

Meeting Minutes: Plumbing Board

Date: July 18, 2023
Time: 9:30 a.m.
Minutes by: Lyndy Logan
Location: Minnesota Room, DLI, 443 Lafayette Rd. No., St. Paul, MN 55155

Members

1. Karl Abrahamson
2. Sam Arnold
3. Richard Becker (Chair)
4. Kent Erickson (Secretary)
5. Jonathan Lemke
6. Justin Parizek
7. Bryce Pylkas
8. Scott Stewart
9. Rick Wahlen
10. Mike Westemeier (DLI CO's Designee)
David Weum (MDH CO's Designee) – WebEx
11. Shane Willis – WebEx

Members Absent

Mike Dryke – WebEx
Mike Herman (Vice Chair)

DLI Staff & Visitors

Brittany Wysokinski (Board. Counsel, DLI)
Lyndy Logan (DLI)
Hannah Mardaus (DLI)
Sean O'Neil (DLI)
Brad Jensen (DLI)
Tom Eisert (DLI) – WebEx
Josiah Moore (DLI)
Jessica Stimac (DLI)
George Abernathy (Sambatek) – WebEx
Nick Adam (Rehder & Assoc.) – WebEx
Jonathan Boesche (MN ABC)
Brady Busselman (Sambatek) – WebEx
Nico Cantarero (Stantec) – WebEx

DLI Staff & Visitors continued

Nick Erickson (Housing First)
Dean Gale (Plumbers Local 34)
Sean Gokey (Dodge Nature Center)
Becky Guenther (ISG Inc) – WebEx
Julie Hagstrom (HGA) – WebEx
Jason Haugen (Canterbury Park) – WebEx
Joel Hipp (Hobart) – WebEx
Todd Hubmer (Bolton & Menk Inc) – WebEx
Will Huston (Rice Companies) – WebEx
Rick Jacobs (Plumbers Local 34)
Matthew Julkowski (Mission Const.) – WebEx
Jennifer Levitt (City of Cottage Grove)
Stephanie Menning (MUCA) – WebEx
Amanda Meyer (City of Cottage Grove)
Erik Miller (Sambatek) – WebEx
Pete Moreau (Ads-pipe) – WebEx
Patricia Nauman (Metro Cities) – WebEx
Owen Neubauer (Poul Haas) – WebEx
Jake Newhall (WSB) – WebEx
Tom Pakkala (Plumbers Local 15)
Jim Peterson (MN PHCC)
Tim Ramerth (Widseth) – WebEx
Doug Reeves (Greystone Construction)
Jason Sanders (Dodge Nature Center) – WebEx
Gary Schick (City of Rochester) – WebEx
Dave Sobania (DNR) – WebEx
Fonda Ruth Thompson (My Plumbing Training)
Katy Thompson (Stantec) – WebEx
Scott Thompson (My Plumbing Training)
Gary Thaden (MMCA)
Charlie Wilson (MN Utilities & Excavation) – WebEx

1. Call to Order, Chair

- A. The meeting was called to order by Chair Becker at 9:34 AM. Roll call was taken by the Secretary and a quorum was declared with 9 of 13 voting members – Scott Stewart joined the meeting at 9:40 a.m. resulting in 10 of 13 members present and Bruce Pylkas

joined the meeting at 9:45 a.m. resulting in 11 of 13 members present in person or via WebEx.

- B. Announcements – Introductions (members and attendees) – Chair Becker
- Everyone present in person and remotely are able to hear all discussions.
 - All votes will be taken by roll call if any member is attending remotely.
 - All handouts discussed and WebEx instructions are posted on the Board’s website.
 - WebEx instructions/procedures can be found on the board’s website at:
<https://www.dli.mn.gov/about-department/boards-and-councils/plumbing-board>

2. Approval of meeting agenda

A motion was made by Abrahamson, seconded by Erickson, to approve the agenda as presented. The roll call vote was unanimous with 9 votes in favor; the motion carried.

3. Approval of previous meeting minutes

A motion was made by Arnold, seconded by Wahlen, to approve the Apr. 18, 2023, meeting minutes. The roll call vote was unanimous with 9 votes in favor; the motion carried.

4. Regular Business

Expense reports were approved.

Scott Stewart joined the meeting at 9:40 a.m. resulting in 10 members present in person or via WebEx.

5. Special Business

A. Bylaw Review

- Wysokinski noted that it would generally be helpful if the board secretary would be more involved in drafting minutes due to the technical language discussed.
- Wysokinski said there has been a change in the open appointments law that affects the Construction Codes Advisory Council (CCAC); therefore, going forward, the representative from the Plumbing Board will no longer be a direct appointment and applications will need to be submitted to the Secretary of State (SOS). Logan will follow up with those affected with a link to apply. Appointed members would then choose their alternate from their respective board.

Bruce Pylkas joined the meeting at 9:45 a.m. resulting in 11 members present in person or via WebEx.

B. 2024 UPC update – Chair Becker

- Becker discussed the rulemaking process that led to the adoption of the 2020 Minnesota Plumbing Code. He stated that an ad hoc rulemaking committee had been formed and then those recommendations were brought to the full board for input and approval. The intent during that rulemaking process was to keep the Minnesota amendments that were currently in the code and incorporate them in with the UPC as it stood. The Committee solicited requests from interested parties for suggested changes or amendments to the code. Becker noted a rulemaking process can take 2-3 years.
- Becker stated that the Board can decide to proceed with rulemaking or decide to stay with the current code.

- Wysokinski said that Chair Becker has the authority to create a 2024 UPC Ad hoc Rulemaking Committee and appoint a secretary.

A motion was made by Erickson, seconded by Wahlen, to move forward with the adoption of the 2024 UPC. The roll call vote was unanimous with 11 votes in favor; the motion carried.

- Becker created the 2024 UPC Ad hoc Rulemaking Committee and appointed the following members to serve on the committee: Abrahamson, Becker, Parizek, and Westemeier. Abrahamson volunteered to serve as Secretary for the Committee.

C. Officer nominations and elections

Election of Officers (Meeting turned over to Mike Westemeier, Commissioner's Designee)

1. Chair

Erickson nominated Becker. The roll call vote was unanimous with 11 in favor; the nomination passed – Becker was re-elected as Chair.

2. Vice-Chair

Becker nominated Erickson for Vice-Chair. The roll call vote was unanimous with 11 in favor; the nomination passed – Erickson was elected as Vice-Chair.

3. Secretary

Becker nominated Abrahamson for Secretary. The vote was 11 in favor; the nomination passed – Abrahamson was elected as Secretary.

D. Enforcement & Licensing update – Sean O'Neil – provided handouts – see **Attachment A and he summarized plumbing enforcement actions found [here](#).**

E. Department updates – Mike Westemeier

- Westemeier said the department is very busy and he gave a brief update regarding the number of plumbing plan review applications received.

F. Request for Variance – Dodge Nature Center, Cottage Grove – see **Attachment B**

- Wysokinski explained standards for mandatory and discretionary variances under Minn. Stat. Section 14.055.
- Tom Ward, general contractor for the project, Sean Gokey, site manager at the Dodge Nature Center, and Nick Adam, Rehder & Associates, (attending via WebEx) addressed the Board.
- Per the Petition (**Attachment B**), the petitioner is requesting a variance from Section 310.2 of the 2020 Minnesota Plumbing Code, prohibiting drainage and vent piping from being drilled and tapped for the purpose of making a connection thereto.

- Ward explained that there is only one way in and out of a nearby neighborhood and that the use of a traditional open excavating put would significantly impact residents of the neighborhood. Therefore, they are requesting to be able to directionally drill to make the necessary connection, thereby minimally impacting the residents.
- Adam noted that the City of Cottage Grove is in favor of this variance for safety reasons because it might limit access to the neighborhood for emergency vehicles. Adam confirmed, per a question from Becker, that the variance is requested from manhole #100 to the existing manhole in the street. Gokey further noted that they have an easement with the HOA.
- Per a question from Wahlen, Wysokinski stated the three requirements for a discretionary variance. She advised that this petition may meet those requirements, but that it is ultimately up to the Board to determine whether the requirements are met. In particular, Wysokinski advised the Board to consider what harm the rule is trying to prevent, and whether granting the variance would impact that.
- Becker outline questions he had about the proposed piping, including how the void space resulting from the drilling technique effects the piping and the load rating of the piping given its depth. Becker also asked about the standards and allowable tolerances with this technique. Gokey and Adam stated that they could provide additional information to answer these questions. Charlie Wilson, Minnesota Utilities, also stated that the project site has been tested to see if the directional drilling technique would work and that he can obtain data on the sufficiency of the piping material.
- Board members discussed and raised questions about the specifics of the proposed method, including maintaining the appropriate slope and the connection to the manhole. Wysokinski reminded Board members that the law permitted them to attach conditions to the variance.
- Pylkas asked whether the City of Cottage Grove had asked for a bond, or anything related to the integrity of the street once the project finished drilling underneath it. Jennifer Levitt, Cottage Grove City Administrator, was in attendance and addressed the Board.
- Levitt explained that the city has reviewed the project and found that the proposed directional drilling is how the city does its own directional drilling for its sanitary sewer within the city infrastructure. Levitt explained that the city's greatest concern is that the appropriate grade is maintained and noted that the project has a 3% slope to give an added factor of safety. Levitt stated that the city is in support of this variance, in particular due to the public safety concern.
- Board discussion and questioning continued, including why the decision was made to connect to this particular manhole as well as questions about the ridge created by fusing the pipes.

- Abrahamson stated that he does not think section 310.2 of the Minnesota Plumbing Code is the part of the code that requires the variance, because that section is focused on drilling and tapping physical piping. Becker agreed and pointed out that the actual connection occurs in the street, which would be covered by a utility easement and be outside of the Plumbing Code. Westemeier stated that usually the installation of this pipe would require open cut trenching, so the variance is to do directional drilling instead.
- Pylkas stated that, if this practice is an accepted practice in the public street, it should be sufficient for private property in this case. Becker expressed a desire for additional information. Wahlen stated that, if the site experiences periods of low activity, this might cause a maintenance issue for this pipe.
- Wysokinski stated that the Board could pass a resolution allowing the Chair to request additional information from the petitioner. Per Minn. Stat. Section 14.056, the 60-day time period in which to issue a decision begins when the Board receives a completed petition.
- Board discussed wanting additional information on the specifications for the proposed piping, the load carrying capacity of the pipe material, the proposed joining method, and the directional boring standards.
- Wysokinski clarified that a resolution the Board passed on October 21, 2014, already gives the Chair the authority to request additional information. Therefore, the Board could decide to refer back to that resolution or pass a new one to replace it.
- **A motion was made by Wahlen, seconded by Erickson, to pass the resolution as read by Wysokinski, stating that:**
 - **it is hereby resolved that the plumbing board chair is authorized to take the following actions in connection with a petition for variance submitted to the board under Minnesota Statutes section 14.55:**
 - **(1) require the petitioner to submit additional information in connection with the petition if the chair believes that the petition does not contain all information required by Minnesota Statutes section 14.56, Subd. 1, or if the chair believes that the board needs additional information in order to determine whether to grant or deny the requested variance and,**
 - **(2) require the petitioner to serve notice in the manner determined by the chair on any person or entity who may be affected by the variance. This includes not only persons or entities listed by the petitioner under Minnesota Statutes section 14.56, Subd. 17, but also any other person entity who, in the opinion of the chair, may be affected by the variance and,**
 - **(3) enter into an agreement with the petitioner to extend the 60 day deadline for the board to grant or deny the variance and,**
 - **(4) charge the petitioner a variance fee in accordance with Section 14.56, Subd. 2, including entering into an agreement on the costs and the timing and manner of payment. The roll call vote was unanimous with 11 votes in favor; the motion carried.**

- Per questions from petitioner, Becker explained that, after receiving the additional information, the ultimate approval wouldn't occur until the next Board meeting, but that he intends to hold that meeting as soon as practicable. Ward asked whether the variance could be considered approved, pending the receipt of information. Becker stated that the variance must be approved by the Board at a meeting. After further questioning from petitioner and Westemeier, Becker reiterated that the additional information must be reviewed by the Board as a whole before a decision is reached.
- Ward asked if these clarifications are provided, is there any other reason why we couldn't consider that an approval with providing the information? These are very knowable technical specifications and items that can be handled with special inspections, with the AHJ.
- Westemeier suggested that the Department could review the plan, and everything could be approved up to the manhole, which would let the project start the construction process.

A motion for reconsideration was made by Wahlen, seconded by Westemeier, to reconsider the earlier resolution. The roll call vote was unanimous with 11 votes in favor; the motion carried.

- Wysokinski explained that a resolution was now in writing, which was then shared on the screen for all Board members to review. Wysokinski stated that it would be preferable for the written resolution to be passed, rather than the resolution that was read aloud.

A motion was made by Pylkas, seconded by Stewart, to approve the Resolution, as written below. The roll call vote was unanimous with 11 votes in favor; the motion carried.

A motion was made by Pylkas, seconded by Stewart, to apply the below Resolution to the Dodge Nature Center located in Cottage Grove, Minnesota. The roll call vote was unanimous with 11 votes in favor; the motion carried.

CERTIFICATE OF THE PLUMBING BOARD; AUTHORIZING RESOLUTION

This resolution replaces the resolution passed at the October 21, 2014, meeting. It is hereby resolved that the Plumbing Board Chair is authorized to take the following actions in connection with a petition for a variance submitted to the Board under Minnesota Statutes § 14.055.

1. Require the Petitioner to submit additional information in connection with the Petition if the Chair believes that the Petition does not contain all information required by Minnesota Statutes § 14.056, subdivision 1, or if the Chair believes that the Board needs additional information in order to determine whether to grant or deny the requested variance;

2. Require the Petitioner to serve notice, in the manner determined by the Chair, on any person or entity who may be affected by the variance. This includes not only persons or entities listed by the Petitioner under Minnesota Statutes § 14.056, subdivision 1(7), but also any other person or entity who, in the opinion of the Chair, may be affected by the variance;
3. Enter into an agreement with the Petitioner to extend the 60 day deadline for the Board to grant or deny the variance; and Plumbing Board Meeting Minutes
4. Charge the Petitioner a variance fee in accordance with section 14.056, Subd. 2, including entering into an agreement on the costs and the timing and manner of payment.

G. Request for Variance – Father Hennepin State Park, Isle – see Attachment C

- Dave Sobania, engineer with the DNR, addressed the Board regarding DNR’s petition for variance. Referring to their cover letter (**Attachment C**), Sobania explained that Father Hennepin State Park currently uses septic tanks and gravity flow to a treatment pond and indicated that the pond is an aged system. The Park would like to connect to the City of Isle and is requesting a variance from the Minnesota Plumbing Code prohibition on connecting a septic tank to a public sewer or to a building sewer leading to a public sewer (per **Attachment C**). The Park is requesting to continue to operate with the use of septic tank.
- Sobania explained that the site’s water use varies drastically throughout the week and the year, and removing solids as close to the building as possible is going to prevent any future plugging of the system . Sobania provided a map as part of the petition (**Attachment C**) showing locations for the 7 tank locations they would like to keep, which are at least 1,000 feet from the site’s farthest campground. Sobania also explained that they have cultural and natural resource concerns with having to dig up the lines necessary to comply with the Code.
- Tim Ramerth, City Engineer for City of Isle, stated that the best solution to deal with the site’s aged system is for the site to connect with the city system. Ramerth noted that the system is fully contained within DNR property and that the existing manholes show no advanced deterioration. Therefore, the city has no concerns with leaving the septic systems in place.
- Sobania explained, with questioning from Becker, that discharge from the buildings will flow through the septic tanks and through a lift station, which DNR is replacing, and then it will flow to the city. Originally DNR planned to use directional drilling but have now determined to use open cut installation for the gravity line. Eventually, they plan to submit an alternate design in the future for the piping from the lift station to the city system in order to directionally drill HDPE pipe.
- Becker asked additional questions about the septic tank piping and about tank maintenance. Sobania explained that the tanks have been pumped annually and are considering whether that is the appropriate frequency. Westemeier noted that septic systems are usually regulated by the PCA, and the Plumbing Code stops at the pipe into the septic tank. He asked what the PCA’s role is in this instance.

Shane Willis departed the meeting at 11 a.m. resulting in 10 voting members present in person or via WebEx.

- Ramerth stated that his team did reach out to the Department (DLI) regarding this issue and that DLI has confirmed that its regulations apply to this entire system. Becker requested and received confirmation that the tank was originally under MPCA purview when it was part of system connecting to the pond, but once the system connects to the city then it falls within the purview of the Plumbing Code. The Board then discussed whether the septic system would be acting like a solids interceptor. Erickson expressed concern about the tanks not being inspected by the MPCA and whether DLI has the capacity to inspect the tanks, and how the site will clean the tanks.
- Sobania explained that solids are removed from the system to prevent backup problems and, as a result, the system does not have to be cleaned. If the line does become plugged, driving the required equipment to the site to fix the problem puts the archeological artefacts at risk, and thus avoiding the line plugging up is a priority for the site. Ramerth further stated that the site is within the Mille Lacs Band of Ojibwe reservation, and thus all the work has to go through the appropriate channels and investigations because of the likelihood of artifacts being present.
- The Board then returned to discussing who would have jurisdiction over the septic tanks, MPCA or DLI, and Brad Jensen, Chief Plumbing Inspector, DLI, stated that DLI does not inspect the tanks. Sobania explained that when the system is pumped by a licensed service provider, the provider is required to inspect the tank and provide a report, which the site then sends to the MPCA. If the variance would take the septic tank out of MPCA's purview, the Board then discussed where that report would go.
- Becker compared the tank to an exterior grease trap on a building, which is within the purview of the Plumbing Code. If a grease trap was found to be failing, the Authority Having Jurisdiction (AHJ) would receive that report. For the site at issue here, DLI is the AHJ. Becker asked whether DLI had the means to receive the reports that are generated when the septic tanks are cleaned.

The Board took a brief break and resumed the meeting at 11:32 a.m.

- The Board discussed the variance process and Wysokinski confirmed that the variance is only applicable to this project and that the Board could place a stipulation on the variance.
- The Board discussed the possibility of requiring inspections. Becker stated that he thinks annual inspections would be necessary and that, if the septic tanks eventually fail, then the site would not be able to replace them with new ones. Arnold expressed concern about who would be reviewing the inspections. Wysokinski reminded the Board members that they can attach necessary conditions to protect public health, safety, and the environment.

- Becker suggested that a condition similar to the language regulating flammable waste traps could be used. With respect to flammable waste traps, the operator needs to maintain those records and have them available for review by the AHJ at their discretion and, if the AHJ find that the traps are not being maintained, then the AHJ has the authority to require more frequent inspections.
- Jensen reminded the Board that DLI inspectors are not inspecting the septic tanks.
- The Board further discussed limiting the variance to the existing tanks. The Board and Jensen discussed process that would occur when the tanks fail and how, at that point, the project would return to DLI as the AHJ.
- The Board found that each of the three elements required for a discretionary variance were met:
 - **Application of the rule to the petitioner would result in hardship or injustice:** The Board determined that this element was met, in part due to the cultural sensitivity of the site.
 - **Consistent with Public Interest:** The Board determined that this element was met.
 - **The variance does not prejudice the substantial legal or economic rights of any person or entity:** The Board determined that this element was met.
- Becker stated that the stipulations he would like to see attached to the variance are that annual inspections are performed, and that documentation is maintained and available for inspection by the AHJ.

