

Applicant: Brian Bochman; Enclave Companies
Consultant: Jacob Mitzel; Sambatek, Inc.
Project: The Ovation (Cinema 6 Redevelopment)
Location: 1118 Mainstreet: Hopkins
Applicable Rule(s): 4 and 5
Reviewer(s): Dallen Webster and Louise Heffernan; Barr Engineering Co.

General Background & Comments

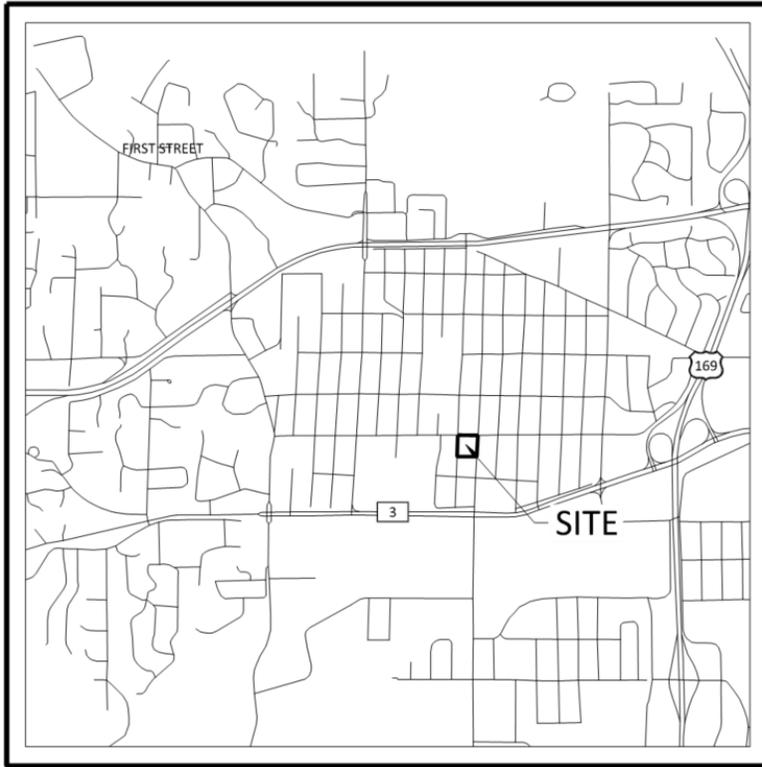
The applicant proposes the redevelopment of the commercial site located at 1118 Mainstreet in Hopkins. Currently, the 1.9-acre site is occupied by two existing buildings, including the Mann Hopkins Cinema 6 theater and the Thirty Bales restaurant, with their respective associated surface parking areas.

The project proposes the following:

- demolition and removal of the exiting Cinema 6 building, concrete and bituminous pavement, and surface parking. The existing Thirty Bales building and associated concrete sidewalks are to remain.
- site clearing and grading.
- construction of a 32,027-square foot multi-family apartment building, The Ovation, with surface and underground parking.
- construction of a building access driveway.
- site improvements including concrete sidewalks, landscaping, and utility improvements.
- construction of an underground stormwater management facility (UGSWMF) and installation of a proprietary manufactured treatment device for stormwater management.

The site location is shown in Figure 1 below.

Figure 1. Site Location.



The project site information is:

- Total Site Area: 1.88 acres (82,016 square feet)
- Disturbed Area: 1.62 acres (70,744 square feet)
- Existing Site Impervious Area: 1.85 acres (80,770 square feet)
- Proposed Site Impervious Area: 1.66 acres (72,427 square feet)
- Disturbed Impervious Area: 69,621 square feet (86% of the existing impervious surface is to be disturbed – the Thirty Bales restaurant and associated site amenities are proposed to remain)
- Change in Impervious Area: a reduction of 8,344 square feet (10.3% decrease) in the site impervious area.
- Regulated Impervious Area: 1.66 acres (72,427 square feet)

The district's requirements for both stormwater management and erosion and sediment control apply to the project because more than 50 cubic yards of material will be disturbed and 5,000 square feet or more of surface area is altered, Rules 4.2.1a and b and 5.2.1a and b.

