

**CITY OF HANOVER
PLANNING COMMISSION MEETING
FEBRUARY 22, 2016**

CHAIR

STAN KOLASA

COUNCIL LIAISON

DOUG HAMMERSENG

BOARD MEMBERS

JIM SCHENDEL

MICHAEL CHRISTENSON

MICHELLE ARMSTRONG

DEAN KUITUNEN

- 1. Call to Order and Pledge of Allegiance: 7:00 p.m.**
- 2. Oath of Office**
- 3. Selection of Chair and Vice Chair**
- 4. Approval of Agenda**
- 5. Approval of Minutes from November 23, 2015 Regular Meeting**
- 6. Citizen's Forum**
- 7. Unfinished Business**
- 8. New Business**
 - a. MS4**
 - b. Impervious Surface in Industrial Park**
- 9. Reports and Announcements**
 - a. Planning Commission Reports**
 - b. Liaison Report**
 - c. Staff Reports**
- 10. Adjournment**

**CITY OF HANOVER
PLANNING COMMISSION MEETING
NOVEMBER 23, 2015
DRAFT MINUTES**

Call to Order/Pledge of Allegiance

Chair Kolasa called the November 23, 2015, Planning Commission Meeting to order at 7:00 pm. Members present were Chair Stan Kolasa, Jim Schendel, Reid Rabon, Michelle Armstrong and Dean Kuitunen. Also present were Council Liaison Doug Hammerseng, City Planner Cindy Nash and City Administrator Brian Hagen. Also present was Scott Cole for Bradford Development.

Approval of Agenda

MOTION by Schendel to approve the agenda as presented, seconded by Armstrong. **Motion carried unanimously.**

Approval of Minutes from the October 26, 2015, Regular Meeting

MOTION by Armstrong to approve the October 26, 2015, minutes as presented, seconded by Schendel. **Motion carried unanimously.**

Citizen's Forum

None.

Public Hearing

Amending Chapter 10 Related to the B-1, Downtown River Commercial District

Kolasa opened the Public Hearing at 7:02 p.m. Nash explained this amendment follows the intent of an Ordinance pass in 2012. When the Zoning Ordinance was recodified in 2013, the 2012 amendment was not included. The Ordinance in front of Planning Commission at this meeting would allow certain forms of limited industrial in the Downtown River Commercial District.

At this time Kolasa asked for any public input or comments. There were none and the Public hearing was closed at 7:07 p.m.

MOTION: Schendel moved to follow the recommendations presented by Nash, seconded by Rabon. **Motion carried unanimously.**

Unfinished Business

Landscaping and Photometry Plans for 10875 Settlers Lane

Nash presented the Photometry plans to the members. She stated the lights to be used will be directing the lighting downward. Cole clarified to the members where the light poles will be located on the property, as well as on the building. He further explained the brightness of the lights.

MOTION: Schendel moved to approve the photometry plans, seconded by Rabon. **Motion carried unanimously.**

The landscaping plan was reviewed. Consensus of the members was the plan meets expectations. They were pleased with the locations of the proposed trees and the desire to create screening. Hammerseng asked where sod will be installed versus seed. Cole stated that sod will be installed ten feet out from the edge of the building, with seeding covering the remaining disturbed areas.

MOTION: Armstrong moved to approve the landscaping plan, seconded by Schendel. **Motion carried unanimously.**

Cole did provide clarification of the siding material. The architect had made a change to the plans based off a different project. The Greenhouse Facility in Hanover will have a hardy board siding.

New Business

None

Reports:

Planning Commission:

Schendel inquired about a sign along Co. Rd. 19 advertising a realtor's business. This sign is located on residential property.

Liaison Report:

Hammerseng provided a public works facility update. The Council consensus is to have a portion of the 10 acre parcel along 5th St. NE be the future home of the facility.

Staff Reports:

Hagen provided an update of the Historic Bridge Project. He also discussed the plans for road projects and funding options. Hagen further explained that the City is planning for an Open House event in January.

