

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

**RESOLUTION NO. 2024-106**

*A RESOLUTION APPROVING A CONDITIONAL USE PERMIT TO ALLOW EXPANSION OF  
AN EXISTING PUBLIC SCHOOL IN THE PUBLIC FACILITIES DISTRICT*

**WHEREAS**, the City of Lake Elmo is a municipal corporation organized and existing under the laws of the State of Minnesota; and

**WHEREAS**, Stillwater Area Schools, ISD 834, (the “Applicant”), owner of the property located at 820 Manning Avenue N PID# 36.029.21.11.0002 and 36.029.21.11.0003, Lake Elmo, MN 55042 (the “Property”) has submitted an application to the City of Lake Elmo (the “City”) for Conditional Use Permit the expansion of Oak Land Middle School; and

**WHEREAS**, notice has been published, mailed, and posted pursuant to the Lake Elmo Zoning Code, Section 105.12.250; and

**WHEREAS**, the Lake Elmo Planning Commission held a public hearing on said matter on September 9, 2024; and

**WHEREAS**, the Lake Elmo Planning Commission submitted its report and recommendation concerning the Conditional Use Permit request to the City Council as part of a Staff Memorandum dated October 1, 2024; and

**WHEREAS**, the City Council considered said matter at its October 1, 2024 meeting.

**NOW, THEREFORE**, based on the testimony elicited and information received, the City Council makes the following:

**FINDINGS**

- 1) That the procedures for obtaining said Conditional Use Permit (CUP) are found in the Lake Elmo Zoning Ordinance, Section 105.12.290.
- 2) That all the submission requirements of said Section 105.12.290 have been met by the Applicant.
- 3) That the proposed Conditional Use Permit is to allow the expansion of Oak Land Middle School as more fully described in application materials submitted to the City.
- 4) That the proposed Conditional Use Permit will be located on property to be legally described as found in Exhibit A to this Resolution.

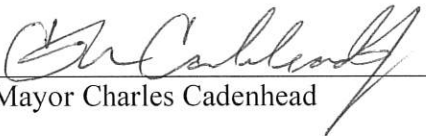
- 5) That a public school is designated as a Conditional Use within the PF – Public Facilities Zoning District in Section 105.12.970 of the Zoning Ordinance; and
- 6) That the proposed use will not be detrimental to or endanger the public health, safety, comfort, convenience or general welfare of the neighborhood or the city.
- 7) That the proposed use conforms to the City of Lake Elmo Comprehensive Plan.
- 8) That the proposed use is compatible with the existing neighborhood.
- 9) That the proposed use meets all specific development standards for such use listed in Article 7 of the Zoning Ordinance.
- 10) That the proposed use will be designed, constructed, operated and maintained so as to be compatible in appearance with the existing or intended character of the general vicinity and will not change the essential character of that area.
- 11) That the proposed use will not be hazardous or create a nuisance as defined under this Chapter to existing or future neighboring uses.
- 12) That the proposed use will be served adequately by essential public facilities and services, including streets, police and fire protection, drainage structures, refuse disposal, water and sewer systems and schools or will be served adequately by such facilities and services provided by the persons or agencies responsible for the establishment of the proposed use:
- 13) That the proposed use will not create excessive additional requirements at public cost for public facilities and services and will not be detrimental to the economic welfare of the community.
- 14) That the proposed use will not involve uses, activities, processes, materials, equipment and conditions of operation that will be detrimental to any persons, property or the general welfare because of excessive production of traffic, noise, smoke, fumes, glare or odors.
- 15) That vehicular approaches to the property, where present, will not create traffic congestion or interfere with traffic on surrounding public thoroughfares.
- 16) That the proposed use will not result in the destruction, loss or damage of a natural or scenic feature of major importance.

