlands in the area.

Recommendations

After researching the area, looking at existing land uses, and taking into account the comments received throughout the study, Staff has developed several Land Use Recommendations. Recommendations for the area:

- Recognize and support existing businesses and institutions and, where possible, look at a Future Land Use category that allows them to continue and to expand when necessary.
- Protect the character of existing single-family neighborhoods by placing close attention to buffers and transitions between land uses.
- Support land uses that protect natural resources while still allowing reasonable development on privately owned property.

All of the below are recommendations to change the Comprehensive Plan – Future Land Use Map as shown in the attached map, *Recommendations*.

- A. Increase areas of Preservation as a Future Land Use along Chester Creek.** The current Future Land Use Map reflects Preservation over a smaller area. It should be noted that the entire shoreland (300' on either side of the stream) has regulatory protection via the Natural Resources Overlay district; this recommendation adds the goal of shoreland protection into the guiding land uses of the Comprehensive Plan.
- B. Change the Future Land Use from Low-Density Neighborhood to Rural Residential along Arrowhead Road in the western portion of the study area.** This area is currently characterized by large-lot residential uses. Many of these residents attending the public meetings expressed a desire for this area to remain residential. As this area is bordered by major roads to the west and south, and Chester Creek on the north, and given the large wetlands and individual property ownership, it is unlikely that this area would develop into a suburban-style single-family neighborhood. The change to Rural Residential suggests a lower density for this area than what is currently shown in the Comprehensive Plan. *This change matches the current RR-1 zoning of this area.*
- C. Change the Future Land Use to Institutional around Edison schools.** This includes a change from Urban Residential to Institutional for the existing North Star Academy, and a change from Business Park to Institutional in the location of Edison's proposed high school. While Edison can develop a high school with the existing RR-1 zoning, the Comprehensive Plan can better recognize the school use with a land use designation of Institutional.
- D. Change the Future Land Use to Rural Residential for the remainder of the Edison property.** Edison purchased the entire Snowflake property, which currently is developed with ski trails. Since the remainder of this property is not needed for a school use, it is appropriate to change the land use to Rural Residential to match the adjacent land use category to the north and east.
- E. Change the Future Land Use From Neighborhood Mixed Use to Urban Residential for McCarthy Manor.** Urban Residential is still supportive of assisted living in this area, but is a lower intensity than Neighborhood Mixed Use, which is more appropriate for this parcel as it is adjacent to Low-Density Neighborhood on the west and south sides.
- F. Change the Future Land Use from Low-Density Neighborhood to Urban Residential.** This area currently contains Eastridge Church, St. John's Church, and the oral surgery clinic. Since the land use category of Urban Residential supports not only residential but also institutions and businesses that serve the surrounding area, this is an appropriate land use. It also provides a transition between the Rural Residential to the west and the Neighborhood Mixed Use to the east. The City of Duluth encourages potential developments in area F to pursue Mixed Use-Planned zoning (Planned Unit Development) for flexible development options that also provides a greater level of public benefit than would be required under the existing zone district.
- G. Change the Future Land Use from Low-Density Neighborhood to Neighborhood Mixed Use.** This parcel contains a graded and ready-to-build commercial site. Adjacent to Nortrax on the east and Arrowhead Road on the south, this is not an appropriate location for a single-family house. It is separated from St. John's Church to

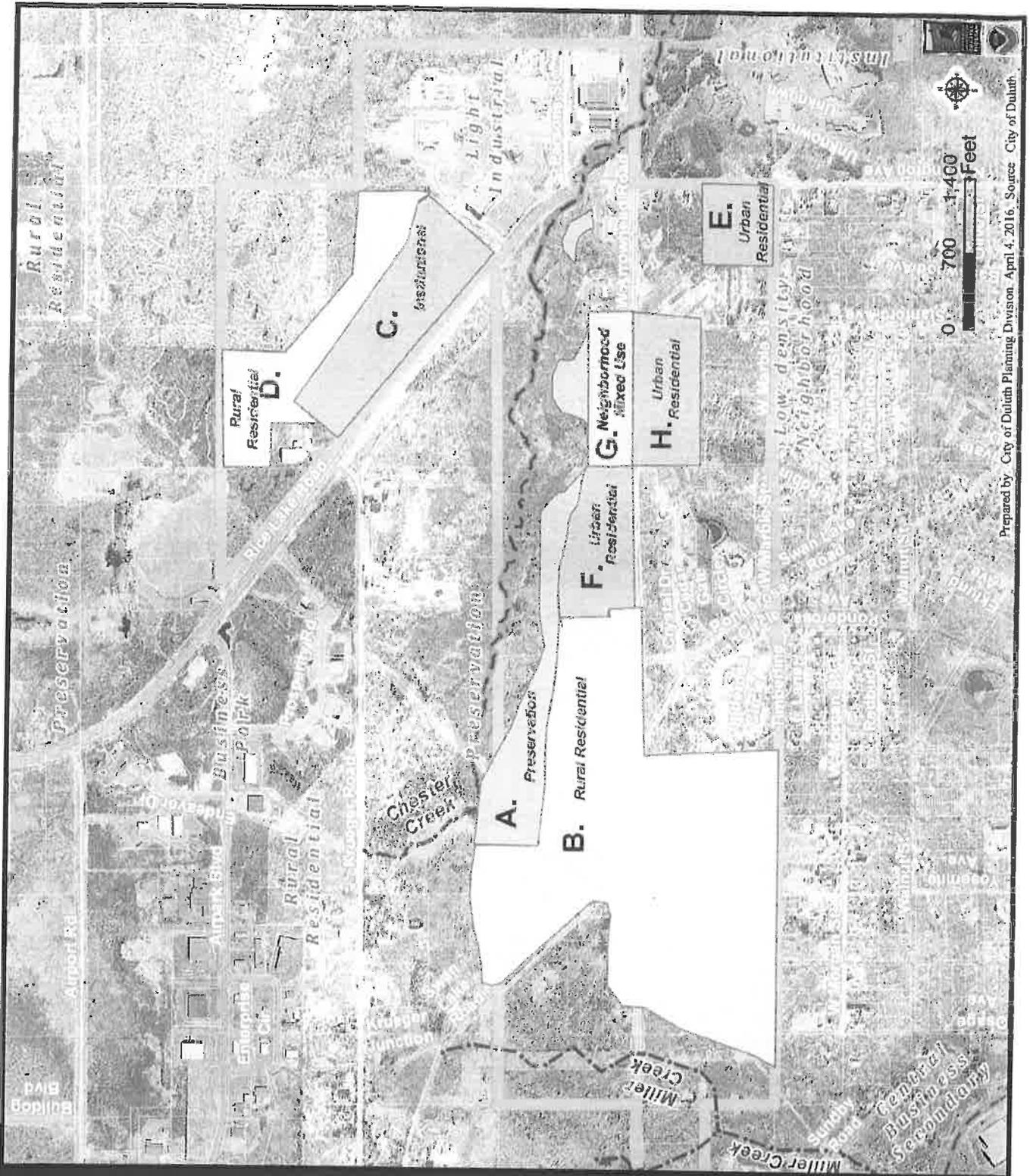
the west by a wetland area, which will provide a likely buffer between the more commercial uses to the east and the church/clinic campuses to the west.

- H. Change the Future Land Use from Low-Density Neighborhood to Urban Residential.** This reflects the general public support for increased development immediately adjacent to Arrowhead Road, and provides a transition between the Low-Density Neighborhood to the west and the Neighborhood Mixed Use to the East. The City of Duluth encourages potential developments in area H to pursue Mixed Use-Planned zoning (Planned Unit Development) for flexible development options that also provides a greater level of public benefit than would be required under the existing zone district. In addition, future development should pay attention to how it interacts with surrounding neighborhoods, including site design that supports the single-family neighborhood feel along Marble Street and continues the greenway and pedestrian trail system located to the west.

Next Steps

Planning staff is asking Planning Commission to recommend approval of these Comprehensive Plan Future Land Use Changes to City Council. It is anticipated that a resolution would appear on the City Council agenda for its regular meeting on April 25, 2016. Council must adopt Comprehensive Plan amendments with a two-thirds vote. Future steps prior to development in the area would be rezoning of these areas to implement the Comprehensive Plan.

Recommendations

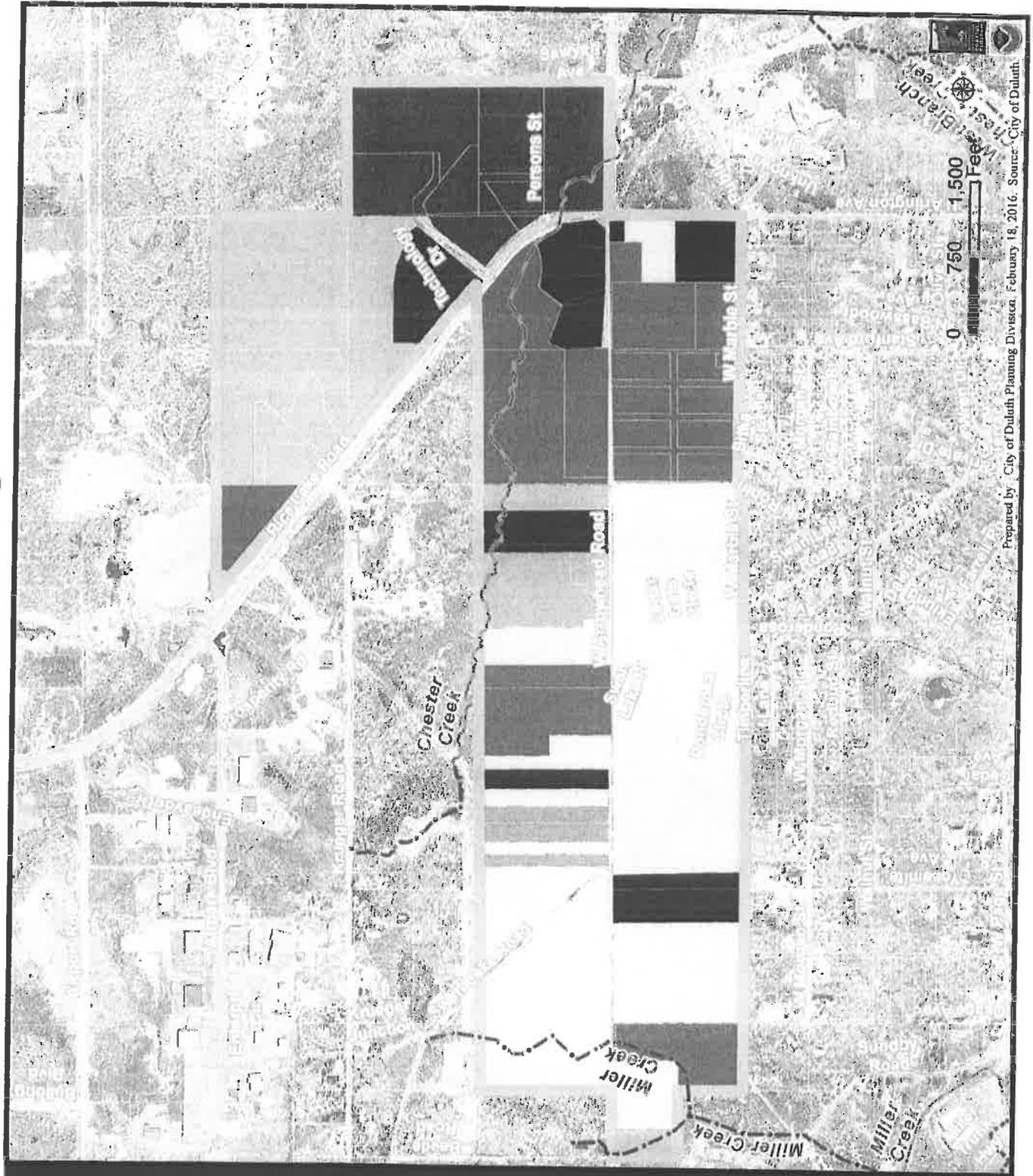


Legend

- Study Area
- Future Land Use
- Preservation
- Recreation
- Rural Residential
- Low-density Neighborhood
- Traditional Neighborhood
- Urban Residential
- Neighborhood Commercial
- Neighborhood Mixed Use
- General Mixed Use
- Central Business Secondary
- Central Business Primary
- Auto Oriented Commercial
- Large-scale Commercial
- Business Park
- Tourism/Entertainment District
- Medical District
- Institutional
- Commercial Waterfront
- Industrial Waterfront
- Light Industrial
- General Industrial
- Transportation and Utilities

Prepared by City of Duluth Planning Division, April 4, 2016. Source: City of Duluth.

