

## **Article 7 Shoreland Management Regulations**

### **Sec. 7.01 Policy**

The uncontrolled use of shorelands of Cook County, Minnesota affects the public health, safety and general welfare not only by contributing to pollution of public waters, but also by impairing the local tax base. Therefore, it is in the best interests of the public health, safety and general welfare to provide for the wise development of shorelands of public waters. The Legislature of the State of Minnesota has delegated responsibility to the counties of the state to regulate the subdivision, use and development of the shorelands of public waters located in unincorporated areas and thus preserve and enhance the quality of surface waters, preserve the economic and natural environmental values of shorelands, and provide for the wise utilization of waters and related land resources.

### **Sec. 7.02 Statement of Purpose**

- A. Designate suitable land use districts for each public water.
- B. Regulate the placement of sanitary and waste disposal facilities on lots.
- C. Regulate the area of a lot and the length of water frontage suitable for a building site, sewage treatment and water supply.
- D. Regulate alteration on the shorelands of public waters.
- E. Regulate alterations of the natural vegetation and the natural topography.
- F. Regulate subdivision of land in unincorporated areas.
- G. Provide variances from the minimum standards and criteria.

### **Sec. 7.03 Classification**

The public waters of Cook County, Minnesota have been classified by the Minnesota Department of Natural Resources and the Cook County Board of Commissioners as follows:

- A. Lakes
  1. SNR Special Natural Environment
  2. NE Natural Environment
  3. SRD Special Recreational Development
  4. RD Recreational Development
  5. GD General Development
- B. Rivers
  1. RR Remote River Segments
  2. FR Forested River Segments
  3. TR Tributary River Segments

(For individual lake and stream classifications in Cook County, refer to Appendix II)

**Sec. 7.04 Compliance**

The use of any shoreland of public waters; the size and shape of the lots; the use, size, type and location of structures on lots; the installation and maintenance of water supply and waste disposal facilities; the filling, grading, lagooning, or dredging of any shoreland areas; the cutting of shoreland vegetation; and the subdivision of lots; shall be in full compliance with the terms of these regulations and other applicable regulations. Construction of buildings, private water supply and sewage disposal systems shall require a permit unless otherwise expressly excluded by the requirements of these regulations.

**Sec. 7.05 Lot Sizes and Setbacks**

	<b>Lot Width</b>	<b>Lot Size</b>	<b>Building Setback From OHWL Elevation</b>	<b>Soil Absorption Setback From OHWL Elevation</b>
Special Natural Environment (SNE)	200 Feet	2 ½ Acre	150 Feet	150 Feet
Natural Environment (NE)	200 Feet	2 Acres	150 Feet	150 Feet
Special Recreational Development (SRD)	200 Feet	1 ½ Acres	100 Feet	150 Feet
Recreational Development (RD)	150 Feet	1 Acre	100 Feet	100 Feet
Special General Development (SGD)	150 Feet	1 Acre	75 Feet	100 Feet
General Development	150 Feet	1 Acre	75 Feet	100 Feet
General Development Lake Superior	200 Feet	1 Acre	**	100 Feet
Remote River Segment (RR)	300 Feet	*	200 Feet	150 Feet
Forested River Segment (FR)	200 Feet	*	150 Feet	100 Feet
Tributary River Segment (TR)	100 Feet	*	100 Feet***	100 Feet

\* Minimum lot size depends on specific zone district.

\*\* 40 Feet from the Vegetation Line.

\*\*\* 75 Feet in the North Shore Management Area.

**Sec. 7.06 Placement of Structures on Lots**

- A. All structures shall meet the required setbacks for their particular shoreland classification (except boathouses on Lake Superior).
- B. Boathouses shall be permitted to be located up to the normal high water mark only on Lake Superior and only under a conditional use permit, provided that they shall not be used for habitation and they shall not contain any sanitary facilities.

- C. Setback for placement of structures on Lake Superior shall be 40 feet from the vegetation line.
- D. Additional structure setbacks. The following additional structure setbacks apply, regardless of the classification of the water body.
  - 1. Top of bluff 30 Feet
  - 2. Un-platted Cemetery 50 Feet
- E. No structure may be placed on a significant historic site in a manner that affects the values of the site unless adequate information about the site has been reviewed and documented in a public repository.
- F. The Zoning Administrator must evaluate possible soil erosion impacts and development visibility from public waters before issuing a permit for grading, filling, construction of sewage treatment systems, roads, driveways, structures or other improvements on steep slopes. When determined, necessary conditions must be attached to issued permits to prevent erosion and to preserve existing vegetation screening of structures, vehicles and other facilities as viewed from the surface of public waters, assuming summer, leaf-on vegetation.

