## GRADING PLAN FOR COMMERCIAL BUILDINGS

Every proposed new building requires a grading plan to be submitted with the building permit plans. The following items are required to be shown on the proposed grading plan:

- 1. The location of the building, driveway, tree cover (every tree over 6" diameter shall be individually located on the plan) wetlands, drainage ways or ditches, city streets, neighboring structures, easements, including trail, conservation, drainage and utility, and other significant features.
- 2. The existing elevation (MSL) of the building pad of neighboring structures, top of curb at the driveway, wetlands elevation, all lot corners and any drainage structures.
- 3. The proposed elevation (MSL) of the building floors and high or low points (breaks in grade).
- 4. Drainage arrows showing the route of run off across the lot with proposed elevations of drainage swales, proposed storm sewers, holding ponds and copies of engineering computations. Lots bigger than one acre must provide a contour map.
- 5. The plan should show how erosion will be controlled. Normally a silt fence and other erosion control methods will be required. Also, turf establishment will be required immediately after grading.
- 6. Any retaining walls with top and bottom wall elevations, steep slopes, or other special grading features should be denoted.
- 7. The plan should indicate a storm water and water quality management plan.

An as-built grading plan, which verifies all items listed above, will be required to be submitted along with a request for release of escrow funds to the engineering department before the grading escrow will be refunded. In addition to the items listed above, the following items are also required to be submitted on the as-built grading plan:

- 1. The plan should show the depth and length of sewer and water lines from the stub to the building.
- 2. The route of sewer and water lines including ties, clean-outs, bends, etc. Also indicate the size and type of sewer pipe.
- 3. Show the route of all private utilities, such as electric and gas.
- 4. As-built information for storm sewer system, including invert and rim elevations, pipe size, type, location (omissions and additions).
- 5. Lot corner elevations.

- 6. Final floor elevations.
- 7. Topnut hydrant elevations, if any.

A cash escrow in an amount established by resolution shall be paid before a building permit is issued for all new commercial construction. The fees are as follows:

Lots less than 1 acre: \$1,500.00 grading escrow

\$50.00 engineering fee (non-refundable)

Lots larger than 1 acre: \$5,000.00 grading escrow

\$250.00 engineering fee (non-refundable)

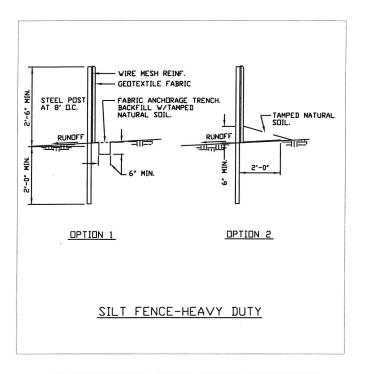
The cash escrow shall be returned to the permit applicant, without interest, upon successful completion of all of the following:

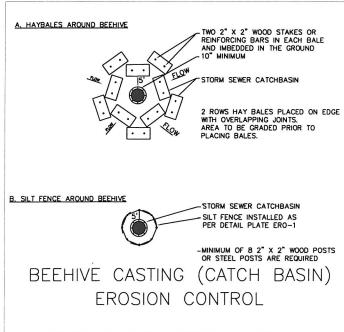
- 1. Submit the as-built grading plan along with the request for release of escrow funds.
- 2. Written certification from a registered engineer or land surveyor that the grades and elevations are in conformance with the City approved grading plan and verification by a surveyor that permanent iron monuments are in place at each lot corner.
- 3. Turf must be established by the use of grass seed or sod on all lots within 30 days, excluding the time between October 1st and May 1st, of issuance of a Certificate of Occupancy.
- 4. Water service curb box access cover at finished grade and curb box valve operable.

If the escrow items are not completed within 30 days, excluding the time between October 1st and May 1st of issuance of a Certificate of Occupancy, the City may enter the lot, perform the work, and apply the cash escrow toward the cost, plus administrative fees.

If at any time a city inspection indicates erosion, storm water or grading problems are present on the site, the owner will be notified of the problem, given direction on possible corrective actions, and will have 48 hours to complete corrective measures. If the owner fails to comply, the City may enter the site to make the corrections and charge all costs of doing so against the escrow.

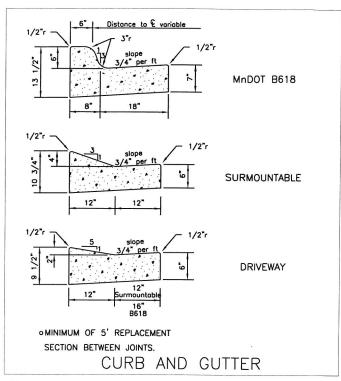
In addition to the cash escrow, an escrow administration fee in an amount established by resolution shall be paid before a permit is issued for all permits requiring escrow per Ordinance Section.





Corrective measures, suggestions and enforcement on reverse side.





- Install <u>ALL</u> required erosion control or BMP prior to any soil disturbance.
- Maintain <u>ALL</u> erosion control measures until sufficient vegetation is established.
- Protect all curb and sidewalk. *Contractor responsible for all damage.*
- Silt fence must be installed in accordance to city detail.
- Contractor responsible for all erosion control prevention and correction until site is stabilized in a permanent manner.
- Protect all survey lot corners and easements.
- All concrete cleanout must be done on private property owned by the builder and away from city structures.
- •All attempts must be made to maintain sidewalk access at all times. The sidewalk should not be blocked, covered or impassable at any time. Except for a specific construction entrances. *E.G.* Avoid storage of material on sidewalk that may make it impassable. Do not place dumpster on sidewalk unless there is no other alternative. Remove any silt or soil buildup that hides or otherwise blocks the sidewalk.

**Construction Entrance** - 6" layer of clean fill or course aggregate over a city structures such as sidewalk or curb to protect it from construction damage.

# SITE PROTECTION & EROSION CONTROL

# **CORRECTIVE MEASURES**

- Transverse cracks may be sawed and sealed as approved by the engineer.
- Sawed & sealed cuts should be 1/2 thickness filled with approved sealant.
- 5' minimum separation on curb joints for curb replacement.
- Full panel replacement on sidewalk replacement.
- 5" minimum sidewalk thickness.
- 6" minimum sidewalk thickness in all driveways.
- MnDot 3Y32 Type A concrete required for all replacement.
- High erosion areas may be blanketed as required by engineer.
- Additional silt fence must be installed as soon as possible as required by engineer.

#### **SUGGESTIONS**

- Silt fence entire lot and limit access to one entrance.
- Construct construction entrance over curb and sidewalk with a minimum of 6" compacted clean fill or course aggregate to protect curb and sidewalk.
- Display direct contact name and number for corrections and comments located on site. (By building permit)
- Use extreme caution around wetlands and buffer areas and excessive erosion and access control into wetland areas.

# **ENFORCEMENT**

- No footing inspection will be made without required silt fence installation.
- Maintenance and inspection must be made after each rain event.
- No further inspections will be scheduled after verbal notification by the city of out of compliance erosion control measure until corrective actions are taken.
- -A 'Stop Work Order' may be issued for any site that is out of compliance until the erosion / grading problems are resolved.

## **CONTACTS**

Engineering Department

**Building Inspections** 

(651) 430-8830

(651) 430-8825