Exhibits Reviewed:

1. Permit Application dated August 22, 2022 (received August 30, 2022), with owner authorization dated September 29, 2022, indicating that the applicant's representative (Brian Bochman, Enclave Companies) may act on the owner's behalf (Bill Beard, The Beard Group, Inc.). Email correspondence dated September 13, 2022, October 20, 2022, November 17, 2022 (following discussion), November 22, 2022, December 14, 2022, January 13, 2023, and January 19, 2023, outlining items required to complete the application. The application with the submittal items is complete.
2. Plans received August 30, 2023, December 21, 2022, and February 3, 2023, prepared by Sambatek, Inc.
3. Stormwater Management Report dated December 2021 (received August 30, 2022), 2022, revised November 21, 2022 (received November 22, 2022), December 19, 2022 (received December 21, 2022), and February 3, 2023, prepared by Sambatek, Inc.
4. Electronic MIDS model files received September 14, 2022, November 22, 2022, December 21, 2022, and February 3, 2023, prepared by Sambatek, Inc.
5. Electronic HydroCAD model files received September 14, 2022, November 22, 2022, December 21, 2022, and February 3, 2023, prepared by Sambatek, Inc.
6. Geotechnical Evaluation Report dated December 3, 2020, prepared by American Engineering Testing, Inc.
7. Comment Response Memorandum dated November 11, 2022, and revised December 19, 2022, prepared by Sambatek, Inc.

4.0 Stormwater Management

The district's requirements for stormwater management apply to the project because more than 50 cubic yards of material will be disturbed and 5,000 square feet or more of surface area is altered, Rules 4.2.1a and b.

The NMCWD's Rule for Redevelopment, Rule 4.2.3, states, if a proposed activity will disturb more than 50% of the existing impervious surface on the site or will increase the site imperviousness by more than 50%, stormwater management will apply to the entire project site. Otherwise, the stormwater requirements will apply only to the disturbed, replaced, and net additional impervious surface on the project site. Since the project will disturb more than 50% of the existing site impervious surface (86% of the existing impervious surface is proposed to be disturbed), the district's stormwater management criteria are required for the entire site, including 1.66 acres (72,427 square feet) of impervious surface.

Stormwater management for compliance with Rules 4.3.1a, b and c will be provided by an underground stormwater management facility (UGSWMF) and Contech StormFilter propriety treatment device.

Rule 4.3.1b requires the 2-, 10-, and 100-year post development peak runoff rates be equal to or less than the existing discharge rates for all collection points where stormwater leaves the

site. The applicant used a HydroCAD hydrologic model to simulate runoff rates at the two collection points where stormwater discharge leaves the site. The existing and proposed 2-, 10- and 100-year frequency discharges from the site are summarized in the tables below.

Existing Conditions			
Modeled Discharge Location	2-year (c.f.s.)	10- year (c.f.s.)	100-year (c.f.s.)
To 11 th Avenue S (East)	2.9	4.4	7.6
To 12 th Avenue S (West)	4.9	7.4	12.9
Total	7.8	11.8	20.5

Proposed Conditions			
Modeled Discharge Location	2-year (c.f.s.)	10- year (c.f.s.)	100- year (c.f.s.)
To 11 th Avenue S (East)	1.1	2.8	7.2
To 12 th Avenue S (West)	<1.0	<1.0	1.8
Total	1.7	3.1	9.0

The proposed stormwater management plan provides rate control in compliance with the NMCWD requirements for the 2-, 10-, and 100-year events. Rule 4.3.1b is met.

The American Engineering Testing, Inc. geotechnical report identifies the underlying soil within the area of the UGSWMF as gravelly sand (SP) underlain by sand (SP). A design infiltration rate of 0.80 inches per hour has been used, conforming with infiltration rates identified in the Minnesota Storm Water Manual.

A retention volume of 6,639 cubic feet is required from the 72,427 square feet of proposed impervious area. A retention volume of 6,722 cubic feet is proposed to be provided (6,639 cubic feet required) with an infiltration area of 4,082 square feet (2,075 square feet required). With an infiltration area of 4,082 square feet provided, the required 6,639 cubic feet of volume retention is drawn down within 25-hours, complying with Rule 4.3.1a (ii).

The district's water quality criterion requires a 60% annual removal efficiency for total phosphorus (TP) and 90% annual removal efficiency for total suspended solids (TSS). The results from the MIDS model provided show the UGSWMF and StormFilter proprietary treatment device will provide an annual removal efficiency of 90% for TSS (433 lbs.) and an annual removal efficiency of 86% for TP (2.28 lb.). The NMCWD engineer agrees with the modeling results and the project is in conformance with Rule 4.3.1c criteria.

