



AGENDA OF THE PLANNING
COMMISSION
CITY OF BIRCHWOOD VILLAGE
WASHINGTON COUNTY, MINNESOTA
December 1, 2016
7:00 P.M.

CALL TO ORDER

APPROVE AGENDA

Regular Agenda

- A. City Code 300.020: Definition 23: Impervious Surface *

ADJOURN

* Denotes items that have supporting documentation provided



MEMORANDUM

TO: Birchwood Planning Commission
FROM: Tobin Lay, City Administrator
DATE: November 23, 2016
SUBJECT: Impervious Surface Definition

In follow-up to previous discussions regarding the City Code's definition of Impervious Surface, the City Council has asked TKDA to review proposed language and TKDA has provided suggested changes (attached). The purpose of this Planning Commission meeting is to review TKDA's suggestions and make a recommendation to City Council. Please review all of the attachments and prepare for a good discussion.

If you have any questions, please contact Tobin Lay at 651-426-3403 or Tobin.Lay@cityofbirchwood.com

Thanks,
Tobin Lay

Draft Ordinance Options
Impervious Cover

Option 1

302.050 IMPERVIOUS SURFACES

1. Impervious surface coverage of lots shall not exceed twenty-five (25) percent of the lot area unless the applicant obtains a variance and the following conditions are satisfied, and in no case, shall the impervious surface area exceed thirty-five (35)/forty (40) percent:
 - a. The applicant shall submit a stormwater management plan for the site that analyzes the effects of the proposed development relative to the direction, rate of discharge, volume of discharge and timing of runoff. Modelling shall meet the modelling requirements of the current Rice Creek Watershed District Rules.
 - b. The stormwater management plan shall include structures and/or best management practices for the mitigation of stormwater impacts on receiving waters in compliance with the City's Surface Water Management Plan, or as approved by the City Engineer, so that the site design includes stormwater management practices that control the stormwater runoff volumes, and the post-construction runoff volume shall be retained on site for 1.1 inches of runoff from impervious surfaces.
 - c. No permeable pavement system is permitted in the Bluff Impact Zone or Shore Impact Zone.
 - d. Site design shall minimize tree removal, ground cover change, loss of natural vegetation, and grade change as much as possible.
 - e. The base of installed infiltration structures or practices must be a minimum of three (3) feet above the established ground water table.
 - f. The stormwater management practices shall be designed and certified by a registered engineer or landscape architect and installed by an experienced and qualified installer for the system used. The City shall inspect the installation of the stormwater management system at the site
 - g. The design must include maintenance instructions and a maintenance schedule provided to the property owner and to the Zoning Administrator or Building Inspector and shall be filed along with the permit.
 - h. The stormwater management practices shall be designed so that they may be monitored to ensure that they continue to work as designed.
 - i. Documentation shall be provided by a qualified individual that the proposed stormwater management methods meet the required standard, and are designed and installed consistent with the City's Surface Water Management Plan, NPDES stormwater standards, and the Minnesota Pollution Control Agency's Minnesota Stormwater Manual.

Option 2

302.50 IMPERVIOUS SURFACES

1. Impervious surface coverage of lots shall not exceed twenty-five (25) percent of the lot area unless the following conditions are satisfied, and in no case, shall impervious surface area exceed thirty (30) percent:
 - a. No water-oriented accessory structures (except docks, boatlifts, and retaining walls) will be located within the shore impact zone.
 - b. No more than 50 percent of the impervious area on the property drains directly to an adjoining protected water.



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 651.292.4400
 tkda.com

Memorandum

To:	Birchwood City Council and Planning Commission	Reference:	Impervious Cover Ordinance Options
Copies To:	Mike Anderson, City Administrator	Project No.:	16190.000
From:	Sherri Buss, RLA AICP, Planner	Routing:	
Date:	October 11, 2016		

On September 28, the City Council and Planning Commission held a joint meeting to discuss ideas to permit more flexibility in the City's ordinance requirements for impervious surfaces. The meeting consensus was to request the Planner to develop some options for the City to consider that would allow a higher percentage of impervious cover, if the result were "effectively" limited to the same stormwater standards that result from the 25% cover standard.

I have reviewed ordinances from a variety of communities with Shoreland areas in Minnesota and DNR and MPCA recommendations related to impervious cover in Shoreland and Special Waters areas, and have developed two draft options for the City's consideration.

Option 1

- The City should discuss two items within line 1:
 - Will applicants be required to obtain a variance in order to use the alternative impervious coverage standard?
 - Should the maximum impervious cover with the alternative standard be 35%, 40% or another standard? On small sites, it may be difficult to include enough practices to go beyond 35 or 40% coverage and be equivalent in result to the current 25% coverage standard.
- This option requires that applicants who want to exceed the 25% impervious cover standard to complete a stormwater management plan. The draft proposes that the modelling used for the plan must meet the Rice Creek Watershed modelling standards, so that a common local standard is employed in the analyses completed for all plans.
- I looked at some options for increasing the standards for water quantity and quality management so that a plan with a higher level of impervious coverage would "effectively" meet the stormwater management goals of 25% coverage. The recommended requirement I am proposing for the plan is that the site plan must include practices that result in the infiltration of a minimum of 1.1 inches of rainfall on impervious surfaces. This standard was chosen as a simple and direct way to require infiltration that is higher than most current standards, is slightly higher than the standard recommended by the DNR for variances in shoreland areas, and was recommended by recent city and agency working groups on stormwater management. Using this standard also increases the water quality treatment (phosphorus and sediment removal) which is correlated with stormwater volume control over current requirements. The 1.1-inch

standard was recommended for infiltration by the Minnesota Minimal Impact Design Standard (MIDS) that were recently developed by a task force representing MS4 Cities, agencies, and other stakeholders. Using this standard is simpler and more direct than developing new language for "effective" cover standards, and it should be relatively easy for applicant's engineer to model in the stormwater management plan and for the City's engineer to review.

- Option 1 proposes several other standards recommended by the Minnesota DNR (items c. through h.) for variances from the 25% coverage standard to improve the effectiveness of the design.
- Item i. requires that the design be consistent with current regulatory standards in Minnesota.

Option 2

Option 2 is a simpler approach that is used by the City of Shoreview, and is submitted for discussion. This option permits a minimal increase in impervious coverage (up to 30%) without a variance, if 2 requirements are met. The City could consider this approach if it wishes to permit only a minor increase in impervious cover and avoid the permit requirements and review process identified in Option 1.