**Sec. 7.07 High Water Elevation**

- A. For lakes, ponds or flowages, structures shall be placed at an elevation such that the lowest floor, including basement floors, is at least three feet above the highest known water level. In those instances where sufficient data on known high water levels is not available, the elevation of the line of permanent shoreland vegetation shall be used as the estimate high water elevation. When fill is required to meet this elevation, the fill shall be allowed to stabilize.
- B. For rivers and streams, the elevation to which the lowest floor, including basement, is placed must be determined by placing the lowest floor at least three feet above the flood of record, if data is available. If data is not available, by placing the lowest floor at least three feet above the ordinary high water level, or by conducting a technical evaluation to determine effects of proposed construction upon flood stages and flood flows and to establish a flood protection elevation. Under all three approaches, technical evaluations must be done by a qualified engineer or hydrologist, and be consistent with State Rules 6120.5000 to 6120.6200 which govern the management of flood plain areas. If more than one approach is used, the highest flood protection elevation determined must be used for placing structures and other facilities.

**Sec. 7.08 Shoreland Alterations**

Alterations of vegetation and topography will be regulated to prevent erosion into public waters, fix nutrients, preserve shoreland aesthetics, preserve historic values, prevent bank slumping, and protect fish and wildlife habitat.

- A. Vegetation Alterations
  - 1. Vegetation alteration necessary for the construction of structures and sewage treatment systems and the construction of roads and parking areas regulated by Section 7.08(C) of this ordinance are exempt from the vegetation alteration standards that follow.

2. Removal or alteration of vegetation, except for agricultural and forest management uses as regulated in Section 7.10(B) is allowed subject to the following standards:
  - a. Intensive vegetation clearing within the shore and bluff impact zones and on steep slopes is not allowed. Intensive vegetation clearing for forest land conversion to another use outside of these areas is allowed as a conditional use if an erosion control and sedimentation plan is developed and approved by the Soil and Water Conservation District in which the property is located.
  - b. In shore and bluff impact zones and on steep slopes, limited clearing of trees and shrubs and cutting, pruning, and trimming of trees is allowed to provide a view to the water from the principal dwelling site and to accommodate the placement of stairways and landings, picnic areas, access paths, livestock watering areas, beach and watercraft access areas, and permitted water oriented accessory structures or facilities, provided that:
    - i. The screening of structures, vehicles, or other facilities as viewed from the water, assuming summer, leaf-on conditions, is not substantially reduced;
    - ii. Along rivers, existing shading of water surfaces is preserved; and
    - iii. The above provisions are not applicable to the removal of trees, limbs, or branches that are dead, diseased, or pose safety hazards.

B. Topographic Alterations/Grading and Filling

1. Grading and filling and excavations necessary for the construction of structures, sewage treatment systems, and driveways under validly issued construction permits for these facilities do not require the issuance of a separate grading and filling permit. However, the grading and filling standards in this Section must be incorporated into the issuance of permits for construction of structures, sewage treatment systems, and driveways.
2. Public roads and parking areas are regulated by Section 7.08(C) of this Ordinance.
3. Notwithstanding Items 1 and 2 above, a grading and filling permit will be required for:
  - a. Movement of more than ten (10) cubic yards of material on steep slopes or within shore or bluff impact zones; and
  - b. Movement of more than 50 cubic yards of materials outside of steep slopes and shore and bluff impact zones.
4. The following considerations and conditions must be adhered to during the issuance of construction permits, grading and filling permits, conditional use permits, variances and subdivision approvals:
  - a. Grading or filling in any type 2, 3, 4, 5, 6, 7, or 8 wetland must be evaluated to determine how extensively the proposed activity would affect the following functional qualities of the wetland<sup>(\*)</sup>:
    - i. Sediment and pollutant trapping and retention;
    - ii. Storage of surface runoff to prevent or reduce flood damage;

- iii. Fish and wildlife habitat;
- iv. Recreational use;
- v. Shoreline or bank stabilization; and
- vi. Noteworthiness, including special qualities such as historic significance, critical habitat for endangered plants and animals, or others.

