

ORDINANCE NO. 2026-~~XX~~
CITY OF ARDEN HILLS
RAMSEY COUNTY, MINNESOTA

**AN ORDINANCE AMENDING CHAPTER 11 OF THE ARDEN HILLS CITY CODE
CONCERNING SUBDIVISIONS**

THE CITY COUNCIL OF THE CITY OF ARDEN HILLS, MINNESOTA, ORDAINS:

SECTION 1. Chapter 11 – Subdivision Code, Section 1140 – Required Improvements is hereby amended removing the following ~~struck~~ text and adding the following underlined text:

1140.08 Stormwater Management.

Stormwater management plans shall comply with ~~with Rule C: Stormwater Management Plans of the Rice Creek Watershed District Rules.~~ the following: the standards established by the Minnesota Pollution Control Agency's National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) Construction Permit MNR 100001 (Construction Storm Water (CSW) Permit) as amended in its entirety and now constituted and from time to time amended; Rule C: Stormwater Management Plans of the Rice Creek Watershed District Rules; and the standards listed below, whichever is more restrictive.

Subd. 1 Post-Construction Stormwater Management

A. Submittal of Site Plans consisting of Post-Construction Plans

1. Site plans must be submitted for review and confirmation that ordinance requirements have been met, prior to start of construction activity.
2. Site plans must consist of, at a minimum, the following items:
 - (i) All calculations for the permanent stormwater treatment system;
 - (ii) The water quality volume that will be treated through volume reduction practices;
 - (iii) Rationale and documentation supporting the location of any off-site permanent stormwater treatment projects;
 - (iv) All legal mechanisms related to Part c. (Long-term Maintenance).

B. Post-Construction Stormwater Management BMPs must meet the following criteria:

1. Designed with accepted engineering practices and in accordance with part d. (Permanent Stormwater Management System Design Criteria).
2. Designed so that discharges from the project during and after construction activities do not cause a violation of state water quality standards, including

nuisance conditions, erosion in receiving channels or on downslope properties, or a significant adverse impact to wetlands caused by inundation or decrease of flow.

3. Treat the water quality volume on any project where the sum of the new impervious surface and the fully reconstructed impervious surface equals one or more acres.
4. For construction activity (excluding linear projects), water quality volume must be calculated as one (1) inch times the sum of the new and the fully reconstructed impervious surface.
5. For linear projects, water quality volume must be calculated as the larger of one (1) inch times the new impervious surface or one-half (0.5) inch times the sum of the new and the fully reconstructed impervious surface. Where the entire water quality volume cannot be treated within the existing right-of-way, a reasonable attempt to obtain additional right-of-way, easement, or other permission to treat the stormwater during the project planning process must be made. Volume reduction practices must be considered first, as described in Section 3.b.vi. Volume reduction practices are not required if the practices cannot be provided cost effectively. If additional right-of-way, easements, or other permission cannot be obtained, the owner/operator of construction activity must maximize the treatment of the water quality volume prior to discharge from Arden Hill's MS4.
6. Volume reduction practices (e.g., infiltration or other) to retain the water quality volume on-site must be considered first when designing the permanent stormwater treatment system. Wet sedimentation basins and filtration systems are not considered volume reduction practices. If infiltration is prohibited, as described in Part d.i.14. (Infiltration System), other volume reduction practices, a wet sedimentation basin, or a filtration basin may be considered.

C. Post Long-term Maintenance

1. The Permittee must enter into a long-term maintenance agreement with the City of Arden Hills that documents all responsibilities for long-term operation and maintenance of stormwater treatment practices that are not owned or operated by the City of Arden Hills. At a minimum, the long-term maintenance agreement must include provisions that:
 - (i) Allow the City of Arden Hills to conduct inspections of structural stormwater BMPs not owned or operated by the City of Arden Hills, perform necessary maintenance, and assess costs for those structural stormwater BMPs when the City of Arden Hills determines the owner of that structural stormwater BMP has not ensured proper function;
 - (ii) Are designed to preserve the City of Arden Hills right to ensure maintenance responsibility, for structural stormwater BMPs not owned or operated by the City of Arden Hills, when those responsibilities are legally transferred to another party; and

- (iii) Are designed to protect/preserve structural stormwater BMPs. If structural stormwater BMPs change, causing decreased effectiveness, new, repaired, or improved structural stormwater BMPs must be implemented to provide equivalent treatment to the original BMP.