A motion was made by Pylkas, seconded by Wahlen, to approve the variance with the following stipulations (friendly amendment by Becker was accepted regarding the stipulations): tanks shall be inspected yearly by a 3rd party with inspection and maintenance records following 1017.2.1. of the 2020 MN Plumbing Code with the language “oil and flammable liquid interceptor” replaced with “solids interceptor” and the variance would apply only to the existing tanks. The roll call vote was unanimous with 10 votes in favor; the motion carried.

H. **Construction Codes Advisory Council member/alternate appointments**

- Abrahamson agreed to apply as the representative and Lemke agreed to be the alternate.

6. **Committee Reports**

Construction Codes Advisory Council (CCAC) – Mike Herman (rep) / Richard Becker (alt). The last CCAC meeting was held on June 1, 2023. The presentation can be found at <https://www.dli.mn.gov/sites/default/files/pdf/ccac-060123-presentation.pdf>

7. **Complaints and Correspondence**

- Terence Jamison submitted **Attachment D** regarding backflow prevention inspection.
- Becker read the email aloud and said the board should let Mr. Jamison know that, when it moves into rulemaking, he can submit a request to change the code. Becker commented the unit in this case is likely not a high hazard based on the email, but that there isn't anything for the Board to do at this time.

8. Open Forum

- Jennifer Levitt, City Engineer, City of Cottage Grove, and Amanda Meyer, City Administrator, City of Cottage Grove, addressed the Board (**Attachment E**) regarding the Board's final interpretation involving storm drainage surcharge (PB0159).
- Levitt stated that PB0159 has had significant ramifications and differs from engineering practices and the city's surface water management plan. Levitt described other organizations and agencies that oversee stormwater pond designs. Levitt specifically referenced three building permits that had not been approved due to PB0159, including a water treatment plant. Levitt requested that the Board stay PB0159, conduct more research and analysis on the citation, or clarify the interpretation.
- Becker stated that PB0159 was the first time the Board had interpreted this particular issue and that the underlying provisions had been in the code for a while. Westemeier explained that the code had not been uniformly enforced, which is part of what prompted the submission of the original RFI.
- Wysokinski stated that, as options, the Board had the authority to do a more targeted rulemaking for just this issue, or could rescind the request for the interpretation, although she noted that DLI, as the enforcing agency, could still decide to enforce the code in the same manner as the RFI describes. Wysokinski also stated that the Board could edit or clarify the variance, but it would have to rely on the existing code and could not create a new requirement. The Board discussed the fact that a variance request is also an option.
- Becker suggested that setting up a committee is another option to gather more information.
- A member of the public asked about the Plumbing Board's authority over licensed professional engineers. Wysokinski stated that the provision interpreted in PB0159 is a provision of the Plumbing Code, which the Board has the authority to interpret.
- The Board discussed what qualifies as rulemaking and whether there was a way to interpret the measurements existing in the Plumbing Code to equate to the measurements used on the engineering side.

A motion was made by Wahlen, seconded by Abrahamson, to form an Ad hoc Storm Drainage Surcharge Committee to conduct more research and the following members were appointed Mike Westemeier, Bruce Pylkas, Rick Wahlen, Karl Abrahamson, Richard Becker (Secretary). The roll call vote was unanimous with 10 votes in favor of the motion; the motion passed.

9. Board Discussion

The Board discussed a potential issue with continuing education sessions stating things that are contrary to final interpretations issued by the Board. The Board also discussed that all final interpretations are available online.

10. Announcements

Regularly scheduled meetings occur on the 3rd Tuesday of each quarter at 9:30 a.m., in-person at DLI with WebEx/Phone options

- Oct. 17, 2023
- Jan. 16, 2024

11. Adjournment

A motion was made by Abrahamson, seconded by Erickson, to adjourn the meeting at 12:54 p.m. The roll call vote was unanimous with 10 votes in favor of the motion; the motion passed.

Respectfully submitted,

Karl Abrahamson

Karl Abrahamson
Secretary

Green meeting practices

The State of Minnesota is committed to minimizing in-person environmental impacts by following green meeting practices. DLI is minimizing the environmental impact of its events by following green meeting practices. DLI encourages you to use electronic copies of handouts or to print them on 100% post-consumer processed chlorine-free paper, double-sided.

Contractor fined \$45,000 for failing to complete projects

- A licensed Blaine residential building contractor was found to have breached contracts with several homeowners by failing to complete projects after receiving payments. DLI revoked the contractor's license and assessed a \$45,000 fine.
- A licensed Sleepy Eye residential building contractor was found to have engaged in elevator work without being licensed. The contractor was censured, ordered to cease and desist from performing elevator work and fined \$5,000, which was stayed contingent on future compliance.
- A licensed Chaska electrical contractor failed to comply with supervision requirements. The contractor was censured and fined \$8,000, of which \$5,000 was stayed contingent on future compliance.
- An unlicensed contractor based in Cottage Grove was found to have engaged in unlicensed residential building contractor and plumbing activities. The contractor was ordered to cease and desist from engaging in the unlicensed activity and fined \$10,000, of which \$6,000 was stayed contingent on future compliance.
- An Alabama contractor was found to have engaged in unlicensed electrical work. The contractor was ordered to cease and desist from the unlicensed activity and fined \$5,000, of which \$4,000 was stayed contingent on future compliance.



Enforcement actions

View enforcement and license actions levied against licensees.

More information

View summaries of enforcement actions at dli.mn.gov/workers/homeowners/file-complaint-and-view-enforcement-actions. Contact us at 651-284-5069 or dli.contractor@state.mn.us.



3440 Federal Drive, Suite
110
Eagan, MN 55122
☎ 651-452-5051
✉ info@rehder.com

Technical Memorandum

Date: 6-7-23

To: Mike Westemeier, P.E. – MN Dept. of Labor and Industry

From: Nicholas Adam, P.E. – Rehder & Associates, Inc.

Re: Dodge Nature Center – Variance Request

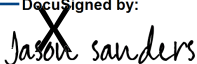
The Dodge Nature Center is requesting a variance from the requirement that drainage or vent piping shall not be drilled and tapped for the purpose of making connections thereto (Mn Plumbing Code Section 310.2). We are requesting that a 203' section of a proposed private sanitary sewer service to the Dodge Nature Center be directionally drilled. There are two reasons for this the Dodge Nature Center believe this justifies a variance:

1. The sanitary sewer service needs to cross through an outlot owned by the residential development HOA and the proposed piping is approximately 18'-22' feet deep where it crosses the outlot. The HOA has expressed that they would not be in favor of an open cut installation due to the amount of landscaping and trees that would have to be removed and thus would not grant an easement to Dodge Nature Center unless the pipe was directionally drilled.
2. Open cut installation for the connection of the sanitary sewer service to the public main in 67th Street Court would require the entire road to be shut down due to the depth of the connection (Approx. 16' deep). The City of Cottage Grove expressed concerns with shutting down the road due to it being the only outlet out of the residential development with approximately 50 homes. Shutting down the road could potentially limit emergency vehicles and residents from accessing or leaving the development while the road is shut down.

If granted, the only person or entity affected by the variance will be the Dodge Nature Center.

The variance is being requested by Dodge Nature Center:

Jason Sanders
Executive Director
365 Marie Avenue West
West St. Paul, MN 55118

DocuSigned by:

52D584965D22404
Jason Sanders
Executive Director

6/9/2023

The accuracy within this variance document is true.

Certificate Of Completion

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Certificate Pages: 4

Initials: 0

Matt Julkowski

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13821 Industrial Park Blvd

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Plymouth, MN 55441

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matt.julkowski@missionconstruction.com

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matt.julkowski@missionconstruction.com

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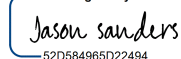
Jason sanders

jsanders@dodgenaturecenter.org

Executive Director

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Signature Adoption: Pre-selected Style

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Signed: 6/9/2023 10:21:38 AM

Electronic Record and Signature Disclosure:

Accepted: 6/9/2023 10:21:25 AM

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If you decide to receive notices and disclosures from us electronically, you may at any time change your mind and tell us that thereafter you want to receive required notices and disclosures only in paper format. How you must inform us of your decision to receive future notices and disclosure in paper format and withdraw your consent to receive notices and disclosures electronically is described below.

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If you elect to receive required notices and disclosures only in paper format, it will slow the speed at which we can complete certain steps in transactions with you and delivering services to you because we will need first to send the required notices or disclosures to you in paper format, and then wait until we receive back from you your acknowledgment of your receipt of such paper notices or disclosures. To indicate to us that you are changing your mind, you must withdraw your consent using the DocuSign "Withdraw Consent"™ form on the signing page of a DocuSign envelope instead of signing it. This will indicate to us that you have withdrawn your consent to receive required notices and disclosures electronically from us and you will no longer be able to use the DocuSign system to receive required notices and consents electronically from us or to sign electronically documents from us.

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You may contact us to let us know of your changes as to how we may contact you electronically, to request paper copies of certain information from us, and to withdraw your prior consent to receive notices and disclosures electronically as follows:

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To advise Mission Construction of your new e-mail address

To let us know of a change in your e-mail address where we should send notices and disclosures electronically to you, you must send an email message to us at amandas@missionconstruction.com and in the body of such request you must state: your previous e-mail address, your new e-mail address. We do not require any other information from you to change your email address..

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- ii. send us an e-mail to amandas@missionconstruction.com and in the body of such request you must state your e-mail, full name, US Postal Address, and telephone number. We do not need any other information from you to withdraw consent.. The consequences of your withdrawing consent for online documents will be that transactions may take a longer time to process..

Required hardware and software

Operating Systems:	Windows® 2000, Windows® XP, Windows Vista®; Mac OS® X
Browsers:	Final release versions of Internet Explorer® 6.0 or above (Windows only); Mozilla Firefox 2.0 or above (Windows and Mac); Safari®, 3.0 or above (Mac only)
PDF Reader:	Acrobat® or similar software may be required to view and print PDF files
Screen Resolution:	800 x 600 minimum
Enabled Security Settings:	Allow per session cookies

** These minimum requirements are subject to change. If these requirements change, you will be asked to re-accept the disclosure. Pre-release (e.g. beta) versions of operating systems and browsers are not supported.

Acknowledging your access and consent to receive materials electronically

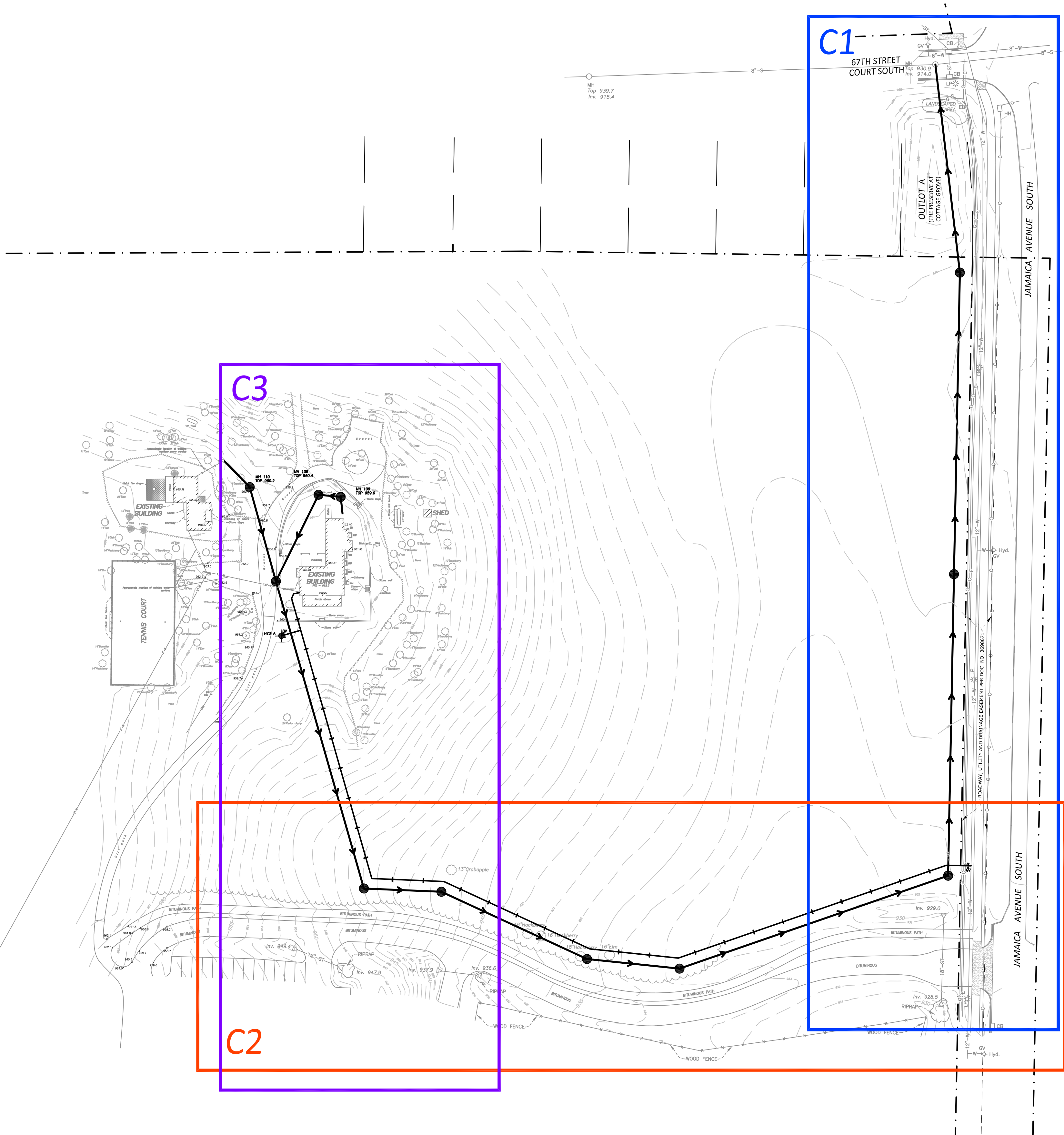
To confirm to us that you can access this information electronically, which will be similar to other electronic notices and disclosures that we will provide to you, please verify that you were able to read this electronic disclosure and that you also were able to print on paper or electronically save this page for your future reference and access or that you were able to e-mail this disclosure and consent to an address where you will be able to print on paper or save it for your future reference and access. Further, if you consent to receiving notices and disclosures exclusively in electronic format on the terms and conditions described above, please let us know by clicking the “I agree”™ button below.

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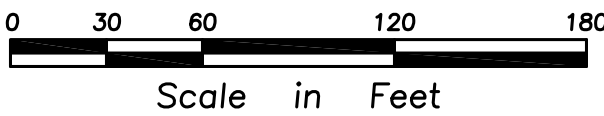
DODGE NATURE CENTER

8946 70th Street S.
Cottage Grove, MN 55016



SHEET INDEX	
TITLE	SHEET NO.
COVER SHEET	C0
SANITARY SEWER PLAN & PROFILE	C1 - C3
DIRECTIONAL DRILLING PLAN	C4
EROSION CONTROL PLAN	C5 - C6
CITY DETAILS	C7 - C8
DETAILS & SPECIFICATIONS	C9
SWPPP	C10

- LEGEND**
- PROPOSED MANHOLE
 - ◆ PROPOSED HYDRANT
 - ◆ PROPOSED GATE VALVE
 - PROPOSED SANITARY SEWER
 - +— PROPOSED WATERMAIN
 - ▨ PROPOSED GRAVEL
 - ▨ PROPOSED BITUMINOUS
 - BOUNDARY/ROW/BLOCK LINE
 - EASEMENT
 - BUILDING/PARKING SETBACK LINE
 - W — EXISTING WATERMAIN
 - S — EXISTING SANITARY SEWER
 - ST — EXISTING STORM SEWER
 - G — EXISTING BURIED GAS LINE
 - E — EXISTING BURIED ELECTRIC LINE
 - C — EXISTING BURIED COMMUNICATION LINE
 - 980 — EXISTING CONTOUR
 - x 995.50 EXISTING ELEVATION



HORIZONTAL DATUM: NAD 83(1986) COORDINATE PROJECTION
FOR WASHINGTON COUNTY, MINNESOTA
VERTICAL DATUM: NAVD 88

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Civil Engineers & Land Surveyors

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Telephone: 651-452-5051
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Nicholas P. Adam Date 6-5-23
Name Nicholas P. Adam Reg. No. 43856