- (\*) This evaluation must also include a determination of whether the wetland alteration being proposed requires permits, reviews, or approvals by other local, state, or federal agencies such as a watershed district, the Minnesota Department of Natural Resources, or the United States Army Corps of Engineers. The applicant will be so advised.
- b. Alterations must be designed and conducted in a manner that ensures only the smallest amount of bare ground is exposed for the shortest time possible;
- c. Mulches or similar materials must be used, where necessary, for temporary bare soil coverage, and a permanent vegetation cover must be established as soon as possible;
- d. Methods to minimize soil erosion and to trap sediments before they reach any surface water feature must be used;
- e. Altered areas must be stabilized to acceptable erosion control standards consistent with the field office technical guides of the local soil and water conservation districts and the United States Soil Conservation Service;
- f. Fill or excavated material must not be placed in a manner that creates an unstable slope;
- g. Plans to place fill or excavated material on steep slopes must be reviewed by qualified professionals for continued slope stability and must not create finished slopes of 30 percent or greater;
- h. Fill or excavated material must not be placed in bluff impact zones;
- i. Any alterations below the ordinary high water level of public waters must first be authorized by the commissioner under Minnesota Statutes, Section 103G. 245;
- j. Alterations of topography must only be allowed if they are accessory to permitted or conditional uses and do not adversely affect adjacent or nearby properties; and
- k. Placement of natural rock riprap, including associated grading of the shoreline and placement of a filter blanket, is permitted if:
  - i. The finished slope does not exceed 3 feet horizontal to 1 foot vertical.
  - ii. The landward extent of the riprap is within 10 feet of the ordinary high water level; and
  - iii. The height of the riprap above the ordinary high water level does not exceed 3 feet.

5. Connections to Public Waters

Excavations where the intended purpose is connection to a public water, such as boat slips, canals, lagoons, and harbors, must be controlled by local shoreland controls. Permission for

excavations may be given only after the DNR Commissioner has approved the proposed connection to public waters.

C. Placement and Design of Roads, Driveways, and Parking Areas.

1. Public and private roads and parking areas must be designed to take advantage of natural vegetation and topography to achieve maximum screening from view from public waters. Documentation must be provided by a qualified individual that all roads and parking areas are designed and constructed to minimize and control erosion to public waters, consistent with the field office technical guides of the local Soil and Water Conservation District, or other applicable technical materials.
2. Roads, driveways and parking areas must meet shoreland structure setbacks.
3. Roads, driveways and parking areas must not be placed within bluff and shore impact zones when other reasonable and feasible placement alternatives exist. If no alternatives exist, they may be placed within these areas, and must be designed to minimize adverse impacts.
4. Public and private watercraft access ramps, approach roads, and access-related parking areas may be placed within the shore impact zones provided the vegetative screening and erosion control conditions of this subpart are met. Access ramps shall not exceed 12 feet in width. For private facilities, the grading and filling provisions of Section 7.08(B) of this Ordinance must be met.

**Sec. 7.09 Stormwater Management**

The following general and specific standards shall apply:

A. General Standards:

1. When possible, existing natural drainage ways, wetlands, and vegetated soil surfaces must be used to convey, store, filter, and retain stormwater runoff before discharge to public waters;
2. Development must be planned and conducted in a manner that will minimize the extent of disturbed areas, runoff velocities, erosion potential, and reduce and delay runoff volumes. Disturbed areas must be stabilized and protected as soon as possible and facilities or methods used to retain sediment on site;
3. When development density, topographic features, and soil and vegetation conditions are not sufficient to adequately handle stormwater runoff using natural features and vegetation, various types of constructed facilities such as diversions, settling basins, skimming devices, dikes, waterways, and ponds may be used. Preference must be given to designs using surface drainage, vegetation, and infiltration rather than buried pipes and man-made materials and facilities;

B. Specific Standards:

1. Impervious surface coverage of lots must not exceed 25 percent of the lot area.
2. When constructed facilities are used for stormwater management, documentation must be provided by a qualified individual that they are designed and installed consistent with the field office technical guide of the local Soil and Water Conservation District.

3. Newly constructed stormwater outfalls must provide for filtering or settling of suspended solids and skimming of surface debris before discharge to public waters.

**Sec. 7.10 Standards**

A. General Commercial, Industrial, Public and Semi-Public Use Standards

Activities of this type are not to be encouraged in shorelands. However, if such activities are found to be in the public interest for location within a shoreland management area, they shall be strictly regulated through Zoning Districts and Conditional Use Permits in a manner consistent with Shoreland Best Management Practices and other regulations of this Ordinance.

