

Retaining Walls Innovative Standards

Part of a series highlighting innovative local government standards intended to help encourage adoption of more protective shoreland standards.



Benefits

- Protects riparian vegetation and habitat
- Allows movement of wildlife to & from water
- Preserves and enhances natural lake shore character
- Minimizes disturbances runoff and nutrient flows into surface waters

Types of Approaches

1. Wall size & location determine permit type 2
2. Wall size, location, and need determine permit type 2
3. Only to correct an erosion problem 3

The ordinance language used in these examples varies significantly depending on complexity of the issue and method of implementation. In straight forward cases, actual ordinance language is provided. In complex examples, the key provisions are summarized. Please contact the planning and zoning staff with the relevant community if you have questions about the specific ordinance provisions.

All examples provided are specific to walls located above the Ordinary High-Water Level. All walls, or portions of them, located below the OHWL will require a DNR public waters work permit, under [Minn. R. 6115](#), and meet floodplain regulations limiting increases in flood elevations. Contact your [DNR Area Hydrologist](#) for more information.

1. Wall size & location determine permit type

LeSueur County

Walls 3 feet high or less, 25 feet long or less or on a slope less than 12% outside the SIZ are a permitted use. Any wall within the SIZ or walls outside of the SIZ greater than 3 feet high, 25 feet long or on a slope over 12% require a conditional use permit.

All walls must be placed in an inconspicuous location with vegetation screening views from the water - walls needed for erosion problems may be exempt from being inconspicuous. All permits require a land alteration plan requiring vegetation restoration, scaled site plans with 2-foot contours, and as-built drawings completed by a surveyor or engineer. Boulders more than 30-inches in diameter are considered a retaining wall

Ordinance Citation: Section 13. Subdivision 5.A.7.

2. Wall size, location, and need determine permit type

Stearns County*

A minor land alteration permit is required for retaining walls:

- 4 feet cumulative height or less for documented erosion problems
- 4 feet cumulative height or less for no erosion problem, if the wall is no longer than 25% of the lot width measured at the OHWL, or 75 feet, whichever is less
- That are not visible from shore
- Replacement of walls
- Beyond the structure setback from the OWHL

A major land alteration permit, requiring approval by the county board, is required for retaining walls:

- Within the BIZ, SIZ, or on a steep slope for a demonstrated need and no aesthetic intrusion on land or shoreline
- Anywhere else if:
 - Walls are over 4 feet cumulative height for documented erosion problems
 - Walls are over 4 feet cumulative height for ornamental purposes for more than one area, more than 25% of the lot width or more than 75 feet in total width
 - Replacing retaining walls over 4 feet cumulative height

No permit is required if the wall is more than two times the structure setback from the OWHL or to repair a wall.

Ordinance Citation: Section 10.2.14.

*Murray County has standards very similar to those described above for Stearns County. See Section 12 – Vegetation and Land Alterations.

3. Only to correct an erosion problem

Becker County

A conditional use is required for new and replacement walls within the SIZ and BIZ and must be:

- Designed to correct an established erosion problem
- Suitable given the demonstrated need
- Designed by a registered engineer or landscape architect, depending on project scope
- Designed to be the minimum size necessary to control the erosion problem

Walls located in the Pelican River and Cormorant Lakes Watershed Districts are permitted by the districts and do not require a permit from the county

Ordinance Citation: Chapter 6, Section 8

Morrison County

Retaining walls are allowed only to correct an existing erosion hazard that cannot be addressed with vegetative erosion controls or riprap. Retaining walls must be the minimum size necessary to control erosion and any walls of five feet or more in height must be designed by a registered professional engineer or landscape architect.

Ordinance Citation: Section 714.2

Mississippi River Corridor Critical Area (MRCCA) State Rules

A land alteration permit is required for retaining walls in the BIZ, SIZ and within 50 feet of a wetland or natural drainage area and:

- Allowed only to correct an established erosion problem
- Designed to be the minimum necessary to control the erosion problem with each wall no larger than five feet in height or no closer than 10 feet apart
- Anything larger must be determined by a registered engineer to be necessary to correct the problem

A permit is not required to repair existing walls if no land alteration.

All local governments in the MRCCA adopt and administer this rule.

State Rule Citation: 6106.0160 Subp. 4.