Arrowhead Road Area - Existing Land Use



Legend

- Trout Stream (GPS)
- Other Stream (GPS)

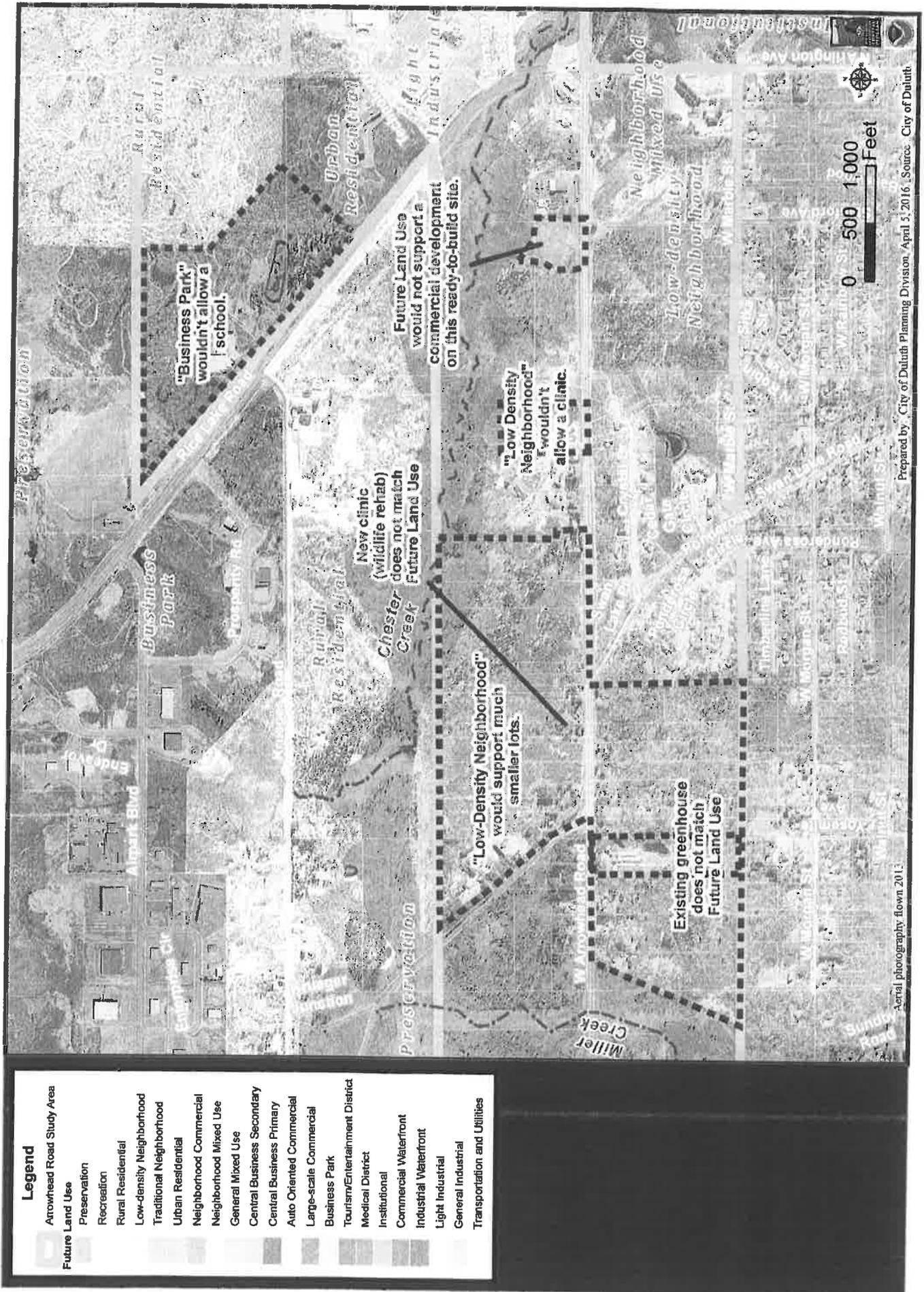
Land Use

- Assisted Living
- Commercial
- Institutional
- Light Industrial
- Recreation
- Religious Assembly
- Residential
- Tax Forfeit
- Vacant
- Study Area

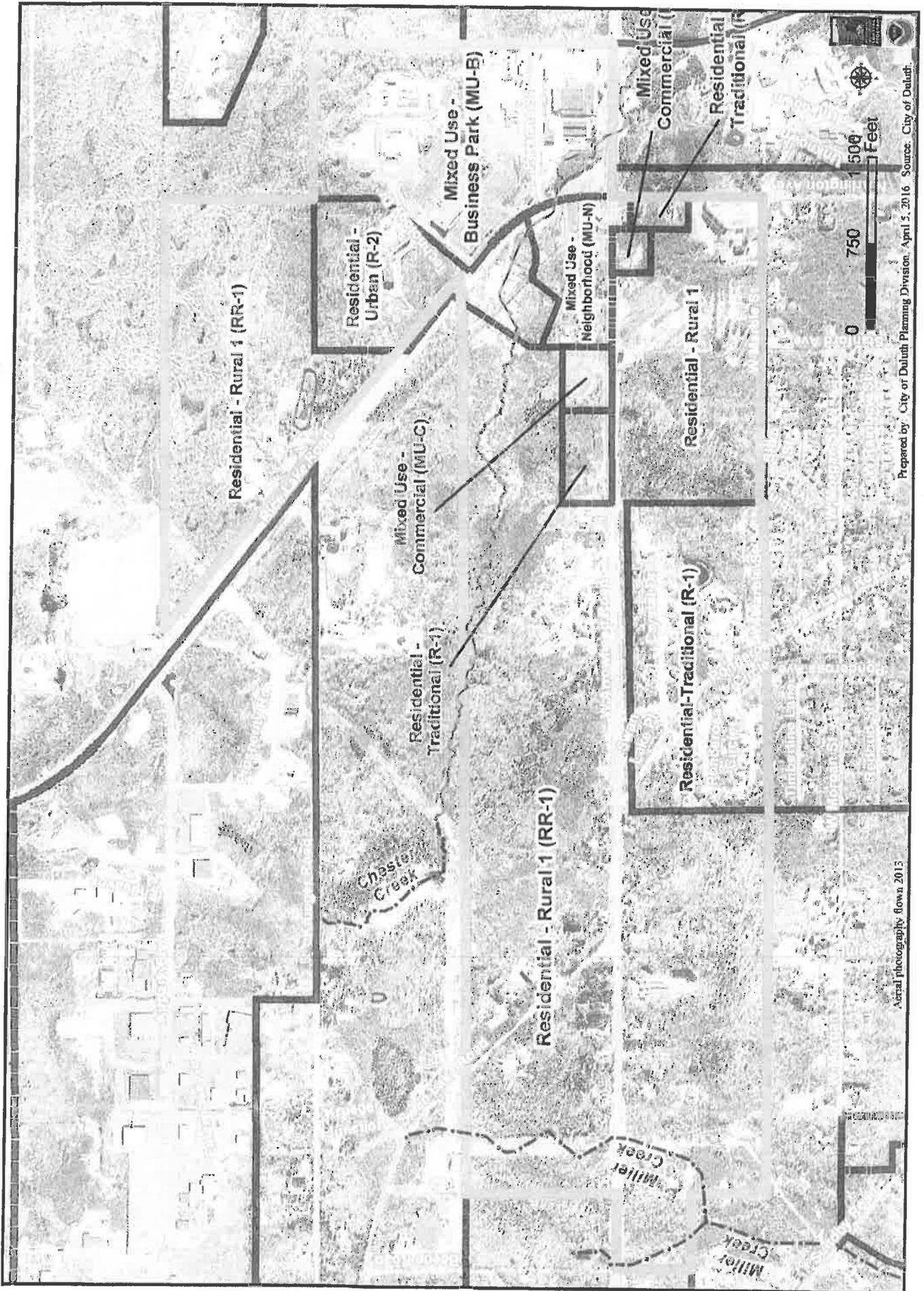
This map shows the existing land uses in the study area, as estimated by evaluating aerial photography and property ownership.

Prepared by City of Duluth Planning Division, February 18, 2016. Source: City of Duluth

Arrowhead Road Area - Comprehensive Plan



Arrowhead Road Area - Zoning



Arrowhead Road Area - Natural Resources



Legend

- Arrowhead Road Study Area
- Wetlands (NREI)
- Shoreland Overlay Zone
- Cold Water
- Natural Environment
- General Development
- Floodplain Type
- General Flood Plain
- Flood Way
- Flood Fringe

This map shows Natural Resources in the area, including streams (and shoreland areas along streams), wetlands, and floodplains.



Prepared By: City of Duluth Planning Division, February 9, 2016 Source: City of Duluth

Arrowhead Road Area - Utilities

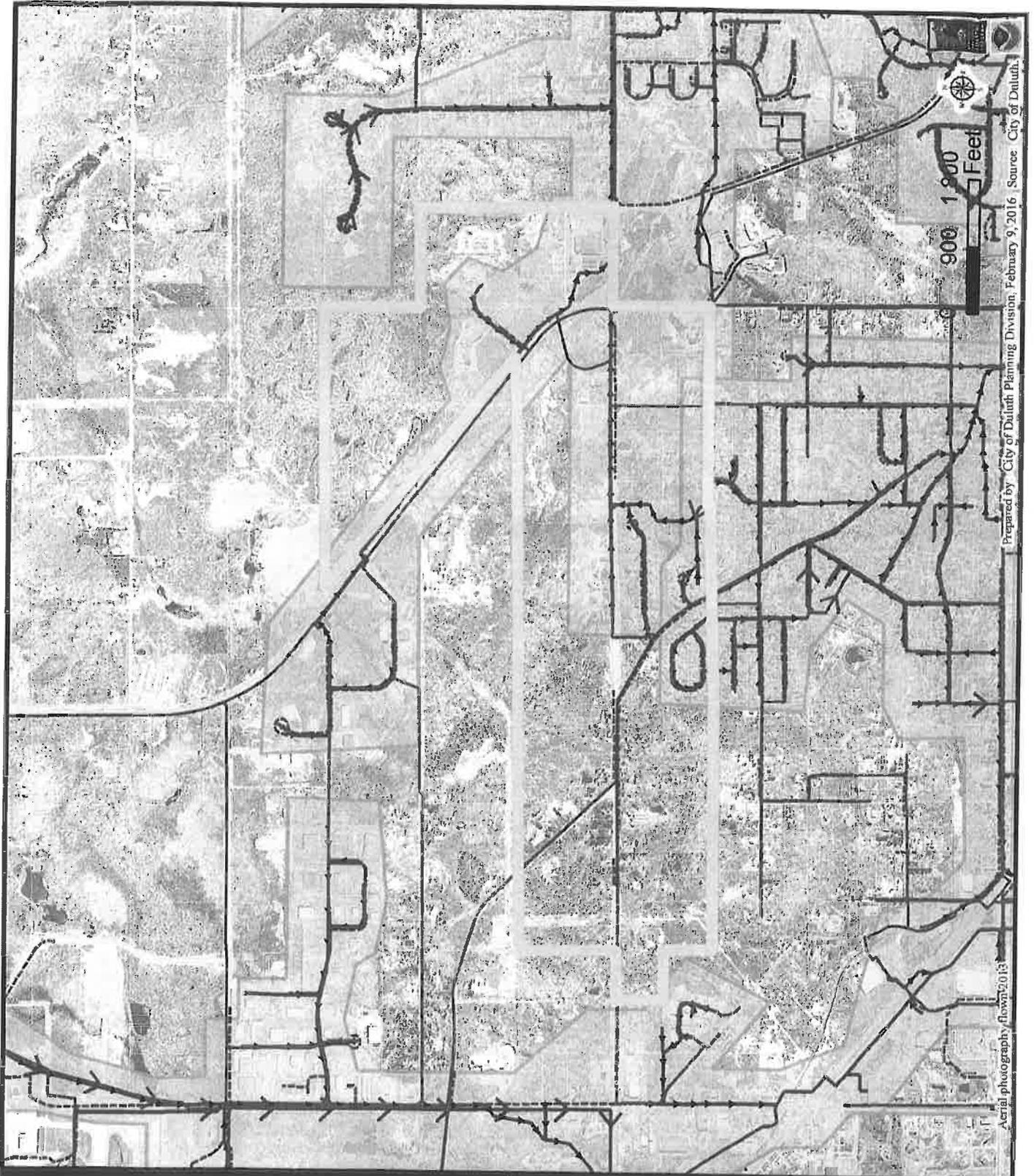
Legend

-  Arrowhead Road Study Area
-  Water Main
-  Sanitary Sewer
-  City of Duluth
-  Other
-  Sanitary Sewer Forced Main
-  Sanitary Sewer Basins
-  Gas Distribution
-  Coated Steel
-  Plastic

This map shows areas that are serviced by water, sewer, and gas.

Areas with existing utilities are more feasible for additional development than other areas.