## **CONCLUSIONS AND DECISION**

Based on the foregoing, the Applicants' application for a Conditional Use Permit is granted subject to the following conditions:

1. The Applicant must enter into a Site Improvement Agreement, in the City's Standard Form, prior to issuance of a notice to proceed or any building permit for work on site.
2. Prior to the City signing or approving recording of the Final Plat or Site Improvement Agreement, the Applicant shall fully address all comments in the following review memos, or any subsequently revised memo, to the satisfaction of the City:
  - a. City Engineer's memo dated August 26, 2024,
  - b. City Landscape Architect's memo dated August 27, 2024,
  - c. City Fire Chief's memo dated August 26, 2024.
  - d. City Attorney's Plat Opinion.
3. The Applicant must incorporate operational improvements on site to eliminate queuing of traffic accessing the site from Manning Avenue.
4. The Conditional Use Permit approval is contingent upon the Applicant agreeing to allow the southern secondary school access to Manning Avenue to be relocated further south when the future neighborhood collector roadway is needed to serve this future development area.
5. Upon substantial completion of the project, as defined in the required site improvement agreement, the school building must be connected to water and sewer.
6. The applicant must provide plans for the water and sewer connection to the satisfaction of the City Engineer, Public Works Director, and Fire Chief prior to the release of the building permit.
7. Water and Sewer Area Charges, and other fees as applicable, must be paid prior to issuance of a building permit.
8. All city, state, or other necessary permits must be obtained prior to the release of the building permit.
9. Substantial construction must take place within 12 months of the date on which the conditional use permit was granted, and the Applicant must otherwise comply with provisions of Section 105.12.290 Conditional Use Permits.
10. Prior to approval of the final construction plans, the Applicant must complete an assessment of irrigation alternatives for the site.

Passed and duly adopted this 1<sup>st</sup> day of October, 2024 by the City Council of the City of Lake Elmo, Minnesota.

  
\_\_\_\_\_  
Mayor Charles Cadenhead

ATTEST:

  
\_\_\_\_\_  
Julie Johnson, City Clerk

**RESOLUTION 2024-106**  
**Exhibit A**  
**Legal Description of Subject Property**

**Old Legal Descriptions:**

**PARCEL A:**

The following parts of the North Half of the Northeast Quarter (N1/2 of NE1/4) of Section Thirty-six (36), Township Twenty-nine (29) North, Range Twenty-one (21) West described as follows: The East 666 feet of the said North Half of the Northeast Quarter and the West 234.9 feet of the East 900.0 feet of the South 891.8 feet, subject to public roadways along the North and East side thereof and containing 25 acres more or less together with a perpetual easement for utility purposes including but not limited to underground gas lines, electrical transmission lines, and drainage, said easement tract being the south 50 feet of the West 1,571.1 feet of the East 2,472.5 feet of the said North Half of the Northeast Quarter (N1/2 of NE1/4) of Section Thirty-six (36). (Description per Warranty Deed Doc. No. 212313)

