PB0229.RFI.David Weum.Storage Overflows

Plumbing Board
Request for Interpretation

Plumbing Board
c/o Department of Labor and Industry
443 Lafayette Road North
St. Paul, MN 55155-4344
www.dli.mn.gov

PRINT IN INK or TYPE

NAME OF SUBMITTER	Rule(s) to be interpreted (e.g., 4714.0330)
David Weum	4714.206, 4714.214, 4714.812.1, 4714.225.0, 4714.601, 4714.801

The Minnesota Plumbing Code (MN Rules, Chapter 4714) is available at www.dli.mn.gov/CCLD/PlumbingCode.asp

Has a request for interpretation been submitted to Department of Labor and Industry (DLI) staff, either as a verbal request or a written request? ☑ Yes ☐ No

If "No," contact DLI staff at 651-284-5898. The DLI is responsible for administration and interpretation of the Minnesota Plumbing Code, and all requests must be processed and provided a DLI interpretation before being referred to the Plumbing Board. This form is intended to be used to request an interpretation from the Plumbing Board only as a resolution of dispute with DLI interpretation.

Code/Rule to be interpreted:	Name of DLI employee gave interpretation:	Date interpretation originally requested:
A bit all over	Micheal Westemeier	

Provide a copy of the DLI interpretation with this request (a copy must be provided as reference).

Is there a local dispute with an Inspector of other official?	If Yes, state the name or type of official
☐ Yes ☑ No	

State the circumstances of the initial dispute:

DLI has interpreted that municipal drinking water storage overflow piping is considered plumbing and is required to meet the plumbing code. DLI has referred to this discharge as clear water waste and that the overflow pipe meets the definition of a plumbing drainage system. The main emphasis has been that it conveys "clear water waste" to a "point of disposal" (see below definitions for relevant terms quoted). This has been applied to clearwells and backwash reclaim tanks, but would also apply to any water tower or water storage reservoir throughout the city drinking water distribution system. Clearwells are the, usually buried, storage basins that are at the end of a drinking water treatment process. Plan sheets will be provided for discussion purposes. DLI is using the following definitions to consider the overflow plumbing:

Drainage System - Includes all the piping within public or private premises that conveys sewage, rainwater, or other liquid wastes to a legal point of disposal, but does not include the mains of a public sewer system or a public sewage treatment or disposal plant. Plumbing System - Includes all potable water, building supply, and distribution pipes; all plumbing fixtures and traps; all drainage and vent pipes; and all building drains and building sewers, including their respective joints and connections, devices, receptors, and appurtenances within the property lines of the premises and shall include potable water piping, potable water treating or using equipment, and nonpotable water piping serving plumbing fixtures. Clear Water Waste - Uncontaminated water discharges, subsoil discharges, and similar discharges.

Explain what you disagree with the interpretation given to you by DLI staff:

See attached

What is your interpretation of the language:

There are a few interpretations that I have related to this situation. First, I interpret that, for plumbing purposes, the types of water borne wastes are liquid waste and domestic sewage. Clear water waste, rainwater, industrial waste, and grey water are more specific subsets of the general term liquid waste and are restricted in their code applicability by the liquid waste definition. Additionally, I interpret the word "other" in the definition of drainage system to not expand the term "liquid wastes" beyond the definition of liquid waste in the code, but rather that "other" is referring to rainwater since rainwater is also a liquid waste when involved in a plumbing system. The "other liquid wastes" means other subsets of liquid wastes besides rainwater. (see storm sewer definition in 221.0 for reference to rainwater as liquid waste). Since liquid wastes for plumbing purposes must come from fixtures, appliances, or appurtenances; an engineered storage structure for municipal purposes does not discharge plumbing liquid waste. This clarifies that plumbing drainage systems only serve plumbing fixture, appliances, and appurtenances.

Finally, since indirect waste pipes carry clear water waste (see 801.1) and by definition (see 211.0) convey liquid waste and are not connected to the drainage system; a pipe carrying anything that could be termed clear water waste must first discharge through an air gap before the pipe transporting it could be considered part of a drainage system.

