

**CITY OF ORONOCO
SINGLE RESIDENTIAL LOT
GRADING PLAN CHECKLIST**



KEY

= Yes

= No

Blank = Not Applicable

Site: _____

Prepared By: _____ **Date:** _____

Reviewed By: _____ **Date:** _____

GENERAL

- Completed grading permit application form.
- Owner name(s) and address(es) listed on Grading Plan.
- Plan is 1"=50' or larger scale. North arrow shown.
- Plan is drawn in two-foot contours. All contours are labeled. Or many spot elev. and arrows alternative.
- Existing contours are dashed and proposed are solid.
- Directional arrows are shown for proposed drainage.
- Details of terrain and drainage are provided for areas adjacent to the proposed grading.
- Existing public and private utilities are shown.
- Property limits are shown. Streets are labeled. Lot & block information. Street address shown, if unknown.
- Schedule of BMP installation shown.
- BMP details included.

SITE GRADING, SEDIMENT & EROSION CONTROL

- Down-slope sediment control scheduled before grading.
- Adjacent property protected from drainage and sediment.
- Stabilized vehicle exit(s) are provided, minimize number.
- All storm sewer inlets, existing and proposed include temporary sediment control & control remains until up-slope sources stabilized.
- Temporary stockpiles include additional silt fence or other sediment control.
- Percent of slope is shown for drainage swales.
- Fill & cut property line setbacks are >2' for cut slope ht. >10' or fill slope ht. >4' and setback is dimensioned on the plans.
- All proposed lot corner elevations are shown.
- Proposed elevations of garage and lowest floor, ground at front and rear of building, along with the structure type are indicated on the plan.
- Top of foundation is min. 6" from the ground.
- Grade 1' below top of foundation 10' from building.
- Drainage flows away from structures at min. 2%.
- Freeboard to structures. Floor el. or the grade adjacent to the building is at least 1' above any overflow elevation, and at least 2' above any pond 100-year water level, whichever is greater and min. 1' above FEMA flood el.
- Minimum lot slopes for vegetated areas are 2% minimum.
- Areas within 200' of surface water seeding scheduled within maximum time allowed.
 - Steeper than 3:1 – 7 days.
 - 10:1 to 3:1 – 14 days.
 - Flatter than 10:1 – 21 days.

- Maximum unbroken 3:1 or steeper slope of 75 feet horz.
- Temporary or permanent cover is indicated for all disturbed areas. Temporary seeding specifies seed mix and includes disk anchored mulch on all slopes longer than 200' or > 5%. Permanent cover specifies 4" topsoil, seed mix and disk anchored mulch, or 4" topsoil and sod.
- Slopes in excess of 4:1 and 4:1 slopes longer than 30' are seeded and protected with erosion control blankets or sodded and staked. Blanket category specified per Mn/DOT 3885.1. Plan depicts required blanket locations.
- For sites where temporary or permanent cover will not be complete by November 15, plan indicates adequate measures to control spring erosion & sedimentation.

DRAINAGE SWALES & EASEMENTS

- Driveway culvert required to convey 25-year storm ditch stormwater flows.
- Drainage easements are shown and labeled on the plan.
- Drainage easements are provided where concentrated flow is received from more than 1 adjacent lot and also where concentrated flow is received from more than 1 acre of adjacent property. 100-year flow in easement.
- Minimum drainage easements for flows from 1 acre or less or 4 lots or less are a minimum of 15' wide. Ditch is 1.9' deep V-shaped with 4:1 slopes.
- Minimum drainage easements for flows from more than 1 acre or more than 4 lots are a minimum of 20' wide. Ditch is a minimum of 2' deep with a 4' bottom and 4:1 slopes up to the easement line. 100-year runoff contained in easement.
- Easement documents are signed and submitted to Public Works with recording fee or included in plat.
- Control elevations for drainage ways are provided.
- Minimum slope of small drainage swales is 2%.
- Drainage easements for flow from more than 1 acre or 4 lots are seeded and protected with erosion control blankets or sodded. Blanket category specified per Mn/DOT 3885.1. Plan depicts required blanket locations.
- Ditches stabilized within 24 hours of connection to surface water or outlet.

As a reference document see
<http://www.pca.state.mn.us/water/stormwater/index.html>

Revised November, 2007