D. Permanent Stormwater Management System Design Criteria

1. Infiltration System

- (i) Infiltration options include, but are not limited to: infiltration basins, infiltration trenches, rainwater gardens, bioretention areas without underdrains, swales with impermeable check dams, and natural depressions;
- (ii) To determine if an infiltration system is suitable, either the MPCA's contamination screening checklist must be completed or an assessment must be conducted. The checklist or assessment must be documented in the site plan. For more information and to access the MPCA's "contamination screening checklist" see the Minnesota Stormwater Manual;
- (iii) Must be designed such that pre-existing hydrologic conditions of wetlands in the vicinity are not impacted (e.g., inundation or breaching a perched water table supporting a wetland);
- (iv) Must not be excavated to final grade, or within three (3) feet of final grade, until the contributing drainage area has been constructed and fully stabilized unless they provide rigorous erosion prevention and sediment controls (e.g., diversion berms) to keep sediment and runoff completely away from the infiltration area.
- (v) When excavating to within three (3) feet of final grade, the Permittee must stake off and mark the area so heavy construction vehicles or equipment do not compact the soil in the infiltration area;
- (vi) A pretreatment device such as a vegetated filter strip, forebay, or water quality inlet (e.g., grit chamber) to remove solids, floating materials, and oil and grease from the runoff, to the maximum extent practicable, must be used before the system routes stormwater to the infiltration system;
- (vii) Designed to provide a water quality volume as described in Section b.iii, b.iv, and b.v;
- (viii) Designed to discharge all stormwater (including stormwater in excess of the water quality volume)routed to the system through the upper most soil surface or engineered media surface within 48 hours. Additional flows that cannot infiltrate within 48 hours must bypass the system through a stabilized discharge point;
- (ix) Must provide a means to visually verify the infiltration system is discharging through the soil surface or filter media surface within 48 hours or less;

- (x) Must provide at least one soil boring, test pit or infiltrometer test in the location of the infiltration practice for determining infiltration rates;
- (xi) For design purposes, divide field measured infiltration rates by 2 as a safety factor or use soil-boring results with the infiltration rate chart in the Minnesota Stormwater Manual to determine design infiltration rates. When soil borings indicate type A soils, field measurements should be performed to verify the rate is not above 8.3 inches per hour.
- (xii) Must employ appropriate on-site testing to ensure a minimum of three (3) feet of separation from the seasonally saturated soils(or from bedrock) and the bottom of the proposed infiltration system;
- (xiii) Must design a maintenance access ,typically eight (8) feet wide;
- (xiv) Infiltration Systems are prohibited in the following areas (See "higher level of engineering review" in the Minnesota Stormwater Manual for more information):
 - i. Areas that that receive runoff from vehicle fueling and maintenance areas;
 - ii. Areas where infiltrating stormwater may mobilize high levels of contaminants in soil or groundwater;
 - iii. Areas where soil infiltration rates are field measured at more than 8.3 inches per hour unless the soils are amended to slow the infiltration rate below 8.3 inches per hour;
 - iv. Areas with less than three (3) feet of separation distance from the bottom of the infiltration system to the elevation of the seasonally saturated soils or the top of bedrock;
 - v. Areas of predominately Hydrologic Soil Group type D soils(clay);
 - vi. The following areas within a Drinking Water Supply Management Area (DWSMA) as defined in Minn. R. 4720.5100, subp. 13:
 - 1. In an Emergency Response Area (ERA) within a DWSMA classified as having high or very high vulnerability as defined by the Minnesota Department of Health; or
 - 2. In an ERA within a DWSMA classified as moderate vulnerability unless a higher level of engineering review sufficient to provide a functioning treatment system and to prevent adverse impacts to groundwater has been approved by the City of Arden Hills; or
 - 3. Outside of an ERA within a DWSMA classified as having high or very high vulnerability unless a higher level of engineering review sufficient to provide a functioning treatment system and

to prevent adverse impacts to groundwater has been approved by the City of Arden Hills.