List any other information you would like the Board to consider:

MDH has specific language on drinking water storage overflow design in the standard that we use for review. That section of the standard starts by saying:

"All water storage structures shall be provided with an overflow that extends down to an elevation between 12 and 24 inches above the ground surface, and discharges over a drainage inlet structure or splash plate. No overflow may be connected directly to any drain, sanitary sewer or storm sewer. All overflow pipes shall be located so that any discharge is visible."

Because of this, interpreting the overflow as a drain directly conflicts with MDH requirements.

Information regarding submitting this form:

- Submit any supporting documentation to be considered electronically to DLI.CCLDBOARDS@state.mn.us. Once your Request For Interpretation form has been received, it will be assigned a file number. Please reference this file number on any correspondence and supplemental submissions.

Information for presentation to the Committee:

- You will be notified with the date of the Committee Meeting in which your Request For Interpretation will be heard.
- Limit presentations to 5 minutes or less.
- Be prepared to answer questions regarding the Code, the circumstances that led to the dispute and please bring copies of any documentation.

What you can do if you disagree with the Board's determination:

- You may appeal the Board's determination pursuant to Minn. Stat. Chapter 14.

Submitted by:

NAME	FIRM NAME	
David Weum	Minnesota Department of Health	
ADDRESS	CITY STATE ZIP CODE	
625 Robert St. N	Saint Paul, MN	
PHONE	SIGNATURE (original or electronic)	DATE
651-201-4684	David Weum	3/24/2026

Office Use Only

RFI File No.	Date Received by DLI	Dated Received by Board	Date of Board Meeting
PB0229	3/24/2026	4/21/2026	4/21/2026

Title of RFI	By:
PB0229.RFI.David Weum.Storage Overflows	

This material can be made available in different forms, such as large print, Braille or on a tape. To request, call 1-800-342-5354 (DIAL-DLI).

For assistance or questions on completing this form, please call 651-284-5898 or 651-284-5889.

Mailing address:

Plumbing Board
c/o Department of Labor and Industry
443 Lafayette Road North
St. Paul, MN 55155-4344

***** Please remember to attach all necessary explanations and supporting documentation*****

Explain what you disagree with in the interpretation given to you by DLI staff:

MDH considers overflows from these structures to be solely MDH's jurisdiction and not part of the plumbing system as there are no plumbing fixtures, devices, appurtenances, or appliances involved in these installations. These storage structures are part of the public drinking water system rather than the property specific plumbing system, and the overflows are an integral part of the structures.

These storage overflows are a part of the municipal drinking water system. The only two parts of the code that refer to the municipal water system are the definition of building supply pipe and 311.1 (the part requiring connection to the system). The plumbing water supply starts at the building supply pipe and the drainage plumbing generally starts at a drainage fixture. This infrastructure is not in that scope as the overflow is an integral part of the drinking water infrastructure and not a separate drainage system. I see the situation as any water supply infrastructure that serves more than just that particular property, would not be plumbing (see 307.1, and definitions for building supply pipe and water supply system)

Some relevant definitions and code language:

Building Supply: Means the pipe carrying potable water from the municipal water supply or source of water to a building water meter, pressure tank, or other point of use or distribution on the lot.

Liquid waste: The discharge from a fixture, appliance, or appurtenance in connection with a plumbing system that does not receive fecal matter.

Indirect Waste Pipe: A pipe that does not connect directly to the drainage system but conveys liquid wastes by discharging into a plumbing fixture, interceptor, or receptor that is directly connected to the drainage system.

801.1 Applicability (for the Indirect Wastes chapter):
This chapter shall govern the materials, design, and installation of indirect waste piping, receptors, and connections; and provisions for discharge and disposal of condensate wastes, chemical wastes, industrial wastes, and clear water wastes.

To entertain the idea of this as plumbing via a clear water waste drainage system, only chapters 3 and 8 of the plumbing code would be applicable via 801.1. The applicability sections of 601.1 and 701.1 indicate that chapter 6 and chapter 7 do not apply to this infrastructure.

801.2 clearly implies that indirect waste piping is separate from the building drainage system and it must discharge into the building drainage system through an air gap. The definition of indirect waste pipe states that it is not connected to the drainage system.