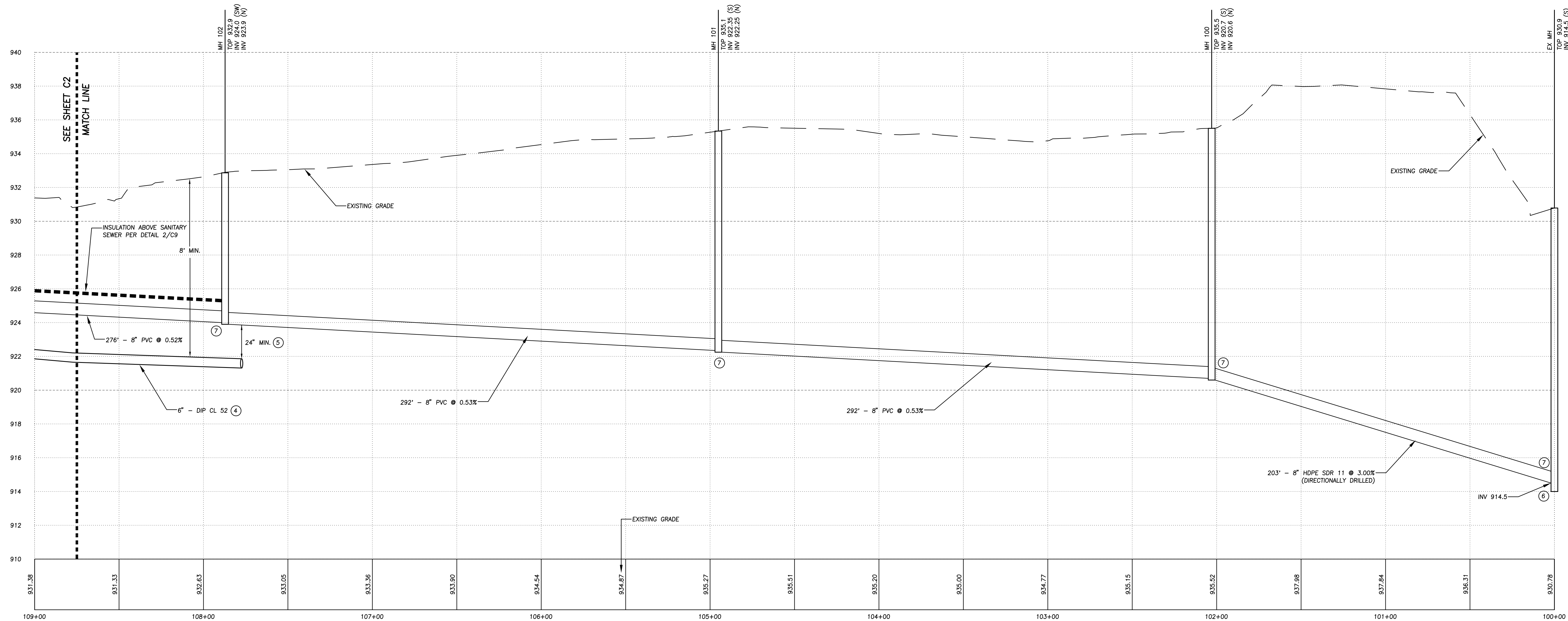
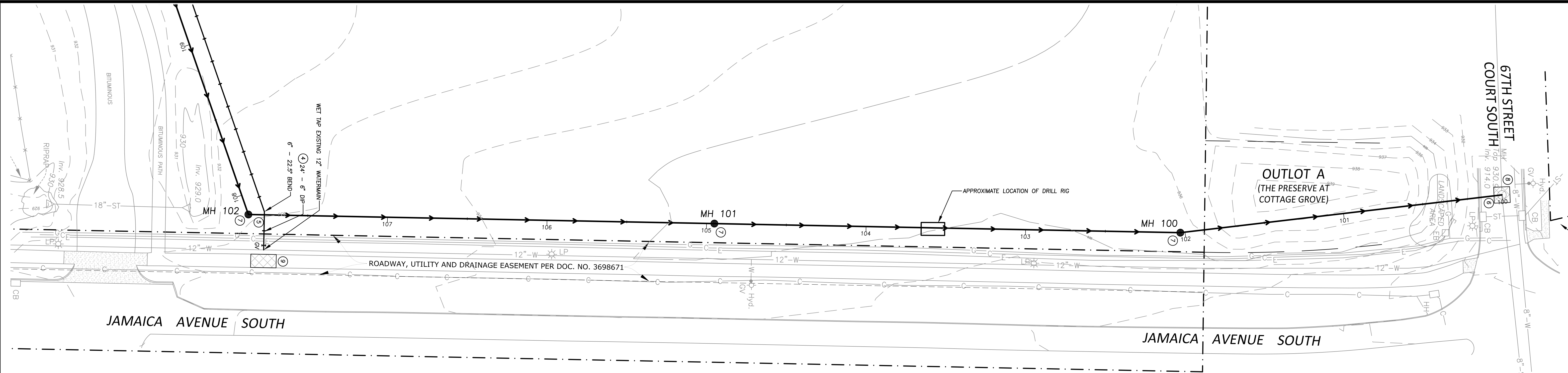
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	6-5-23	
CITY SUBMITTAL		
CITY & DOLI SUBMITTAL		

OVERALL SITE PLAN
DODGE NATURE CENTER
CITY OF COTTAGE GROVE

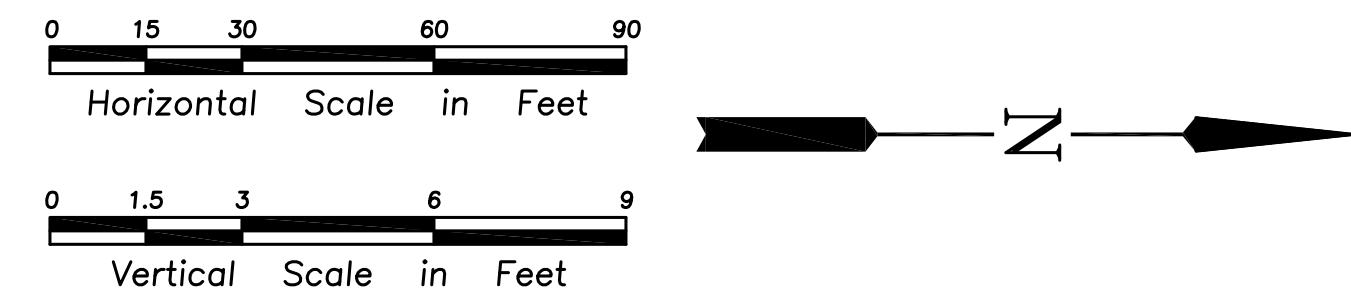
SHEET NUMBER

C0

PROJECT NO.: 221-3267.012 DRAWING FILE: 3267012.DWG



NOTE: SEE SHEET C2 OR C3 FOR UTILITY NOTES



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Michael P. Adam

Date 6-5-23

Name Nicholas P. Adam

Reg. No. 43856

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6-5-23

SANITARY SEWER PLAN & PROFILE

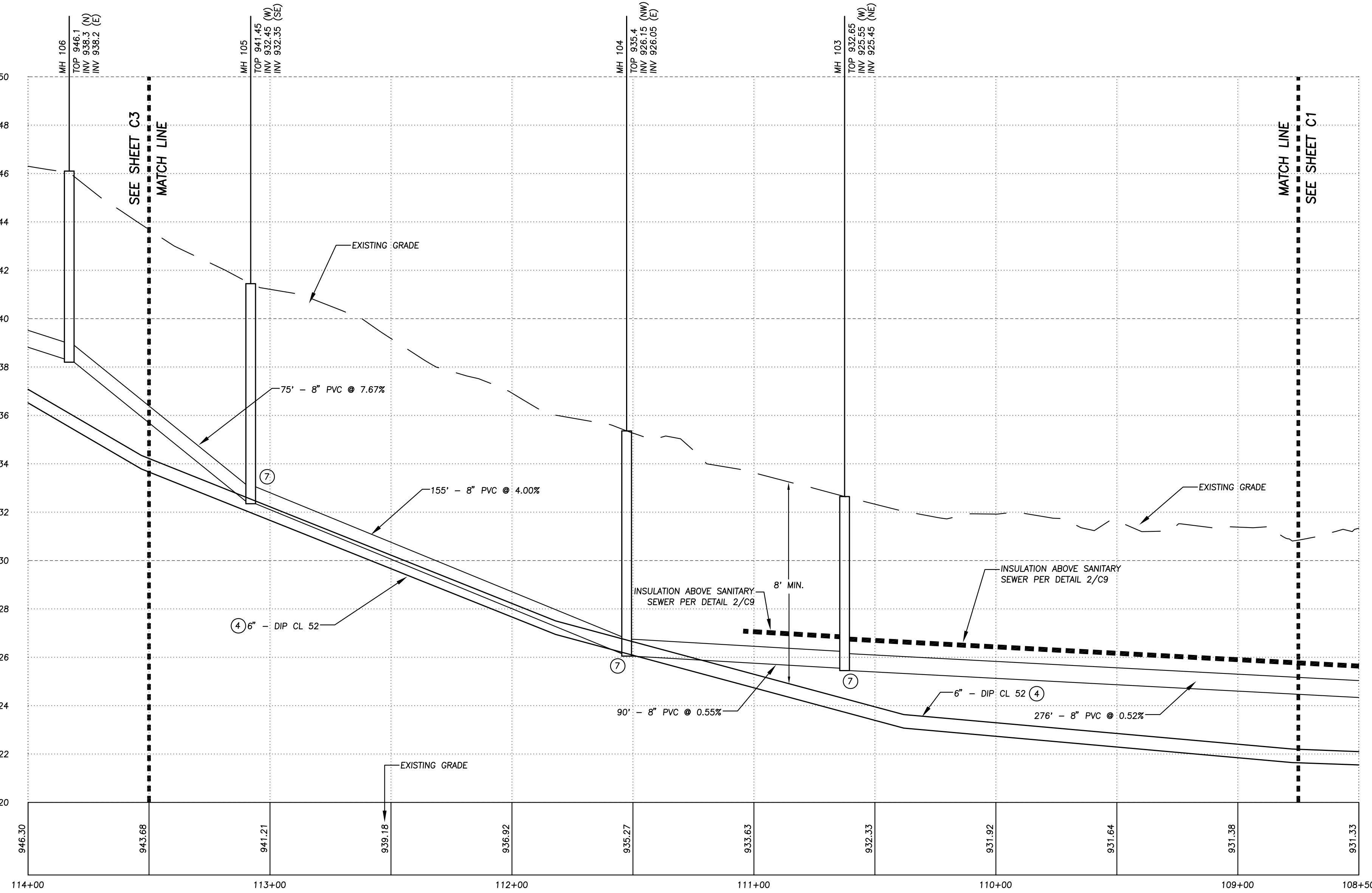
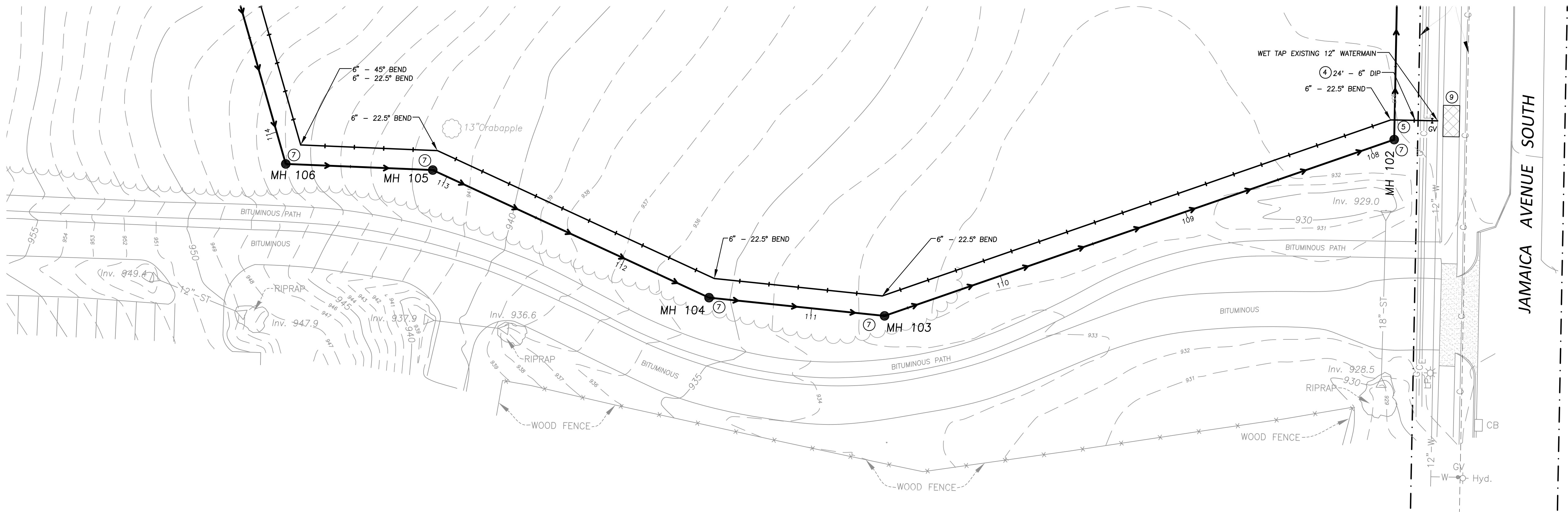
DODGE NATURE CENTER

CITY OF COTTAGE GROVE

SHEET NUMBER

C1

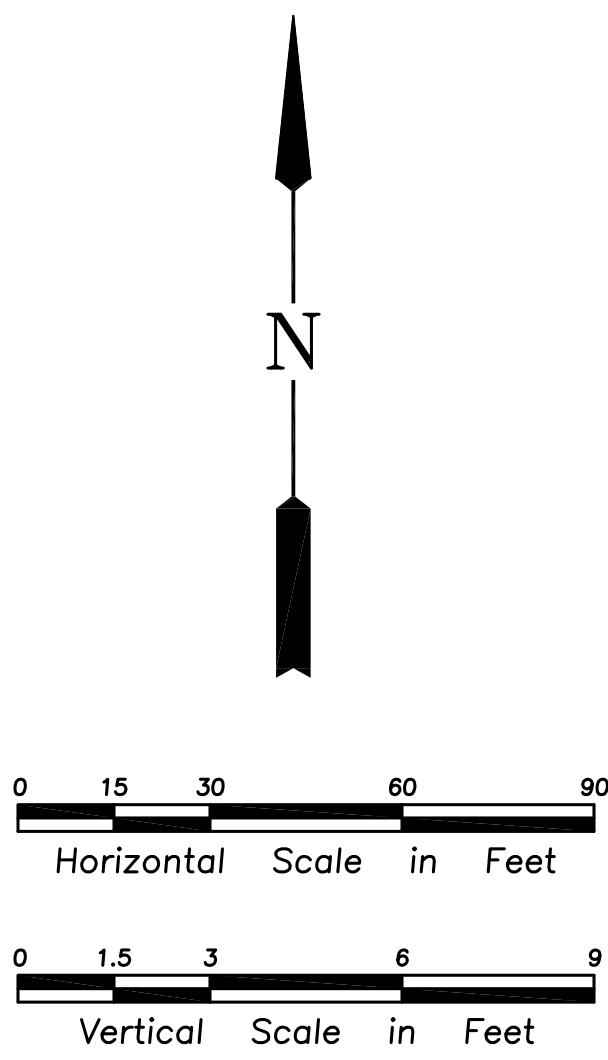
Page 20 of 38



- UTILITY NOTES
- 1 - All sewer services to extend to a point 5' from proposed building.
 - 2 - Bring water main into proposed building and cap at the floor.
 - 3 - Verify all service locations and inverts with mechanical engineer before construction.
 - 4 - All watermain to have a minimum of 8' of cover.
 - 5 - Maintain a minimum of 24" of vertical separation between water main and sewer.
 - 6 - Core through existing sanitary sewer structure and rebuild invert to accommodate proposed service. Repair structure per City standards.
 - 7 - PVC pipe connections into all concrete structures shall be made with water tight materials, utilizing an A-Lok or WaterStop gasket or boot, cast-in-place rubber boot or approved equal.
 - 8 - Remove & replace bituminous pavement within the roadway as required matching the existing pavement section. The minimum roadway pavement section shall be 3.5" of bituminous and 8" of Class 5.
 - 9 - Remove & replace bituminous trail, match existing pavement section. The minimum trail pavement section shall be 3" of bituminous and 6" of Class 5.
 - 10 - Remove/abandon existing 1.5" water service.

LEGEND

- PROPOSED MANHOLE
- PROPOSED GATE VALVE
- PROPOSED SANITARY SEWER
- PROPOSED WATERMAIN
- PROPOSED GRAVEL
- PROPOSED BITUMINOUS
- PROPOSED CONTOUR
- PROPOSED ELEVATION
- SILT FENCE
- INLET PROTECTION DEVICE
- BOUNDARY/ROW/BLOCK LINE
- EASEMENT
- BUILDING/PARKING SETBACK LINE
- EXISTING WATERMAIN
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING BURIED GAS LINE
- EXISTING BURIED ELECTRIC LINE
- EXISTING BURIED COMMUNICATION LINE
- EXISTING CONTOUR
- EXISTING ELEVATION



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Nicholas P. Adam

Date 6-5-23

Name Nicholas P. Adam

Reg. No. 43856

Issued

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CITY SUBMITTAL

6-5-23
CITY & DOL SUBMITTAL

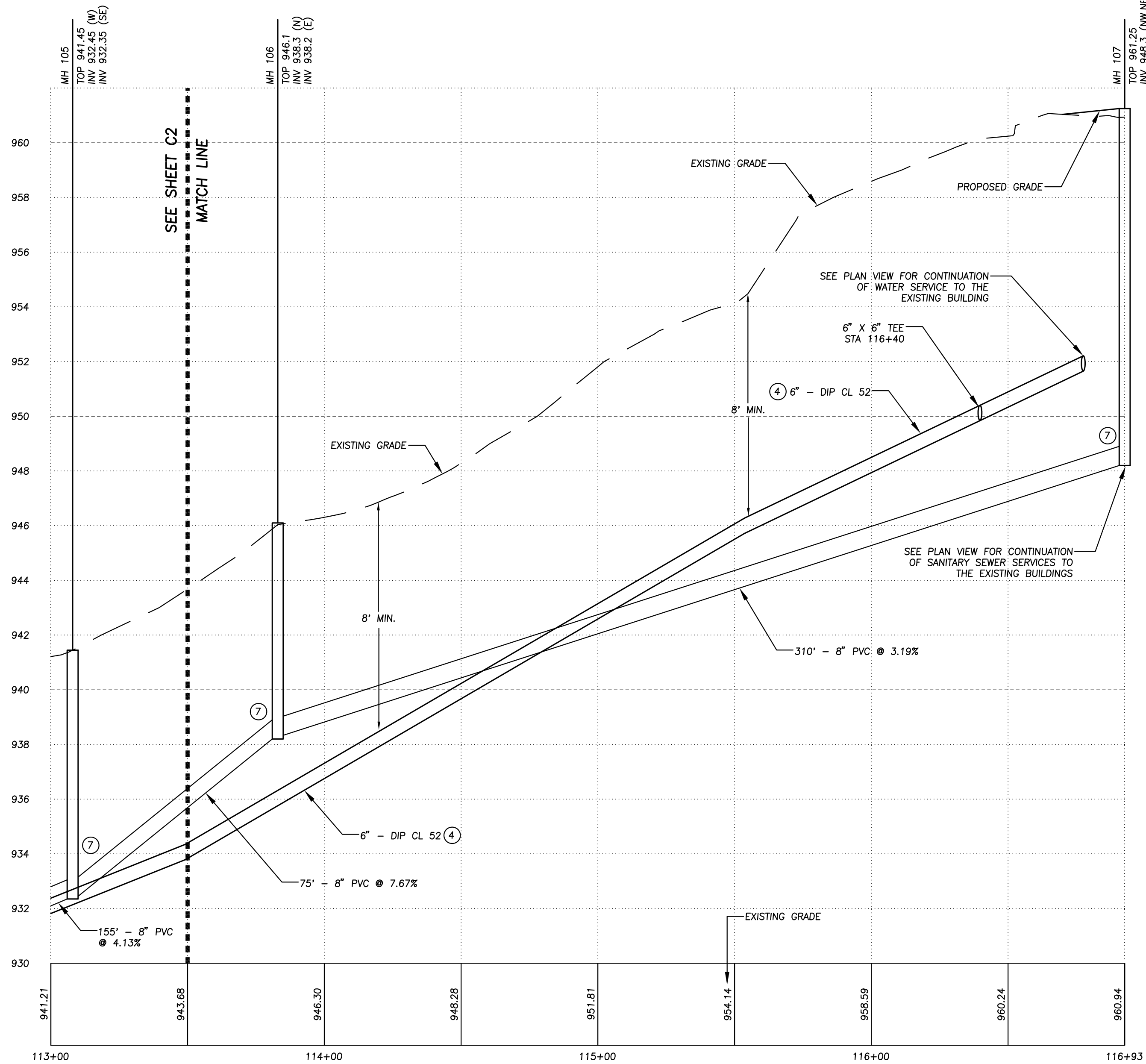
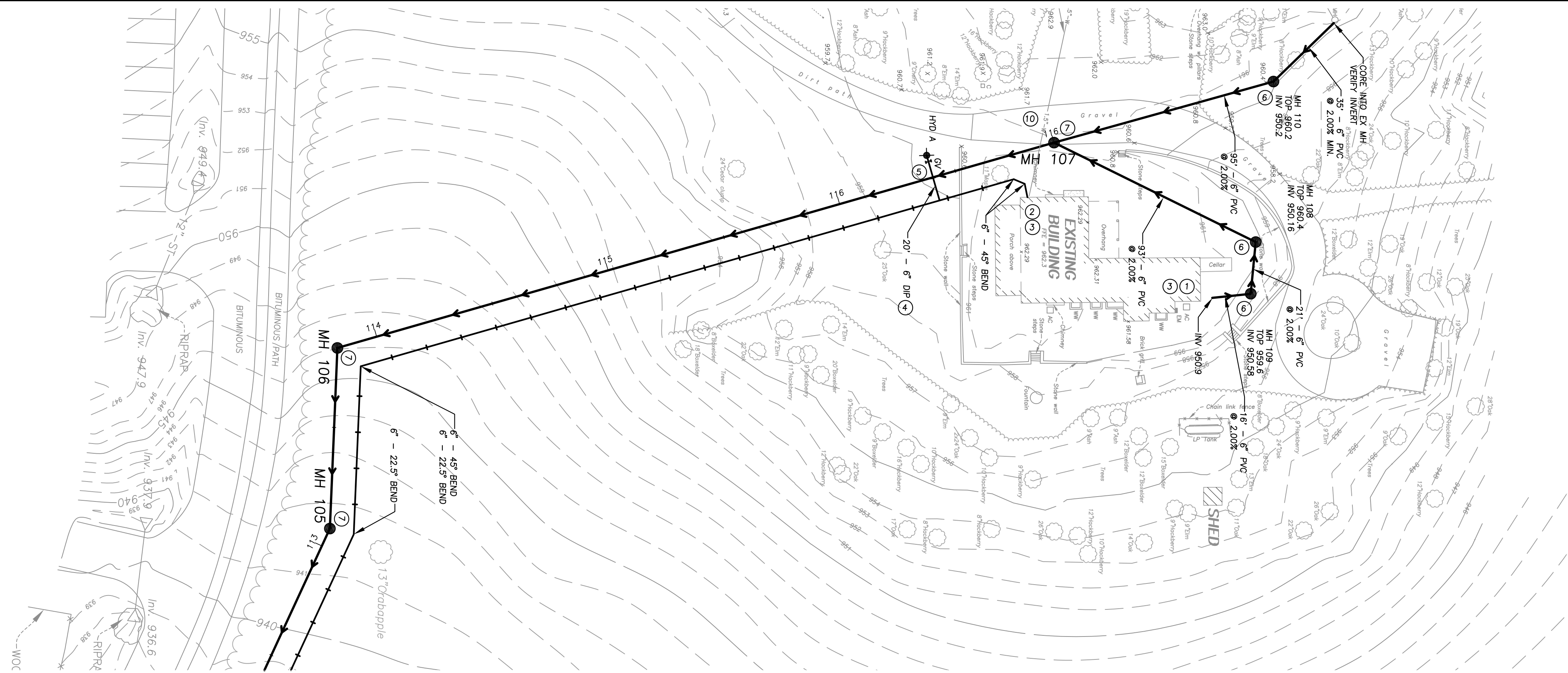
SANITARY SEWER PLAN & PROFILE