**PARCEL B:**

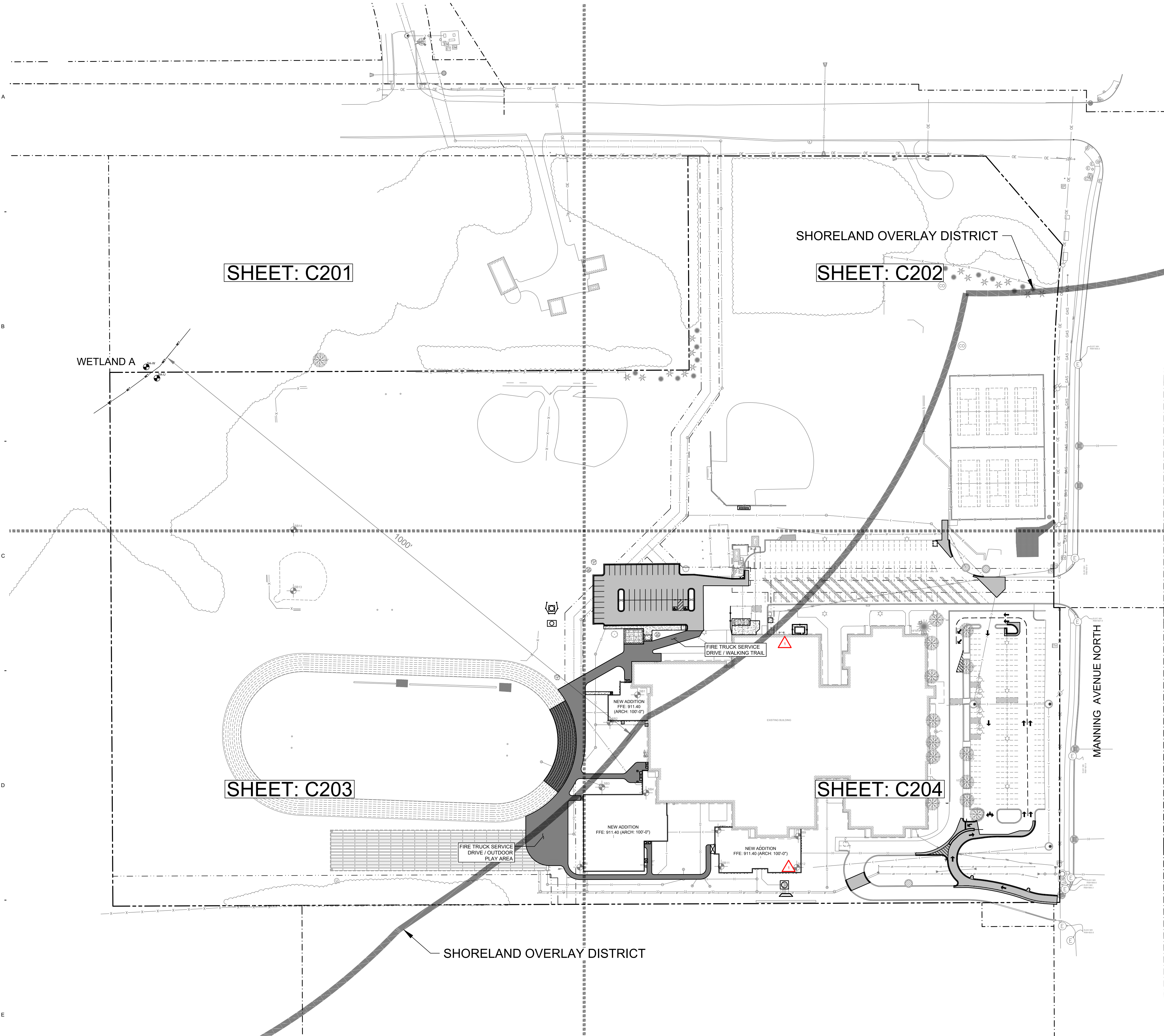
All that part of the North Half of the Northeast Quarter (N1/2 of NE1/4) of Section Thirty-six (36), Township Twenty-nine (29) North, Range Twenty-one (21) West, described as follows: The West 732.68 feet of the East 1633.58 feet of the South 891.8 feet containing 15 acres more or less. (Description per Warranty Deed Doc. No. 218479)

**New Legal Descriptions:**

Lot 1, Block 1, Oak-Land Middle School Addition



MN



SYMBOL LEGEND

- PROPOSED BITUMINOUS PAVEMENT, SEE DETAIL 1/C700
- PROPOSED TRAILS/FIRE LANE BITUMINOUS PAVEMENT, SEE DETAIL 2/C700
- PROPOSED TRACK BITUMINOUS PAVEMENT, SEE DETAIL 3/C700
- PROPOSED CONCRETE PAVEMENT, SEE DETAIL 4/C700
- PROPOSED HEAVY-DUTY CONCRETE PAVEMENT, SEE DETAIL 5/C700
- NEW STOOP, SEE STRL/ARCH
- SOIL BORING MARKER
- PAVEMENT MARKINGS
  - VEHICLE STALLS/ARROWS/CROSSWALKS
  - BUS STALLS/NUMBERING
- PROPERTY LINE
- EASEMENT LINE
- RIGHT-OF-WAY LINE

NOTE: THE CONCRETE JOINTS ARE SHOWN ONLY FOR GENERAL REFERENCE TO SIGNIFY LIGHT DUTY CONCRETE PAVEMENT. ACTUAL JOINTS SHALL BE CONSTRUCTED PER PROJECT SPECIFICATIONS.