This brings up questions such as ,"How then does this discharge clear water waste while at the same time being a drainage system?" The water didn't enter into the overflow pipe through an air gap. Would a storage overflow, if considered plumbing, need to discharge into the building drainage system (801.2 and 812.1) such as the sanitary sewer to conform to the plumbing code? How much would that upsize everything downstream? Note that these overflows commonly range from 8-inch to 24-inch in diameter.

After reading 812.1 (Clear Water Wastes), I must ask, are municipal drinking water storage structures considered "similar devices" to water lifts, expansion tanks, cooling jackets, sprinkler systems, or drip/overflow pans?

The drainage system definition DLI is relying on for this interpretation lists that is conveys "sewage, rainwater, or other liquid wastes" to a legal point of disposal. Liquid wastes has a definition in the code that requires the water to be discharged from a plumbing fixture, appliance or appurtenance. I am unclear if DLI sees clear water waste as not being constrained by the liquid waste definition or if they are saying that the word "other" in the drainage system definition expands it beyond the definition of liquid waste in the code. MDH see the word "other" referring to rainwater in the sentence, because rainwater is also a liquid waste (see storm sewer definition). Additionally, MDH sees clear water waste as a subset of liquid wastes and constrained by the definition of liquid waste.

There is additional inconsistency in attempting to apply the plumbing code is between 310.5 (Obstruction of Flow), 601.1 Applicability of Chapter 6, and 607 in whole.

Everyone can agree that storage overflow pipes need to have a means to protect the water in storage from contamination. Usually this is done with a screen. However, that screen would create an obstruction of flow and conflict with 310.5 if we consider this pipe drainage. DLI has said that this obstruction is acceptable since screens are required on overflows in Chapter 6.

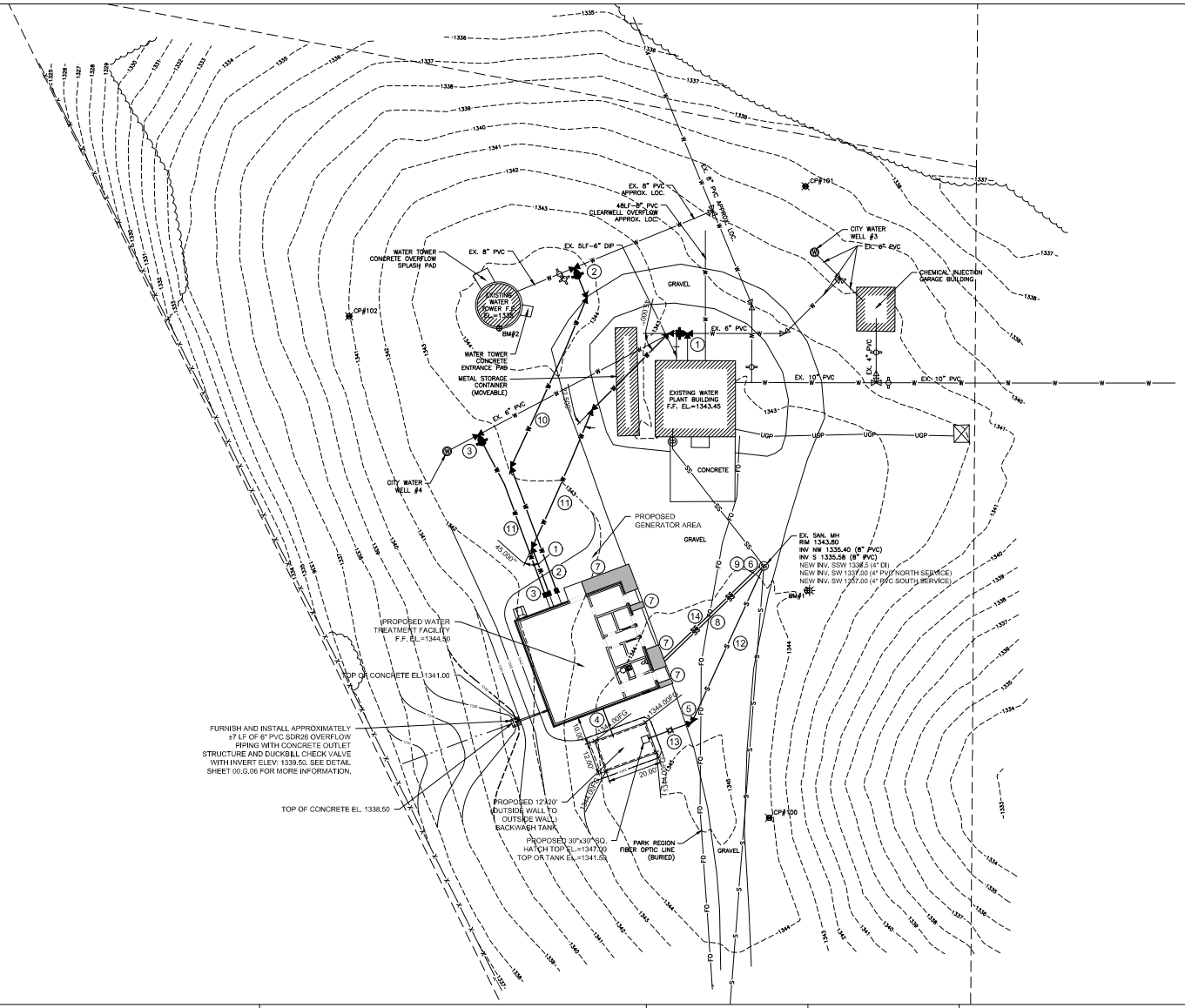
In order to include chapter 6 as applicable here, you'd need to interpret municipal storage to fall under "water supply system" in 601.1. However, MDH does not see municipal storage as meeting any part of the definition of water supply system in the plumbing code. The definition is meant to be restricted to a plumbing water system and not to encompass drinking water production at a municipal level.