DODGE NATURE CENTER

CITY OF COTTAGE GROVE

SHEET NUMBER

C2



- UTILITY NOTES**
- ① - All sewer services to extend to a point 5' from proposed building.
 - ② - Bring water main into proposed building and cap at the floor.
 - ③ - Verify all service locations and inverts with mechanical engineer before construction.
 - ④ - All watermain to have a minimum of 8' of cover.
 - ⑤ - Maintain a minimum of 24" of vertical separation between water main and sewer.
 - ⑥ - Core into existing sanitary sewer structure and rebuild invert to accommodate proposed service.
 - ⑦ - PVC pipe connections into all concrete structures shall be made with water tight materials, utilizing an A-Lok or WaterStop gasket or boot, cast-in-place rubber boot or approved equal.
 - ⑧ - Remove & replace bituminous pavement within the roadway, match existing pavement section. The minimum roadway pavement section shall be 3.5" of bituminous and 8" of Class 5.
 - ⑨ - Remove & replace bituminous trail, match existing pavement section. The minimum trail pavement section shall be 3" of bituminous and 6" of Class 5.
 - ⑩ - Remove/abandon existing 1.5" water service.

CATCH BASIN/MANHOLE SCHEDULE		
STRUCTURE NO.	BARREL SIZE	NEENAH CASTING NO.
MH 101	48"	R-1642B
MH 102	48"	R-1642B
MH 103	48"	R-1642B
MH 104	48"	R-1642B
MH 105	48"	R-1642B
MH 106	48"	R-1642B
MH 107	48"	R-1642B
MH 108	48"	R-1642B
MH 109	48"	R-1642B
MH 110	48"	R-1642B

LEGEND

- PROPOSED MANHOLE
- ⋯ PROPOSED GATE VALVE
- PROPOSED SANITARY SEWER
- PROPOSED WATERMAIN
- ▨ PROPOSED GRAVEL
- ▨ PROPOSED BITUMINOUS
- PROPOSED CONTOUR
- PROPOSED ELEVATION
- SILT FENCE
- ⊙ INLET PROTECTION DEVICE
- BOUNDARY/ROW/BLOCK LINE
- EASEMENT
- BUILDING/PARKING SETBACK LINE
- W — EXISTING WATERMAIN
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- ST — EXISTING STORM SEWER
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- E — EXISTING BURIED ELECTRIC LINE
- C — EXISTING BURIED COMMUNICATION LINE
- 980— EXISTING CONTOUR
- x 995.50 EXISTING ELEVATION

Scale

Horizontal Scale in Feet: 0, 15, 30, 60, 90

Vertical Scale in Feet: 0, 1.5, 3, 6, 9

North Arrow

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Name Nicholas P. Adam Date 6-5-23
Reg. No. 43855

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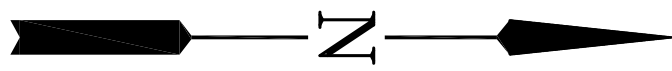
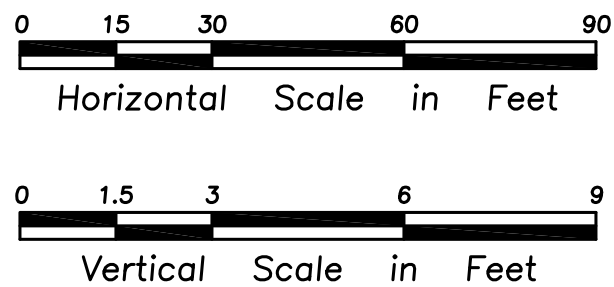
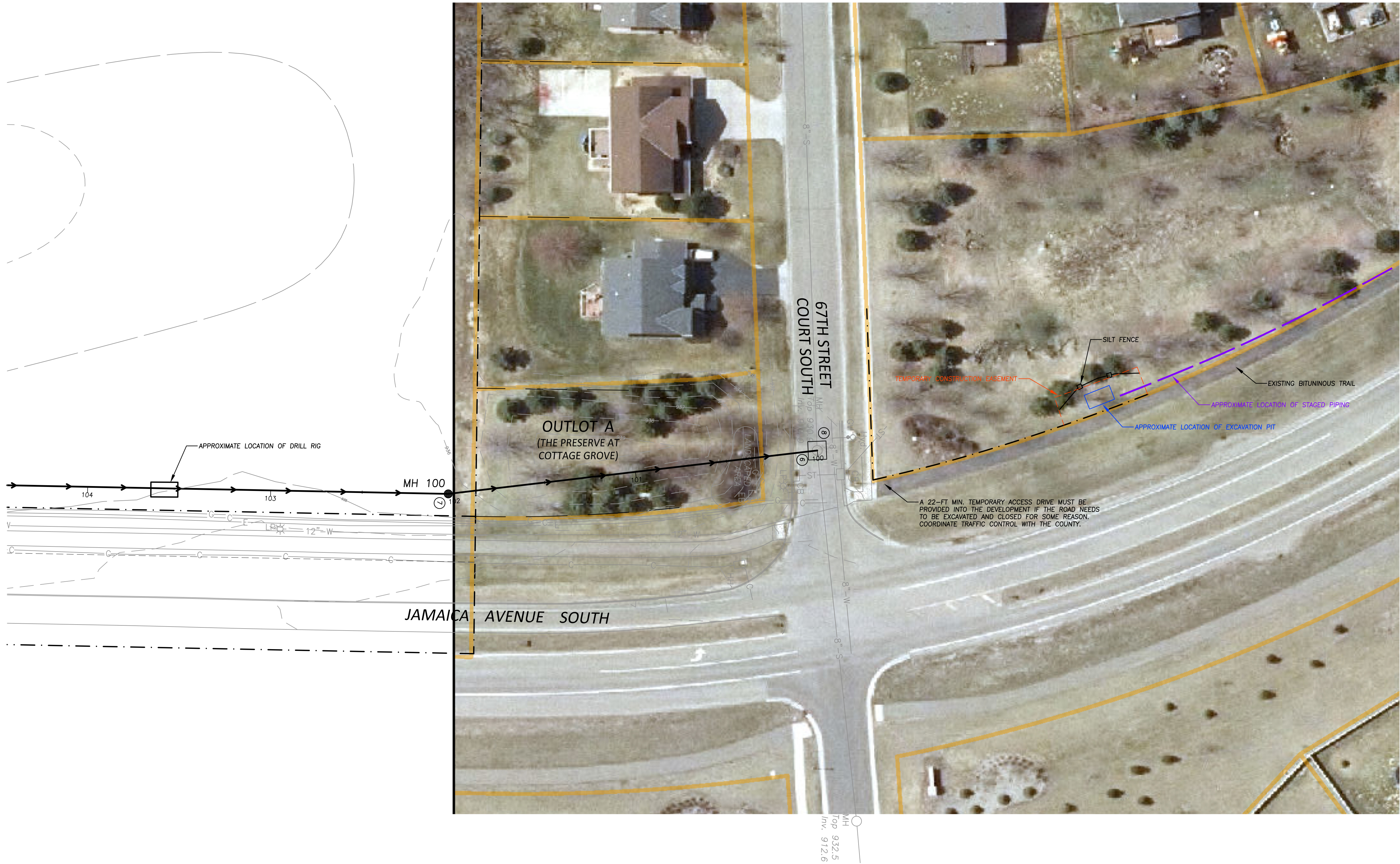
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SANITARY SEWER PLAN & PROFILE
DODGE NATURE CENTER
CITY OF COTTAGE GROVE

SHEET NUMBER

C3



DIRECTIONAL DRILLING PLAN
DODGE NATURE CENTER
CITY OF COTTAGE GROVE

SHEET NUMBER
C4

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Name Nicholas P. Adam Date 6-5-23
Reg. No. 43856

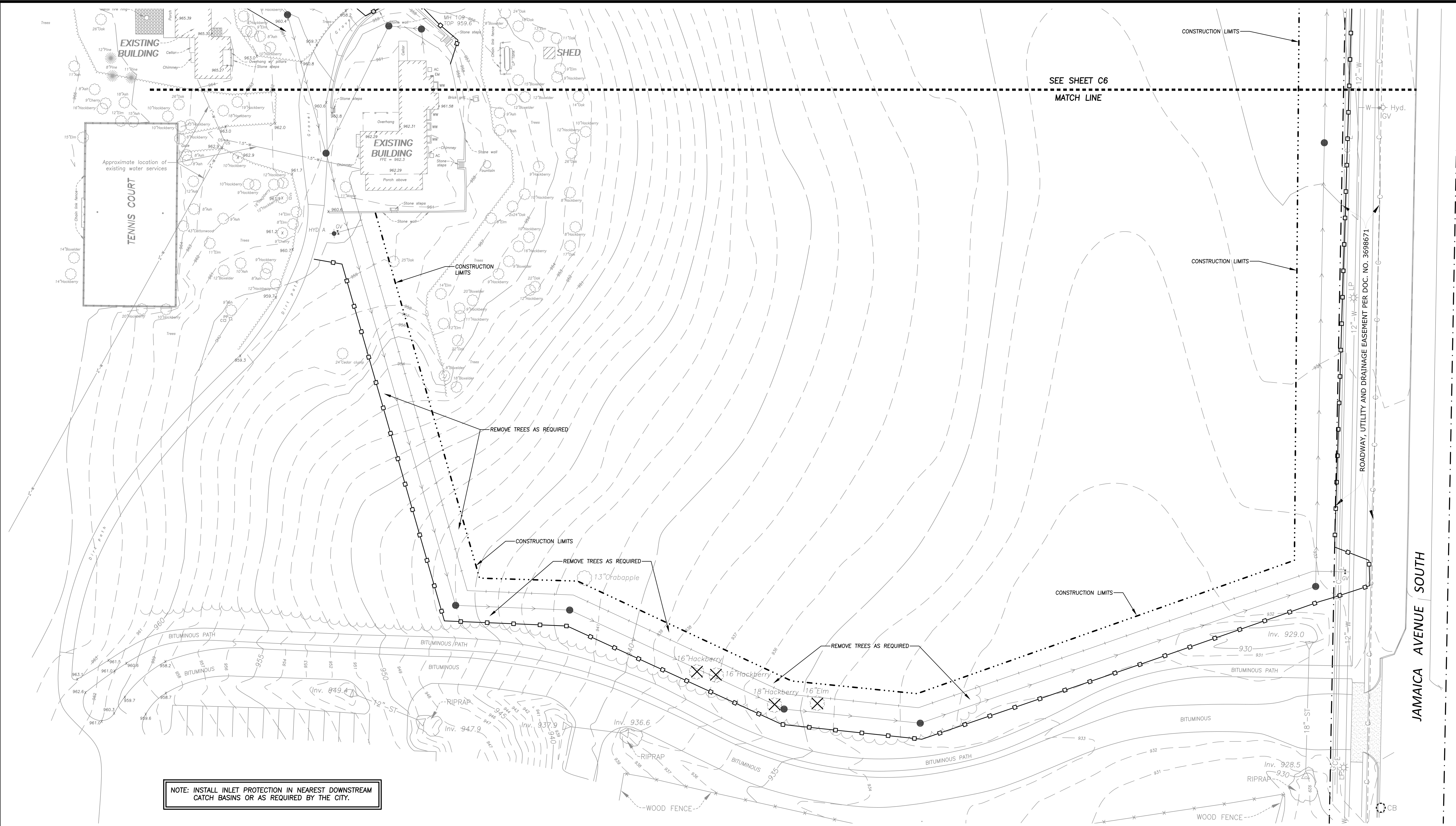
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NOTE: INSTALL INLET PROTECTION IN NEAREST DOWNSTREAM CATCH BASINS OR AS REQUIRED BY THE CITY.

EROSION CONTROL NOTES

- Contractor is responsible for all notifications and inspections required by General Storm Water Permit.
- All erosion control measures shown shall be installed prior to grading operations and maintained until all areas disturbed have been restored.
- Sweep paved public streets as necessary where construction sediment has been deposited.
- Each area disturbed by construction shall be restored per the specifications within 14 days after the construction activity in that portion of the site has temporarily or permanently ceased.
- Temporary soil stockpiles must have silt fence around them and cannot be placed in surface waters, including storm water conveyances such as curb and gutter systems, or conduits and ditches.
- The normal wetted perimeter of any temporary or permanent drainage ditch or swale that drains water from any portion of the construction site, or diverts water around the site, must be stabilized within 200 lineal feet from the property edge, or from the point of discharge into any surface water. Stabilization of the last 200 lineal feet must be completed within 24 hours after connecting to a surface water.
- Excess concrete/water from concrete trucks shall be disposed of in portable washout concrete basin or disposed of in a contained area.
- Spring/Summer temporary turf establishment: seed shall be MNDOT Mixture 110 @ 100 lbs/acre and mulch shall be MNDOT Type 1.
Winter temporary turf establishment: seed shall be MNDOT Mixture 100 @ 100 lbs/acre and mulch shall be MNDOT Type 1.
- Permanent turf establishment: seed shall be MNDOT Mixture 25-131 @ 220 lbs/acre, fertilizer shall be 10-10-10 (NPK) commercial grade, and mulch shall be MNDOT Type 1.

INSPECTION AND MAINTENANCE

- The site must be inspected once every seven (7) days during active construction and within 24 hours after a rainfall event greater than 0.5 inches in 24 hours.
- All inspections and maintenance conducted must be recorded in writing and records retained with the SWPPP.
- Areas of the site that have undergone final stabilization, may have the inspection of these areas reduced to once per month.
- All silt fence must be repaired, replaced, or supplemented within 24 hours when they become nonfunctional or the sediment reaches 1/3 of the height of the fence.
- Surface waters and conveyance systems must be inspected for evidence of sediment being deposited. Removal and stabilization must take place within seven (7) days of discovery unless precluded by legal, regulatory, or physical access constraints.
- Construction site vehicle exit locations must have sediment removed from off-site paved surfaces within 24 hours of discovery.

POLLUTION PREVENTION MANAGEMENT

- All solid waste must be disposed of off-site per the MPCA disposal requirements.
- All hazardous waste must be properly stored with restricted access to storage areas to prevent vandalism. Storage and disposal of hazardous waste must be in compliance with MPCA Regulations.