PROJECT AREA CALCULATIONS

TOTAL SITE AREA:	1,619,971 SF	(37.19 AC)	100%
IMPERVIOUS AREAS:			
PROPOSED IMPERVIOUS AREAS:			
SCHOOL ADDITIONS	30,267 SF	(0.69 AC)	1.87%
SIDEWALK/BIT. TRAILS	23,034 SF	(0.53 AC)	1.42%
PARKING/ROADWAYS	29,043 SF	(0.67 AC)	1.79%
TRACK	4,462 SF	(0.10 AC)	0.27%
EXISTING IMPERVIOUS AREAS:			
SCHOOL	135,372 SF	(3.11 AC)	8.35%
SIDEWALK/BIT. TRAILS	21,864 SF	(0.50 AC)	1.35%
PARKING/ROADWAYS	114,535 SF	(2.63 AC)	7.07%
SPORTFIELDS/TENNIS COURTS/TRACK	120,827 SF	(2.77 AC)	7.46%
TOTAL SITE IMPERVIOUS	479,404 SF	(11.01 AC)	29.59%
OPEN SPACE:			
REMAINING OPEN SPACE	1,140,567 SF	(26.18 AC)	70.41%
IMPERVIOUS WITHIN SHORELAND OVERLAY ZONE:			
SHORELAND OVERLAY AREA	1,122,127 SF	(25.76 AC)	100.00%
IMPERVIOUS AREA WITHIN SHORELAND OVERLAY			
	147,391 SF	(3.38 AC)	13.14%

OAK-LAND MIDDLE SCHOOL 2025-26 ADDITION AND RENOVATION

820 Manning Ave N,  
Lake Elmo, MN 55042

Independent School District #834

1875 Greeley Street South  
Stillwater, MN 55082

Wold

WOLD ARCHITECTS AND ENGINEERS

332 Minnesota Street, Suite W2000  
St. Paul, Minnesota 55101  
woldaec.com | 651 227 7773

Larson Engineering, Inc.  
3524 Labore Road  
White Bear Lake, MN 55110  
651.481.9120 (f) 651.481.9201  
www.larsonengr.com

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I hereby certify that this plan, specifications 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.

Greg A. Buchal, P.E.

Date: 11.12.24 Reg. No.: 23793

Revisions		
Description	Date	Num
ADDENDUM #3	DECEMBER 3, 2024	1
CITY SUBMITTAL	FEBRUARY 13, 2025	

Comm: 12246044  
Date: 11.12.2024  
Drawn: MTH  
Check: NJN

SITE PLAN - OVERALL

C200



**Larson**

## **MEMORANDUM**

To: Nathan Fuerst, City Administrator, City of Lake Elmo

From: Greg Buchal, PE – Larson Engineering, Inc.

Date: February 27, 2025

Project: 12246044

Subject: Additional Submittal to City of Lake Elmo on Behalf of Independent School District #834 for the Oak-Land Middle School 2025 – 2026 Additions & Renovations project, located at 820 Manning Avenue North. (PID# 36.029.21.11.0002 and 36.029.21.11.0003)

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### **Oak-Land Middle School - Additional Analysis of Irrigation Alternatives**

The Conditional Use Permit application was submitted and approved by the City Council on October 1, 2024. As one of the conditions of approval for the CUP, the School District was to provide a list of alternative methods to supply water for irrigating a portion of the property. This information was provided in November of 2024, and since then additional backup and elaboration of these methods was requested. The information below is a response to this request and no revision to the approved Conditional Use Permit is being requested. For context, the Conditional Use Permit complies with the current ordinances and the scope of irrigation is to only irrigate those areas currently being irrigated with no expansion planned.

The City Planner has requested that additional information and analysis be provided for three items; irrigation of the athletic fields utilizing well water; irrigation of the athletic fields utilizing water re-use from storage tanks; and irrigation of the athletic fields utilizing water re-use from Lake Rose. Another option being considered by the School District is to not irrigate any of the fields.

As indicated in the previous Memorandum to the City of Lake Elmo in November of 2024, the School District has made connecting to municipal water a high priority for the Oak-Land Middle School, due to potential future health and safety concerns, and ongoing maintenance costs related to having well-water at the school. This current building addition project provides the opportunity to improve that infrastructure at the school.

With a new municipal water service to the school building, the existing irrigation system for the athletic fields could be utilized and very little improvements, modifications, or costs would be incurred, since the existing connection for the irrigation water remains within the school building. Rain sensors would be added to eliminate irrigation operation when rain events have provided adequate water to the athletic fields. This is the School District's preference and they understand that irrigation restrictions could occur in times of drought and would abide by all City of Lake Elmo related ordinances regarding water use for the athletic field irrigation.