Even if you include chapter 6 to have the overflow piping language in 607.4, then we're starting to call the entire storage structure plumbing and 607.1 clearly sees potable storage as a manufactured device needing adequate support. A clearwell is often instead supporting the whole building itself.

So, we're left with the situation where we either need to willfully ignore 310.5 or require protections from contamination of a city's water supply to be removed in order to not obstruct the flow.

If the plumbing code was fully enforced on this infrastructure, this would create mass noncompliance and I don't think it actually can be fully complied with between trapping and venting (803.3), discharging to the building sewer(801.2), obstruction of flow(310.5), screening(607.4), being both a indirect waste pipe and drainage system(chapter 2), and the various applicability sections (801.1, 601.1). In the more extreme/silly scenario, this would seem to require a plumber to install the overflow pipe on every water tower constructed in Minnesota.

In MDH's opinion, this all speaks clearly to the plumbing code not being appropriate to apply to drinking water storage overflows, and that these overflows are part of an engineered storage design for treating and distributing water to a entire city drinking water system. The municipal water system is separate from plumbing since it serves multiple properties and while it does need to be located on a property, that does not make it suddenly plumbing.



CONSTRUCTION NOTES

1. PROVIDE AND INSTALL 4"x6" DI REDUCING TEE, 3LF-4" C900 PVC, 4" GATE VALVE AND BOX, 4LF-4" C900 PVC, 4" DI 45° BEND, 40LF-4" C900 PVC, 4" DI 22.5° BEND, ±56LF-4" C900 PVC, 4" DI 45° BEND, 18LF-4" C900 PVC, 4" DI TRANSITION COUPLER CONNECTED TO 4" DI FROM BUILDING.
2. PROVIDE AND INSTALL 4"x6" DI REDUCING TEE, 3LF-4" C900 PVC, 4" GATE VALVE AND BOX, 9LF-4" C900 PVC, 4" DI 45° BEND, 69LF-4" C900 PVC, 4" DI 45° BEND, 49LF-4" C900 PVC, 4" DI TRANSITION COUPLER CONNECTED TO 4" DI FROM BUILDING.
3. PROVIDE AND INSTALL 4"x6" DI REDUCING TEE, 3LF-4" C900 PVC, 4" GATE VALVE AND BOX, 18LF-4" C900 PVC, FIELD BEND, 44LF-4" C900 PVC, 4" DI TRANSITION COUPLER CONNECTED TO 4" DI FROM BUILDING.
4. PROVIDE AND INSTALL 11LF-8" DI BACKWASH PIPING, CONNECT TO BACKWASH TANK.
5. PROVIDE AND INSTALL 17LF-4" DI BACKWASH FORCEMAIN PIPING, 4" DI 45° BEND, 64LF-4" DI BACKWASH FORCEMAIN PIPING.
6. CORE DRILL HOLE IN EXISTING SANITARY MANHOLE FOR 4" FORCEMAIN WITH INVERT EL. = 1336.5. INSTALL FLEXIBLE RUBBER SEAL (BOOT).
7. PROVIDE AND INSTALL 4' WIDE CONCRETE SIDEWALK.
8. PROVIDE AND INSTALL 4" SCH 40 PVC APPROX. 49.5LF @ 2.0% SLOPE
9. CORE DRILL HOLE IN EXISTING SANITARY MANHOLE FOR 4" SANITARY PVC SERVICE WITH INVERT EL. = 1337.00. INSTALL FLEXIBLE RUBBER SEAL (BOOT).
10. 4" C900 FINISHED WATERMAIN
11. 4" C900 RAW WATERMAIN
12. 4" DUCTILE IRON FORCEMAIN PIPE
13. 4" DI PLUG VALVE
14. PROVIDE AND INSTALL 4" SCH 40 PVC APPROX. 48.5LF @ 2.0% SLOPE

N

0 10' 20' 40'
SCALE: 1 INCH = 20 FEET

REVISIONS		
Issue #	Description	Date

Apex Engineering Group
Bismarck - Detroit Lakes - Dickinson - Fargo - St. Cloud
920 McKinley Avenue
Detroit Lakes, Minnesota 56501
Office: 218-844-2580
www.apexenggroup.com

CITY OF UNDERWOOD, MINNESOTA

Apex Project #: 21.215.0146
Date: FEBRUARY 21, 2025
Drawn By: James F. / Scott W.
Checked By: Tim P.
Approved By: Ryan K.

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.
Print Name: Ryan Kotta
Signed: Ryan Kotta
Date: 02/21/25 License Number: 48754

