



LAND ALTERATION & GRADING APPLICATION
PUBLIC WORKS DEPARTMENT

Survey & Land Management Division
14949 62nd Street North, P.O. Box 6 Stillwater, Minnesota 55082-0006
PHONE (651) 430-6656 FAX (651) 430-6888

FEE: \$125.00

Rec #: _____

Permit #: _____

Please make checks payable to WASHINGTON COUNTY

Ck #: _____

Form with sections: Legal Description and Parcel Identification Number, Project Address, Owner (Address, City, State, Zip, Phone), Applicant (if different than owner) (Address, City, State, Zip, Phone), Description of Request, In connection with your request for a Land Alteration & Grading Permit, your signature constitutes permission for a representative of the Washington County Public Works Department to enter upon your property, during normal business hours, for the purpose of evaluating your request. This may involve minor excavation and soil borings. If you wish to be present during such inspection, please contact this office., Signature of Owner (Date), Signature of Applicant (if different than owner) (Date)



LAND ALTERATION & GRADING APPLICATION CHECKLIST

The County must receive the following items to process your application. Your application will not be processed until all of these items are received. During the review of your application by staff, additional information may be requested. For further information regarding grading and filling, please refer to Chapter 2, Part 3, Section 1.6 of the Washington County Zoning Ordinance and Section 9 of the Washington County Shoreland Management Ordinance if your property is located within a shoreland district.

_____ **Fee**

_____ **Application Form**

_____ **Site Plan, Drawn to Scale, with the Following Information:**

Existing Conditions:

- Property lines.
- Location of structures.
- Natural features (water courses, wooded areas, flood plain, wetlands, sinks and basins).
- Existing topographical contour data at two (2) foot intervals.
- Area proposed to be altered by grading or filling.

_____ **Land Alteration & Grading Plan, Drawn to Scale, Containing the Following Information:**

- Limits of proposed land alteration and grading.
- Existing topographical contour data at two (2) foot intervals.
- Proposed topographical contour data at two (2) foot intervals.
- Erosion control.
- Sediment control.
- Methods of restoring disturbed areas.
- Amount of fill to be brought in or removed from the property.
- Plans for disposing of excavated material.
- Drainage

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**Excerpt from Washington County Development Code
Chapter Two - Zoning Regulations**

SECTION I. DEVELOPMENT STANDARDS

1.6 Land Alteration and Grading

- (1) Permit Required. Land alteration and grading of fifty (50) cubic yards or more and/or the disturbance of land area of 1,000 square feet or more shall be permitted with a grading permit. A permit is not required for the following: agricultural activities, grading activities associated with a construction project provided a building permit is issued and there is a minimal amount of land disturbance, subdivisions that have received final plat approval and driveways permitted in conjunction with a building permit.
 - (A) The application for a permit shall include an existing and a finished grade plan. The finished grade plan shall show no adverse affects on adjacent land. The Zoning Administrator may require information in addition to this plan, including but not limited to, a plan for fire control, general maintenance of site, control of vehicle ingress and egress, drainage and control of material disbursed from wind or hauling of material to or from the site.
 - (B) Grading permit applications will be reviewed by the Washington County Soil and Water Conservation District and may he reviewed, as deemed necessary by the Zoning Administrator or in accordance with other rules, by the Minnesota Department of Natural Resources, the Community Engineer, and the appropriate Watershed Management Organization.
 - (C) A grading, drainage and erosion control plan may be required if, in the judgment of the Zoning Administrator, significant soil erosion, vegetation destruction or drainage damage may occur during the land alteration process. This plan shall be prepared by the Soil and Water Conservation District and shall contain specific recommendations regarding soil protection, preservation of vegetation and drainage patterns during the land alteration process.
 - (D) The Zoning Administrator may require the applicant to post a bond or other financial guarantee to ensure compliance with the grading permit.
- (2) General Standards. The following general standards shall apply for grading, drainage and erosion control:

- (A) All development shall conform to the natural limitations presented by the topography and soil as to create the best potential for preventing soil erosion.
- (B) Slopes over twenty five percent (25%) (4:1) shall not be altered.
- (C) Development on slopes with a grade between thirteen (13%) (8:1) and twenty five (25%) (4:1) percent shall be carefully reviewed to insure adequate measures have been taken to prevent soil erosion, sedimentation, vegetative and structural damage.
- (D) Erosion and siltation measures shall be coordinated with the different stages of development. Appropriate control measures shall be installed prior to development when necessary to control erosion.
- (E) Land shall be developed in increments of workable size such that erosion and siltation controls can be provided as construction progresses. The smallest practical area of land shall be exposed at any one period of time.
- (F) The drainage system shall be constructed and operational as quickly as possible during construction.
- (G) Whenever possible, natural vegetation shall be retained and protected.
- (H) Where the topsoil is removed, sufficient arable soil shall be set aside for re-spreading over the disturbed area. The soil shall be restored to a depth of four (4) inches and shall be of quality at least equal to the soil quality prior to development.
- (I) When soil is exposed, the exposure shall be for the shortest feasible period of time. No exposure shall be planned to exceed sixty (60) days. Said time period may be extended with approval of the Zoning Administrator provided measures have been established for erosion and sedimentation control.
- (J) The natural drainage system shall be used as far as feasible for the storage and flow of runoff. Storm water drainage shall be discharged to sediment, detention or retention basins or other treatment facilities. Prior to discharge to wetlands, diversion of storm water to marshlands or swamps shall be considered for existing and planned surface drainage. Wetlands used for storm water shall provide for natural or artificial water level control. Storage areas or retention basins scattered throughout developed areas shall be encouraged to reduce peak flow, erosion damage and construction cost.

- (3) Erosion Control. The following measures shall be taken to control erosion during the construction process:
 - (A) Exposed slopes shall not be steeper in grade than four (4) feet horizontal to one (1) foot vertical (25%).
 - (B) Exposed slopes shall be protected by whatever means effective to prevent erosion considering the degree of the slope, soil material, and expected length of exposure. Slope protection may consist of mulch, sheets of plastic, burlap or jute netting, sod blankets, fast growing grasses or temporary seeding of annual grasses.
 - (C) Control measures, other than those stated above may be used in place of the above measures to control if it can be demonstrated that they will as effectively protect exposed slopes.
- (4) Sediment Control. The following measures shall be taken to control sediment from leaving the construction site:
 - (A) Temporary barriers shall be constructed to prevent sediment from leaving the site. These barriers may consist of silt fences or straw bale sediment traps.
 - (B) Temporary sediment basins or traps may be required to remove medium and large sized sediment particles from runoff and reduce discharge velocity.
 - (C) The Zoning Administrator may require a temporary rock driveway at the site entrance to prevent sediment from leaving the site on the tires of vehicles.
- (5) Restoration. All permits shall contain a restoration plan providing for the use of land after project completion. The following are minimum standards for restoration.
 - (A) All disturbed areas shall be restored at the completion of the project.
 - (B) All restoration shall include the application of a minimum of four (4) inches of a mineral topsoil or similar material that will support plant growth.
 - (C) Final grades shall be in conformity with the permit and topography of the surrounding land.
 - (D) If the land is to be restored to crop production, no slope shall exceed five (5) feet horizontal to one (1) foot vertical (20%).