B. Forest Management Standards

The harvesting of timber and associated reforestation must be conducted consistent with the provisions of the Minnesota Non-Point Source Pollution Assessment-Forestry and the provisions of Water Quality in Forest Management “Best Management Practices in Minnesota”.

C. Extractive Use Standards

1. Site Development and Restoration Plan. An extractive use site development and restoration plan must be developed, approved, and followed over the course of operation of the site. The plan must address dust, noise, possible pollutant discharges, hours and duration of operation, and anticipated vegetation and topographic alterations. It must also identify actions to be taken during operation to mitigate adverse environmental impacts, particularly erosion, and must clearly explain how the site will be rehabilitated after extractive activities end.
2. Setbacks for Processing Machinery. Processing machinery must be located consistent with setback standards for structures from ordinary high water levels of public waters and from bluffs.

D. Mining of Metallic Minerals and Peat

Mining of metallic minerals and peat, as defined in Minnesota Statutes, Sections 93.44 to 93.51, shall be a permitted use, provided the provisions of Minnesota Statutes, Sections 93.44 to 93.51, are satisfied.

**Sec. 7.11 Alteration of Beds of Public Waters**

Any work which will alter the bed of a public water by changing or diminishing the course, current or cross section must be approved by the Commissioner of the Minnesota Department of Natural Resources before the work may be initiated.

- A. Work requiring such approval includes construction of channel and ditches, lagooning, dredging of lake bottom for the removal of muck, silt or weeds, and filling in the lakebed including low-lying marsh areas.
- B. Work requiring such approval also includes excavations on shorelands where the intended purpose is connection to a public water, such as boat slips, canals, lagoons and harbors.

**Sec. 7.12 Shoreline Setback Averaging**

Variations to the shoreline setback requirements of Section 7.05 may be granted by the Board of Adjustment under the following circumstances, if not within a floodway:

- A. In areas where development exists on both sides of a proposed building site, water and road setbacks may be varied to conform to the existing established setbacks.
- B. In areas of unusual topography or substantial elevation above the lake level, the water setback may be varied to allow a riparian owner reasonable use and enjoyment of his property.
- C. Regardless of the minimum setbacks set forth in Section 7.05, a variance may be granted permitting a principal structure to be set back from the shoreline a distance equal to the average shoreline setback of certain nearby principal structures, plus the greater of 10 feet or 20 percent of the average. To determine the allowable setback for a principal structure for a given zone district, the following method shall be used:
  - 1. On each side of the given lot, determine a distance equal to twice the normally required minimum lot width for the given zone district;
  - 2. Measure shoreline setback of each principal structure located within the distances determined in “1” above;
  - 3. Should a lot be encountered within the distances determined in “1” above which does not have a principal structure thereon, the lot shall be considered to have one principal structure thereon and the measured setback shall be assumed to be equal to the normally required minimum setback for the given zone district;
  - 4. Total the measured setbacks and divide by the number of the setbacks measured; and
  - 5. To the average obtained in “4” above, add 20 percent of the average or 10 feet, whichever is greater.

**Sec. 7.13 Timber Harvesting in Shoreland Areas**

- A. Timber harvesting within the shoreland areas shall be restricted to generally accepted forest management practices designed to promote and manage a healthy forested area.
- B. Clear cutting, except as authorized for public services such as roads and utilities, shall not be permitted within 150 feet of the normal high water mark.
- C. Selective cutting of trees in excess of 4 inches in diameter, breast height, within 150 feet of the normal high water mark shall be permitted provided that the cutting is spaced in several cutting operations and a continuous tree cover is maintained and uninterrupted by large openings.

**Sec. 7.14 Bluff Area Standards**

- A. General Standards:

The top of the bluff shall be that area where there is a clear break in the slope and generally where the slope is less than 18% over a 50 foot run. All structures must be set back a distance as specified for lakes and rivers from where the break in the slope begins. Unless other provisions have been established for specific soil conditions the following standards shall apply in bluff areas:

- 1. No structures shall be allowed in the bluff impact zone;

2. Compliance with Section 7.09 is required.
3. Erosion control measures and Best Management Practices for Shorelands shall be applied to all Variances and Conditional Uses in bluff areas.

