

## Division of Construction Codes and Licensing REPORT ON PLUMBING PLANS

PROJECT: 3M Hutchinson Storm Sewer Pipe Design, 905 Adams St. SE, Hutchinson, McLeod County,

Minnesota, Plan No. PB-R2309-0174

OWNERSHIP: Samantha Holt, 3M, 905 Adams St. SE, Hutchinson, MN 55350 Submitter: Submitter: Samuel Wickstrom, TKDA, 444 Cedar St., St. Paul, MN 55101

Civil Plans Dated: October 12, 2023 Civil Plans Revise Dated: October 23, 2023 Initial Date Received: September 20, 2023 Last Date Received: October 23, 2023 Date Approved: October 24, 2023

This review is limited to the provisions of the Minnesota Plumbing Code, Minnesota Rules, Chapter 4714 and assumes the data on which the design is based are correct. Approval is contingent upon meeting the requirements listed below. A copy of the approved plans and this report must be retained at the project location.

**INSPECTIONS:** This project will be inspected by the local municipality. The contractor/installer must obtain all required inspection permits from the Hutchinson Building Official, Kyle Dimler. All plumbing installations must be tested and inspected in accordance with the requirements of the Minnesota Plumbing Code. No plumbing work may be covered prior to inspection.

## **REQUIREMENTS:**

- 1. All plumbing shall be installed in accordance with the 2020 Minnesota Plumbing Code (see Minnesota Rules, Chapter 4714). All pipe, fittings, traps, fixtures, materials, and devices shall be listed or labeled by a third-party listing agency and comply with the applicable standards referenced in the code (see Sections 301.2 and 1701.1).
- 2. The site storm sewers system appears to be subject to backwater by design (see Section 310.5). The Minnesota Plumbing Board has issued a final interpretation on the matter which may be viewed at: <a href="https://www.dli.mn.gov/sites/default/files/pdf/PB0159.pdf">https://www.dli.mn.gov/sites/default/files/pdf/PB0159.pdf</a> An Alternative Engineered Design under Section 301.5 was submitted and reviewed by this office to address this item. An addendum review letter for the Alternative Engineered Design will be issued and shall be attached to this report.
- 3. The proposed HDPE storm sewers material listed in the specifications as ASTM D3350 are not currently recognized in the 2020 MN Plumbing Code but were requested to be used as alternate materials (see Table 701.2 and Section 301.3). The products appear suitable, safe, and sanitary for the intended use and may be used with approval for the above-referenced project only and shall have no effect beyond the jurisdictional boundaries. Regardless of this approval the following requirements must also be met:
  - a. Pipes must be listed, labeled, and no fittings are permitted. Water-tight resilient joints must be used at all connections, including structures.
  - b. Pipes must be installed with a minimum 10-feet separation from water piping and any building.
  - c. HDPE connection to a different material must use an approved listed application-specific transition coupling meeting ASTM C1173 or ASTM C1461 (see Section 705.10).
  - d. Installation must be open-trench per Section 314.4.1 and manufacturer's installation instructions. The MN Department of Labor and Industry is in no way endorsing a product, or any advertising, and is not responsible for any situation that may arise from its use.

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- 4. Polyethylene storm sewers must meet ASTM F714 or ASTM F894 (see Section 1101.4.5 and Table 701.2). Joints must be heat fused per Section 705.5.1. Connection to a different material must use an approved application-specific transition coupling meeting ASTM C1173 or ASTM C1461 (see Section 705.10). Polyethylene sewers may not cross above water service lines (see Section 720.1).
- 5. The HDPE storm sewer piping has issues holding an air test so they must not be installed within 10 feet of a building. Storm sewers within 10 feet of the building or water service line must be tested per Section 1107.0.

## NOTES:

- 1. The scope of this project consists of the construction of an existing facility. The plumbing includes installing a 24-inch storm sewer pipe from an existing manhole structure into the first stormwater pond and a 36-inch storm pipe is identified as an equalizer pipe between two extended detention basins and considered as part of the storage basin system.
- 2. This facility is served by existing municipal sewer and water service connections. This approval is for the site storm sewer only. Plans and specifications for the building plumbing system must be submitted to and approved by this office prior to installation. If after review of the building plumbing plans it is found that any of the site utilities are undersized and/or non-compliant, the site utilities must be brought into compliance with the Minnesota Plumbing Code before installation of the interior plumbing may begin.
- 3. The current 2020 Minnesota Plumbing Code, Chapter 4714, and related information can be found at: <a href="http://www.dli.mn.gov/business/plumbing-contractors/2020-minnesota-plumbing-code">http://www.dli.mn.gov/business/plumbing-contractors/2020-minnesota-plumbing-code</a>

Authorization may be withdrawn if installation does not begin within one year. Additional requirements may result from changed conditions or additional information.

Approved:

David J. Lanik

Public Health Engineer

Plumbing Plan Review and Inspections Unit

651/284-5842

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www.dli.mn.gov/business/get-licenses-and-permits/plumbing-plan-review

cc: Samuel Wickstrom, TKDA
Brent Paulsen, TKDA
Samantha Holt, 3M
Kyle Dimler, Building Official
File



October 24, 2023

Samuel Wickstrom TKDA 444 Cedar St., St. Paul, MN 55101 St. Paul, MN 55101

## Gentlemen/Ladies:

Subject:

Plumbing at 3M Hutchinson Storm Sewer Pipe Design, 905 Adams St. SE, Hutchinson, McLeod County, Minnesota, Plan No. PB-R2309-0174

This letter is in response to the alternate request received by the Department of Labor & Industry (DLI) to design and install the on-site storm sewer that would be above a smaller rainfall event. This design is not approved in the Minnesota Plumbing Code, but at your request it has been reviewed by this office as an alternate method under Minnesota Rules, part 4714.0301, Section 301.2.

This office has received a written request from the project design engineer and owner, acknowledging the proposed alternative design is not a code approved method in the Minnesota Plumbing Code. The submitted documentation indicated raising inlet pipe above the required high water level was not feasible, therefore, this proposed storm sewer system and pipe inlet elevations are properly designed and sized for this project.

The DLI has determined that the above-listed installation is suitable, will allow access for a complete regular inspection, maintenance, repairs, and sanitary for its intended use at this facility. Therefore, this request is approved. The approval applies only to the 3M Hutchinson Storm Sewer Pipe Design, Plan No. PB-R2309-0174.

During installation the contractor installing this system must verify with the Building Official in the City of Hutchinson, that they approve the design installation and all testing of the system at this facility. The Minnesota Department of Labor and Industry is in no way endorsing this design or any installation and is not responsible for any situation that may arise from its use.

Sincerely,

David J. Lanik

Public Health Engineer

Plumbing Plan Review and Inspections Unit

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cc: Kyle Dimler, Building Official Brent Paulsen, TKDA

Samantha Holt, 3M

File