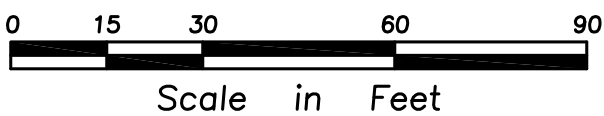
SITE SUMMARY

SITE AREA = 55.6 ACRES
DISTURBED AREA = 1.30 ACRES
(NO ADDITIONAL IMPERVIOUS AREA)

- PROPOSED MANHOLE
- PROPOSED HYDRANT
- PROPOSED GATE VALVE
- PROPOSED SANITARY SEWER
- PROPOSED WATERMAIN
- PROPOSED GRAVEL
- PROPOSED BITUMINOUS
- PROPOSED CONTOUR
- PROPOSED ELEVATION
- SILT FENCE
- INLET PROTECTION DEVICE
- PROPOSED EC BLANKET CATEGORY 20 (MNDOT 3885)

LEGEND

- TREE TO BE REMOVED
- BOUNDARY/ROW/BLOCK LINE
- CONSTRUCTION LIMITS
- EASEMENT
- BUILDING/PARKING SETBACK LINE
- EXISTING WATERMAIN
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING BURIED GAS LINE
- EXISTING BURIED ELECTRIC LINE
- EXISTING BURIED COMMUNICATION LINE
- EXISTING CONTOUR
- EXISTING ELEVATION



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Nicholas P. Adam Date 6-5-23
Name Nicholas P. Adam Reg. No. 43856

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EROSION CONTROL PLAN
DODGE NATURE CENTER
CITY OF COTTAGE GROVE

SHEET NUMBER
C5

LEGEND

- PROPOSED MANHOLE

⊕

PROPOSED HYDRANT

⋯

PROPOSED GATE VALVE

—+—

PROPOSED SANITARY SEWER

—+—

PROPOSED WATERMAIN

12"CB

PROPOSED GRAVEL
- 12"CB
- PROPOSED BITUMINOUS

1050

1023.54

□

SILT FENCE

○

INLET PROTECTION DEVICE

XXXX

BOUNDARY/ROW/BLOCK LINE

CONSTRUCTION LIMITS

EASEMENT

BUILDING/PARKING SETBACK LINE

W

EXISTING WATERMAIN

S

EXISTING SANITARY SEWER

ST

EXISTING STORM SEWER

G

EXISTING BURIED GAS LINE

E

EXISTING BURIED ELECTRIC LINE

C

EXISTING BURIED COMMUNICATION LINE

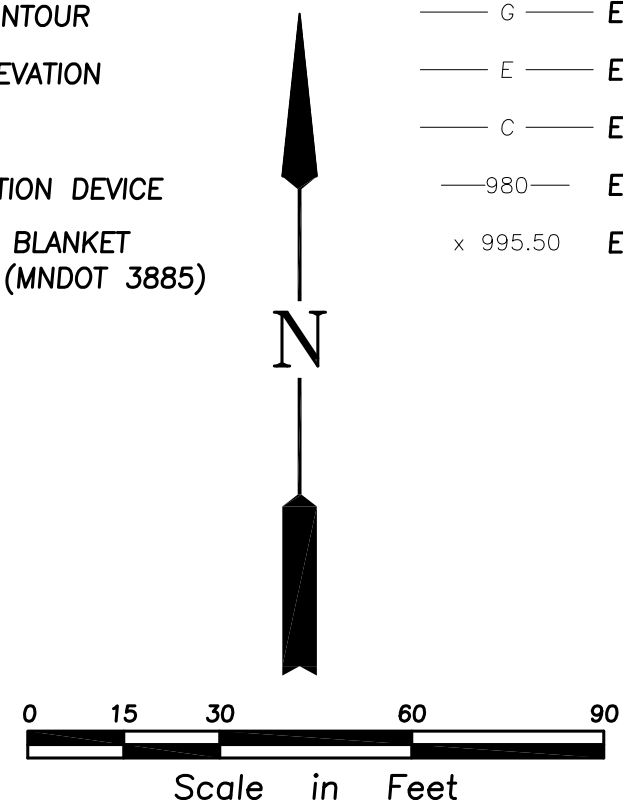
980

EXISTING CONTOUR

x 995.50

EXISTING ELEVATION

NOTE: INSTALL INLET PROTECTION IN NEAREST DOWNSTREAM CATCH BASINS OR AS REQUIRED BY THE CITY.

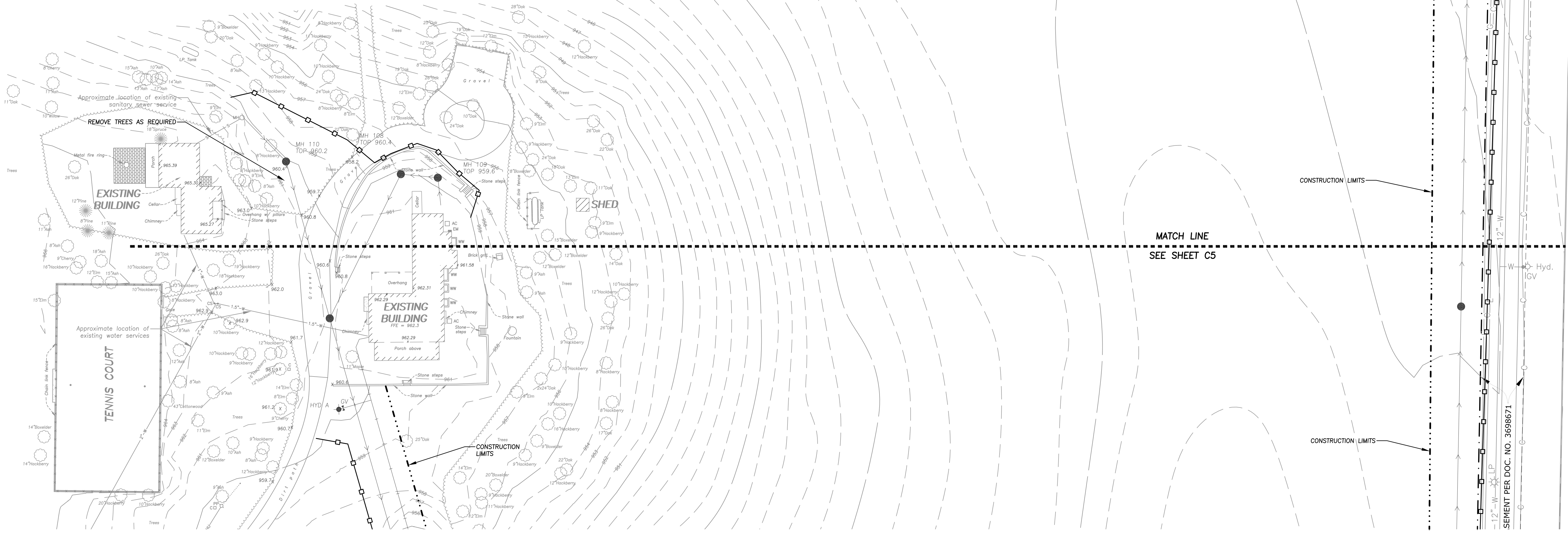


MH
Top 939.7
Inv. 915.4

67TH STREET
COURT SOUTH

OUTLOT A
(THE PRESERVE AT
COTTAGE GROVE)

JAMAICA AVENUE SOUTH



MATCH LINE
SEE SHEET C5

SEMENT PER DOC. NO. 3698671

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Nicholas P. Adam

Date 6-5-23

Reg. No. 43856

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EROSION CONTROL PLAN
DODGE NATURE CENTER
CITY OF COTTAGE GROVE

SHEET NUMBER

C6

Page 25 of 38

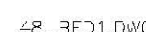
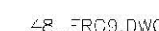
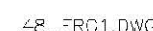
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Name Nicholas P. Adam Date 6-5-23
Reg. No. 43856

CITY & DOLI SUBMITTAL

CITY DETAILS
DODGE NATURE CENTER
CITY OF COTTAGE GROVE

C7





STANDARD DETAILS

HYDRANT DETAIL

COTTAGE GROVE, MINNESOTA

JANUARY 2023

PLATE NO.
WAT-1

48_WAT1.DWG



STANDARD DETAILS

GATE VALVE AND BOX

COTTAGE GROVE, MINNESOTA

JANUARY 2023

PLATE NO.
WAT-3

48_WATZ.DWG



STANDARD DETAILS

WATER MAIN WET TAP

COTTAGE GROVE, MINNESOTA

JANUARY 2023

PLATE NO.
WAT-5

48_WAT.DWG

NOTES:
1. SHAPE VARY AS FIRM UN
2. DIMEN LARGE E
EQUAL T
3. DIMEN AS LARG
INTERFE
4. 0 = 4
5. PLACE CONCRE

BUTTRESS DIMENSIONS

PIPE SIZE	22 1/2° BEND		45° BEND		90° BEND	
	B ₁	D ₁	B ₂	D ₂	B ₃	D ₃
6"	--	--	--	--	2'-3"	1'-6"
8"	--	--	--	--	2'-8"	2'-0"
12"	1'-10"	1'-10"	3'-4"	2'-0"	4'-9"	2'-6"
16"	3'-0"	2'-0"	3'-10"	3'-0"	6'-2"	3'-6"
20"	3'-6"	2'-8"	5'-6"	3'-4"	8'-4"	4'-0"
24"	4'-4"	3'-0"	6'-10"	3'-10"	9'-8"	5'-0"
30"	--	--	9'-3"	6'-0"	17'-0"	6'-0"



STANDARD DETAILS

CONCRETE THRUST BLOCKING

COTTAGE GROVE, MINNESOTA

JANUARY 2023

PLATE NO.
WAT-6

48_WAT6.DWG



STANDARD DETAILS

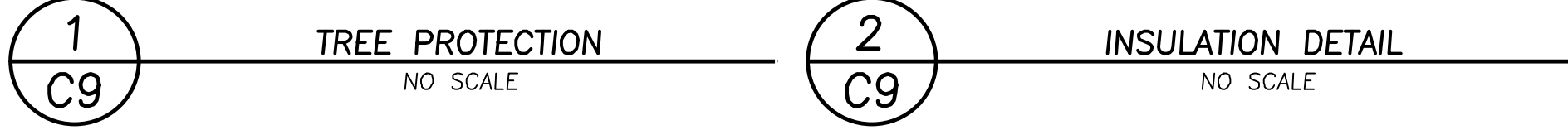
WATER MAIN OFFSET

COTTAGE GROVE, MINNESOTA

JANUARY 2023

PLATE NO.
WAT-7

48_WAT7 DWG



GENERAL

I. GENERAL

- ## SITE CLEARING

I. GENERAL

- A. Remove trees, shrubs, grass, and other vegetation or obstructions, as required, to permit installation of improvements shown on the Plans.
- II. EXECUTION
- A. Trees and stumps shall be hauled from the site. Burial on-site or burning of trees and stumps will not be allowed.
- B. Where existing trees are indicated to remain, leave existing topiary in place within drip lines to prevent damage to root system.
- C. Topsoil shall be stripped from disturbed areas and stockpiled in piles not exceeding 8-feet in depth.
- D. Remove all back dirt and unsuitable material from under drives and roadways within 3-feet of final pavement subgrade.
- E. Remove all waste materials and unsuitable or excess topsoil from Owner's property.

II. EXECUTION

A. Trees and shrubs

- B. Where existing trees are indicated to remain, leave existing topsoil in place within drip lines to prevent damage to root system.
- C. Topsoil shall be stripped from disturbed areas and stockpiled in piles not exceeding 8-feet in depth.
- D. Remove all back dirt and unsuitable material from under drives and roadways within 3-feet of final pavement subgrade.
- E. Remove all waste materials and unsuitable or excess topsoil from Owner's property.

GRADING, EROSION CONTROL, AND TURF ESTABLISHMENT

I. GENERAL

- A. All grading, erosion control and turf establishment shall be according to the materials, workmanship, and other applicable requirements of the Minnesota Department of Transportation "Standard Specifications for Construction", latest edition, unless otherwise specified.
 - B. All erosion control measures shown on the plans must be installed prior to commencement of grading operations and maintained until all areas affected on the site have been restored.
 - C. All areas disturbed by construction shall be restored with seed and disked mulch, sod, wood fiber blanket, or be hard surfaced within two weeks of substantial completion of construction.
 - D. Provide approved borrow soil materials from off-site when sufficient approved soil materials are not available from excavations. Remove all excess and unsatisfactory material from the site.
 - E. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.
 - F. Compaction shall not be less than the following percentages of maximum dry density according to ASTM D 698:
 - i. Under structures, building slabs, steps, and pavements, compact the top 12 inches below subgrade and each layer of backfill or fill material at 100 percent maximum dry density.
 - ii. Under walkways, compact the top 6 inches below subgrade and each layer of backfill or fill material at 100 percent maximum dry density.
 - iii. Under lawn or unpaved areas, compact the top 6 inches below subgrade and each layer of backfill or fill material at 95 percent maximum dry density.
 - G. Grades as shown on the plan are to finished grade.
 - H. Backfill trenches involving utilities under building slabs to be designed by Others (per their requirements).
- II. PRODUCTS**
- A. Satisfactory soils include ASTM D 2487 soil classification groups GP, GF, GM, SW, SP, and SM; free of rock or gravel larger than 2-inches in any dimension, debris waste, frozen materials, vegetation and other deleterious material.
 - B. Unsatisfactory soils include ASTM D 2487 soil classification groups GC, SC, ML, MH, CL, CH, OL, OH, and PT.
 - C. All backfill and fill materials must be satisfactory soil materials.
 - D. Topsoil shall be per ASTM D 5268, free of stones 1" or larger.
 - E. Subbase and base material must be a naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand meeting MNDOT Specifications for Class 5 gravel.
 - F. Spring/Summer temporary establishment: seed shall be MNDOT Mixture 110 @ 100 lbs/acre and mulch shall be MNDOT Type 1.
 - G. Fall/Winter temporary establishment: seed shall be MNDOT Mixture 110 @ 100 lbs/acre and mulch shall be MNDOT Type 1.
 - H. Commercial turf establishment: seed shall be MNDOT Mixture 25-131 @ 220 lbs/acre, fertilizer shall be 10-10-10 (NPK) commercial grade, and mulch shall be MNDOT Type 1.

III. EXECUTION

- A. Fill under buildings shall be compacted to meet Soil Engineer's recommendations.
- B. Place 4-inches of topsoil over all areas to be re-established with turf.
- C. Provide erosion control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and waterways.
- D. Place inlet protection devices in catch basins and maintain until all areas disturbed have been restored.
- E. Wherever construction vehicle access routes intersect paved public roads, provisions must be made to minimize the transport of sediment (mud) by runoff or vehicles tracking onto the paved road surface. Where sediment is transported onto a public road surface, the roads shall be cleaned thoroughly at the end of each day. Sediment shall be removed by shoveling or sweeping and be transported to a sediment controlled disposal area. Street washing shall be allowed only after sediment is removed in this manner.

BITUMINOUS PAVEMENT

E. GENERAL

- A. Provide hot-mix asphalt pavement according to the materials, workmanship, and other applicable requirements of the Minnesota Department of Transportation "Standard Specifications for Construction", latest edition, unless otherwise specified
- B. Conform to applicable standards of authorities having jurisdiction for asphalt paving work on public property.
- II. PRODUCTS**
- A. Use course and fine aggregate materials and gradations that have performed satisfactorily in previous installations.
- B. Provide a base and wear course as indicated on the plan unless otherwise specified.
- C. Provide a tack coat as indicated on the plan unless otherwise specified.
- III. EXECUTION**
- A. Verify that the subgrade is dry and in suitable condition to support paving and imposed loads.
- B. The Contractor shall furnish a tandem truck loaded with a minimum of 14-tons to check the completed subgrade and/or aggregate base for soft spots prior to placement.
- C. Machine place hot-mix asphalt on prepared surface, spread uniformly, and strike off. Place asphalt mix by hand to areas inaccessible to equipment in a manner that prevents segregation of mix. Place each course to required grade, cross section, and thickness, when compacted.
- D. Begin compaction as soon as placed hot-mix paving will bear roller weight without excessive displacement.
- E. Provide an average density of 96 percent of reference laboratory density according to ASTM D 1559, but not less than 94 percent nor greater than 100 percent
- F. Tolerances: Base course thickness shall be plus or minus 0.5-inches and surface course shall be plus or minus 0.25-inches.

SANITARY SEWER

I. GENERAL

- A. Sanitary sewer shall comply with all local regulations pertaining to sanitary sewer systems including materials, installation, and testing. If no regulations exist, comply with "Standard Utilities Specifications" by the City Engineers Association of Minnesota, latest edition.
- B. Do not pursue Work causing shut off of utility services (gas, water, electric, telephone, TV, etc.) to consumers until the utility owner is contacted and all consumers are notified of the shut-off schedule.
- C. Submit shop drawings for all manholes, including reinforcing, joints, pipe connections and castings.
- II. PRODUCTS
- A. Sanitary sewer pipe and fittings shall be made of compounds conforming to ASTM D1784 in accordance with the material requirements of ASTM D 3034.
- B. Sanitary sewer pipe shall be integral bell gasketed joint and a minimum wall thickness conforming to SDR 35.
- C. Joints shall be push-on type only with the bell-end grooved to receive a gasket.
- D. Elastomeric Seal (Gasket): A basic polymer of synthetic rubber conforming to ASTM F477, natural rubber gaskets will not be accepted.
- E. Marking: Each pipe shall be identified with the name of the manufacturer, or trademark and code, nominal pipe size in inches, the PVC cell classification, and "Specification D 3034".
- F. Sanitary sewer manholes shall be precast structures with at least two and at the most five adjusting rings.
- G. Sanitary sewer castings indicated on the plan shall be from the Neenah Foundry or approved equal.
- H. Rubber gasketed joints shall form a watertight seal conforming to ASTM C443.
- I. All manhole shall be fabricated with pipe opening consisting of a rubber bell and stainless steel band in accordance with ASTM C923 to seal off the joint from allowing dirt, ground water, or other objectionable material from entering. These materials shall be installed with the fabrication on all manholes.

III. EXECUTION

- A. The plans indicate the general location and arrangement of underground sanitary sewer systems. Location and arrangement of piping likely into account many design considerations. Install piping as indicated on the plans, to the extent practical.
- B. Construct underground sewer pipe, using only vinyl connections at the building the architectural and mechanical plans.
- C. PVC sewer pipe shall be installed in accordance with ASTM D 2321, "Recommended Practice for Underground Installation of Flexible Thermoplastic Sewer Pipes."
- D. Sanitary sewer services shall be extended to within 5-feet of the building. Plug ends and mark by installing a 2" x 2" wood board from the plugged end to 4 feet out of the ground.
- E. Connection to existing structure at location shown on the Drawings. Core drill opening in the structure, and install a rubber boot on the manhole pipe to the connection of pipe. Make the structure required due to the Work performed. If necessary, reconstruct the inter to accommodate new flow location.

WATER MAIN

I. GENERAL

- A. Water main shall comply with all local regulations pertaining to water main systems including materials, installation, and testing. If no local regulations exist, comply with "Standard Utilities Specifications" by the City Engineers Association of Minnesota, latest edition.
- II. PRODUCTS**
- A. Water main, indicated on the plan as DIP, shall be ductile iron pipe, Class 52, with push on joints and shall provide electrical conductivity across each joint.
- B. All fittings shall be mechanical joint fittings.
- C. Hydrants and valves shall meet all local and municipality requirements.
- D. PE encasement for DIP shall be AWWA C105, PE film, 0.008-inch minimum thickness, tube or sheet.
- III. EXECUTION**
- A. The plans indicate the general location and arrangement of underground water main systems. Indicated locations and arrangement were used to size pipe and calculate friction loss, expansion, pump sizing, and other design considerations. Install piping as indicated, to the extent practical.
- B. Bury of water main with a depth of cover of at least 7.5-feet or with the top at least 12-inches below frost penetration, whichever is greater.
- C. Water main shall be encased in PE film
- D. All bends, stubs, and hydrants shall be radded to the water main using 0.75-inch tie rods.
- E. The water main with size and in location as indicated according to the requirements of the local water utility. The Contractor and pay water utility fee.
- F. Test all installed piping as required by the local water utility.

