



Fill and Grade Application Checklist

Required Permit

Apply for **ONE** of the following permits:

Filling & Grading - 1 & 2 Family Dwelling

Filling & Grading - Commercial & 3+ Multi-Family

Residential 1 and 2 Family Dwellings

Provide the following documents in **PDF format** when applying for this permit on ePlace:

- **Existing Site Plan** – Based on a survey or surveyed plat. Show existing elements and grade (contour lines).
- **Proposed Site Plan** – Show existing elements and proposed grade (contour lines).
- **Contractor's Haul Route** – This can be an internet map with the haul route highlighted or noted

Provide the following items as needed:

- **Minnesota Landowner Statement and Contractor Responsibility for Work in Wetlands** – If project includes or may include disturbing wetlands
- **Minnesota Pollution Control Agency paperwork** – If project disturbs more than an acre
- **Planning Division Approvals** – If working in a shoreland, flood zones, or wetlands
- **Apply for an Erosion Control Permit**
- **MS4 Statement of Compliance** – For land disturbance over 3,000 square feet in a shoreland or 10,000 square feet outside of a shoreland

Commercial and 3+ Multi-Family Buildings

Provide the following documents in **PDF format** when applying for this permit on ePlace:

- **Boundary Survey** – Required for all commercial projects
- **Civil Drawing Plan Set** – Include existing and proposed grades
- **Contractor's Haul Route** – This can be an internet map with the haul route highlighted or noted

Provide the following items as needed:

- **Minnesota Landowner Statement and Contractor Responsibility for Work in Wetlands** – If project includes or may include disturbing wetlands
- **Minnesota Pollution Control Agency paperwork** – If project disturbs more than an acre
- **Planning Division Approvals** – If working in a shoreland, flood zones, or wetlands
- **Apply for an Erosion Control Permit**
- **MS4 Statement of Compliance** – For land disturbance over 3,000 square feet in a shoreland or 10,000 square feet outside of a shoreland
- **Geotechnical Report** – as needed for sitework in preparation for a new building

Additional Permits and Information

The following permits may be needed depending on the project. Call specific department with questions:

Construction Services	Other permits depending on project	218-730-4380
Planning	Shoreland, Wetland, Special Use, etc.	218-730-5580
Engineering	Erosion Control, Excavation, MS4	218-730-5200

No permit is required when:

1. The volume of fill to be placed is less than 10 cubic yards **AND** fill is less than two feet in depth **AND** placed on natural terrain flatter than 5 to 1 (20% slope) **AND** work does not obstruct a drainage course.
- OR**
2. Approval by the Building Official for filling & grading in an isolated and self-contained area if there is no danger to public or private property.

Surface Preparation

The surface shall be prepared to receive fill by removing vegetation, topsoil, and other unsuitable material and scarifying (creating irregularities in the surface of existing soil) to provide a bond with the fill material.

Compaction

All fill shall be compacted to 90% of maximum density as determined by an ASTM D 1557 Modified Proctor Test in lifts not exceeding 12 inches in depth.

Maximum Slope

The slope of fill surfaces shall be no steeper than is safe for the intended use. Fill slopes steeper than 2 to 1 (50%) shall be justified by soils reports or engineering data. Slopes of 1.5 to 1 are permitted only if approved by the Building Official.

Fill Material

Fill material shall not include organic, frozen, or other deleterious materials. No rock or similar irreducible material greater than 12 inches in any dimension shall be included.

Benching

Where existing grade is at a slope steeper than 5 to 1 (20%) and the depth of the fill exceeds 5 feet, benching shall be provided in accordance with [Appendix J Figure J107.3](#) of the International Building Code (IBC) as adopted by Duluth City Code Chapter 10-1.(a).(1). A key shall be provided which is at least 10 feet wide and 2 feet deep.

Setback

Cut and fill slopes shall be set back from the property line as shown in IBC [Appendix J Figure J108.1](#) as adopted by Duluth City Code Chapter 10-1.(a).(1).

Drainage Across Property Lines

Drainage across property lines shall not exceed that which existed prior to grading. Excess or concentrated drainage shall be contained on site or directed to an approved drainage facility. Erosion of the ground in the area of discharge shall be prevented by installation of non-erosive down drains or other devices. Grading shall not create drainage patterns or routes that will adversely affect down-gradient properties.

Restoration

All exposed soils shall be fully restored with vegetation, mulch, and/or a permanent non-erodible surface.