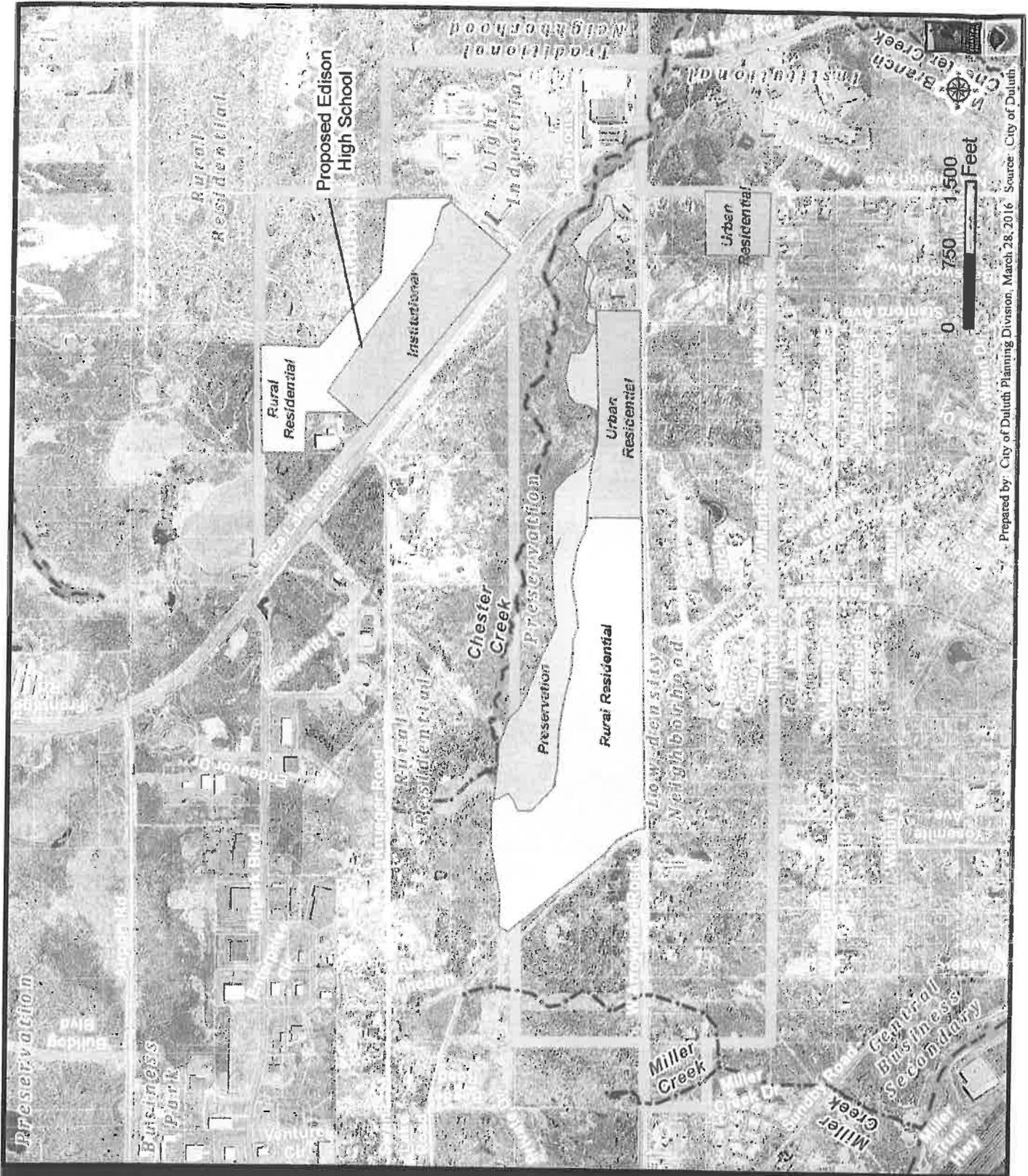
Areas without utilities would need to be evaluated for the feasibility of utility extensions, and any costs of those extensions would need to be paid for by the developer.



Aerial photography flown 2/01/13

Prepared by City of Duluth Planning Division, February 9, 2016 Source City of Duluth.

Option 1 - Low Intensity



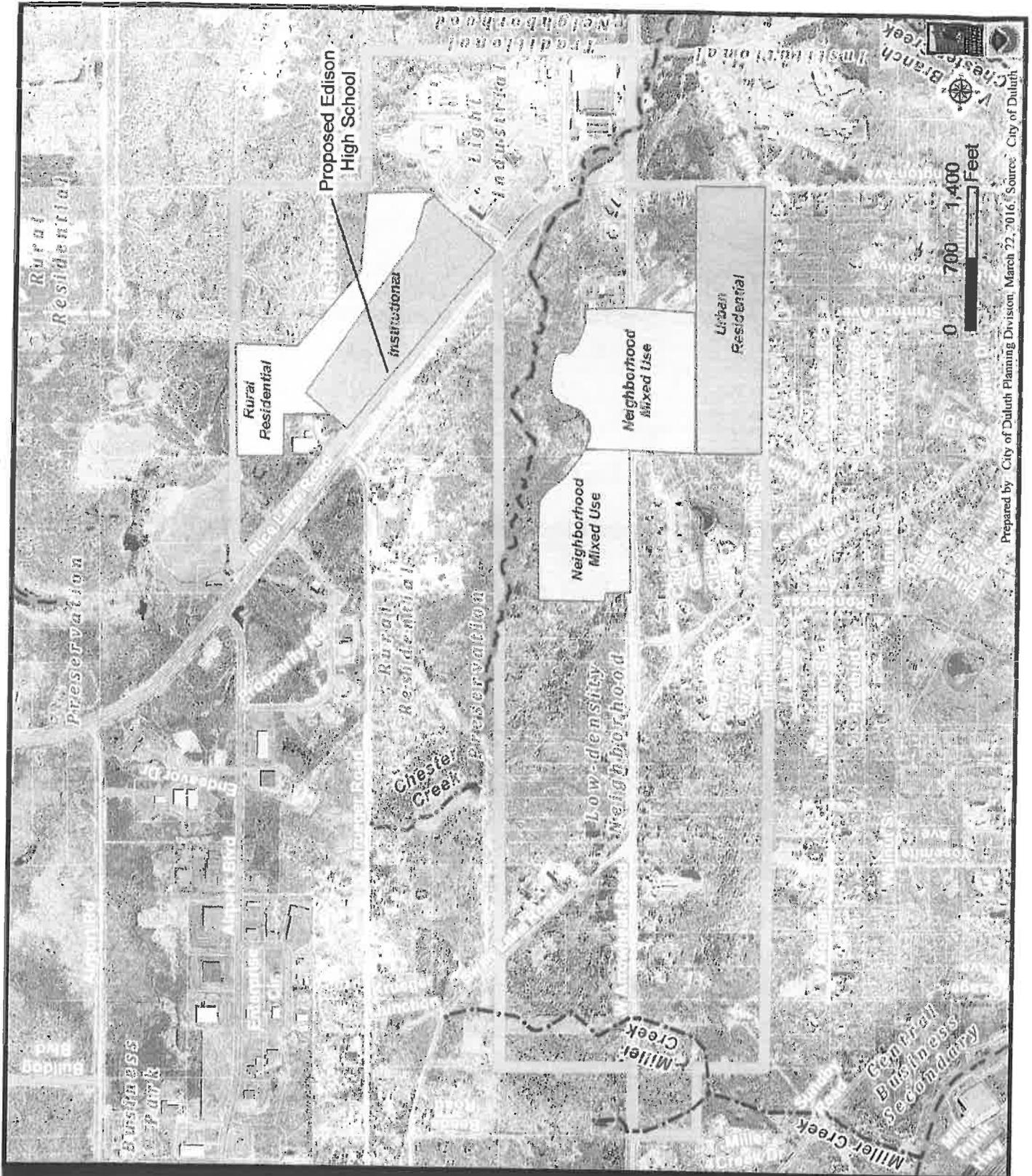
Legend

- Study Area
- Future Land Use
- Preservation
- Recreation
- Rural Residential
- Low-density Neighborhood
- Traditional Neighborhood
- Urban Residential
- Neighborhood Commercial
- Neighborhood Mixed Use
- General Mixed Use
- Central Business Secondary
- Central Business Primary
- Auto Oriented Commercial
- Large-scale Commercial
- Business Park
- Tourism/Entertainment District
- Medical District
- Institutional
- Commercial Waterfront
- Industrial Waterfront
- Light Industrial
- General Industrial
- Transportation and Utilities



Prepared by: City of Duluth Planning Division, March 28, 2016. Source: City of Duluth.

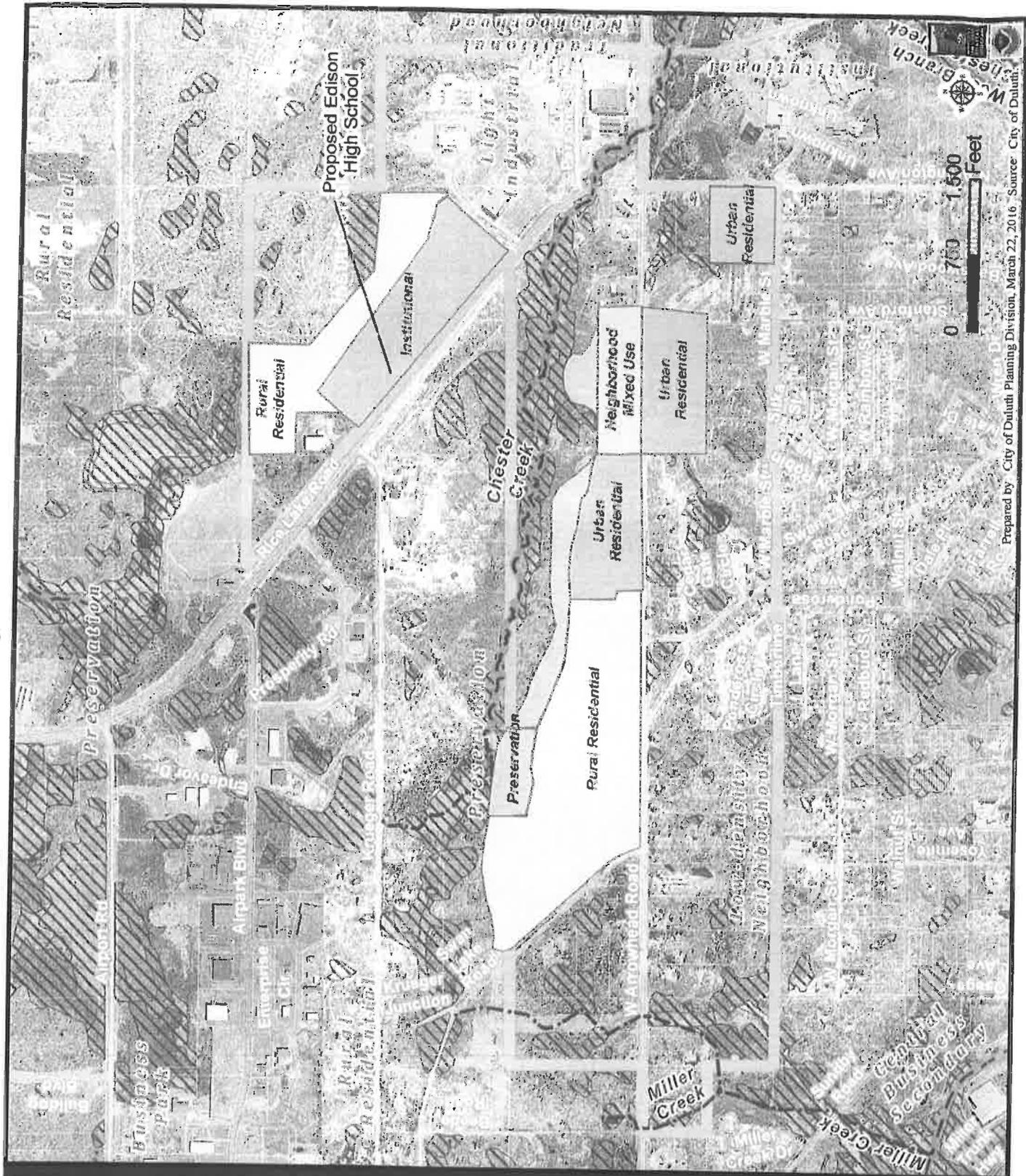
Option 2 - High Intensity



Legend

- Study Area
- Future Land Use
- Preservation
- Recreation
- Rural Residential
- Low-density Neighborhood
- Traditional Neighborhood
- Urban Residential
- Neighborhood Commercial
- Neighborhood Mixed Use
- General Mixed Use
- Central Business Secondary
- Central Business Primary
- Auto Oriented Commercial
- Large-scale Commercial
- Business Park
- Tourism/Entertainment District
- Medical District
- Institutional
- Commercial Waterfront
- Industrial Waterfront
- Light Industrial
- General Industrial
- Transportation and Utilities

Option 3 - Hybrid



Legend

- Study Area
- Wetlands (NRII)
- Future Land Use
 - Preservation
 - Recreation
 - Rural Residential
 - Low-density Neighborhood
 - Traditional Neighborhood
 - Urban Residential
 - Neighborhood Commercial
 - Neighborhood Mixed Use
 - General Mixed Use
 - Central Business Secondary
 - Central Business Primary
 - Auto Oriented Commercial
 - Large-scale Commercial
 - Business Park
 - Tourism/Entertainment District
 - Medical District
 - Institutional
 - Commercial Waterfront
 - Industrial Waterfront
 - Light Industrial
 - General Industrial
 - Transportation and Utilities

Prepared by City of Duluth Planning Division, March 22, 2016. Source: City of Duluth.