### ***Site Data***

The athletic fields that are currently irrigated by the School District are located on the northern side of the school property and within the existing athletic track. The total area of these athletic fields is about 297,000 square feet or 6.8 acres (see attached aerial photograph of the Oak-Land Middle School site).

Current water use for irrigation of the athletic fields is about 15,980 gallons (2,136 cf) per day (based upon well data averaging monthly use quantities). The well was constructed in 1966 and has experienced more frequent repairs and maintenance over the past 10 years. The current well is 315 feet deep and the well is permitted through the Department of Natural Resources (DNR) for use of up to 4.3 million gallons per year.

### ***Irrigation Using Well Water***

The first alternative reviewed is using well water to irrigate the athletic fields. The current location of the existing well conflicts with the proposed improvements at the site that are a part of the current building addition and renovation project. This and in consideration of the current age and condition of the well, a new well would be required at the site. The DNR has indicated that typically a new well to replace an existing well would be permitted as long as the water use did not exceed that of the existing well. However, the DNR indicated this could not be assured in this situation with the regional water issues. A Preliminary Well Construction Assessment Application would be required by the DNR to evaluate the impacts of the well.

Assuming a new well of similar size, depth, and capacity was allowed for irrigation of the athletic fields, well contractors have provided costs of \$160,000 to install a new well. In addition to the well costs, associated costs for related electrical for power to the new location and modifications to the existing irrigation system would add additional costs of about \$45,000, making the overall cost for this approach to be about \$205,000 (not including maintenance and operation costs).

However, as indicated previously the School District's desire was to not use well water due to potential future health risks. The Minnesota Department of Health (MNDH) when contacted also mentioned concerns about potential health risks related to PFAS – Polyfluoroalkyl substances. This contamination is a concern in the east metro area based upon the MNDH (see attached PFAS Contamination Map). Review of Metropolitan Council PFAS maps indicates areas close to the Oak-Land Middle School that have PFAS contamination.

### ***Irrigation Using Water Re-Use with Underground Storage Tanks***

Another alternative reviewed is re-using water stored within new underground storage tanks for irrigation of the athletic fields. Permitting of re-use systems falls under several jurisdictions such as the MNDH, Minnesota Pollution Control Agency (MPCA), DNR, Minnesota Plumbing Code, and the Cities where the systems are located. This permitting could complicate the process and design considerations of the systems. However, the MPCA and the City of Lake Elmo do have guidelines for water re-use and for purposes of this review, we followed those general guidelines.

The basic components of the water re-use system consist of the water source (storage tank), a pump or pumps to convey water through the system to the irrigation system, and filtering and treatment of the water before re-use in the irrigation system (see City of Lake Elmo Standard Drawing C-02). MPCA and City guidelines recommend filtering sediments and particulates from the water and treating the water with UV light and chlorination to address health and safety concerns.



The difficulty with this type of system at this school site is the feasibility of collecting and storing enough water for irrigation use. Roof water is typically the best location to collect re-use water from since this source would not have significant amounts of salts, sediments, grass clipping, etc. But much of the existing roof water at this site discharges on to the ground and various locations around the building and is difficult to centralize and collect. With the current building project, much of the new run-off and roof water is collected and will be infiltrated into the ground in accordance with Valley Branch Watershed District (VBWD) storm water treatment requirements. Incorporating a water re-use system would require additional catch basin structures and piping to direct water to the underground storage tank rather than to the current treatment system.

To provide one inch of water over the athletic field areas would require a tank of about 32,000 cubic feet or approximately 239,000 gallons. A typical 2-year rain event would provide about 19,000 cubic feet (142,000 gallons) of water. Significant rain events would be required to fill the storage tank and the irrigation system would likely need to be supplemented with another source of water, such as municipal water. Historical data indicates that the average weekly rainfall would produce about 0.88 inches per week or 85,000 gallons per week for the drainage area to the tank. See attached Appendix A for a summary of the costs for this water re-use system.