- (E) If the restoration is not for crop production, no grade shall exceed four (4) feet horizontal to one (1) foot vertical (25%).
 - (F) All restored areas shall be seeded with a mixture recommended by the Soil and Water Conservation District or returned to crop production.
 - (G) The standards in B, C, D and E above may be raised or modified to accommodate a specific restoration plan.
- (6) Floodplains. Land alteration in floodplains shall also be in accordance with Floodplain regulations.
 - (7) Public Waters. No public water area shall be filled, partially filled, dredged, altered by grading, mining or disturbed in any manner without first securing a permit from the Minnesota Department of Natural Resources, the United States Army Corp of Engineers and a grading permit from the Zoning Administrator.
 - (8) Drainage.
 - (A) No land shall be developed or altered and no use shall be permitted resulting in surface water runoff causing unreasonable flooding, erosion or deposit of materials on adjacent properties or water bodies. Such runoff shall be properly channeled into a storm drain, a natural watercourse or drainage-way, a ponding area or other public facility.
 - (B) Upon inspection of any site which has created drainage problems or could create a drainage problem with proposed new development, the owner of said site or contractor may be required to complete a grading plan and apply for a grading permit.
 - (C) The owner or contractor of any natural drainage improvement or alteration may be required to obtain a grading permit.
 - (D) On any slope in excess of thirteen percent (13%) (8:1) where the natural drainage pattern may be disturbed or altered, the owner or contractor may be required to obtain a grading permit.
 - (9) Wetland Preservation. The alteration of wetlands shall comply with the rules and regulations of Federal, State and local agencies.
 - (10) Preservation of Natural Drainage-ways/Waterways. The regulation of this subsection shall be administered by the Zoning Administrator unless the Watershed Management Organization has permitting authority. In that event, the regulations of the Watershed Management Organization shall take precedence.

- (A) Storm sewers may be used where it can be demonstrated that the use of the above-ground natural drainage system will inadequately dispose of runoff. Surface water drainage systems may be constructed to augment the natural drainage system.
- (B) The widths of a constructed waterway shall be sufficiently large to adequately channel runoff from a ten (10) year storm. Adequacy shall be determined by the expected runoff when full development of the drainage area is reached.
- (C) No fences or structures shall be constructed across the water way that will reduce or restrict the flow of water.
- (D) The banks of the waterway shall be protected with permanent turf vegetation.
- (E) The banks of the waterway should not exceed five (5) feet horizontal to one (1) foot vertical. The bed of the waterway should be protected with turf or sod. If turf or sod will not function properly, rip rap may be used. Rip rap shall consist of quarried limestone or field stone (if random rip rap is used). The rip rap shall be no smaller than two (2) inches square nor larger than two (2) feet square.
- (F) The gradient of the waterway bed should not exceed a grade that will result in a velocity that will cause erosion of the banks and waterway.
- (G) The bed of the waterway should be protected with turf or sod. If turf or sod will not function properly, rip rap may be used. Rip rap shall consist of quarried limestone or field stone (if random rip rap is used). The rip rap shall be no smaller than two (2) inches square nor larger than two (2) feet square.
- (H) The flow velocity of runoff waterways shall be controlled to a velocity that will not cause erosion of the waterway. If the flow velocity in the waterway is such that erosion of the turf sidewall will occur and said velocity cannot be decreased via velocity control structures, then other materials may replace turf on the side walls. Rip rap would be allowed to prevent erosion at these points.
- (I) Flow velocity should be controlled through the installation of diversions, berms, slope drains and other similarly effective velocity control structures.
- (J) To prevent sedimentation of waterways, pervious and impervious sediment traps and other sediment control structures shall be incorporated throughout the contributing watershed.

- (K) Temporary pervious sediment traps could consist of a construction of hay bales with a low spillway embankment section of sand and gravel that permits slow movement of water while filtering sediment. Such structures would serve as temporary sediment control features during the construction state of the development. Development of housing and other structures shall be restricted from the area on either side of the waterway to channel a twenty five (25) year storm.
- (L) Permanent impervious sediment control structures consist of sediment basins (debris basins, desiltation basins or silt traps) and shall be utilized to remove sediment from runoff prior to its disposal in any permanent body of water.
- (M) The erosion and velocity control structures shall be maintained in a condition that will insure continuous functioning in accordance with the provisions of this Development Code.
- (N) Sediment basins shall be maintained as the need occurs to insure continuous desilting action.
- (O) The areas utilized for runoff waterways and sediment basins shall not be allowed to exist in an unsightly condition. The banks of the sediment basin shall be landscaped.
- (P) **Prior to the approval of a plat for development, the developer shall make provisions for continued maintenance on the erosion and sediment control system.**