UNDERWOOD, MN
WATER TREATMENT FACILITY

PROPOSED SITE AND UTILITY PLAN - NEW WATER TREATMENT FACILITY

Sheet: 00.C.01

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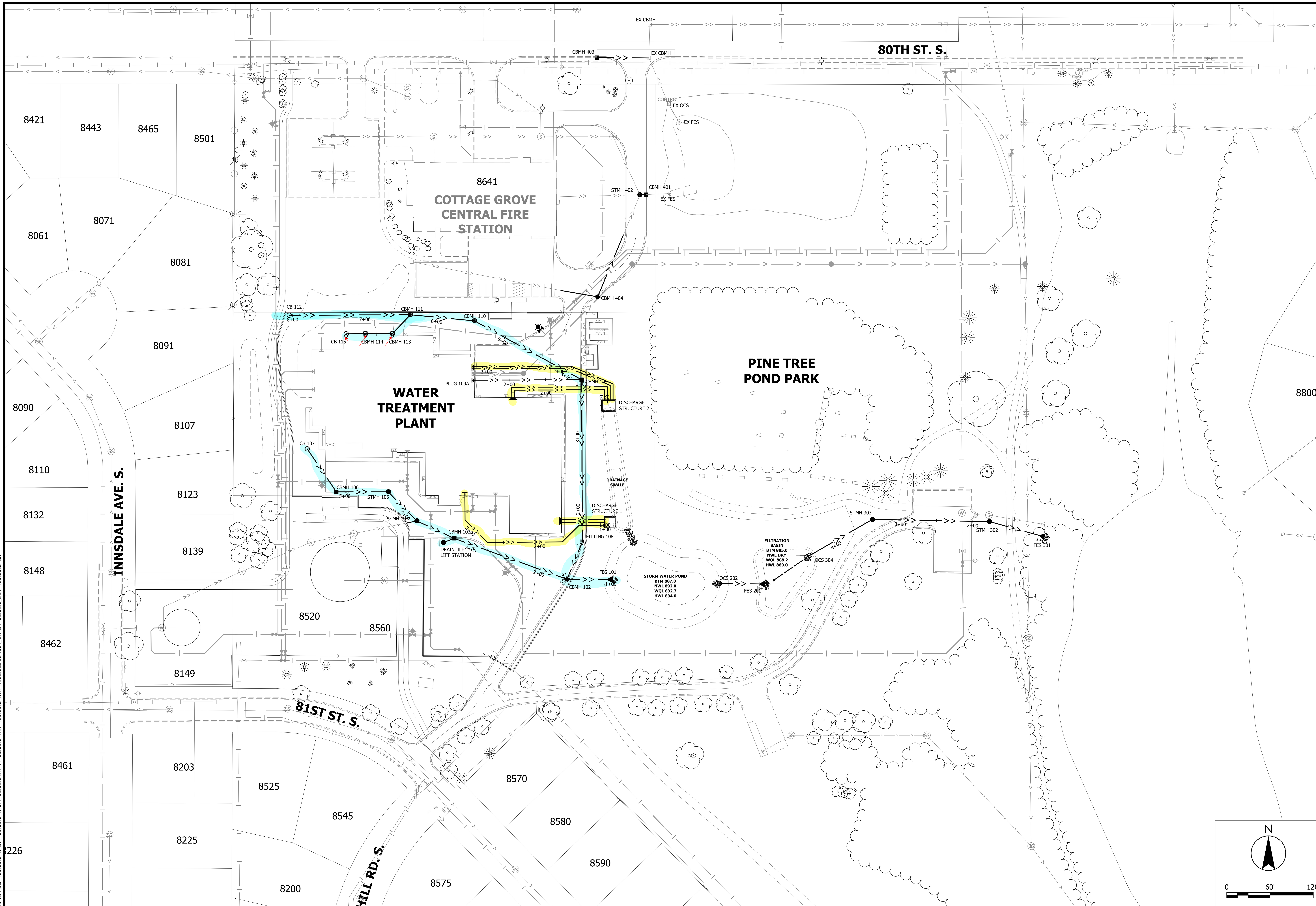

Stantec

733 Marquette Avenue, Suite 1000
Minneapolis, MN 55402
www.stantec.com

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 ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: DAVID S. SANOCKI

SIGNATURE: [signature]