HORIZONTAL DIRECTIONAL DRILLING

1. GENERAL

- A. Horizontal directional drilling procedures shall comply with all local regulations. If no local regulations exist, comply with "Standard Utilities Specifications" by the City Engineers Association of Minnesota, latest edition.
- B. This section contains guidelines and specifications applicable to the installation of pipelines using horizontal directional drilling (HDD). It includes minimum requirements for design, materials and equipment used for the horizontal directional drilling for the substantial lines construction of pipelines. The section also includes materials, dimensions and other pertinent properties of pipe and required accessories. These properties provide minimum performance requirements for various components including joints.
- C. Specifications on material to be used shall be submitted to Engineer and material shall include the pipe, fittings, drilling mud, drilling additives and any other item, which is to be an installed component of the project or used during construction.
- II. PRODUCT
- A. Pipe and fittings shall be 8" HDPE (SDR 11) or as necessary to meet the requirements of the City or Agency having jurisdiction over the project.
- B. Joints shall butt fusion per ASTM F2620.
- C. The directed drilling machine shall consist of a hydraulically powered system to rotate, push and pull hollow drill pipe into the ground at variable angles under 30 degrees above horizontal, while delivering a pressurized fluid mixture to a guideable drill (bore) head. The machine shall have a capacity to adequately complete the drilling and piping installation. The machine shall be anchored to the ground to withstand the pulling, pushing and rotating pressure required to complete the crossing. The hydraulic power system shall be self-contained with sufficient pressure and volume to power drilling operations. Hydraulic system shall be free of leaks. Rigs shall have a system to monitor the maximum pull-back pressure during the pull-back operation. The rig shall be grounded during drilling and pull-back operations. There shall be a system to detect electrical current from the drill string and an audible alarm, which will sound if an electrical current is detected.
- D. The following shall be given: end, and pull (traction) and push (pressure) surfaces and drilling fluid jets.

E. Guidance

- gyroscopic probe and interface shall be used to provide a continuous and accurate determination of the location of the drill head during the drilling operation. The guidance shall be capable of tracking at the maximum depth required and in any soil condition, including those which are highly heterogeneous or contain large boulders. The tool face shall be able to track in any plane (horizontal direction), and inclination (vertical direction). The guidance system shall be accurate to $\pm 2\%$ of the vertical depth of the borehole at sensing position at depths up to one hundred feet and accurate within 1.5 meters horizontally.
- Drilling fluid system shall be a self-contained, closed, drilling fluid mixing system of sufficient size to mix and deliver drilling fluid to the bit. It shall be designed to handle all types of soils and rock formations, including those containing hard mineral grains, berrillite particles from the dry powder to avoid clumping and ensure thorough mixing. The drilling fluid reservoir tank shall be a minimum of 500 gallons. Mixing system shall continually agitate the drilling fluid during drilling operations.
- Additives shall include bentonite, foam, and other additives as needed to enhance the drilling process. No fuel shall be used. No diesel fuel shall be used.

III. EXECUTION

- A. The drawings show existing utilities that are believed to be near the directional drill alignment. There is no guarantee that these utilities are located as shown or that the other utilities may not be present. The Contractor is to field locate existing utilities in advance of the work and to mark them with paint.
- B. Entire drill path shall be accurately surveyed using entry and exit stakes placed in the appropriate locations within the areas indicated on drawings. If Contractor is using a magnetic guidance system, drill path shall be surveyed for any surface geomagnetic variations or anomalies.
- C. Pipe lengths shall be connected together in one length, if space permits. Pipe shall be placed on pipe rollers before pulling into bore hole with rollers spaced close enough to prevent excessive sagging of pipe.
- D. Pilot hole shall be drilled on bore path with no deviations greater than 5% of depth over a length of 100'. In the event that pilot does deviate from bore path more than 5% of depth in 100', Contractor shall notify Owner and Owner may require Contractor to pull back and re-drill from the location along bore path before the deviation.
- E. Upon completion of the pilot hole, Contractor shall increase the pull rate to a minimum of 25% greater than outside diameter of pipe for straight pulls and 50% greater for curved or radius pulls using the appropriate tools. Contractor shall have the option to pre-ream or ream and pull back pipe in one operation if conditions allow. Contractor shall not attempt to ream at one time more than the drilling equipment and mud system are designed to safely handle.
- F. After the hole is reamed, Contractor shall pull the pipe through the bore hole. In front of the pipe shall be a swell. Once pull-back operations have commenced, operations must continue without interruption until pipe is completely pulled into bore hole. During pull-back operations Contractor shall not apply more than the maximum safe pull force of any time. In the event that pipe becomes stuck, Contractor shall notify Owner, Owner, Contractor, and/or the maintaining agency shall discuss options and then work shall proceed accordingly.
- G. In the event that Contractor encounters any of the following conditions or circumstances, Contractor shall cease operations and shall discuss corrective options with Owner and/or maintaining agency, then work shall proceed accordingly:
 1. Excessive pipe resistance
 2. Excessive pipe deflection
 3. Excessive pipe vibration
 4. Excessive pipe rotation
 5. Excessive pipe sag
 6. Excessive pipe wear
 7. Excessive pipe breakage
 8. Excessive pipe leakage
 9. Excessive pipe deformation
 10. Excessive pipe damage
 11. Excessive pipe loss
 12. Excessive pipe loss of material
 13. Excessive pipe loss of strength
 14. Excessive pipe loss of integrity
 15. Excessive pipe loss of function
 16. Excessive pipe loss of performance
 17. Excessive pipe loss of quality
 18. Excessive pipe loss of quantity
 19. Excessive pipe loss of value
 20. Excessive pipe loss of utility
 21. Excessive pipe loss of use
 22. Excessive pipe loss of service
 23. Excessive pipe loss of support
 24. Excessive pipe loss of protection
 25. Excessive pipe loss of maintenance
 26. Excessive pipe loss of repair
 27. Excessive pipe loss of replacement
 28. Excessive pipe loss of removal
 29. Excessive pipe loss of disposal
 30. Excessive pipe loss of destruction
 31. Excessive pipe loss of annihilation
 32. Excessive pipe loss of obliteration
 33. Excessive pipe loss of erasure
 34. Excessive pipe loss of deletion
 35. Excessive pipe loss of destruction
 36. Excessive pipe loss of annihilation
 37. Excessive pipe loss of obliteration
 38. Excessive pipe loss of erasure
 39. Excessive pipe loss of deletion
 40. Excessive pipe loss of destruction
 41. Excessive pipe loss of annihilation
 42. Excessive pipe loss of obliteration
 43. Excessive pipe loss of erasure
 44. Excessive pipe loss of deletion
 45. Excessive pipe loss of destruction
 46. Excessive pipe loss of annihilation
 47. Excessive pipe loss of obliteration
 48. Excessive pipe loss of erasure
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 61. Excessive pipe loss of annihilation
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 66. Excessive pipe loss of annihilation
 67. Excessive pipe loss of obliteration
 68. Excessive pipe loss of erasure
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 78. Excessive pipe loss of erasure
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 83. Excessive pipe loss of erasure
 84. Excessive pipe loss of deletion
 85. Excessive pipe loss of destruction
 86. Excessive pipe loss of annihilation
 87. Excessive pipe loss of obliteration
 88. Excessive pipe loss of erasure
 89. Excessive pipe loss of deletion
 90. Excessive pipe loss of destruction
 91. Excessive pipe loss of annihilation
 92. Excessive pipe loss of obliteration
 93. Excessive pipe loss of erasure
 94. Excessive pipe loss of deletion
 95. Excessive pipe loss of destruction
 96. Excessive pipe loss of annihilation
 97. Excessive pipe loss of obliteration
 98. Excessive pipe loss of erasure
 99. Excessive pipe loss of deletion
 100. Excessive pipe loss of destruction
- H. The Contractor shall be responsible for the proper assembly of all pipe and appurtenances in accordance with the Manufacturers written installation procedure and as supplemented by these guidelines. Prior to joint assembly all joints and joint components shall be thoroughly inspected for damage and defects. In the event of any damage or defects, the Contractor shall be responsible for the assembly of the type of flexible restrained joint being used. If it shall be the responsibility of the Contractor to contact a factory-trained representative for recommendations on the proper and efficient installation of the joint.
- I. Following successful pullback of pipe, Contractor shall hydro-test pipe.
- J. After successful hydro testing, Contractor shall remove the pipe and restore the work-site to original condition. Any and all noticeable surface defects, due to the drilling operation, shall be repaired by the Contractor.

I hereby certify that this plan 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.

Issued	
CITY & DOLI SUBMITTAL	6-5-23

DETAILS & SPECIFICATIONS
DODGE NATURE CENTER
CITY OF COTTAGE GROVE

SHEET NUMBER

C9

SWPPP NOTES

1. THE NATURE OF THIS PROJECT WILL CONSIST OF CONSTRUCTING A SANITARY SEWER SERVICE AND WATER MAIN SERVICE.
2. THE INTENDED SEQUENCING OF MAJOR CONSTRUCTION ACTIVITIES ARE AS FOLLOWS:

2.1. INSTALL VEHICLE TRACKING BMP.

2.2. INSTALL SILT FENCE & INLET PROTECTION AROUND SITE.

2.3. CLEAR AND GRUB SITE.

2.4. STRIP AND STOCKPILE TOPSOIL.

2.5. REMOVE PAVEMENTS AND UTILITIES.

2.6. IMPORT CLEAN FILL OR EXPORT CUT FOR SITE BALANCE.

2.7. INSTALL UTILITIES.

2.8. INSTALL CURB AND GUTTER (AS REQUIRED).

2.9. INSTALL PAVEMENTS AND WALKS (AS REQUIRED).

2.10. FINAL GRADE SITE.

2.11. SEED AND MULCH.

2.12. INSTALL BIO-ROLLS OR SILT FENCE AT BACK OF CURB OR PAVEMENT, AS NECESSARY THROUGH BUILDING CONSTRUCTION PROCESS.

2.13. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE SILT FENCE AND RESEED ANY AREAS DISTURBED BY THE REMOVAL.

2.14. ENSURE FINAL STABILIZATION MEASURE ARE COMPLETE.

2.15. PROVIDE DIGITAL COPY OF ALL FIELD SWPPP DOCUMENTATION INCLUDING INSPECTION REPORTS AND SWPPP REVISIONS TO THE OWNER.

2.16. SUBMIT NOTICE OF TERMINATION TO MPCA. NOTE: THE NOTICE OF TERMINATION MUST BE SUBMITTED TO MPCA BEFORE FINAL STABILIZATION IS CONSIDERED COMPLETE.

3. SITE DATA:

3.1. SITE ADDRESS: 8946 70TH STREET SOUTH, COTTAGE GROVE, MN 55016

3.2. SITE AREA: 55.6 ACRES

3.3. AREA OF DISTURBANCE: 1.30 ACRES

3.4. PRE-CONSTRUCTION IMPERVIOUS AREA: 0.06 ACRES

3.5. POST-CONSTRUCTION IMPERVIOUS AREA: 0.06 ACRES – NO NEW IMPERVIOUS AREA

3.6. PLANNED CONSTRUCTION START DATE: 6–26–23

3.7. ESTIMATED CONSTRUCTION COMPLETION DATE: 12–8–23

GENERAL SOIL TYPE: LEAN CLAY WITH SAND (CL) AND CLAYEY SAND (SC)

4. THE LOCATION OF AREAS NOT TO BE DISTURBED MUST BE IDENTIFIED WITH FLAGS, STAKES, SIGNS, SILT FENCE, ETC. BEFORE CONSTRUCTION BEGINS.

5. NO DRAINAGE AREA TO BE MORE THAN FIVE (5) ACRES OF RUNOFF CAUSING THE NEED FOR A TEMPORARY SEDIMENT BASIN.

6. THE LOCATION OF INFILTRATION SYSTEMS SHALL BE CLEARLY MARKED ON SITE AND COMPACTION OF UNDERLYING SOILS SHALL BE AVOIDED. HEAVY EQUIPMENT, CONSTRUCTION TRAFFIC, CONSTRUCTION STAGING, AND ANY OTHER ACTIVITY RESULTING IN COMPACTION SHALL BE KEPT OUT OF THE INFILTRATION PRACTICE. HEAVY EQUIPMENT SHALL NOT BE USED TO EXCAVATE INFILTRATION SYSTEMS UNLESS WORK IS COMPLETED FROM OUTSIDE OF THE INFILTRATION PRACTICE.

7. ALL DISTURBED GROUND LEFT INACTIVE FOR SEVEN (7) OR MORE DAYS SHALL BE STABILIZED BY SEEDING OR SODDING (ONLY AVAILABLE PRIOR TO SEPTEMBER 15) OR BY MULCHING OR COVERING OR OTHER EQUIVALENT CONTROL MEASURE.

8. ON SLOPES 3:1 OR GREATER, MAINTAIN SHEET FLOW AND MINIMIZE RILLS AND/OR GULLIES. SLOPE LENGTHS SHALL BE NO GREATER THAN 75 FEET.

9. ALL STORM DRAINS AND INLETS MUST BE PROTECTED UNTIL ALL SOURCES OF POTENTIAL DISCHARGE ARE STABILIZED.

10. TEMPORARY SOIL STOCKPILES MUST HAVE EFFECTIVE SEDIMENT CONTROL AND CAN NOT BE PLACED IN SURFACE WATERS OR STORM WATER CONVEYANCE SYSTEMS. TEMPORARY STOCKPILES WITHOUT SIGNIFICANT AMOUNT OF SILT, CLAY, OR ORGANIC COMPOUNDS ARE EXEMPT EX: CLEAN AGGREGATE STOCKPILES, DEMOLITION CONCRETE STOCKPILES, SAND STOCKPILES.

11. SEDIMENT LADEN WATER MUST BE DISCHARGED TO A SEDIMENTATION BASIN WHENEVER POSSIBLE. IF NOT POSSIBLE, IT MUST BE TREATED WITH THE APPROPRIATE BMP'S.

12. SOLID WASTES MUST BE STORED, COLLECTED AND DISPOSED OF PROPERLY PER MPCA STANDARDS.

13. EXTERNAL WASHING OF CONSTRUCTION VEHICLES MUST BE LIMITED TO A DEFINED AREA OF THE SITE. RUNOFF MUST BE PROPERLY CONTAINED.

14. NO ENGINE DEGREASING IS ALLOWED ON SITE.

15. IN THE EVENT OF ENCOUNTERING A WELL OR SPRING DURING CONSTRUCTION, CONTRACTOR TO CEASE CONSTRUCTION ACTIVITY AND NOTIFY ENGINEER.

16. THE OWNER WHO SIGNS THE NPDES PERMIT APPLICATION IS A PERMITTEE AND IS RESPONSIBLE FOR COMPLIANCE WITH ALL TERMS AND CONDITIONS OF THE PERMIT. THE OPERATOR (CONTRACTOR) WHO SIGNS THE NPDES PERMIT APPLICATION IS A PERMITEE FOR PARTS 2.B–2.F, PART 5, PART 6, AND APPLICABLE CONSTRUCTION ACTIVITY REQUIREMENTS FOUND IN APPENDIX A, PART C OF THE NPDES PERMIT AND IS JOINTLY RESPONSIBLE WITH THE OWNER FOR COMPLIANCE WITH THOSE PORTIONS OF THE PERMIT.

17. DOCUMENT RETENTION: PERMITEE(S) MUST MAKE THE SWPPP, INCLUDING ALL INSPECTION REPORTS, MAINTENANCE RECORDS, TRAINING RECORDS AND OTHER INFORMATION REQUIRED BY THIS PERMIT, AVAILABLE TO FEDERAL, STATE, AND LOCAL OFFICIALS WITHIN THREE (3) DAYS UPON REQUEST FOR THE DURATION OF THE PERMIT AND FOR THREE (3) YEARS FOLLOWING THE NOTICE OF TERMINATION.

18. SWPPP AMENDMENTS AND SUBMITTALS:

18.1. CONTRACTOR MUST PREPARE AND SUBMIT TO THE ENGINEER A SWPPP AMENDMENT AS NECESSARY TO INCLUDE ADDITIONAL BEST MANAGEMENT PRACTICES (BMP'S) TO CORRECT PROBLEMS IDENTIFIED OR ADDRESS THE FOLLOWING SITUATIONS:

18.1.1. UPDATE CONTRACT INFORMATION AND TRAINING DOCUMENTATION FOR CONSTRUCTION SWPPP MANAGER AND BMP INSTALLER.

18.1.2. THERE IS A CHANGE IN CONSTRUCTION METHOD OF PHASING, OPERATION, MAINTENANCE, WEATHER OR SEASONAL CONDITIONS NOT ANTICIPATED DURING THE DESIGN OF THE SWPPP INCLUDING BUT NOT LIMITED TO:

18.1.2.1. TYPES AND/OR LOCATION OF BMP'S

18.1.2.2. MATERIAL STORAGE AND SPILL RESPONSE

18.1.2.3. FUELING PLANS

18.1.2.4. LOCATION FOR STOCKPILES, CONCRETE WASHOUT, AND SANITATION FACILITIES

18.1.2.5. PROJECT PHASING

18.1.3. IT IS DETERMINED THAT THE SWPPP IS NOT ACHIEVING OBJECTIVES OF MINIMIZING POLLUTANTS IN STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES.

18.1.4. THE SWPPP IS NOT CONSISTENT WITH THE TERMS AND CONDITIONS OF THE PERMIT.

18.1.5. THERE IS A CHANGE IN DESIGN, OPERATION, MAINTENANCE, WEATHER OR SEASONAL CONDITIONS THAT HAS A SIGNIFICANT EFFECT ON DISCHARGE.

18.2. THE CONTRACTOR MAY IMPLEMENT SWPPP AMENDMENTS IMMEDIATELY AND IS NOT REQUIRED TO WITH FOR ENGINEER REVIEW OF THE SUBMITTAL. THE RESPONSIBILITY FOR COMPLETENESS OF SWPPP AMENDMENTS AND COMPLIANCE WITH THE PERMIT LIES WITH THE CONTRACTOR. REVIEW, COMMENT, OR LACK OF COMMENT BY THE ENGINEER ON A SWPPP AMENDMENT SHALL NOT ABSOLVE THE RESPONSIBILITIES OF THE CONTRACTOR IN ANY WAY.

18.3. IF A CHANGE ORDER IS ISSUED FOR A DESIGN CHANGE THE SWPPP AMENDMENT WILL BE PREPARED BY THE ENGINEER AND INCLUDED IN THE CHANGE ORDER.

18.4. IN ADDITION TO SWPPP AMENDMENTS, THE CONTRACT SHALL SUBMIT TO THE ENGINEER WEEKLY EROSION AND SEDIMENT CONTROL SCHEDULE MEETING THE REQUIREMENTS OF MNDOT 17.