### ***Irrigation Using Water from Rose Lake***

The third alternative reviewed is using water from Rose Lake for irrigation of the athletic fields. Drawing water from Rose Lake would require permitting through the DNR, VBWD, and may not be allowed. Assuming water can be taken from Rose Lake, the approach would be very similar to that described above using underground storage tanks but using the water “stored” in Rose Lake instead of underground storage tanks. The primary differences in this situation are additional piping, pumps, and filtering to get water from Lake Rose to the treatment/re-use system, but the underground tanks would not be needed. All of the treatment components would be the same. However, runoff to Rose Lake could introduce salts and other contaminants not anticipated in roof water. Rose Lake has the potential for PFAS contamination such that there are potential health concerns with this source of water, and the potential for contamination of the soil from the irrigation water. See attached Appendix B for a summary of the costs for this water re-use system.

### ***No Irrigation***

Another option being considered by the School District is to remove all irrigation from the school site. Much of the site is currently not irrigated. Obviously, irrigation helps keep natural grass fields more playable and resilient, and therefore more usable for school and community use.

### ***Summary***

While there are several options for how the fields at Oak-Land Middle School could be irrigated, the current plan is to leave the existing irrigation system connected to the building water system. With the connection of municipal water, the irrigation would then be supplied by the municipal water. This has been the plan for the entire planning process with City.

At the request of the City, the School District has studied other options and their additional costs for implementation.

1. Irrigate with City water (additional project cost \$0)
2. Irrigate with a new well system (additional project cost \$205,000)
3. Irrigate with captured rainwater (additional project cost \$313,400)
4. Irrigate with water from Rose Lake (additional project cost \$212,8500)
5. Discontinue irrigation (additional project cost \$0)

Nathan Fuerst, City Administrator, City of Lake Elmo  
Oak-Land Middle School

The School District is recommending that their project continue with irrigating the fields with City water and that they would comply with City ordinances regarding the use of the irrigation system just like other properties within the City.

## **Appendix A**

### **Water Re-Use with Underground Storage Tanks**

#### **Pump & Intake Components**

- Pump & Motor, VMS, 10HP-208-230V/3Ph
- Pump Discharge Header 100HP
- Flow Meters
- Pressure Relief Valves
- Discharge Terminations
- Discharge Manifolds
- Inlet Drop Pipes
- Intake Manifolds
- Float Kits (3" HDPE Pipe)

#### **Treatment Systems & Components**

- UV Systems
- Discharge Filters
- Self-Cleaning Intake Screen

#### **Control Panel & Components**

- Control System
- Touch Screen Displays
- Surge Protection
- Optical Devices
- Electrical Enclosure (with cooling and heating)
- VFD's
- Composite Enclosure
- Formed Steel Base
- Electrical Service

#### **Storage & Distribution Components**

- 6" PVC Sch. 40 Pipe (200 LF)
- Storage Tank (32,000 CF / 239,360 Gallons)
- Reducers
- Gate valves

**Total Cost:      \$313,400.00**

## **Appendix B**

### **Irrigation Using Water from Rose Lake**

#### **Pump & Intake Components**

- Pump & Motor, VMS, 10HP-208-230V/3Ph
- Pump Discharge Header 100HP
- Flow Meters
- Pressure Relief Valves
- Discharge Terminations
- Discharge Manifolds
- Inlet Drop Pipes
- Intake Manifolds
- Float Kits (3" HDPE Pipe)