City of Duluth

Unofficial Actions

City Council

MISSION STATEMENT: *The mission of the Duluth City Council is to develop effective public policy rooted in citizen involvement that results in excellent municipal services and creates a thriving community prepared for the challenges of the future.*

TOOLS OF CIVILITY: *The Duluth City Council promotes the use and adherence of the tools of civility in conducting the business of the council. The tools of civility will provide increased opportunities for civil discourse in order to find positive resolutions to the issues that face the city. These tools include: pay attention, listen, be inclusive, do not gossip, show respect, be agreeable, apologize, give constructive criticism and take responsibility. [Approved by the council on August 25, 2003]*

Monday, April 25, 2016

7:00 PM

Council Chamber

ROLL CALL

PLEDGE OF ALLEGIANCE

APPROVAL OF MINUTES

PUBLIC HEARING

REPORTS FROM THE ADMINISTRATION

REPORTS FROM OTHER OFFICERS

REPORTS OF BOARDS AND COMMISSIONS

1. [16-047](#) DECC October, November and December 2015 Meeting Minutes

Attachments: [December 15 2015 DECC Board Meeting Minutes](#)
[November 24 2015 DECC Board Meeting Minutes](#)
[October 27 2015 DECC Board Meeting Minutes](#)

This Board or Commission Report was received.

2. [16-048](#) Duluth parking commission meeting minutes.

- Attachments:** [Duluth Parking Commission 1-29-16 minutes](#)
[Duluth Parking Commission 8-28-15 minutes](#)
[Duluth Parking Commission 11-6-15 minutes](#)
[Duluth Parking Commission 12-4-15 minutes](#)
[Duluth Parking Commission 3-4-16 minutes](#)

This Board or Commission Report was received.

3. [16-049](#) DEDA February 2016 meeting minutes

- Attachments:** [DEDA 2-24-16 Minutes](#)

This Board or Commission Report was received.

4. [16-051](#) Duluth Parking Commission Resolutions

- Attachments:** [Duluth Parking Commission 3-4-16 resolutions](#)
[Duluth Parking Commission 4-8-16 resolutions](#)
[Duluth Parking Commission 1-29-16 resolutions](#)

This Board or Commission Report was received.

REPORTS OF COUNCIL COMMITTEES

REPORTS OF COUNCIL OPEN ISSUES

OPPORTUNITY FOR CITIZENS TO BE HEARD

RESOLUTIONS TABLED

BY COUNCILOR WESTERLUND (PUBLIC WORKS & UTILITIES)

5. [16-0248R](#) RESOLUTION OF INTENT TO CONVEY CERTAIN REAL PROPERTY WITHIN THE CITY OF DULUTH ABUTTING RIDGEVIEW ROAD TO THE STATE OF MINNESOTA FOR AN ENTRANCE TO THE AIR NATIONAL GUARD FACILITY.

- Attachments:** [Exhibit A-Legal Description](#)

This Resolution was adopted unanimously.

MOTIONS AND RESOLUTIONS

CONSENT AGENDA**BY COUNCILOR HANSEN (FINANCE)**

6. [16-0245R](#) RESOLUTION AMENDING RESOLUTION NO. 16-0152, WHICH AMENDED RESOLUTION NO. 16-0055, CONFIRMING DEMOLITION ASSESSMENT ROLL TO DELETE A SECOND PROPERTY AND REDUCING THE AMOUNT ASSESSED.

This Resolution was adopted unanimously.

7. [16-0311R](#) RESOLUTION AUTHORIZING PROPER CITY OFFICIALS TO ACCEPT A GRANT ON BEHALF OF THE HISTORIC UNION DEPOT FROM THE DULUTH LEGACY ENDOWMENT FUND IN THE AMOUNT OF \$2500 FOR DEPOT BEAUTIFICATION PROJECT.

Attachments: [Exhibit A - Depot Grant Agreement](#)

This Resolution was adopted unanimously.

8. [16-0314R](#) RESOLUTION APPROVING THE BUDGET FOR THE FISCAL YEAR MAY 1, 2016 TO APRIL 30, 2017 IN THE AMOUNT OF \$5,546,836 FOR THE SPIRIT MOUNTAIN RECREATION AREA AUTHORITY.

Attachments: [Exhibit A](#)

This Resolution was adopted unanimously.

9. [16-0320R](#) RESOLUTION APPROVING THE ADOPTION OF A TWO YEAR GRACE PERIOD FOR IMPLEMENTING NEW PROCUREMENT REQUIREMENTS IN COMPLIANCE WITH THE UNIFORM ADMINISTRATIVE REQUIREMENTS FOR FEDERAL AWARDS.

This Resolution was adopted unanimously.

BY COUNCILOR HOBBS (PURCHASING & LICENSING)

10. [16-0292R](#) RESOLUTION AUTHORIZING A CONTRACT WITH TRAIL SOURCE, LLC., FOR PHASE IV CONSTRUCTION OF THE DULUTH TRAVERSE TRAIL IN THE AMOUNT OF \$361,447.56.

Attachments: [Phase IV Map](#)

This Resolution was adopted unanimously.

11. [16-0293R](#) RESOLUTION AUTHORIZING A CONTRACT WITH ROCK SOLID TRAIL CONTRACTING, LLC., FOR THE PHASE V CONSTRUCTION OF THE DULUTH TRAVERSE TRAIL IN THE AMOUNT OF \$472,843.25.

Attachments: [Phase V Map](#)

This Resolution was adopted unanimously.

12. [16-0297R](#) RESOLUTION APPROVING THE ISSUANCE OF OFF SALE 3.2 PERCENT MALT LIQUOR LICENSE RENEWALS FOR THE PERIOD BEGINNING MAY,1 2016, AND ENDING APRIL 30, 2017

Attachments: [OFF SALE BEER ATTACHMENT A-04142016085624](#)

This Resolution was adopted unanimously.

13. [16-0298R](#) RESOLUTION APPROVING THE ISSUANCE OF ON SALE 3.2 PERCENT MALT LIQUOR LICENSE RENEWALS FOR THE PERIOD BEGINNING MAY,1 2016, AND ENDING APRIL 30, 2017

Attachments: [ON SALE BEER RENEWALS-Attachment A](#)

This Resolution was adopted unanimously.

14. [16-0299R](#) RESOLUTION AUTHORIZING AN AMENDMENT TO AGREEMENT 22579 WITH HOISINGTON KOEGLER GROUP, INC., FOR ADDITIONAL PROFESSIONAL SERVICES TO COMPLETE A MINI MASTER PLAN FOR VARIOUS ST. LOUIS RIVER CORRIDOR NEIGHBORHOOD PARKS, AN INCREASE OF \$4,070, AND AN AMENDED TOTAL NOT TO EXCEED \$79,070.

Attachments: [Exhibit A](#)

[Exhibit B](#)

This Resolution was adopted unanimously.

15. [16-0312R](#) RESOLUTION AUTHORIZING A CONTRACT WITH STACK BROS MECHANICAL CONTRACTORS, INC. FOR THE CONSTRUCTION OF CHAMBERS GROVE PARK IMPROVEMENTS FOR AN AMOUNT NOT TO EXCEED \$769,650.80.

This Resolution was adopted unanimously.

BY COUNCILOR RUSS (PLANNING & ECONOMIC DEVELOPMENT)

16. [16-0287R](#) RESOLUTION AMENDING RESOLUTION 15-0831, ADOPTING LICENSE, PERMIT, FINE, PENALTY AND OTHER CHARGES FOR 2016, TO ADD AN ACCESSORY HOME SHARE PERMIT AND SETTING THE FEE FOR \$100 PER YEAR.

This Resolution was adopted unanimously.

17. [16-0294R](#) RESOLUTION DISCHARGING \$112,018.70 IN DEBT OWED BY THE FOLLOWING BUSINESSES TO THE REVOLVING LOAN FUND FORMERLY OPERATED BY NORTH STAR COMMUNITY DEVELOPMENT CORPORATION.

This Resolution was adopted unanimously.

18. [16-0296R](#) RESOLUTION AUTHORIZING AN AMENDMENT TO THE LICENSE AGREEMENT WITH THE DULUTH ECONOMIC DEVELOPMENT AUTHORITY FOR DEDA LOT B.

Attachments: [Exhibit A - 16-0296R](#)

This Resolution was adopted unanimously.

19. [16-0304R](#) RESOLUTION AUTHORIZING A CONTAMINATION INVESTIGATION AND RESPONSE ACTION PLAN DEVELOPMENT GRANT APPLICATION IN THE AMOUNT OF \$28,834 TO THE MINNESOTA DEPARTMENT OF EMPLOYMENT AND ECONOMIC DEVELOPMENT RELATING TO PROPERTY LOCATED AT 42nd AVENUE WEST AND GRAND AVENUE AND COMMITTING A DEVELOPER MATCH OF \$9,611

This Resolution was adopted unanimously.

20. [16-0305R](#) RESOLUTION AMENDING THE COMPREHENSIVE LAND USE PLAN - FUTURE LAND USE MAP FOR THE ARROWHEAD ROAD LANE USE STUDY AREA, FROM EAST OF HAINES ROAD TO ARLINGTON ROAD, AND NORTH ALONG RICE LAKE ROAD.

Attachments: [Attachment 1](#)
[Attachment 2](#)

This Resolution was adopted

21. [16-0308R](#) RESOLUTION VACATING A PORTION OF A UTILITY EASEMENT SOUTHEAST OF GRAND AVENUE BETWEEN 75TH AVENUE WEST AND 78TH AVENUE WEST.

Attachments: [Attachment 1](#)

This Resolution was adopted unanimously.

22. [16-0309R](#) RESOLUTION VACATING A PORTION OF THE PLATTED RIGHT OF WAY OF EAST SUPERIOR STREET, NORTH SECOND AVENUE EAST, AND THE FIRST STREET ALLEY, ADJACENT TO THE NORSHOR THEATER AT TWO NORTH SECOND AVENUE EAST (DULUTH ECONOMIC DEVELOPMENT AUTHORITY).

Attachments: [Attachment 1](#)

[Attachment 2](#)

[Attachment 3](#)

[Attachment 4](#)

This Resolution was adopted unanimously.

BY COUNCILOR HANSON (INTERGOVERNMENTAL RELATIONS)

23. [16-0316R](#) RESOLUTION AUTHORIZING A TEMPORARY FIVE (5) YEAR EASEMENT TO THE STATE OF MINNESOTA FOR HIGHWAY PURPOSES FOR ITS GRAND AVENUE IMPROVEMENT PROJECT.

Attachments: [Exhibit 1 \(Parcel 49\)](#)

[Exhibit 2 \(Parcel 49\)](#)

[Exhibit 3 \(Parcel 49\)](#)

This Resolution was adopted unanimously.

24. [16-0317R](#) RESOLUTION AUTHORIZING A TEMPORARY FIVE (5) YEAR EASEMENT TO THE STATE OF MINNESOTA FOR HIGHWAY PURPOSES FOR ITS GRAND AVENUE IMPROVEMENT PROJECT.

Attachments: [Exhibit 1 \(Parcel 61\)](#)

[Exhibit 2 \(Parcel 61\)](#)

[Exhibit 3 \(Parcel 61\)](#)

This Resolution was adopted unanimously.

25. [16-0318R](#) RESOLUTION AUTHORIZING A TEMPORARY FIVE (5) YEAR EASEMENT TO THE STATE OF MINNESOTA FOR HIGHWAY PURPOSES FOR ITS GRAND AVENUE IMPROVEMENT PROJECT.

Attachments: [Exhibit 1 \(Parcel 60\)](#)
[Exhibit 2 \(Parcel 60\)](#)
[Exhibit 3 \(Parcel 60\)](#)

This Resolution was adopted unanimously.

BY COUNCILOR WESTERLUND (PUBLIC WORKS & UTILITIES)

26. [16-0288R](#) RESOLUTION AWARDED A CONTRACT TO PARSONS ELECTRIC LLC FOR THE REMOVAL AND REPLACEMENT OF GENERATORS AT DULUTH STEAM IN THE AMOUNT OF \$156,828.

This Resolution was adopted unanimously.

27. [16-0289R](#) RESOLUTION AWARDED A CONTRACT TO VEIT & COMPANY, INC. FOR STREAM BANK STABILIZATION AT CHESTER CREEK IN THE AMOUNT OF \$518,187.35.

Attachments: [16-0289R Map](#)

This Resolution was adopted unanimously.

28. [16-0290R](#) RESOLUTION AUTHORIZING THE 2012 ROAD AND BRIDGE DISASTER RELIEF BOND GRANT AND ACCEPTING A GRANT FROM THE MINNESOTA STATE TRANSPORTATION FUND FOR THE OVERLAY OF 63rd AVENUE WEST FROM GRAND AVENUE TO CODY STREET IN THE AMOUNT OF \$62,085.48.

Attachments: [16-0290R Map](#)
[Flood Bond Agreement 118-103-006](#)

This Resolution was adopted unanimously.

29. [16-0291R](#) RESOLUTION AUTHORIZING THE 2012 ROAD AND BRIDGE DISASTER RELIEF BOND GRANT AND ACCEPTING A GRANT FROM THE MINNESOTA STATE TRANSPORTATION FUND FOR THE RECLAMATION OF SKYLINE PARKWAY FROM KENWOOD AVENUE TO BRIDGE NO. L6115 IN THE AMOUNT OF \$190,578.60.