DATE: MARCH 28, 2025 LIC. NO. 40973

CITY OF COTTAGE GROVE, MINNESOTA

INTERMEDIATE ZONE WATER TREATMENT PLANT

DRAINAGE PLAN

NO	REVISION	DATE
1	ADD #4	5/16/25

SURVEY	PBW
DRAWN	EPV
DESIGNED	DRS
CHECKED	LMM
APPROVED	DRS
PROJ. NO.	193805302

SHEET NUMBER
C501

Plot Date: 05/15/2025 - 1:03pm
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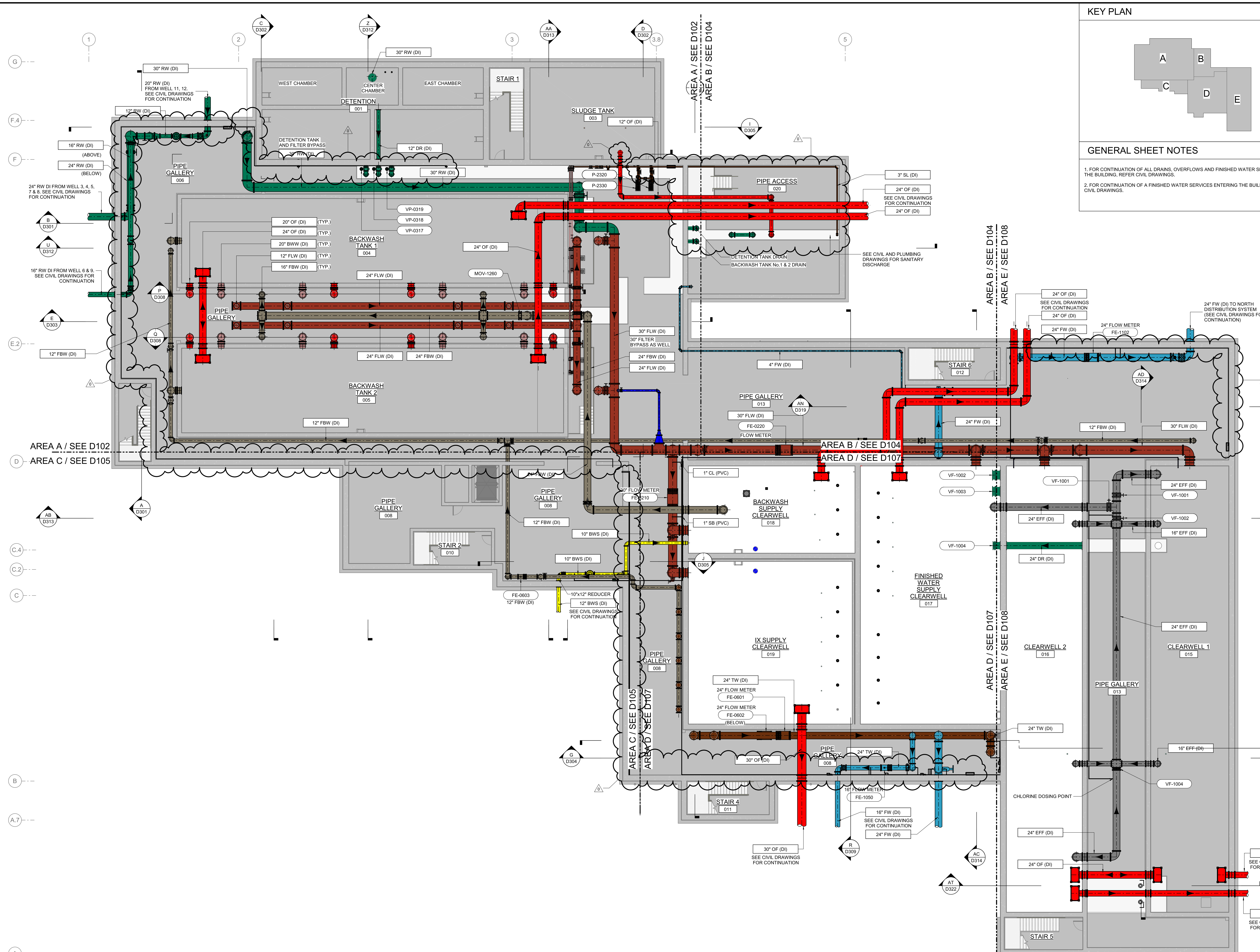

LOWER LEVEL PLAN

SCALE: 3/32" = 1'-0"

0 5'-4" 10'-8" 21'-4"

KEY PLAN

GENERAL SHEET NOTES

1. FOR CONTINUATION OF ALL DRAINS, OVERFLOWS AND FINISHED WATER SERVICES EXITING THE BUILDING, REFER CIVIL DRAWINGS.
2. FOR CONTINUATION OF A FINISHED WATER SERVICES ENTERING THE BUILDING, REFER CIVIL DRAWINGS.

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733 Marquette Avenue, Suite 1000
Minneapolis, MN 55402
www.stantec.com

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

PRINT NAME: RYAN J. CAPELLE

SIGNATURE:

DATE: MARCH 28, 2025 LIC. NO. 43142

CITY OF COTTAGE GROVE, MINNESOTA

INTERMEDIATE ZONE WATER TREATMENT PLANT

OVERALL LOWER LEVEL PLAN

NO.	REVISION	DATE
0	ADD # 1	4/25/25

SURVEY	-
DRAWN	DC
DESIGNED	BL\CS
CHECKED	AH
APPROVED	RC
PROJ. NO.	193805302

SHEET NUMBER
D101

Plot Date: 4/25/2025 11:15:06 AM
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