18.5. THE CONTRACTOR SHALL KEEP COPIES OF ALL SWPPP AMENDMENTS, WEEKLY EROSION AND SEDIMENT CONTROL SCHEDULES, INSPECTION LOGS, AND MAINTENANCE LOGS WITH THE FILED COPY OF THE SWPPP. A PDF COP OF THESE DOCUMENTS WILL BE PROVIDED ALONG WITH A COPY OF THE FINAL FIELD COPY OF THE SWPPP TO THE ENGINEER ALONG WITH THE SIGNED NOTICE OF TERMINATION WHEN FINAL STABILIZATION IS COMPLETE.

19. INSPECTION & MAINTENANCE

19.1. A TRAINED PERSON SHALL ROUTINELY INSPECT THE ENTIRE SITE AT THE TIME INTERVAL INDICATED ON THIS SHEET OF THE SWPPP DURING ACTIVE CONSTRUCTION AND WITHIN 24–HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS.

19.2. ALL INSPECTIONS AND MAINTENANCE CONDUCTED DURING CONSTRUCTION MUST BE RECORDED ON THE DAY IT IS COMPLETED AND RETAINED WITH THE SWPPP. INSPECTION REPORT FORMS WILL BE PROVIDED BY THE CONTRACTOR BUT A TEMPLATE CAN BE PROVIDED BY THE ENGINEER UPON REQUEST.

19.3. THE CONTRACTOR MAY REQUEST A CHANGE IN INSPECTION SCHEDULE FOR THE FOLLOWING CONDITIONS:

19.3.1. INSPECTION OF AREAS WITH PERMANENT COVER TO BE REDUCED TO ONCE PER MONTH.

19.3.2. INSPECTION OF AREAS THAT HAVE PERMANENT COVER AND HAVE NO CONSTRUCTION ACTIVITY FOR 12 MONTHS TO BE SUSPENDED UNTIL CONSTRUCTION RESUMES.

19.3.3. INSPECTION OF AREAS WHERE CONSTRUCTION IS SUSPENDED DUE TO FROZEN GROUND CONDITIONS, INSPECTION TO BE SUSPENDED UNTIL THE EARLIER OF WITHIN 24 HOURS OF RUNOFF OCCURRING, OR UPON RESUMING CONSTRUCTION.

19.4. NO CHANGE IN INSPECTION SCHEDULE SHALL OCCUR UNTIL AUTHORIZED BY THE ENGINEER

19.5. INSPECTIONS MUST INCLUDE:

19.5.1. ALL EROSION PREVENTION AND SEDIMENT CONTROL BMP'S AND POLLUTION MANAGEMENT MEASURES TO ENSURE INTEGRITY AND EFFECTIVENESS.

19.5.2. SURFACE WATERS, INCLUDING DRAINAGE DITCHES AND CONVEYANCE SYSTEMS FOR EVIDENCE OF EROSION AND SEDIMENT DEPOSITION.

19.5.3. CONSTRUCTION SITE VEHICLE EXIT LOCATIONS, STREETS AND CURB AND GUTTER SYSTEMS WITHIN AND ADJACENT TO THE PROJECT FOR SEDIMENTATION FROM EROSION OR TRACKED SEDIMENT FROM VEHICLES.

19.5.4. INFILTRATION AREAS TO ENSURE THAT NO SEDIMENT FROM ONGOING CONSTRUCTION ACTIVITY IS REACHING THE INFILTRATION AREA AND THAT EQUIPMENT IS NOT BEING DRIVEN ACROSS THE INFILTRATION AREA.

19.6. PERMITEES MUST OBTAIN RAINFALL AMOUNTS BY EITHER A PROPERLY MAINTAINED RAIN GAUGE INSTALLED ONSITE, A WEATHER STATION THAT IS WITHIN ONE (1) MILE OF THE SITE LOCATION, OR A WEATHER REPORTING SYSTEM THAT PROVIDES SITE SPECIFIC RAINFALL DATA FROM RADAR SUMMARIES

19.7. ALL NON–FUNCTIONING BMP'S AND THOSE BMP'S WHERE SEDIMENT REACHES ONE–HALF (1/2) OF THE DEPTH OF THE BMP, OR IN THE CASE OF SEDIMENT BASINS ONE–HALF (1/2) OF THE STORAGE VOLUME, MUST BE REPAIRED, REPLACED, OR SUPPLEMENTED BY THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW.

19.8. PERMITEES MUST REPAIR, REPLACE OR SUPPLEMENT ALL NONFUNCTIONAL BMP'S WITH FUNCTIONAL BMP'S BY THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW.

19.9. ANY SEDIMENT THAT ESCAPES THE SITE MUST BE REMOVED AND THE AREA STABILIZED WITHIN 7 CALENDAR DAYS OF DISCOVERY UNLESS PRECLUDED BY LEGAL, REGULATORY, OR PHYSICAL ACCESS IN WHICH CASE THE WORK SHALL BE COMPLETED WITHIN 7 CALENDAR DAYS OF AUTHORIZATION. PAVED SURFACES SUCH AS STREETS SHALL HAVE ANY ESCAPED OR TRACKED SEDIMENT REMOVED BY THE END OF THE DAY THAT IT IS DISCOVERED. SEDIMENT RELEASE, OTHER THAN PAVED SURFACES THAT CAN BE CLEANED UP WITH STREET SWEEPING SHALL BE REPORTED IMMEDIATELY UPON DISCOVERY TO THE ENGINEER.

19.10. SILT FENCE TO BE REPAIRED, REPLACED, SUPPLEMENTED WHEN NONFUNCTIONAL, OR 1/3 FULL, WITHIN 24 HOURS.

20. CONCRETE WASHOUT AREA:

20.1. CONTRACTOR TO PROVIDE PORTABLE OR PREFABRICATED CONCRETE WASH–OUT CONTAINER WITH RAIN PROTECTION.

20.2. CONCRETE WASH–OUT TO BE IDENTIFIED WITH SIGNAGE STATING "CONCRETE WASHOUT AREA DO NOT OVERFILL".

20.3. CONCRETE WASH–OUT WATER NEEDS TO BE PUMPED WITHIN 24 HOURS OF STANDING WATER IN WASH–OUT AREA.
21. POLLUTION PREVENTION AND OTHER BMP'S:

21.1. PESTICIDES, HERBICIDES, FERTILIZERS, TREATMENT CHEMICALS, ETC. MUST BE UNDER COVER.

21.2. HAZARDOUS MATERIALS (OIL, GAS, PAINT, ETC.) MUST BE PROPERLY STORED IN SEALED CONTAINERS AND MEET STATE SECONDARY CONTAINMENT REQUIREMENTS.

21.3. PORTABLE TOILETS MUST BE SECURED.

21.4. ADEQUATE SPILL RESPONSE KIT AND DISPOSAL PLAN ON–SITE. SPILLS MUST BE CLEANED UP IMMEDIATELY.

21.5. ALL MPCA LIQUID AND SOLID WASTE (CONCRETE, STUCCO, PAINT, CURES, ETC) WASHOUT REQUIREMENTS MUST BE MET ON SITE.
22. EROSION PREVENTION PRACTICES:

22.1. STORM WATER CONVEYANCE CHANNELS SHALL BE ROUTED AROUND UNSTABILIZED AREAS. EROSION CONTROLS AND VELOCITY DISSIPATION DEVICES SHALL BE USED AT OUTLETS WITHIN AND ALONG THE LENGTH OF ANY CONSTRUCTED CONVEYANCE CHANNEL.

22.2. THE NORMAL WETTED PERIMETER OF ALL DITCHES OR SWALES, INCLUDING STORM WATER MANAGEMENT POND SLOPES, THAT DRAIN WATERS FROM THE SITE MUST BE STABILIZED WITHIN 200' OF ANY PROPERTY EDGE OR DISCHARGE POINT, INCLUDING STORM SEWER INLETS, WITHIN 24 HOURS OF CONNECTION.

22.3. TEMPORARY OR PERMANENT DITCHES OR SWALES USED AS SEDIMENT CONTAINMENT DURING CONSTRUCTION DO NOT NEED TO BE STABILIZED DURING TEMPORARY PERIOD OF USE AND SHALL BE STABILIZED WITHIN 24 HOURS AFTER NO LONGER USED AS SEDIMENT CONTAINMENT.

22.4. MULCH, HYDROMULCH, TACKIFIER, OR OTHER SIMILAR PRACTICE SHALL NOT BE USED IN ANY PORTION OF THE WETTED PERIMETER OF A TEMPORARY OR PERMANENT DRAINAGE DITCH OR SWALE SECTION WITH A CONTINUOUS SLOPE OF GREATER THAN 2 PERCENT.

22.5. ENERGY DISSIPATION SHALL BE INSTALLED AT ALL TEMPORARY OR PERMANENT PIPE OUTLETS WITHIN 24 HOURS OF CONNECTION TO A SURFACE WATER OR PERMANENT STORM WATER TREATMENT SYSTEM.

22.6. THE CONTRACTOR SHALL PHASE CONSTRUCTION AND USE CONSTRUCTION METHODS TO THE EXTENT PRACTICAL TO MINIMIZE EXPOSED SOILS. THE PROJECT PHASING SHALL BE DOCUMENTED IN THE WEEKLY EROSION AND SEDIMENT CONTROL SCHEDULE.
23. SEDIMENT CONTROL PRACTICES:

23.1. DOWN GRADIENT BMP'S, INCLUDING PERIMETER BMP'S, MUST BE IN PLACE BEFORE UP GRADIENT LAND–DISTURBING ACTIVITIES BEGIN AND SHALL REMAIN IN PLACE UNTIL FINAL STABILIZATION.

23.2. ALL BMP'S THAT HAVE BEEN ADJUSTED OR REMOVED TO ACCOMMODATE SHORT–TERM ACTIVITIES SHALL BE REINSTALLED OR REPLACED THE EARLIER OF THE END OF THE WORK DAY OR BEFORE THE NEXT PRECIPITATION EVENT, EVEN IF THE ACTIVITY IS NOT COMPLETE.

23.3. INLET BMP'S MAY BE REMOVED FOR SPECIFIC SAFETY CONCERNS; THE BMP'S SHALL BE REPLACED AS SOON AS THE SAFETY CONCERN IS RESOLVED. THE REMOVAL SHALL BE DOCUMENTED IN THE SWPPP AS A SWPPP AMENDMENT.

23.4. TEMPORARY STOCKPILES MUST HAVE SEDIMENT CONTROL BMP'S. THE CONTRACTOR SHALL PREPARE AND SUBMIT TO THE ENGINEER A SWPPP AMENDMENT SHOWING THE LOCATION OF TEMPORARY STOCKPILES AND THE BMP'S FOR EACH STOCKPILE. THE SWPPP AMENDMENT MUST MEET THE MINIMUM REQUIREMENTS OF SECTION 9 OF THE PERMIT.

23.5. SOIL COMPACTION SHALL BE MINIMIZED AND TOPSOIL SHALL BE PRESERVED, UNLESS INFEASIBLE OR IF CONSTRUCTION ACTIVITIES DICTATE SOIL COMPACTION OR TOPSOIL STRIPPING.

23.6. THE USE OF POLYMERS, FLOCCULANTS, OR OTHER SEDIMENTATION TREATMENT CHEMICALS ARE NOT PROPOSED AS PART OF THIS SWPPP AS DESIGNED BY THE ENGINEER. IF METHODS OR PHASING OF CONSTRUCTION REQUIRE THE USE OF ANY OF THESE CHEMICALS, THE CONTRACTOR SHALL PREPARE AND SUBMIT TO THE ENGINEER A SWPPP AMENDMENT THAT MEETS THE MINIMUM REQUIREMENTS OF SECTION 09 OF THE PERMIT.
24. TEMPORARY SEDIMENTATION BASIN:

24.1. A TEMPORARY SEDIMENTATION BASIN HAS NOT BEEN INCLUDED IN THIS SWPPP AS DESIGNED BY THE ENGINEER. IF A BASIN IS LATER DETERMINED TO BE DESIRABLE OR NECESSARY, THE CONTRACTOR SHALL PREPARE AND SUBMIT TO THE ENGINEER A SWPPP AMENDMENT. TEMPORARY SEDIMENTATION BASINS SHALL MEET OR EXCEED THE MINIMUM REQUIREMENTS OF SECTION 14 OF THE PERMIT AND SHALL INCLUDE A BASIN DRAINING PLAN MEETING OR EXCEEDING THE MINIMUM REQUIREMENTS OF SECTION 10 OF THE PERMIT. WHERE THE SITE DISCHARGES TO SPECIAL AND/OR IMPAIRED WATERS, THE SWPPP AMENDMENT SHALL ALSO MEET OR EXCEED THE MINIMUM REQUIREMENTS OF SECTION 23 OF THE PERMIT.
25. DEWATERING:

25.1. A DEWATERING PLAN HAS NOT BEEN INCLUDED IN THIS SWPPP AS DESIGNED BY THE ENGINEER. IF DEWATERING IS REQUIRED FOR THIS PROJECT, THE CONTRACTOR SHALL PREPARE AND SUBMIT TO THE ENGINEER A SWPPP AMENDMENT. ALL DEWATERING SHALL MEET OR EXCEED THE MINIMUM REQUIREMENTS OF SECTION 10 OF THE PERMIT.
26. FINAL STABILIZATION:

26.1. FINAL STABILIZATION IS NOT COMPLETE UNTIL ALL THE FOLLOWING REQUIREMENTS HAVE BEEN MET:

26.1.1. SUBSTANTIAL COMPLETION HAS BEEN REACHED AND NO GROUND DISTURBING ACTIVITIES ARE ANTICIPATED.

26.1.2. PERMANENT COVER HAS BEEN INSTALLED WITH AN ESTABLISHED MINIMUM UNIFORM PERENNIAL VEGETATION DENSITY OF 70 PERCENT OF ITS EXPECTED FINAL GROWTH; VEGETATION IS NOT REQUIRED IN AREAS WHERE NO VEGETATION IS PROPOSED BY THIS PROJECT SUCH AS IMPERVIOUS SURFACES OR THE BASE OF A SAND FILTER.

26.1.3. ACCUMULATED SEDIMENT HAS BEEN REMOVED FROM ALL PERMANENT STORM WATER TREATMENT SYSTEMS AS NECESSARY TO ENSURE THE SYSTEM IS OPERATING AS DESIGNED.

26.1.4. ALL SEDIMENT HAS BEEN REMOVED FROM CONVEYANCE SYSTEMS.

26.1.5. ALL TEMPORARY SYNTHETIC EROSION PREVENTION AND SEDIMENT CONTROL BMP'S HAVE BEEN REMOVED. BMP'S DESIGNATED ON THE SWPPP TO REMAIN TO DEPOSED ON–SITE MAY REMAIN.

26.1.6. FOR RESIDENTIAL CONSTRUCTION ONLY, PERMIT COVERAGE TERMINATES ON INDIVIDUAL LOTS IF THE STRUCTURES ARE FINISHED AND TEMPORARY EROSION PREVENTION AND DOWNGRADIENT PERIMETER CONTROL IS COMPLETE, THE RESIDENCE SELLS TO THE HOMEOWNER, AND THE PERMITTEE DISTRIBUTES THE MPCA'S "HOMEOWNER FACT SHEET" TO THE HOMEOWNER.

26.1.7. FOR AGRICULTURAL LAND ONLY (E.G., PIPELINES ACROSS CROPLAND), THE DISTURBED LAND MUST BE RETURNED TO ITS PRE–CONSTRUCTION AGRICULTURAL USE PRIOR TO SUBMITTING THE NOTICE OF TERMINATION.

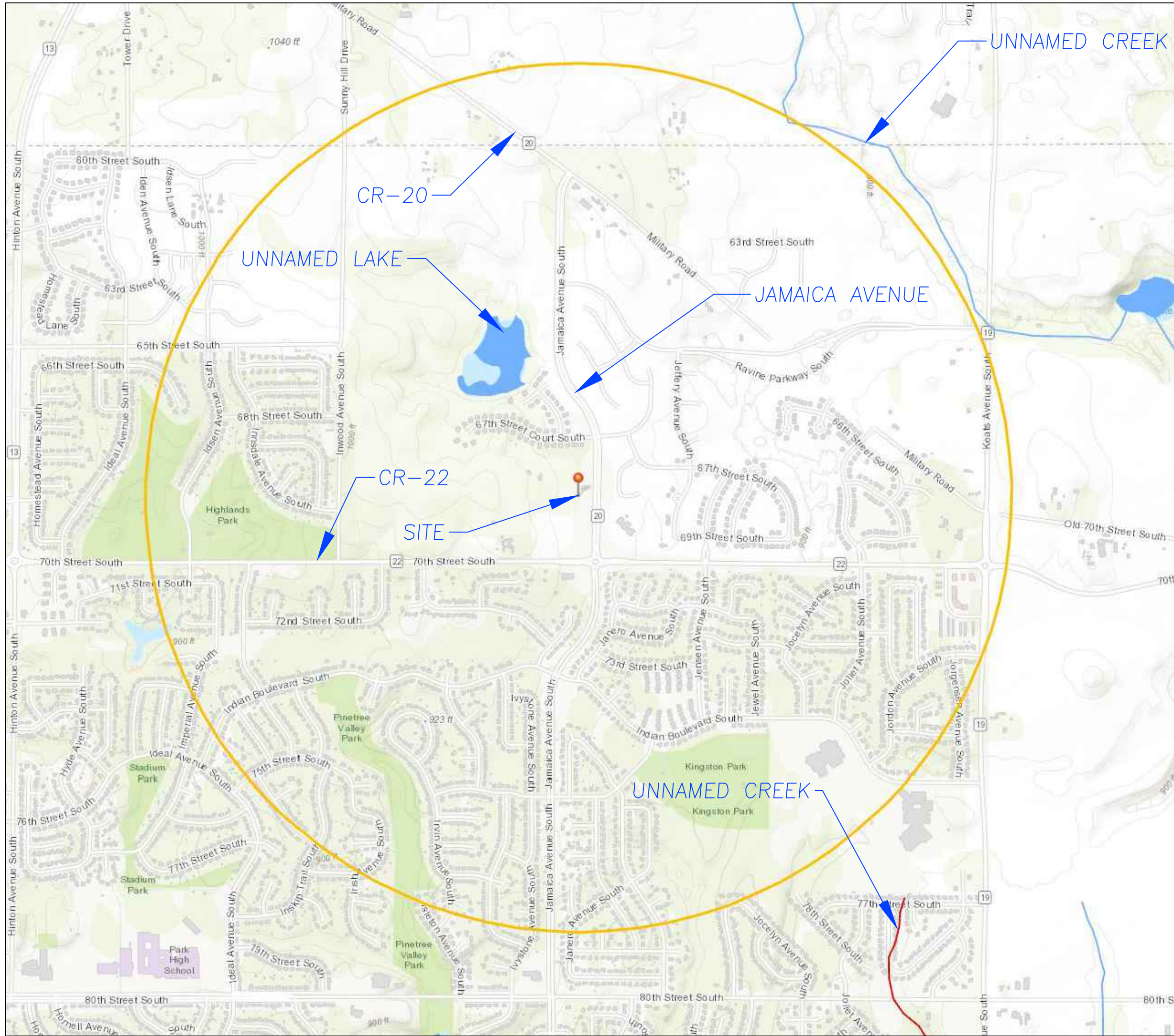
27. TERMINATION OF COVERAGE:

27.1. PERMITEE(S) WISHING TO TERMINATE COVERAGE MUST SUBMIT A NOTICE OF TERMINATION TO THE MPCA. ALL PERMITEE(S) MUST SUBMIT A NOTICE OF TERMINATION WITHIN 30 DAYS AFTER ONE OR MORE OF THE FOLLOWING CONDITIONS HAVE BEEN MET:

27.1.1. FINAL STABILIZATION, PER SECTION 9 OF THE PERMIT HAS BEEN ACHIEVED ON ALL PORTIONS OF THE SITE FOR WHICH THE PERMITEE IS RESPONSIBLE.