Attachments: [16-0291R Map](#)
[Flood Bond Agreement 118-179-006](#)

This Resolution was adopted unanimously.

30. [16-0302R](#) RESOLUTION AWARDING A CONTRACT TO GEORGE BOUGALIS & SONS CO., INC. FOR THE CONGDON BOULEVARD CULVERT LINING AND REPLACEMENT IN THE AMOUNT OF \$956,358.30.

Attachments: [16-0302R Map](#)

This Resolution was adopted unanimously.

31. [16-0306R](#) RESOLUTION REQUESTING A VARIANCE FROM THE MINNESOTA DEPARTMENT OF TRANSPORTATION AND INDEMNIFYING THE STATE OF MINNESOTA IN CONNECTION WITH THE GRANTING OF A MINNESOTA STATE AID VARIANCE IN THE RECONSTRUCTION OF SUPERIOR STREET.

Attachments: [16-0306R Map](#)
[Parking Layout Variance](#)

This Resolution was adopted unanimously.

32. [16-0315R](#) RESOLUTION APPROVING SETTLEMENT IN THE AMOUNT OF \$35,000 IN THE MATTER OF MARK R. CARLSON AND LYNNE E. CARLSON VS. CITY OF DULUTH.

This Resolution was adopted unanimously.

33. [16-0319R](#) RESOLUTION AWARDING A CONTRACT TO SHANNON'S INC. FOR THE LAKEWOOD WATER TREATMENT PLANT HEATING, VENTILATION AND COOLING SYSTEM IMPROVEMENTS IN THE AMOUNT OF \$940,850.

This Resolution was adopted unanimously.

BY COUNCILOR FOSLE (PUBLIC SAFETY)

34. [16-0303R](#) RESOLUTION AUTHORIZING LICENSE AGREEMENT WITH THE CITY OF HERMANTOWN TO ALLOW THE HERMANTOWN POLICE DEPARTMENT LIMITED ACCESS TO THE CITY'S FILE SERVER TO

ACCESS THE BCA MINNESOTA LICENSE PLATE DATA FILE.

Attachments: [Exhibit A - Hermantown license agreement](#)
[Exhibit B - BCA agreement](#)

This Resolution was adopted unanimously.

BY COUNCILOR SIPRESS (RECREATION, LIBRARIES & AUTHORITIES)

35. [16-0300R](#) RESOLUTION AUTHORIZING PROPER CITY OFFICIALS TO ACCEPT A GRANT FROM THE DULUTH LEGACY FUND IN THE AMOUNT OF \$2,500 FOR TODDLER BOOK BINS AND BOOKS FOR THE MT. ROYAL BRANCH LIBRARY.

Attachments: [Exhibit A - 16-0300R](#)

This Resolution was adopted unanimously.

36. [16-0301R](#) RESOLUTION AUTHORIZING PROPER CITY OFFICIALS TO ACCEPT A \$2,500 GRANT FROM THE DULUTH LEGACY ENDOWMENT FUND FOR THE GARY NEW DULUTH COMMUNITY CENTER AND RECREATION AREA MINI-MASTER PLAN PROJECT.

Attachments: [EXHIBIT A - 16-0301R](#)

This Resolution was adopted unanimously.

37. [16-0307R](#) RESOLUTION AUTHORIZING ACCEPTANCE AND EXECUTION OF A HOST SITE AGREEMENT WITH THE MINNESOTA POLLUTION CONTROL AGENCY FOR THE 2016-2017 PROGRAM YEAR GREENCORPS MEMBERS.

Attachments: [EXHIBIT A - 16-0307R](#)

This Resolution was adopted unanimously.

38. [16-0313R](#) RESOLUTION AUTHORIZING A FIVE (5) YEAR LEASE AGREEMENT WITH RPK BASEBALL, LLC AND NORTHWOODS LEAGUE, INC. FOR THE USE OF WADE STADIUM THROUGH 2020.

Attachments: [Exhibit 1](#)

This Resolution was adopted unanimously.

END OF CONSENT AGENDA**BY COUNCILOR ANDERSON (PERSONNEL)**

39. [16-0295R](#) RESOLUTION CONFIRMING THE APPOINTMENT OF JOHN STRONGITHARM TO THE CIVIL SERVICE BOARD

Attachments: [Lon Hanson CSB Application](#)
[LonHansonResume-CityofDuluth](#)
[Strongitharm CSB Application](#)
[John Strongitharm Resume](#)
[NEWQUIST APP](#)

This Resolution was adopted as amended.

INTRODUCTION AND CONSIDERATION OF ORDINANCES

The following entitled ordinances are to be read for the first time:

BY COUNCILOR FOSLE (PUBLIC SAFETY)

40. [16-024-O](#) AN ORDINANCE AMENDING CHAPTER 29A OF THE DULUTH CITY CODE, 1959, AS AMENDED, TO CLARIFY APPLICATION OF THE INTERNATIONAL PROPERTY MAINTENANCE CODE FOR THE HOUSING AND MAINTENANCE CODE FOR THE CITY, PROVIDE A MECHANISM FOR RESOLVING CONFLICTS BETWEEN THE PROVISIONS OF CHAPTER 29A AND THE HOUSING AND PROPERTY MAINTENANCE CODE, AND STRIKE OBSOLETE CODE LANGUAGE.

This Ordinance was read for the first time.

The following entitled ordinances are to be read for the second time:

BY COUNCILOR HANSEN (FINANCE)

41. [16-023-O](#) AN ORDINANCE TO AMEND THE BUDGET OF THE CITY OF DULUTH FOR YEAR 2016 BY INCREASING THE BUDGET BY \$500,000 FOR FUNDING AN ENERGY PLAN.

This Ordinance was adopted.

BY COUNCILOR RUSS (PLANNING & ECONOMIC DEVELOPMENT)

42. [16-022-O](#) AN ORDINANCE AMENDING SECTIONS 50-20.3 COMMERCIAL USES

AND 50-20.5 ACCESSORY USES, TO AMEND EXISTING STANDARDS FOR VACATION DWELLING UNITS AND ACCESSORY VACATION DWELLING UNITS. (AS AMENDED)

Attachments: [Motion to Amend 16-022-O Sipress](#)
[Motion to Amend 16-022-O Hobbs.Filipovich - Passed](#)
[Motion to Amend \(2\) 16-022-O Sipress](#)

A motion was made that this ordinance be tabled. Motion passed:

8: Yay

1: Nay

This Ordinance was tabled.

BY COUNCILOR WESTERLUND (PUBLIC WORKS & UTILITIES)

43. [16-021-O](#) AN ORDINANCE AUTHORIZING THE CONVEYANCE OF CERTAIN REAL PROPERTY ABUTTING RIDGEVIEW ROAD TO THE STATE OF MINNESOTA FOR AN ENTRANCE TO THE AIR NATIONAL GUARD FACILITY.

Attachments: [Exhibit A](#)
[Exhibit B](#)
[Exhibit C](#)

This Ordinance was adopted.

COUNCILOR QUESTIONS AND COMMENTS

COUNCILOR PREVIEW OF UPCOMING BUSINESS

Why don't on-site concepts show more development deeper into the site? You have 140 acres to work with.

There are several reasons for this:

1. Currently, the purchaser of land, dba Pacific Education Partners, is obligated to preserve as much of the current Snowflake Nordic operations as possible for a period of up to five years. Pushing the development into the core of the 140 acres and away from Rice Lake Road will impact more important ski trails than if the development is constructed closer to Rice Lake Road, as currently proposed. I initially had the perception that a ski trail was a ski trail. I was later informed by the leadership at Snowflake Nordic that each trail has a specific purpose and there are topographic and distance characteristics that make each trail unique. Without these unique characteristics, they will be less attractive as a ski center and they fear losing the funding that comes from different schools to use their site. In other words, if too many trails at Snowflake are destroyed, members and other schools will no longer use the facility.
2. The topography steepens dramatically as you move into the site. There is more exposed bedrock and more scattered high quality wetlands. While we have not determined exactly how many wetlands would be impacted if we moved the development deeper into the site, we know it would possible meet or exceed the current proposed impacts. In addition, the wetlands deeper into the site are the wetlands of higher quality compared to the wetlands proposed to be impacted as part of the existing proposal.
3. Habitat fragmentation would be exacerbated if we pushed the development further into the site. Roads would have to be lengthened to reach the development site, and there would be a forested edge on four sides of the development versus just three sides (Rice Lake Road is not a forested edge in terms of habitat). The more exposed forest edge, the more chance of non-native plant and animal intrusion. Such is the case with nest raiding cowbirds, which interfere with neotropical migrant hatchlings on disturbed forest edges.

Why not construct a parking ramp?

1. Charter schools receive per pupil financing from the Minnesota Department of Education. That funding amounts to about \$0.35 on the dollar to what levied schools receive. The projected number of students frames the amount of income, and therefore the bond amount that can be attained. The bond amount dictates the construction budget. Parking ramps are extremely expensive. Where a surface parking lot might cost \$700 per stall, a parking ramp can cost \$3000 per stall.
2. Even with a parking ramp, the space currently proposed for surface parking would have to be occupied by the ramp. After the first level of parking and part of the second level, the relative loss of the surface parking proposal would be equalized, then additional levels would be required to accommodate the remainder of the parking. The current zoning has a height

limitation of only 30', so the benefit to a parking ramp by attaining efficiency with greater height, cannot be realized.

Why not construct the school next to the jail?

1. The attached letter from the DPSA Head of Schools Bonnie Jorgenson notes the reason for not selecting a school site next to a jail.
2. None of the consulting team was willing to advocate for a school site next to a jail. Even though the chance of an issue between inmates and students is probably small, if there was an issue, it would be a monumental disaster. As a matter of self preservation and/or common sense, nobody with DPSA or the design team was willing to take any unnecessary chance with a child's well being, no matter how small the chance.

How is storm water going to be treated?

Attached is the most recent storm water plan with associated grading. All of the storm water will be treated below ground. An underground corrugated metal pipe storage system is proposed; although a tire derived aggregate system is being evaluated pursuant to MPCA input. In either case, the systems work in similar ways, storing volumes of storm water underground and releasing that water slowly.

How are you dealing with freshwater seeps from the hillside?

All subsurface and surface water that runs down the hill toward the track and field will be collected with subdrains that bi-pass storm water treatment and go directly back into the wetlands along Rice Lake Road. The rate of this discharge will be controlled by a bed of rock beneath the track and careful sizing of the subdrain outlet.

Storm water that runs into the proposed County backage road will be treated in much the same way, whether the County constructs the road or it remains a private enterprise. That has yet to be determined

Why is the County backage road located where it is and not closer to Rice Lake Road?

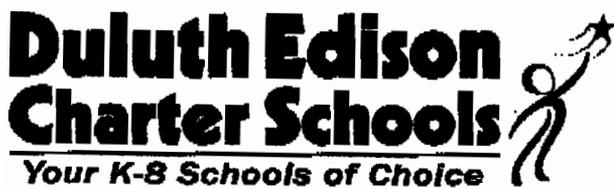
1. The County has directed the position of the road. The curve speeds and stacking distance against Rice Lake Road are two major considerations in the alignment of the road. If the road were located on the south side of the school, there would not be enough vehicle stacking ahead of Rice Lake Road. The current design runs that stacking up gradient to the north and perpendicular to Rice Lake Road.
2. A 30 mph curve, which is the County minimum for this application, is too large of a radius of curvature to come off of Rice Lake Road and arc east toward the school. There is also the complication of the existing driveway that leads to Arrowhead tennis.
3. Having a 30mph 36' wide public road run past the front of a new high school is not an ideal situation when busses are pulled of to the side loading children.

Where is the traffic study?

It is attached.

Why did you show the old Duluth Armory as a potential off site candidate if it is not a viable option?

We feel that it is important to frame the conversation about wetland impact. The subject of adaptive reuse comes from not only City planning but from citizens concerned about the impacts to wetlands and forest. The Duluth Armory is one of the first available sites re-evaluated as part of this process, even though it was quickly dismissed due to a lack of available programmable green space, lack of parking and potential for environmental remediation issues.



NORTH STAR ACADEMY: K-8

RALEIGH ACADEMY: K-5

3301 Technology Drive
Duluth, MN 55811
Ph: (218) 728-9556
Fax: (218) 728-2075

5905 Raleigh Street
Duluth, MN 55807
Ph: (218) 628-0697
Fax: (218) 628-2264

May 5, 2016

To Whom It May Concern:

It is the practice of the Duluth Public Schools Academy, Tischer Creek Duluth Building Company and school administration to put safety of students at the forefront of our decision making. We strive for academic excellence and the safety of our students.

Part of creating a safe learning environment is to seek out sites for our facilities that will have adjacent land uses that are compatible with school operations. Our administration has informed our site selection contractors, and also our participating design team, that locating a school next to a County Jail or other penal / correctional facilities is not a compatible land use with a high school or any of our educational facilities.

It is for this reason that we were not able to utilize the land that was available on the northeast corner of Haines Road and Arrowhead road in Duluth, MN. This land was shown as an off-site option on the wetland permit application because it was one of the sites we evaluated and members of the public must be informed of this process."