B. Shallow Soils Standards

In bluff areas, where the soil depth over ledge rock averages 24 inches or less, the following standards shall apply if the bluff impact zone, using the above general formula (in A), results in a structure setback from the ordinary high water line of more than 150% of the required structure setback if no bluff existed:

1. All parcels shall have suitable area set aside for sewage treatment including a sewage system expansion area. No structure will be permitted in those areas;
2. The structure setback shall be 150% of minimum building setback if a bluff exists according to the general formula, but the structure may be placed in the bluff at that location regardless of the continuation of bluff conditions;
3. The shore impact zone shall be one-half of the new structure setback as established in number 2 above; and
4. Erosion control guidelines shall be attached to the permit and adhered to by the owner. These guidelines will be considered performance standards and will be reviewed and approved by the Planning Commission in general form but the individual permits will not be reviewed by the Commission.

C. Exposed Bedrock Standards:

In areas where there is exposed bedrock, the setback from the top of the bluff shall not apply. The following Criteria shall apply:

1. All setbacks, including the shoreline setback shall be met.
2. Natural vegetation shall be maintained on the site. Natural vegetation may be removed only in areas necessary for the principal structures, accessory buildings, driveway, and a parking area. No vegetation between the principal structure and the shoreline shall be removed.
3. Structures shall be finished in earth tone colors.

D. Additions to Existing Structures Within the Bluff.

1. Principal structures within the bluff but not the shore impact zone may expand when permitted, and without limits to the size of expansion, if:
  - a. The original structure has at least a 600 square foot footprint;
  - b. Erosion control guidelines are followed;
  - c. The building contractor demonstrates to the county that effective erosion control measures will be taken; and
  - d. The addition does not encroach within the shore impact zone or closer than twice the minimum side yard setback standard.

2. If the structure foundation footprint area is less than 600 square feet in size, an addition of 50% of floor area is permitted without variance provided the side-yard setback standards, set above, are followed and erosion control measures are taken.
3. Accessory structures in the bluff but not in the shore impact zone may have additions, but no structure shall exceed 500 square feet. Decks on principal and accessory structures will be permitted provided they do not encroach upon the shore impact zone.
4. The same deck standards that apply for shore impact zones shall apply in these situations.

**Sec. 7.15 Stairways, Lifts, and Landings.**

Stairways and lifts are the preferred alternative to major topographic alterations for achieving access up and down bluffs and steep slopes to shore areas. Stairways and lifts must meet the following design requirements:

- A. Stairways and lifts must not exceed four feet in width on residential lots. Wider stairways may be used for commercial properties, public open-space recreational properties, and planned unit developments;
- B. Landings for stairways and lifts on residential lots must not exceed 32 square feet in area. Landings larger than 32 square feet may be used for commercial properties, public open-space recreational properties, and planned unit developments;
- C. Canopies or roofs are not allowed on stairways, lifts, or landings;
- D. Stairways, lifts, and landings may be either constructed above the ground on posts or pilings, or placed into the ground, provided they are designed and built in a manner that ensures control of soil erosion; and
- E. Stairways, lifts, and landings must be located in the most visually inconspicuous portions of lots, as viewed from the surface of the public water assuming summer, leaf-on conditions, whenever practical.

**Sec. 7.16 Conditional Uses**

Conditional uses allowable within shoreland areas shall be subject to the review and approval procedures, and criteria and conditions for review of conditional uses established community-wide. The following additional evaluation criteria and conditions apply within shoreland areas:

A. Evaluation Criteria.

A thorough evaluation of the water body and the topographic, vegetation, and soils conditions on the site must be made to ensure:

1. The prevention of soil erosion or other possible pollution of public waters, both during and after construction;
2. The visibility of structures and other facilities as viewed from public waters is limited;
3. The site is adequate for water supply and on-site sewage treatment; and
4. The types, uses, and numbers of watercraft that the project will generate are compatible in relation to the suitability of public waters to safely accommodate these watercraft.

B. Conditions Attached to Conditional Use Permits.

The Planning Commission, upon consideration of the criteria listed above and the purposes of this ordinance, shall attach such conditions to the issuance of the conditional use permits as it deems necessary to fulfill the purposes of this ordinance. Such conditions may include, but are not limited to, the following:

1. Increased setbacks from the ordinary high water level;
2. Limitations on the natural vegetation to be removed or the requirement that additional vegetation be planted; and
3. Special provisions for the location, design, and use of structures, sewage treatment systems, watercraft launching and docking areas, and vehicle parking areas.

**Sec. 7.17 Water Supply and Sewage Treatment**

Water Supply

Any public or private supply of water for domestic purposes must meet or exceed standards for water quality of the Minnesota Department of Health and the Minnesota Pollution Control Agency.

Sewage treatment.