27.1.2. TRANSFER OF OWNERSHIP AS DESCRIBED IN THE PERMIT.

SURFACE WATERS WITHIN 1–MILE OF SITE



RECEIVING WATERS

NAME OF WATER BODY	TYPE OF WATER BODY	SPECIAL WATER	IMPAIRED WATER
UNNAMED LAKE	LAKE	NO	NO

MPCA COVERAGE LETTER

PERMANENT STORMWATER MANAGEMENT SYSTEM

	INFILTRATION/FILTRATION
	WET SEDIMENTATION BASIN
	REGIONAL PONDING
X	PERMANENT STORMWATER MANAGEMENT NOT REQUIRED

ESTIMATED BMP QUANTITIES

DESCRIPTION	QUANTITY	UNIT
ROCK CONSTRUCTION ENTRANCE (1" – 2" WASHED ROCK)	50	TONS
SILT FENCE	1,800	L.F.
INLET PROTECTION	3	EACH

SITE STABILIZATION COMPLETION:
STABILIZATION OF EXPOSED SOILS SHALL BEGIN IMMEDIATELY AND SHALL BE COMPLETED AFTER THE CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED NO LATER THAN: 14 DAYS

SITE INSPECTION INTERVAL:
A TRAINED PERSON SHALL ROUTINELY INSPECT THE ENTIRE CONSTRUCTION SITE DURING ACTIVE CONSTRUCTION AT AN INTERVAL OF NO MORE THAN: 7 DAYS

3440 Federal Drive, Suite 110
Cottage Grove, MN 55016
Telephone 651-452-6051
www.rehder.com

REHDER
& ASSOCIATES, INC.
Civil Engineers & Land Surveyors

PROJECT NO.: 221 – 3267/012 DRAWING FILE: 3267012.DWG

I hereby certify that this plan 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.
Nicholas P. Adam Date 6-5-23
Name Nicholas P. Adam Reg. No. 43856

Issued

CITY & DOLI SUBMITAL

6-5-23

SWPPP

DODGE NATURE CENTER

CITY OF COTTAGE GROVE

SHEET NUMBER

C10

July 11, 2023

To:

Richard Becker, Board Chair
Minnesota Plumbing Board
7710 Everest Ln N.
Maple Grove, MN 55311

Mike Herman, Board Vice Char
Minnesota Plumbing Board
8624 Rose Street
Owatonna, MN 55060

From:

Dave Sobania
Administrative Engineer

Subject: Variance Petition to allow septic tanks to remain in use after Father Hennepin State Park connects in the City of Isle sewer.

DNR Project No.: 8S173

Attached is a variance request for all septic tanks to remain in use after Father Hennepin State Park connects to the City of Isle sewer.

The existing system utilizes septic and tanks and gravity flow to a treatment pond. This pond is dated and no longer meets current design standards. Being proactive, the DNR approached the City of Isle and received approval for connecting Father Hennepin State Park to the municipal wastewater system. See attached map showing the exiting system and plan overview of proposed system.

The new system will collect all park wastewater flow at the existing lift station near the shop. This lift station will be replaced with a new one. The lift station will pump to city MH located just outside the park, +/- 2900 ft., across Hwy 27. Minnesota State Parks have a statutory obligation (Minnesota Statue 86A.05, Subd. 2c) to preserve and perpetuate the natural and historic features present. The pressure line will be horizontally bored to reduce impacts to cultural and natural resources in the park. Existing gravity lines and MH's leading to treatment pond past **MH 3#** will be abandoned in place, again to reduce cultural and natural resource impacts. The exiting pond will be decommissioned, and site restored.

As noted in the attached variance request, the city has inspected MH's past septic tanks and see no evidence of premature deterioration and agreed to accept the park wastewater with the septic tanks remaining in use.

The DNR understands there may be a fee to process this variance request.

Thank you for your consideration, please contact me with any questions.

Sincerely,



Digitally signed by Dave
Sobania, P.E. #22844
Date: 2023.07.11
09:33:01 -05'00'

Dave Sobania, P.E.

Cc: Jarrett Purdue, P.E., Steve Hennessy, Tim Ramerth, P.E.

VARIANCE PETITION

14.056 RULE VARIANCES

Subdivision 1: Contents of variance petition

1. The name and address of the person or entity for whom a variance is being requested:

Minnesota Department of Natural Resources
Operations Services Division
500 Lafayette Road
St. Paul, MN 55155

2. A description of and, if known, a citation to the specific rule for which a variance is requested:

4714.71403 Prohibited Sewer Connection. No cesspool, septic tank, seepage pit, or drainfield shall be connected to a public sewer or to a building sewer leading to such public sewer.

3. The variance requested, including the scope and duration of the variance:

Scope: Allow existing septic tanks to remain in use when connecting park sewer to the city.
Duration: This is a permanent installation.

4. The reasons that the petitioner believes justify a variance, including a signed statement attesting to the accuracy of the facts asserted in the petition:

State Park water use varies drastically from Monday to Sunday and seasonally. During park start up and shut down we may have one toilet flush a day. This limited water use increases plugging potential if there are no septic tanks in the system as there is not enough water to flush solids through the system.

a. The city inspected the existing MH's downstream of septic tanks. Those MH's show no signs of premature deterioration. The city has agreed to accept the park wastewater leaving septic in place. We are concerned that if the existing septic tanks are removed, we may start to have plugging issues in the hundreds of feet of pipe within the park. The existing gravity system currently works, replacing old gravity lines that start to plug due to solids in the wastewater would impact the resources we have a statutory obligation to protect (Minnesota Statute 86A.05, Subd. 2c); and would have significant cost implications.

i. The entire park is considered a sensitive and important location for the Mille Lacs Band of Ojibwe and has many known archaeological and Native American cemetery sites within its boundaries. The DNR has a duty to preserve and protect these known resources and the potential resources that are as of yet unknown. There is high potential in Father Hennepin State Park, and examples from recent incidents, for human remains and artifacts to be found not just in the grassy areas but also within previously disturbed areas such as the road gravel and fill due to where that fill was originally taken from.

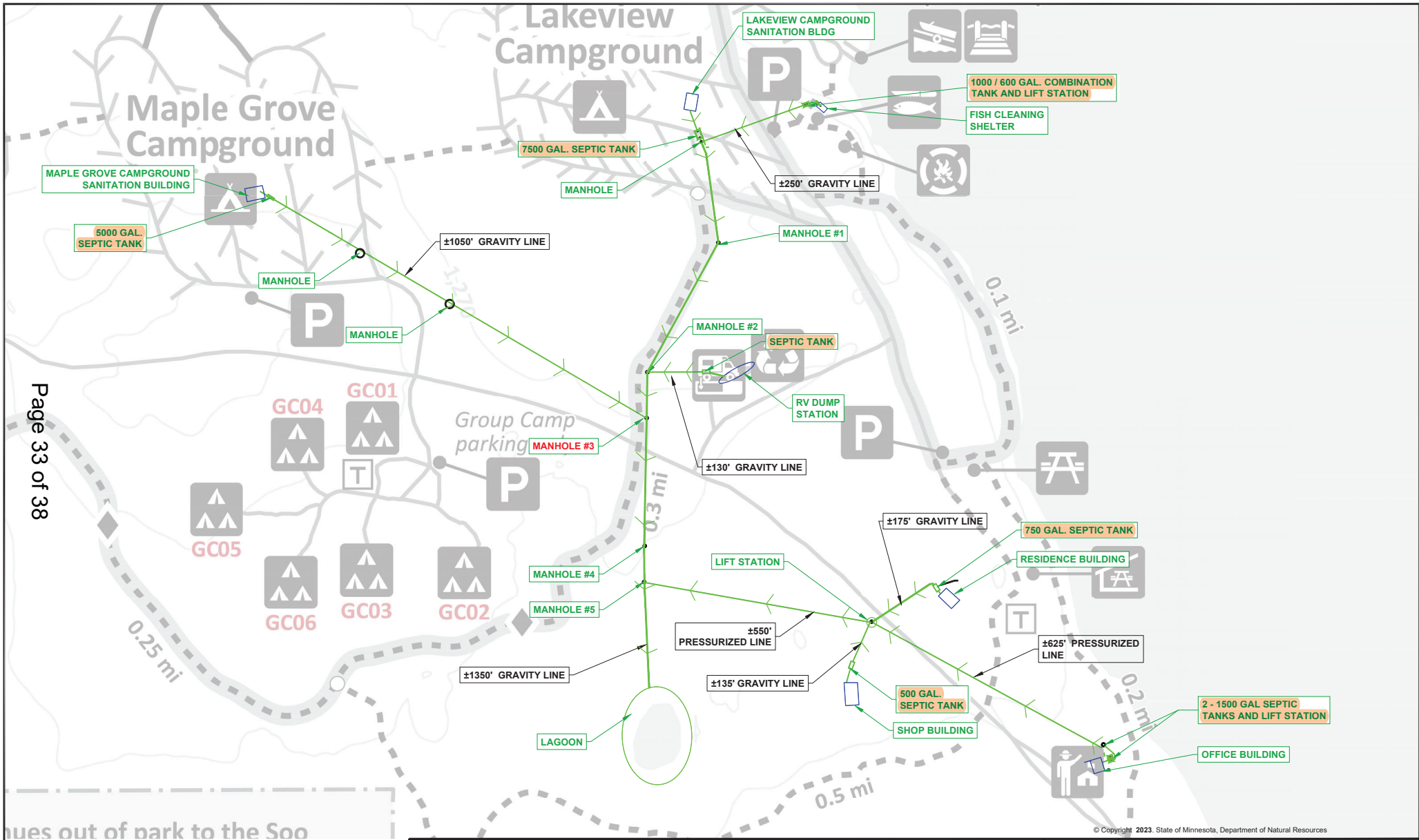
- ii. In consultation with the Mille Lacs Band of Ojibwe and the Minnesota Historical Society, the recommendation is to eliminate any unnecessary open excavation, tank removal or pipe replacement. Doing so will greatly reduce the potential for disturbance of human remains or archaeological features which would require the project to be completely shut down and would risk damaging relationships with Tribal partners.

5. A history of the agency's action relative to the petitioner, as relates to the variance request:

We are not aware of any previous variance request from the DNR related septic tank effluent discharging to municipal systems.

6. Information regarding the agency's treatment if similar cases, if known:

- a. We are not aware of any similar variance request from the DNR.



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Continues out of park to the Soo

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 DEPARTMENT OF NATURAL RESOURCES	SANITATION LAYOUT FATHER HENNEPIN STATE PARK PARKS AND TRAILS		Revisions		EXISTING CONDITIONS PLAN VIEW		Sheet: 1 OF 1
	MILLE LACS COUNTY	NEAR CITY OF ISLE	Date	By	Survey: 2005	Designed:	CC2:
	Section:	Township:			Drawn:	Drawn:	File #:
		Range:			Checked:	Checked:	Site #:
					Horz. datum: NAD83	Vert. datum: NAVD88	

PLAN VIEW

This plan view illustrates the layout of a sewer system, including existing and proposed infrastructure. The system is shown in relation to a road and a building.

Key Features and Callouts:

- EXISTING SS MH #2 TO REMAIN IN PLACE** RIM ELEV. = 1269.22 INV ELEV. = 1267.27
- EXISTING SS MH #3 TO BE REPLACED**
- CONSTRUCT NEW MH AND CONNECT TO EXISTING SS**
- CONSTRUCT NEW MH**
- 8" PVC** (multiple segments)
- 4" PVC SEWER** (multiple segments)
- 4" HDPE FORCEMAIN (DIRECTIONAL DRILLED)**
- 2" FORCEMAIN (TO BE ABANDONED)**
- EXISTING ELECTRIC**
- EXISTING 4" PVC SEWER (TO REMAIN AND CONNECT TO NEW LIFT STATION)**
- LIFT STATION WITH AIR RELEASE VALVE**
- PROPOSED STAGING AREA** (multiple locations)
- EXISTING 2" FORCEMAIN (TO REMAIN AND CONNECT TO NEW LIFT STATION)**
- RESIDENCE**
- SHOP BUILDING**
- PARK ROAD**
- BUTTERNUT** (multiple locations)

Scale: 0 40 80 SCALE (IN FEET)

Page 34 of 38

Logan, Lyndy (DLI)

Subject: Backflow Prevention Inspection**From:** Terence Jamison <terence.jamison@gmail.com>**Sent:** Wednesday, May 10, 2023 10:39 AM**To:** richardb@steeneng.com; Mike.Dryke@jamarcompany.us; kerickson@mankatomn.gov; mikeh@culliganultrapure.com; Jonathan.Lemke@saintpaul.edu; j.parizek@hotmail.com; karl.abrahamson@ci.stpaul.mn.us; sam@ualocal6.org; bpylkas@totalmech.com; rwahlen@edenprairie.org; bigssw@gmail.com; Wysokinski, Brittany (DLI) <brittany.wysokinski@state.mn.us>; Westemeier, Michael (DLI) <michael.westemeier@state.mn.us>**Subject:** Backflow Prevention Inspection**This message may be from an external email source.**

Do not select links or open attachments unless verified. Report all suspicious emails to Minnesota IT Services Security Operations Center.

Hello Plumbing Board Members,

I wanted to vent my frustration with the backflow testing requirements for my PVB. As a member of the Plumbing Board I hope you can help to address this issue and consider it for future changes.

I received notice from my city Chanhassen I am required to have this inspected annually. Calling around it is a \$230 cost and time needed to be taken away from work. Over 5 years we are talking over \$1,000. When you look at 10 or 15 years we are talking thousands of dollars. There are many points of failure for electric, plumbing, hvac that result in risk to homeowners this seems like a very low risk, high cost inspection that is being required.

This is for a residential home irrigation system. It seems like this is not consistently enforced across communities. As I have had irrigation systems in the past and did not have this extra cost and never experienced a problem.

In my research this seems very unlikely to fail in a residential irrigation environment. Maybe you could show me data where it is? It seems like this is something that could be inspected much less frequently and money would be better spent perhaps actually testing the drinking water and then diagnosing problems that exist. If there is a high likelihood of failure new equipment should be developed e.g. alarm system.

Thanks for consideration in reviewing and addressing this.

Best,
Terry Jamison

Plumbing Board
Department of Labor and Industry

Board Meeting Open Forum Request

Please keep your presentation to 5 minutes or less.

- Please send this form, and any related materials/presentations to Lyndy Logan at **least 1 day prior to the start of the WebEx meeting.**
- Availability based on length of meeting and number of requestors.

Plumbing Board		Date of Meeting July 18, 2023		Will you be attending meeting in person or by phone? In-person 	
Name Jennifer Levitt		Street/Mailing Address 12800 Ravine Parkway S			Phone Number 651-458-2890
City Cottage Grove	State MN	Zip 55016	Email Address jlevitt@cottagegrovemn.gov		
Representing/Company Name City of Cottage Grove					
Topic: The City of Cottage Grove would like to formally request a stay on Final Interpretation PB0159 from February 10, 2023.					

- Send this form and related materials to Lyndy at: lyndy.logan@state.mn.us
- For meeting information, including Open Forum Request forms, please visit the Plumbing Board's web-page at: <https://www.dli.mn.gov/about-department/boards-and-councils/plumbing-board>

July 14, 2023

Attn: Chair Richard Becker and Minnesota Plumbing Board
Department of Labor and Industry
443 Lafayette Road N
St. Paul, MN 55155

Re: Final Interpretation PB0159 Storm Drainage Surcharge

Dear Chair Becker and the Minnesota Plumbing Board,

Over the last few months, developments within the City of Cottage Grove have been greatly impacted by the Plumbing Board's recent Final Interpretation PB0159 on February 10, 2023. The City of Cottage Grove respectfully requests to be added to the July 18, 2023 Plumbing Board meeting to formally request a stay on Final Interpretation PB0159 and address the board about this hardship it is creating in our community and across the state.

Following the requirements of the 1982 Surface Water Management Act, the City of Cottage Grove prepared and implemented a local Surface Water Management Plan (SWMP) that preserves and improves the integrity of surface waters. This plan was coordinated and reviewed by various agencies for compliance such as the Metropolitan Council, Minnesota Department of Natural Resources, Minnesota Pollution Control Agency, Board of Water and Soil Resource, and the South Washington Watershed District. As part of the SWMP and following guidance from other agencies, inlet pipes of stormwater ponds are designed to be located at the normal water level (NWL) elevation, also known as the permanent pool, in order to provide effective energy dissipation and prevent erosion.

With the new Final Interpretation, the Plumbing Board is now requiring that instead of locating storm sewer pipe inlets at the normal water level/permanent pool of ponds as is standard design practice, they must be placed above the pond's design high water level (HWL) to prevent surcharging in order to receive a plumbing permit. Therefore, as a pond rises, even during a small storm event, the inlet pipe does not become submerged. Ponding system HWL's are typically designed to contain the 100-year storm event (a storm with a 1% probability of occurring in any given year). Conversely, it is common engineering practice to design site storm sewer piping systems to a 5-year or 10-year storm event (20% or 10% probability of occurring in any given year) without surcharge. Designing storm sewer piping systems to handle large storm events without surcharging is generally considered impractical and cost prohibitive in most cases.

Most recently, the Cottage Grove staff, Planning Commission, and City Council have worked through the review and approval of three projects: a daycare facility, an apartment complex, and an industrial facility. The design of each of these facilities meet all standards required by the city and watershed district, and the industrial facility has already begun grading operations. The impact of this new interpretation on a project with a site improvement valuation estimated at just over \$1.3 million includes raising the 12.67-acre site six feet which equates to approximately 130,000 cubic yards of structural fill for a total cost of \$1,950,000. Additionally, once the site has been raised, it requires approximately 6,000 square feet face of retaining wall in total of approximately \$600,000. These additional requirements more than double the overall site improvement cost.

We look forward to discussing this item further on July 18, 2023, at the Plumbing Board meeting.

Sincerely,

A handwritten signature in black ink, appearing to read "Jennifer Levitt". The signature is fluid and cursive, with the first name "Jennifer" written in a more compact, stylized manner and the last name "Levitt" written more fully.

Jennifer Levitt, City Administrator
City of Cottage Grove

Cc: Mayor Bailey and City Councilmembers