Sincerely,

Bonnie Jorgenson, Head of School
Crystal Palmer, School Board President
Paul Goossens, President, Tischer Creek Duluth Building Company



DEPARTMENT OF THE ARMY
ST. PAUL DISTRICT, CORPS OF ENGINEERS
180 FIFTH STREET EAST, SUITE 700
ST. PAUL MINNESOTA 55101-1678

May 16, 2016

REPLY TO
ATTENTION OF
Operations
Regulatory (2014-03734-DWW)

Mr. Caleb Roope
Pacific Education Partners, President
430 East State Street, Suite 100
Eagle, Idaho 83616

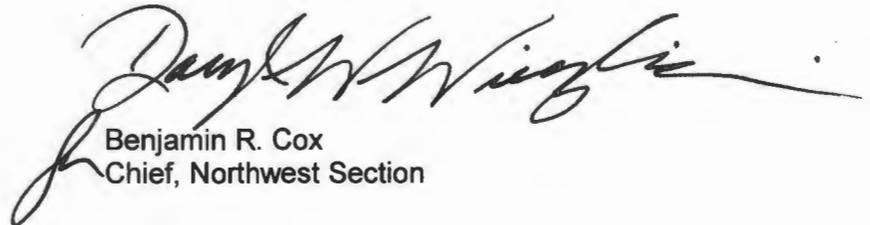
Dear Mr. Roope:

We are enclosing for your information correspondence we received as a result of our public notice that described your proposed Edison Charter High School project in the City of Duluth.

It is our policy to give you the opportunity to give us your proposed resolution or rebuttal of these comments. Any response should be sent to this office so that potential resolutions or rebuttals can be considered in our final evaluation. If we receive no response within fifteen (15) days of this letter, we will presume that no response is intended.

In the interim, we will continue to evaluate your application. If you have any questions, contact Daryl W. Wierzbinski in our Duluth office at (218) 720-5291 Ext 35401. In any correspondence or inquiries, please refer to the Regulatory number shown above.

Sincerely,



Benjamin R. Cox
Chief, Northwest Section

Enclosure(s):
Bois Forte comment dated May 3, 2016
EPA comment dated May 9, 2016

Copy furnished:
Dave Chmielewski, Blackhoof, Cloquet, MN
Steve Robertson, City of Duluth, MN
R.C. Boehm, South St. Louis SWCD, Duluth, MN
Lynda Peterson, BWSR, Duluth, MN



Bois Forte

TRIBAL GOVERNMENT

May 3, 2016

Daryl W. Wierzbinski
Regulatory Branch
St. Paul District
Corps of Engineers
600 South Lake Avenue, Suite 211
Duluth, Minnesota 55802

**RE: 2014-03734-DWW St. Louis County, Minnesota
S 8, T 50N, R 14W**

Dear Daryl;

The Bois Forte Tribal Historic Preservation Office (THPO) has reviewed the above project. The sponsor is proposing to discharge dredged and fill materials into 2.5 acres of wetlands that are adjacent to Chester Creek, a tributary to Lake Superior.

THPO staff reviewed our files and did not find references to cultural or religious places within the Area of Potential Effect (APE). However, should another Band or Tribe indicate the project may impact historic or traditional properties/resources; Bois Forte reserves the right to continue consultation.

Thank you for the opportunity to comment on this project. Should you have any questions, please do not hesitate to contact me at 218-753-6017 or blatady@boisforte-nsn.gov.

Sincerely,

Bill Latady

Bill Latady
Tribal Historic Preservation Officer

5344 Lakeshore Drive | Box 16 | Nett Lake, MN 55772 | 218-757-3261 | 800-221-8129 | FAX 218-757-3312

Kevin Leecy
Chairman

David C. Morrison, Sr.
Secretary/Treasurer

Karlene Chosa
District I Representative

Brandon Benner
District I Representative

Ray Toutloff
District II Representative

Wierzbinski, Daryl W MVP

From: Finocchiaro, Marco <Finocchiaro.Marco@epa.gov>
Sent: Monday, May 09, 2016 3:25 PM
To: Wierzbinski, Daryl W MVP
Subject: [EXTERNAL] MVP 2014-03734 - Pacific Education Partners charter high school

Good afternoon Daryl,

As per our phone conversation, upon review of the public notice for the proposed charter high school at the Snowflake Nordic Ski Center in Duluth, MN (MVP 2014-03734) EPA offers the following comments.

As outlined by the sequencing requirements of the 404(b)(1) guidelines, an applicant is required to take all appropriate and practicable steps to avoid and minimize impacts to Waters of the U.S. before a permit can be issued. In this case, we believe the permit application to be incomplete due to lack of avoidance. One on-site design alternative has been offered to develop approximately 22 ac of an approximately 180 ac site. We recommend the applicant, Pacific Education Partners, provide additional information regarding the avoidance of aquatic resources on-site. This information may include but is not limited to property boundary maps, delineation of all wetland boundaries within the property lines, alternative design plans and building/parking configurations, etc.

We recommend denial of the permit for this project as proposed.

Thank you for the opportunity to comment. If you have any questions please let me know.

Marco

Marco Finocchiaro, Biologist

U.S. Environmental Protection Agency, Region 5

Water Division, Watersheds and Wetlands Branch
77 W. Jackson Boulevard (WW-16J)
Chicago, IL 60604
312-886-7566

Finocchiaro.Marco@epa.gov

CITY OF DULUTH - TEP REVIEW

Monday, May 16, 2016, at 1:00 PM

Room 106A

MINUTES

Attendance: R.C. Boheim (SWCD), Kyle Deming and Steven Robertson (City of Duluth), Lynda Peterson (BWSR)

1. Duluth Public Schools Academy Wetland Replacement Plan

Discussed the Wetland Replacement Plan and the response to TEP Questions on May 2, 2016. The USACE Correspondence, Bois Forte Tribal Government and US EPA Region 5 (Received May 16, 2016) was also noted.

Recommended that the plan be denied as it does not meet the standards of 8420.0520 for impact avoidance and impact minimization.

Meeting conclude at approximately 2:00 pm

Steven Robertson

From: David Chmielewski <dave@blackhoof.com>
Sent: Monday, May 16, 2016 4:30 PM
To: Keith Hamre; Steven Robertson
Cc: Gary Leistico (gleistico@rinkenoonan.com); Greg Strom
Subject: 051616 SNOWFLAKE DPSA
Attachments: 051616 ADDITIONAL PC SUBMITTAL.pdf

Keith / Steven:

See attached revised site plan illustrating the accommodations for the reversed bus traffic flow. We will continue to work on our construction documents based on this layout.

I re-attached the landscape plan and tree preservation plan that I sent back in February, then again on March 8th of 2016. Burr Oak was used as the principal parking lot canopy tree because it has the largest canopy, has good durability in this application and has great character. It is a slower growing tree, but we will be prescribing soil and oxygen amendments to maximize growth rate. This detailing will occur in the construction documents. The canopy size selection was made from the City approved tree tables. All of the calculations for parking lot canopy coverages are on the attached drawing. If you have any questions about this, please be specific and I will do my best to answer your questions.

The area to be preserved as a Nordic Ski area and outdoor educational area has been identified, and a 100 unit apartment schematic has been attached that would utilize underground parking. Snow storage areas have been called out on the attached exhibit.

Our attorney, Gary Leistico, has also drafted a document relative to the variances and the SUP conditions.

Sincerely,

David M. Chmielewski
Blackhoof Development
2020 14th Street
Cloquet, MN 55720
O: 218-384-9727
C: 218-310-9229
F: 218-499-8067

TREE PRESERVATION PLAN

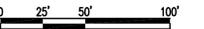
22.27 ACRES
5.43 NOT INCLUDED IN DPSA 8-12
6.04 ACRES CURRENTLY OPEN

10.8 ACRES CURRENT FORESTED AREA
X 10%

SAMPLE PLOTS 1.08A (5 @ 0.216 ACRES EACH)
AREAS 1-5
SEE WRITTEN TREE PRESERVATION PLAN IN SUBMITTAL



BLACKHOOF



CLIENT:

PACIFIC
EDUCATION
PARTNERS

02-08-16 CITY UDC SUBMITTAL

NO DATE REVISION

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Landscape Architect under the laws of the state of Minnesota.

Signature: *David M. Chmielewski*

Typed or Printed Name: DAVID M. CHMIELEWSKI

Date 02-08-16 Reg. No. 40639

PROJECT NAME:

DPSA 8-12

DRAWING TITLE:

TREE
PRESERVATION
PLAN

FILE:
DRAWN BY:
CHECKED BY:
PROJ. NO.:
DRAWING NO.:

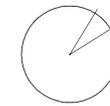
D1

GENERAL TURF
 ALL AREAS NOT BUILDING, PARKING, DRIVEWAYS,
 TRACK AND FIELD OR RIP RAP SLOPE, EDGE EMBANKMENT
 OR STORM WATER POND WILL BE SEEDED
 WITH TURF GRASS AND HYDROMULCHED

STORMWATER FACILITIES
 BWSR 36-361 STORM WATER NE
 7 LBS/ACRE ON GRASS MIX PORTION
 1.5 LBS/ACRE ON FORBS
 50 LBS/ACRE ON SEED OATS (SPRING) OR
 WINTER WHEAT (FALL). ALL AREAS TO BE
 SEEDED MUST BE SPRAYED WITH ROUNDUP TWO
 WEEKS PRIOR TO SEEDING. USE EXISTING SOIL. COVER
 WITH DOUBLE NET STRAW BLANKET. SECURE WITH 6"
 STAPLE AT 1 PER SY

EMBANKMENTS GREATER THAN 2:1
 ON SITE BLAST ROCK 2-30"
 GEOTEXTILE SEPARATOR FABRIC
 APPLY ENOUGH RIP-RAP TO COVER
 THE SEPARATOR FABRIC IMPORT
 MATCHING MATERIAL IF REQUIRED

SLOPES OFF EMBANKMENTS TO EXISTING FORESTED AREAS
 BWSR 36-311 WOODLAND EDGE NORTHEAST
 7 LBS/ACRE ON GRASS MIX PORTION
 1.5 LBS/ACRE ON FORBS
 50 LBS/ACRE ON SEED OATS (SPRING) OR
 WINTER WHEAT (FALL). ALL AREAS TO BE
 SEEDED MUST BE SPRAYED WITH ROUNDUP TWO
 WEEKS PRIOR TO SEEDING. USE EXISTING SOIL. COVER
 WITH DOUBLE NET STRAW BLANKET. SECURE WITH 6"
 STAPLE AT 1 PER SY



SPECIAL AND SIGNIFICANT REPLACEMENT TREES
 2.5" CALIPER BB SPECIAL TREE REPLACEMENT
 55 TOTAL TREES: 18 SUGAR MAPLE, 18 BUR OAK, 19 LINDEN
 SEE TABLE TR.1 FOR REPLACEMENT CALCULATIONS



SMALL TREE - DOLGO CRAB
 2.5" CALIPER BB OR #25 CONT.<
 MAXIMUM CANOPY RANGE 20' DIA



LARGE TREE - WHITE OAK
 2.5" BB OR #25 CONT
 MAXIMUM CANOPY RANGE ASSUMED 100' DIA
LARGE TREE - SUGAR MAPLE
 2.5" CALIPER BB OR #30 CONT
 MAXIMUM CANOPY RANGE ASSUMED 50' DIA



SELECT SHRUB SPECIES - MAX HT 4.0'