4. Areas within 1,000 feet upgradient or 100 feet downgradient of active karst features; and
5. Areas that receive runoff from the following industrial facilities not authorized to infiltrate stormwater under the NPDES stormwater permit for industrial activities:
 - a. Automobile salvage yards;
 - b. Scrap recycling and waste recycling facilities;
 - c. Hazardous waste treatment, storage, or disposal facilities;
 - d. Wood preserving facilities; or
 - e. Air transportation facilities that conduct deicing activities.

ii. Filtration System

- 1) Filtration options include, but are not limited to: sand filters with underdrains, biofiltration areas, swales using underdrains with impermeable check dams and underground sand filters;
- 2) Must not install filter media until the contributing drainage area is constructed and fully stabilized unless they provide rigorous erosion prevention and sediment controls (e.g., diversion berms) to keep sediment and runoff completely away from the filtration area;
- 3) Designed to remove at least 80 percent of TSS;
- 4) Must use a pretreatment device such as a vegetated filter strip, small sedimentation basin, water quality inlet, forebay or hydrodynamic separator to remove settleable solids, floating materials, oils and grease from the runoff to the maximum extent practicable, before runoff enters the filtration system;
- 5) Designed to provide a water quality volume as described in Section b.iii, b.iv, and b.v;
- 6) Designed to discharge all stormwater(including stormwater in excess of the water quality volume) routed to the system through the uppermost soil surface or engineered media surface within 48 hours. Additional flows that the system cannot filter within 48 hours must bypass the system or discharge through an emergency overflow;
- 7) Designed to provide a means to visually verify the system is discharging through the soil surface or filter media within 48 hours;
- 8) Employ appropriate on-site testing to ensure a minimum of three (3) feet of separation between the seasonally saturated soils(or from bedrock) and the bottom of the proposed filtration system;

9) Construct with an impermeable liner when the system has less than three (3) feet of separation between seasonally saturated soils or bedrock;

10) Designed with a maintenance access, typically eight(8) feet wide.

iii. Wet Sedimentation Basin

1) Permanent volume of 1,800 cubic feet of storage below the outlet pipe for each acre that drains to the basin;

2) Permanent volume must reach a minimum depth of at least three (3) feet and must have no depth greater than 10 feet;

3) Must be configured to minimize scour or resuspension of solids;

4) In addition to the permanent volume, the basin must provide the water quality volume as live storage. Water quality volume is described in Section b.iii, b.iv, and b.v;

5) Water quality volume discharges at no more than 5.66 cubic feet per second (cfs) per acre of surface area of the basin;

6) Designed to prevent short-circuiting and the discharge of floating debris;

7) Basin outlets must have energy dissipation;

8) Must include a stabilized emergency overflow to accommodate storm events in excess of the basin's hydraulic design;

9) Must have a maintenance access, typically eight (8) feet wide, for the basin;

10) Must be located outside of surface waters and any buffer zones identified in Construction Stormwater General permit.

11) Permittees must design basins using an impermeable liner if located within active karst terrain.

iv. Regional Wet Sedimentation Basins

1) When the entire water quality volume cannot be treated by volume reduction practices onsite, regional wet sedimentation basins can be used or created, provided they are constructed basins, not a natural wetland or water body.

2) The regional basin conforms to all requirements for a wet sedimentation basin as described in Part d.iii. (Wet Sedimentation Basin)

3) Must be large enough to account for the entire area that drains to the basin.

4) Waterways between the project and the regional basin must not be significantly degraded.

5) Written authorization from the City of Arden Hills or private entity that owns and maintains the regional basin.

SECTION 2. This Ordinance shall become effective immediately upon its passage and publication according to law. A Summary of this Ordinance will be published in accordance with state statute.

PASSED and ADOPTED this ____ day of _____, 2026, by the City Council of the City of Arden Hills, Minnesota.

CITY OF ARDEN HILLS

By _____
David Grant, Mayor

ATTEST:

Julie Hanson, City Clerk

Published in the Pioneer Press on _____, 2026