Rule 4.5.4d (i) requires at least three feet of separation between the bottom of an infiltration facility and groundwater. The American Engineering Testing, Inc. geotechnical evaluation indicates that groundwater was encountered at elevation 907.2 M.S.L. in soil boring B-5, taken near the proposed facility. The following table provides a comparison of the bottom elevation of the UGSWMF relative to the elevation groundwater was encountered.

Proposed Stormwater Management Facility	Bottom Elevation of Facility M.S.L.	Groundwater Elevation (B-5) M.S.L.	Separation Provided (feet)
Underground Stormwater Management Facility	911.6	907.2 ¹	4.4

1. Observed water level at boring B-5

The required three (3) feet of separation is provided between the bottom of the infiltration area and groundwater. Rule 4.5.4d (i) is met.

Rule 4.3.3 states:

- 1) All new and reconstructed buildings must be constructed such that the low floor is at least two feet above the 100-year high-water elevation or one foot above the emergency overflow of a constructed facility.
- 2) All new and reconstructed buildings must be constructed such that no opening where surface flow can enter the structure is less than two feet above the 100-year high-water elevation of an adjacent facility.
- 3) A stormwater management facility must be constructed at an elevation that ensures no adjacent habitable building will be brought into noncompliance with a standard in subsection 4.3.3.

The low floor elevations of the proposed building and existing building in relation to the UGSWMF's 100-year high-water elevation is summarized in the table below. Appendix 4a analysis was used to demonstrate compliance with subsection 4.3.3 criteria for structures noted below.

Building	Low Floor Elevation of Building (M.S.L.)	Adjacent Stormwater Management Facility	100-year Frequency Flood Elevation of Facility (M.S.L.)	Low Floor Elevation Freeboard (feet)	Distance from Building to Adjacent Facility (feet)	Water Table Elevation ¹ (M.S.L.)	Minimum Permissible Depth to Water Table (ft)	Provided Depth from Low Floor Elevation to Water Table (ft)
The Ovation (proposed multi-family apartment building)	912.7	UGSWMF	917.6	-4.9	13	907.2 ¹	0.5	5.5
Thirty Bales (existing building)	920.6	UGSWMF	917.6	3.0	N/A	N/A	N/A	N/A

1. Observed water level for boring B-5.

The runoff volume generated from the site will be detained by the UGSWMF during the 100-year event. The 100-year high water elevation of the facility, elevation 917.6 M.S.L., will remain below the ground surface. The buildings underground parking garage entrance at 12th Avenue South is the low floor/ low opening elevation of the building (912.7 M.S.L.). Since the entrance is not hydraulically connected to the UGSWMF emergency surface overflow, the 917.6 M.S.L. high water elevation of the facility will not having an impact on the building. A

surface overflow from the underground facility, should it occur, is directed towards 11th Avenue South at elevation 919.6 M.S.L. The applicant must further demonstrate that surface flow will not enter the low opening elevation of the existing structure by identifying the low opening and low floor elevations of the existing and proposed structures on the plans.

In accordance with Rule 4.3.1a (i), where infiltration or filtration facilities, practices or systems are proposed, pre-treatment of runoff must be provided. Sump manholes will provide the required pretreatment of runoff entering the underground stormwater management facility, complying with Rule 4.3.1a (i).

In accordance with Rule 4.3.4, a post-project chloride management plan must be provided that will, 1) designate an individual authorized to implement the chloride-use plan and 2) designate a MPCA certified salt applicator engaged in the implementation of the chloride-use plan for the site.

Subsection 4.3.5 requires the submission of a maintenance plan. All stormwater management structures and facilities must be designed for maintenance access and properly maintained in perpetuity to assure that they continue to function as designed. The applicant must provide a receipt showing recordation of a maintenance declaration for the operation and maintenance of the stormwater management facilities.

5.0 Erosion and Sediment Control

The district’s requirements for erosion and sediment control apply to the project because more than 50 cubic yards of material will be disturbed and 5,000 square feet or more of surface area is altered, Rules 5.2.1a and b.

The erosion control plan prepared by Sambatek Inc. includes installation of silt fence, sediment control logs, a stabilized rock construction entrance and storm drain inlet protection.

The contractor for the project will need to designate a contact who will remain liable to the district for performance under the District’s Erosion and Sediment Control Rule 5.0, in accordance with subsection 5.4.1e. NMCWD must be notified if the responsible individual changes during the permit term.