ANTHONY WATERER SPIREA, COMPACT VIBURNUM
 BRIDAL WREATH SPIREA, MUGO PINE, CUT LEAF SPIREA
 ARBOR VITAE



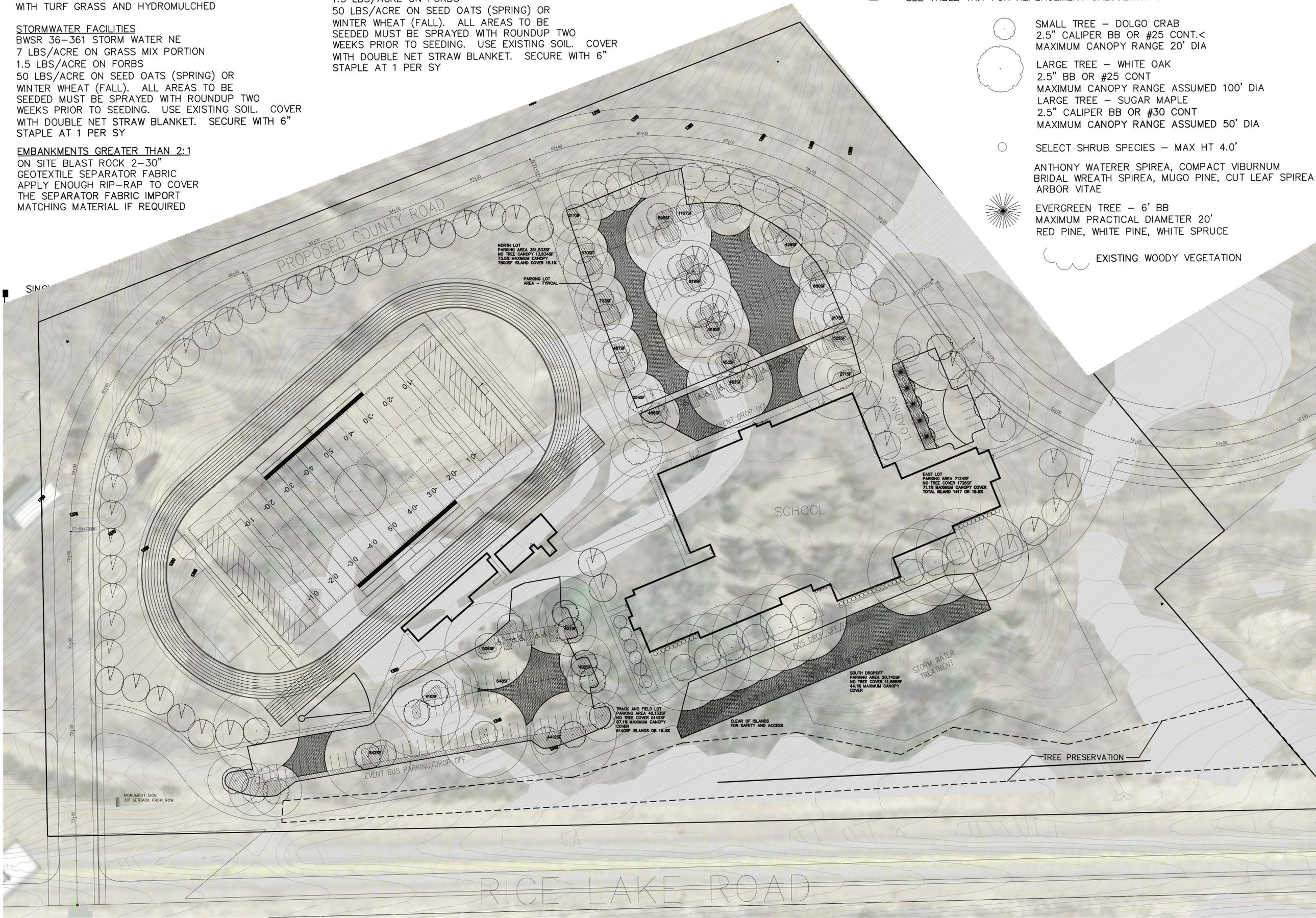
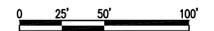
EVERGREEN TREE - 6' BB
 MAXIMUM PRACTICAL DIAMETER 20'
 RED PINE, WHITE PINE, WHITE SPRUCE



EXISTING WOODY VEGETATION



BLACKHOOF



CLIENT:

**PACIFIC
 EDUCATION
 PARTNERS**

02-08-16 CITY UDC SUBMITTAL
 03-08-16 CITY UDC SUBMITTAL

NO DATE REVISION

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Landscape Architect under the laws of the state of Minnesota.

Signature: *David M. Chmielewski*

Typed or Printed Name: DAVID M. CHMIELEWSKI

Date 02-08-16 Reg. No. 40639

PROJECT NAME:

**GENERAL
 LANDSCAPE
 PLAN**

DRAWING TITLE:

DPSA 8-12

FILE:

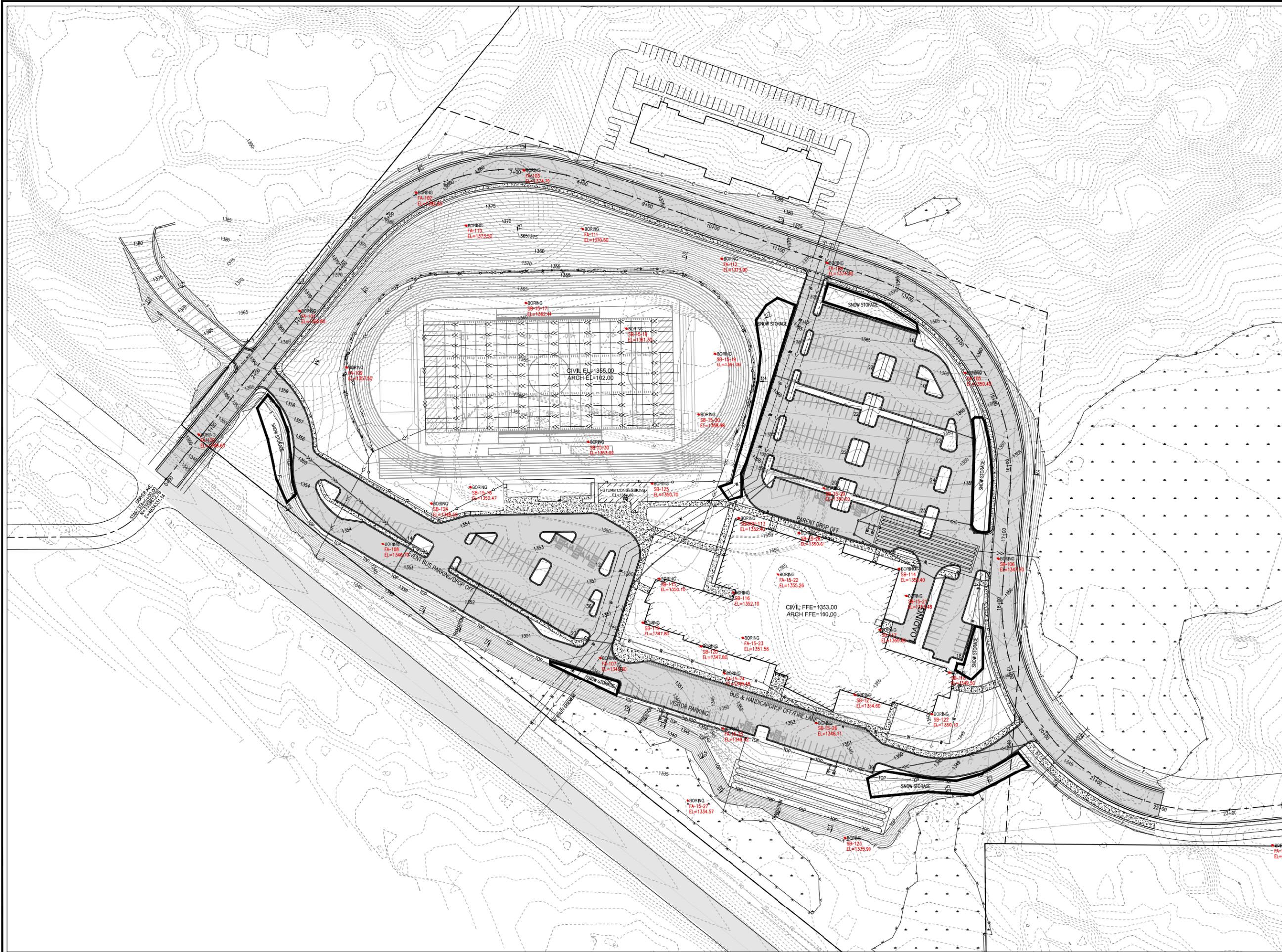
DRAWN BY:

CHECKED BY:

PROJ. NO.:

DRAWING NO:

D1



I HEREBY CERTIFY THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

SIGNATURE PRELIMINARY
NOT FOR CONSTRUCTION
DAVID BOLF, PE

DATE XX/XX/XX LICENSE No. 40926

PROPOSED BUILDING FOR:
DECS 8-12 SCHOOL
43XX RICE LAKE ROAD
DULUTH, MINNESOTA 55811
OWNER: PROJECT OWNER

REVISIONS

ISSUED DATE
05/06/2016

PROJECT NO. 15-504-C
DRAWN BY JDO
APPROVED BY ARZ

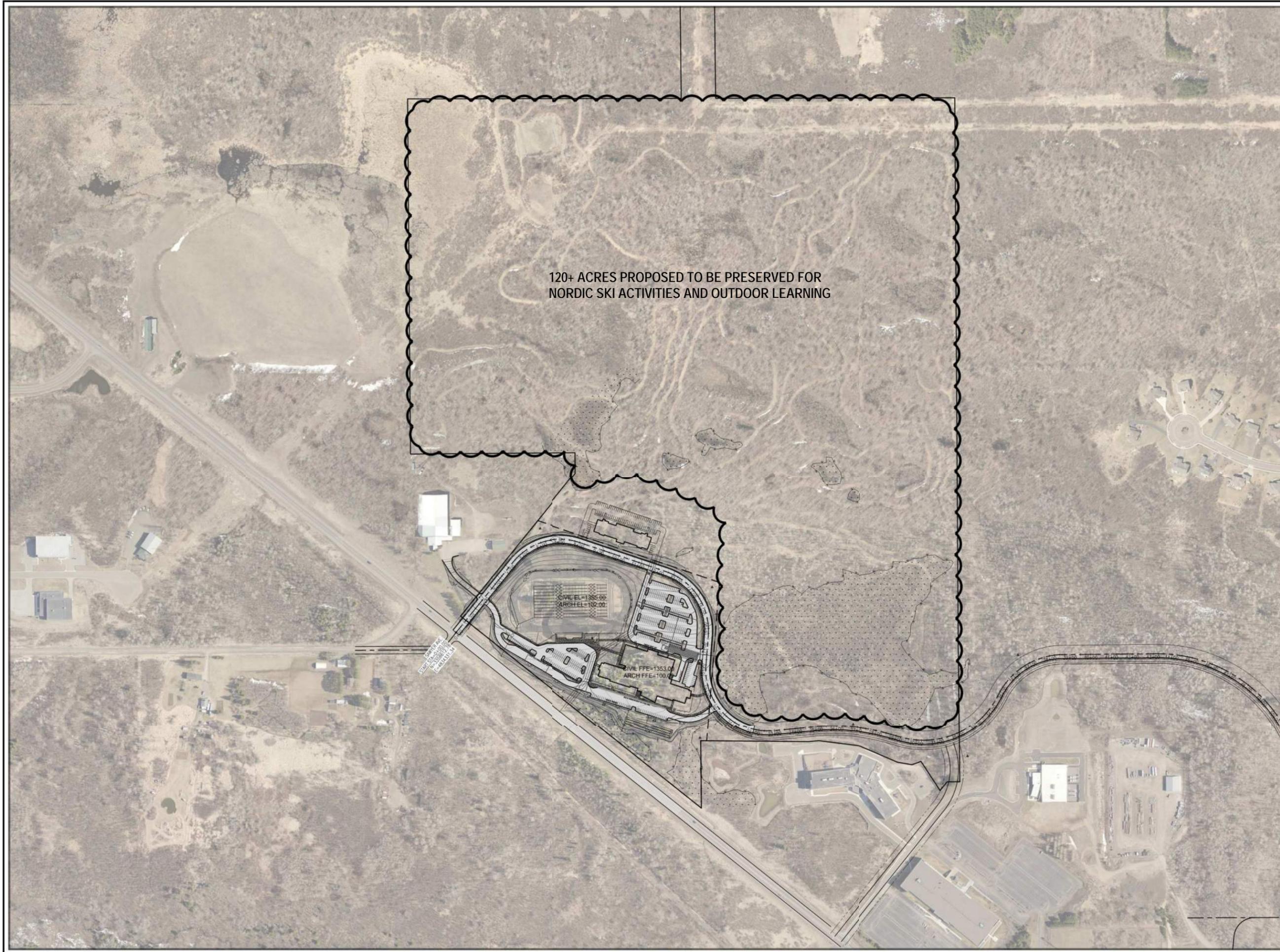
0 10 20
SCALE = 2" AT FULL SCALE



OVERALL GRADING PLAN

SHEET NO.

CX.0



120+ ACRES PROPOSED TO BE PRESERVED FOR NORDIC SKI ACTIVITIES AND OUTDOOR LEARNING

I HEREBY CERTIFY THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRELIMINARY
NOT FOR CONSTRUCTION
SIGNATURE DAVID BOLF, PE
DATE XX/XX/XX LICENSE No. 40926

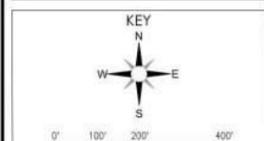
PROPOSED BUILDING FOR:
DECS 8-12 SCHOOL
43XX RICE LAKE ROAD
DULUTH, MINNESOTA 55811
OWNER: PROJECT OWNER

REVISIONS

ISSUED DATE
05/06/2016

PROJECT NO. 15-504-C
DRAWN BY JDO
APPROVED BY ARZ

0 100' 200' 400'
SCALE = 2" AT FULL SCALE



OVERALL GRADING
PLAN

SHEET NO.

CX.1



May 16, 2016

Direct Dial: 320-656-3518
Gleistico@RinkeNoonan.com

Keith Hamre, Director of Planning and Development
Duluth Planning Commission
Duluth City Hall
411 W 1st Street, #402
Duluth, MN 55802

SENT BY US MAIL AND EMAIL: khamre@duluthmn.gov

**Re: Duluth Edison High School - Pacific Education Partners
Our File No. 26535-0001**

Dear Mr. Hamre:

I represent the developer, Pacific Education Partners, with respect to the SUP and Variances submitted by Pacific Education and currently before the City of Duluth Planning Commission for Public Hearing on May 24, 2016. This letter is sent to clarify the position of Pacific Education as to certain conditions of the SUP, the issuance of the variances, and the timing of the approval determination by the Commission.