#### **Treatment Systems & Components**

- UV Systems
- Discharge Filters
- Self-Cleaning Intake Screen

#### **Control Panel & Components**

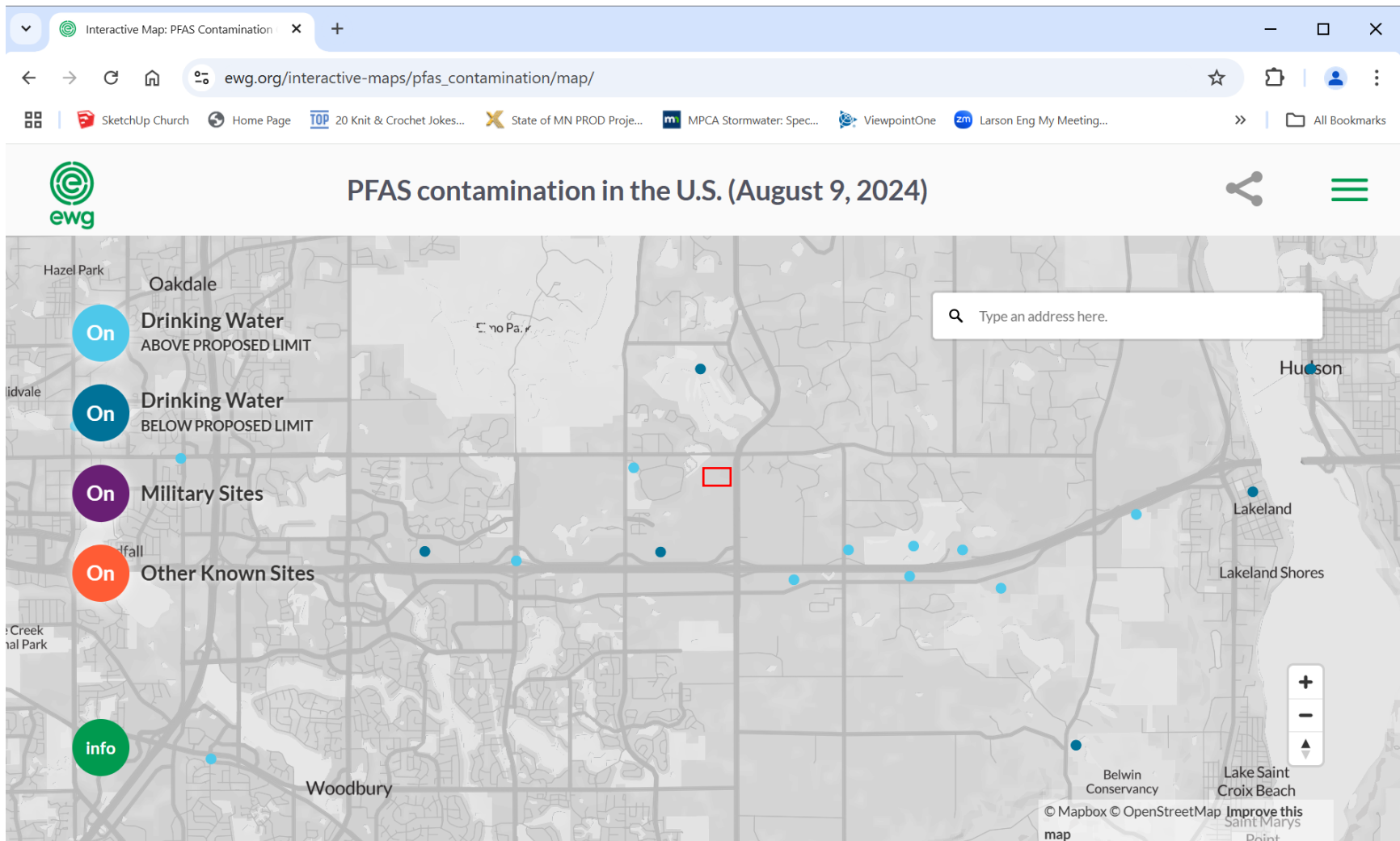
- Control System
- Touch Screen Displays
- Surge Protection
- Optical Devices
- Electrical Enclosure (with cooling and heating)
- VFD's
- Composite Enclosure
- Formed Steel Base
- Electrical Service