11.0 Fees

Fees for the project are:

Rules 4.0-5.0 \$1,500

12.0 Financial Assurances

Financial Assurances for the project are:

Rule 5: Perimeter Control: 1,150 L.F. x \$2.50/L.F. =	\$2,875
Inlet Protection: 20 x \$100 =	\$2,000
Site Restoration: 1.6 acres x \$2,500/acre =	\$4,000
Rule 4: Stormwater Management Facility: 2,075 S.F. x \$12/S.F.=	\$24,900
Chloride Management	\$5,000
Contingency and Administration	\$14,525

Findings

1. The proposed project includes the information necessary, plan sheets and erosion control plan for review.
2. Rules 4 and 5 will be met with the fulfillment of the conditions identified below.
3. The proposed stormwater management facilities will provide volume retention, rate control and water quality management in accordance with subsections 4.3.1a-c criteria.
4. In accordance with NMCWD Rule 4.3.5, the applicant must provide a maintenance and inspection plan that identifies and protects the design, capacity and functionality of the stormwater management facility and proprietary treatment device.
5. Based on the district's Atlas 14 watershed-wide model, a portion of the site becomes inundated during the 100-year frequency flood event. However, the NMCWD does not manage this 100-year frequency flood inundation area, as it is not associated with a waterbody or watercourse.

Recommendation

Approval, contingent upon:

Compliance with the General Provisions (attached).

Financial Assurance in the amount of \$53,300, \$48,300 for stormwater management, erosion control, and site restoration, and \$5,000 for compliance with the chloride management requirements.

The applicant providing a name and contact information for the individual responsible for the erosion and sediment control at the site. NMCWD must be notified if the responsible individual changes during the permit term.

Per Rule 4.3.5, a receipt showing recordation of a maintenance declaration for the operation and maintenance of the stormwater management facility and proprietary treatment device is required. A draft of the declaration must be approved by the district prior to recordation.

Rule 4.3.3 states that all new and reconstructed buildings must be constructed such that no opening where surface flow can enter the structure is less than two feet above the 100-year high-water elevation of an adjacent facility. To fully comply with Rule 4.3.3 criteria, the following must be addressed:

- The low floor and low opening elevations are identified in the stormwater narrative. The plans must be amended to identify the **low floor and low opening elevations** of the following:
 - The proposed multi-family apartment building.
 - The existing Thirty Bales building.
- Appendix F indicates that the low opening elevation of the proposed structure is 921.3 M.S.L. However, the low opening is located at the underground garage access drive

along 12th Avenue South. The low opening garage elevation must be clarified and identified on the plans.

- As shown on the plans, the low opening garage elevation pumps runoff from the access driveway to the underground stormwater management facility. The capacity of the pump must be shown on the plans, and must accommodate the 100-year frequency flood discharge to the system, based on the tributary drainage area. Additionally, methods to prevent flow from entering the low opening garage area from the facility must be shown on the plans (e.g., backflow preventer).
- Stormwater runoff from 12th Avenue South is conveyed south along 12th Avenue South, directly adjacent to the low opening garage elevation. The high point between the street and the low opening garage elevation must be clarified to ensure the flood risk is not impacted by stormwater runoff conveyed along 12th Avenue South.

By accepting the permit, when issued, the applicant agrees to the following stipulations for closeout of the permit and release of the financial assurance after the project:

The work for The Ovation (Cinema 6 Redevelopment) under the terms of Permit 2022-122 must have an impervious surface area and configuration materially consistent with the approved plans. Design that differs materially from the approved plans will need to be the subject of a request for a permit modification or new permit, which will be subject to review for compliance with all applicable regulatory requirements.

Per Rule 4.5.6, an as-built drawing of the underground stormwater management facility conforming to the design specifications, including a stage volume relationship in tabular form for the underground stormwater management facility, as approved by the district, must be provided. The as-built drawing must include relevant design information based on surveyed data including but not limited to the invert elevation of the pipe, the controlling outlet elevation, the bottom of the facility, etc.

Submission of a plan for post-project management of Chloride use on the site. The plan must include 1) the designation of an individual authorized to implement the chloride use plan and 2) the designation of a Minnesota Pollution Control Agency certified salt applicator engaged in the implementation of the chloride-use plan for the site. The release of the \$5,000 of the financial assurance required for the chloride-management plan requires that chloride-management plan has been provided and approved by the District's Administrator.

Per Rule 12.4.1b, demonstration and confirmation that the stormwater management facility has been constructed or installed and are functioning as designed and permitted. Verification, through daily observation logs and photographs, must be provided showing the stormwater management facility used for volume retention have drawn down within 48 hours from the completion of two 1-inch (approximate) separate rainfall events.