The current staff recommendation is to have the SUP conditioned on “work with the County to establish a development agreement for construction and cost sharing of the new road.” We understand this to be the proposed “backage road”. Such a condition would be inappropriate. It is agreed that the proposed High School have adequate and safe access to public roads. Such a condition is appropriate under Chapter 50 of the City of Duluth Legislative Code (UDC). However, the proposed “backage road” is currently just proposed, and ultimately, just one option for adequate and safe access. If the backpage road is ultimately not completed, for one of many potential reason beyond the control of Pacific Education, the School could still be connected safely to a public roads. This is supported by current limitations on SUPs: where a zoning ordinance authorizes a use by special permit, the denial of such a permit, or any condition of the permit, must be based on reasons of public health, safety, and general welfare or because of express language in the county's land use plan. *Hubbard Broadcasting, Inc. v. City of Afton*, 323 N.W.2d 757, 763 (Minn.1982). There is no specific requirement for the High School to be accessed only by the backpage road, and therefore any such condition would be inappropriate. The UDC only identifies three (3) use specific standards applicable to schools, and these do not include a separate road to be constructed. It is the complete intent of Pacific Education to work with Saint Louis County to complete the backpage road, but it would be improper to condition the SUP on such a requirement, and we ask that no such condition be required. Saint Louis County

Keith Hamre
May 16, 2016
Page 2

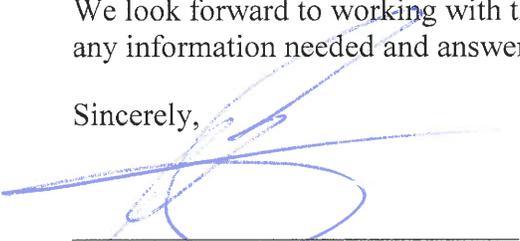
Public Works/Highway Department has made this same request pursuant to the May 9, 2016, letter that requests the backage road should not be a condition of the SUP.

Pacific Education also requests that the variance requests identified by file numbers PL 16-014, PL 16-015, and PL 16-029 be recommended for approval. While it is understood that the City Staff Reports indicate that a rezoning of the property will resolve the need for two of the variances, the rezoning process will be lengthy and the planning and preconstruction process cannot fully occur without assurance that the full parking and height requirements are allowed. Any delay in the planning and construction will severely impair the completion of the project. The submitted variance meet the criteria for granting the variances, and Saint Louis County has stated that they fully support the parking projections and the proposed parking variances. Both parking variances are needed to fully utilize the available parking areas on the site.

The City Staff originally recommended that the Planning Commission table this matter until the June hearing date to allow additional time for the Planning Commission to review the matter, however, due to the unforeseen events of the May 10, 2016 hearing, an additional two weeks will have passed for the Planning Commission's review. Therefore, we hope and believe the Planning Commission has had adequate time to make a decision on May 24, 2016. Additionally, DPSA has been granted \$400,000.00 from the Department of Education that is premised on Edison High School being opened by the Fall of 2017. If this matter is continued, it will put in peril this grant money.

We look forward to working with the City and the City Council on this matter and will provide any information needed and answer any questions that may arise.

Sincerely,



Gary R. Leistico
GRL/dvf

CC: Steven Robertson, City of Duluth (By Email only)
Mark Pilon (By Email only)
Dave Chmielewski (By Email only)

B. Wetlands.

This Section 50-18 shall apply to all wetlands within the city. All development in the city shall comply with state statutes and regulations. In addition, any development impacting wetlands requires formal approval by the designated city wetland representative.

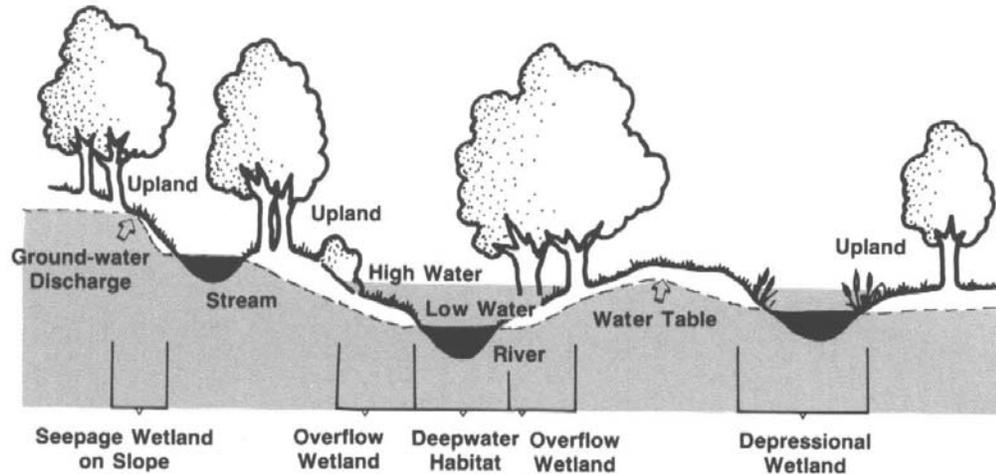


Figure 50-18.1-1: Typical Inland Wetland. Graphic taken from *Floodplain Management in the United States: An Assessment Report*, prepared for the Federal Interagency Floodplain Management Task Force 1992.

1. The building official shall require each permit applicant to specify on the permit application whether or not the proposed site contains wetlands. Regardless of the answer given, if the building official has reasonable grounds to believe the site contains wetlands, the official shall make a determination as to the existence of wetlands. In making that determination, the building official may require any of the following:
 - (a) Require the applicant to submit a complete wetland delineation as outlined in WCA and performed by a professional wetland delineator, including information such as soil analysis, surveys of vegetation and engineering or hydrological data, to aid in the determination;
 - (b) Conduct a site inspection and evaluation;
 - (c) Consult with the city engineer, St. Louis County Soil and Water Conservation District, Board of Water and Soil Resources, and other available wetland experts;
 - (d) Use any other reasonable method to determine if the site contains wetlands;

8420.0520 SEQUENCING.

Subpart 1. **Requirement.** The local government unit must not approve a wetland replacement plan unless the local government unit finds that the applicant has demonstrated that the activity impacting a wetland complies with all of the following principles in descending order or priority:

A. avoids direct or indirect impacts that may destroy or diminish the wetland under the criteria in subpart 3;

B. minimizes impacts by limiting the degree or magnitude of the wetland activity and its implementation under the criteria in subpart 4;

C. rectifies impacts by repairing, rehabilitating, or restoring the affected wetland under the criteria in subpart 5;

D. reduces or eliminates impacts over time by operating the project in a manner that preserves and maintains the remaining wetland under the criteria in subpart 6; and

E. replaces unavoidable impacts by restoring or, if wetland restoration opportunities are not reasonably available, creating replacement wetland areas having equal or greater public value as provided for in parts 8420.0500 and 8420.0522 to 8420.0528.

Wetlands located in cultivated fields that are subject to subpart 8 are an exception to this part.

Subp. 2. [Repealed, 34 SR 145]

Subp. 3. **Impact avoidance.**

A. Avoidance is required when indicated by part 8420.0515.

B. Wetland dependence determination:

(1) Based on information provided by the applicant, the local government unit must determine if the proposed project is wetland dependent. A project is wetland dependent if wetland features or functions are essential to fulfill the basic purpose of the project. A wetland present at the site of a proposed project does not make that project wetland dependent.

(2) A project that has been determined by the local government unit to be wetland dependent is exempt from the analysis of avoidance alternatives in item C.

C. Alternatives analysis:

(1) In addition to documentation for the proposed project, the applicant must provide the local government unit with documentation describing at least two alternatives that avoid wetland impacts, one of which may be the no-build alternative. For projects that repair or rehabilitate existing infrastructure, only one alternative is

required. The alternatives may include consideration of alternate sites or alternative project configurations on the proposed site. The alternatives must be judged by the local government unit as good faith efforts, or the local government unit may require the applicant to redraft them for reconsideration.

(2) The local government unit must determine whether any proposed feasible and prudent alternatives are available that would avoid impacts to wetlands. An alternative is considered feasible and prudent if it meets all of the following requirements:

- (a) it is capable of being done from an engineering point of view;
- (b) it is in accordance with accepted engineering standards and practices;
- (c) it is consistent with reasonable requirements of the public health, safety, and welfare;
- (d) it is an environmentally preferable alternative based on a review of social, economic, and environmental impacts; and
- (e) it would create no truly unusual problems.

(3) The local government unit must consider the following in evaluating avoidance alternatives as applicable:

- (a) whether the basic project purpose can be reasonably accomplished using one or more other sites in the same general area that would avoid wetland impacts. An alternate site must not be excluded from consideration only because it includes or requires an area not owned by the applicant that could reasonably be obtained, used, expanded, or managed to fulfill the basic purpose of the proposed project;
- (b) the general suitability of the project site and alternate sites considered by the applicant to achieve the purpose of the project;
- (c) whether reasonable modification of the size, scope, configuration, or density of the project would avoid impacts to wetlands;
- (d) efforts by the applicant to accommodate or remove constraints on alternatives imposed by zoning standards or infrastructure, including requests for conditional use permits, variances, or planned unit developments;
- (e) the physical, economic, and demographic requirements of the project. Economic considerations alone do not make an alternative not feasible and prudent; and
- (f) the amount, distribution, condition, and public value of wetlands and associated resources to be affected by the project and the potential for direct and indirect effects over time.

(4) If the local government unit determines that a feasible and prudent alternative exists that would avoid impacts to wetlands, it must deny the replacement plan. If no feasible and prudent alternative is available that would avoid impacts to wetlands, the local government unit must evaluate the replacement plan for compliance with subparts 4 to 8.

Subp. 4. **Impact minimization.** The applicant shall demonstrate to the local government unit's satisfaction that the activity will minimize impacts to wetlands. In reviewing the sufficiency of the applicant's proposal to minimize wetland impacts, the local government unit must consider all of the following:

- A. the spatial requirements of the project;
- B. the location of existing structural or natural features that may dictate the placement or configuration of the project;
- C. the purpose of the project and how the purpose relates to placement, configuration, or density;
- D. the sensitivity of the site design to the natural features of the site, including topography, hydrology, and existing vegetation;
- E. the value, function, and spatial distribution of the wetlands on the site;
- F. individual and cumulative impacts; and
- G. an applicant's efforts to:
 - (1) modify the size, scope, configuration, or density of the project;
 - (2) remove or accommodate site constraints including zoning, infrastructure, access, or natural features;
 - (3) confine impacts to the fringe or periphery of the wetland; and
 - (4) otherwise minimize impacts.

Subp. 5. **Impact rectification.** Temporary impacts must be rectified by repairing, rehabilitating, or restoring the affected wetland according to the no-loss provisions of part 8420.0415, item H.

Subp. 6. **Reduction or elimination of impacts over time.** After an activity is completed, further impacts must be reduced or eliminated by maintaining, operating, and managing the project in a manner that preserves and maintains remaining wetland functions. The local government unit must require applicants to implement best management practices to protect wetland functions.

Subp. 7. **Unavoidable impacts.** Unavoidable impacts that remain after efforts to minimize, rectify, or reduce or eliminate them must be replaced according to parts 8420.0522 to 8420.0528.

Subp. 7a. **Sequencing flexibility.**

A. Flexibility in application of the sequencing steps may be requested by the applicant and allowed at the discretion of the local government unit, subject to the conditions in item B, as determined by the local government unit, if:

(1) the wetland to be impacted has been degraded to the point where replacement of it would result in a certain gain in function and public value;

(2) avoidance of a wetland would result in severe degradation of the wetland's ability to function and provide public value, for example, because of surrounding land uses, and the wetland's ability to function and provide public value cannot reasonably be maintained through implementation of best management practices, land use controls, or other mechanisms;

(3) the only feasible and prudent upland site available for the project or replacement has greater ecosystem function and public value than the wetland. This may be appropriate only if the applicant:

(a) demonstrates impact minimization to the wetland;

(b) agrees to perpetually preserve the designated upland site; and

(c) completely replaces the impacted wetland's functions and public value; or

(4) the wetland is a site where human health and safety is a factor.

B. Flexibility in the order and application of sequencing standards must not be implemented unless alternatives have been considered and the proposed replacement wetland is certain to provide equal or greater public value as determined based on a functional assessment reviewed by the technical evaluation panel using a methodology approved by the board. The applicant must provide the necessary information and the local government unit must document the application of sequencing flexibility in the replacement plan approval.

Subp. 8. **Wetlands on cultivated fields.** If the wetland is located on a cultivated field and will be replaced through restoration, then the priority order for sequencing in subpart 1 is not required. A wetland impacted under this subpart must not be converted to nonagricultural land for ten years. The landowner must execute and record a notice of this requirement in the office of the county recorder for the county in which the property is located and, as a condition of approval, provide documentation of the recording to the local government unit.

Subp. 9. [Repealed, 34 SR 145]

Statutory Authority: *MS s 14.06; 14.386; 103B.101; 103B.3355; 103G.2242*

History: *18 SR 274; 22 SR 1877; 25 SR 152; 27 SR 135; 32 SR 281; 34 SR 145*

Published Electronically: *August 26, 2009*