#### **Storage & Distribution Components**

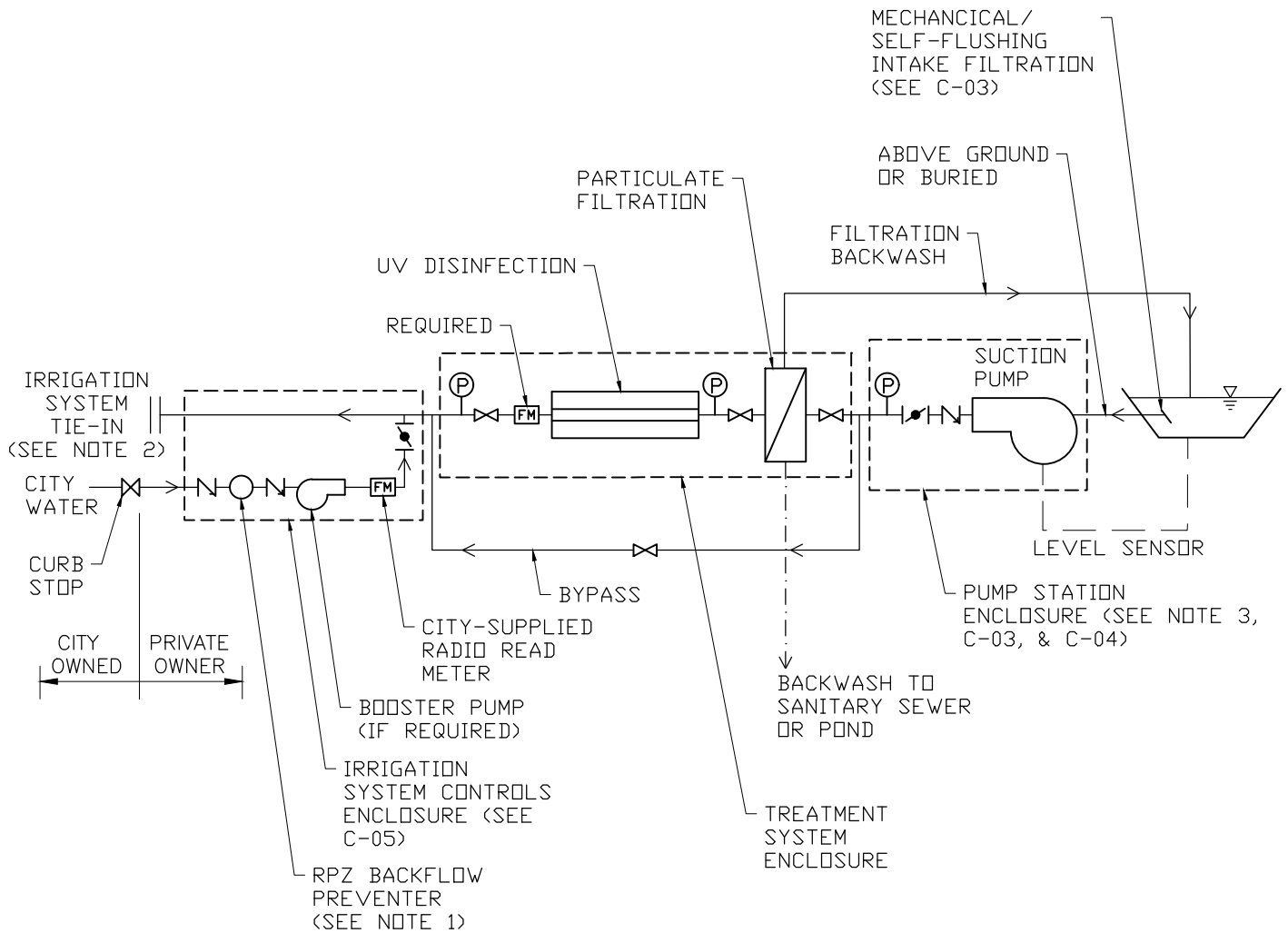
- 6" PVC Sch. 40 Pipe (600 LF)
- Reducers
- Gate valves

**Total Cost:      \$212,850.00**









**NOTES:**

1. BACKFLOW PREVENTION TO MEET MINNESOTA DEPARTMENT OF HEALTH REQUIREMENTS.
2. NON-CLOGGING SPRINKLER HEADS RECOMMENDED.
3. PUMP CAN BE LOCATED WITHIN TREATMENT SYSTEM ENCLOSURE IF SUCTION LIFT ALLOWS.

**LEGEND**

- ◯ CHECK VALVE
- ✕ ISOLATION VALVE
- Ⓟ PRESSURE GAUGE
- FM FLOW METER
- ✎ BUTTERFLY VALVE

# POTENTIAL/FUTURE WATER REUSE PROCESS FLOW DIAGRAM (TREATMENT)

JANUARY 2022



**CITY OF LAKE ELMO**

STANDARD DRAWING NO.

C-02

LAKE ELMO