Minnesota Rules, Chapter 7080, Individual Sewage Treatment Systems Standards is adopted within this Ordinance by reference. Any premises used for human occupancy must be provided with an adequate method of sewage treatment, as follows:

- A. Publicly-owned sewer systems must be used where available;
- B. All private sewage treatment systems must meet or exceed the Minnesota Pollution Control Agency’s standards for individual sewage treatment systems contained in the document titled, “Individual Sewage Treatment Systems Standards, Chapter 7080”, a copy of which is hereby adopted by reference and declared to be a part of this ordinance;
- C. On-site sewage treatment systems must be set back from the ordinary high water level in accordance with the setbacks contained in Section 7.05 of this ordinance.
- D. All proposed sites for individual sewage treatment systems shall be evaluated in accordance with the criteria in sub-items 1 – 4. If the determination of a site’s suitability cannot be made with publicly available, existing information, it shall then be the responsibility of the applicant to provide sufficient soil borings from on-site field investigations. Evaluation criteria are:
  1. Depth to the highest known or calculated ground water table or bedrock;
  2. Soil conditions, properties, and permeability;
  3. Slope; and
  4. The existence of lowlands, local surface depressions, and rock outcrops.
- E. Nonconforming sewage treatment systems shall be regulated and upgraded in accordance with Section 9.04 of this ordinance.

**Sec. 7.18 Subdivision/Platting Provisions**

- A. Land suitability – Each lot created through subdivision, including planned unit developments authorized within the Cook County Subdivision Ordinance, must be suitable in its natural state for the proposed use with minimal alteration. Suitability analysis by the local unit of government shall consider susceptibility to:
1. Flooding;
  2. Existence of wetlands;
  3. Soil and rock formations with severe limitations for development;
  4. Severe erosion potential;
  5. Steep topography;
  6. Inadequate water supply or sewage treatment capabilities;
  7. Near-shore aquatic conditions unsuitable for water based recreation;
  8. Important fish and wildlife habitat;
  9. Presence of significant historic sites; or
  10. Any other feature of the natural land likely to be harmful to the health, safety, or welfare of future residents of the proposed subdivision or of the community.

B. Consistency With Other Controls.

Subdivisions must conform to all official controls of this county. A subdivision will not be approved where a later variance from one or more setback standards in official controls would be needed to use the lots for their intended purpose. In areas not served by publicly owned sewer and water systems, a subdivision will not be approved unless domestic water supply is available for every lot and every lot has a minimum of 2 acres which can support a standard soil treatment system. Each lot shall meet the minimum lot size and dimensional requirements of Section 7.05, including at least a minimum continuous area that is free of limiting factors and is sufficient for the construction of two standard soil treatment systems. Lots that would require use of holding tanks must not be approved.

C. Information Requirements:

Sufficient information must be submitted by the applicant for the county to make a determination of land suitability. The information shall include at least the following:

1. Topographic contours at 10-foot intervals or less from United States Geological Survey (USGS) maps or more accurate sources, showing limiting site characteristics;
2. The surface water features required in Minnesota Statutes, Section 505.02, Subdivision 1, to be shown on plats, obtained from United States Geological Survey quadrangle topographic maps or more accurate sources;
3. Adequate soils information to determine suitability for building and on-site sewage treatment capabilities for every lot from the most current existing sources or from field investigations such as soil borings, percolation tests, or other methods;

4. Information regarding adequacy of domestic water supply; extent of anticipated vegetation and topographic alterations; near-shore aquatic conditions, including depths, types of bottom erosion, both during and after construction activities;
  5. Location of 100-year flood plain areas and floodway districts from existing adopted maps or data; and
  6. A line or contour representing the ordinary high water level, the “toe” and the “top” of bluffs, and the minimum building setback distances from the top of the bluff and the lake or stream.
- D. Dedications – When a land or easement dedication is a condition of subdivision approval, the approval must provide easements over natural drainage or ponding areas for management of stormwater and significant wetlands.
- E. Platting – All subdivisions that create 5 or more lots that are 2 ½ acres or less in size shall be processed as a plat in accordance with Minnesota Statutes, Chapter 505. No permit for construction of buildings or sewage treatment systems shall be issued for lots created after these official controls were enacted unless the lot was approved as a formal subdivision.
- F. Controlled Access or Recreational Lots – Lots intended as controlled access to public waters or for recreation use for use by non-riparian lots within a subdivision must meet or exceed the sizing criteria in Section 7.05 of this ordinance.