Adjournment

MOTION by Armstrong to adjourn, seconded by Rabon. **Motion carried unanimously.** Meeting adjourned at 7:36 pm.

ATTEST:

Brian Hagen, City Administrator



Site Address: _____

Hanover New Construction Checklist

To be completed prior to Building Inspector:

- _____ Building Permit Application completed and signed by applicant.
- _____ Certified Land Survey or Plot Plan (scale drawing 2 copies
Required by Section 10.10(A) of the Hanover Zoning Ordinance.
- _____ Minnesota Energy Code Compliance Worksheet: 2 copies
- _____ Building Plans - Blueprints
 - _____ Full-size prints: 2 copies
 - _____ Digital copy in pdf format (saved to an electronic address file).
- _____ Copy of Minnesota State Residential Building Contractor or Remodeler License on file at City Hall.
- _____ For new construction sites **not on City water or sewer:**
 - _____ On-site Sewage Treatment System Design: 2 copies
 - _____ Soil Borings (minimum of two) and Percolation Test: 2 copies
- _____ Driveway permit if site is located on a county road.
- _____ Application is reviewed by Zoning Administrator for compliance with Zoning Ordinances. If building permit has noncompliant sections, the Zoning Administrator will inform the applicant of the changes necessary. The building permit application will not be sent to the Building Inspector until it is compliant.

For office use only.

_____ Date application received. _____ Date to Building Inspector for review.
_____ Date digital copy of plans received. _____ Date called for permit pick up.

Notes:

Site Address: _____

Building Permit Number: _____ Date: _____ Staff: _____

To be completed prior to permit being issued:

- _____ Application has been reviewed and approved by Building Inspector.
- _____ Appropriate fees have been recorded on permit.
- _____ Applicant has been notified of permit fee and that the permit is ready to be picked up.

To be completed at time of permit issuance:

- _____ Necessary handouts are presented to the applicant:
 - _____ Requirements on the building site.
 - _____ Erosion Control Measures.
 - _____ Crow River Heights Construction Entrance (if applicable).
- _____ Water and Sewer Inspection Requirements Handout from Veolia.
- _____ Escrow Form completed and signed by applicant.
- _____ Collect permit fees and issue a receipt to applicant. Make copy for accountant.
- _____ Issue permit number:
 - _____ Record permit number on permit card.
 - _____ Record permit number and information in Building Permit Log.
- _____ Applicant receives the following:
 - _____ Receipt of payment.
 - _____ Permit card.
 - _____ Pink copy of building permit application.
 - _____ Copy of escrow form.
 - _____ Necessary handouts.
 - _____ On-site copies of building plans, land survey, energy code sheet.

To be completed after permit issuance:

- _____ Copy payment receipt on back of building permit application.
- _____ Copy building permit on back of accountant's copy of payment receipt. Put in Receipts.
- _____ Fax copy of building permit application to Joint Powers Water Board.
- _____ Record necessary information in Surcharge Report in the Building Inspections folder.
- _____ Distribute copies to building inspector and county assessor boxes.
- _____ Create address file: building permit application, plans, land survey, energy code sheets.
Put checklist in address file. Place address file in appropriate filing cabinet.



Building Site Requirements

The items outlined below must be in place prior to any inspections by the Building Inspector. If at any time during the construction process one or more of these items have lapsed, a stop work order will be placed at the construction site. Once the item has been corrected, work may resume as well as inspections.

Erosion Control Measures

Erosion control measures as outlined in the accompanying handout must be in place at all times during the construction process. The erosion control measures must be properly installed and maintained. Stop work orders will be issued if any erosion control measure lapses.

Soil Tracked Onto Roadways

Any mud or soil from the building site which tracks onto the roadways is prohibited. Loose dirt and mud on the roadways enters the storm water sewer system and creates blockages at curbs, catch basins, and pipes throughout the system.

Soil and mud that has been tracked onto the roadways needs to be swept. Please make provisions to eliminate tracking and to sweep on a daily basis. Stop work orders will be issued if this is not done.

Garbage and Building Debris

Containers should be located on-site for garbage and building debris. Items must be placed inside of the container and not piled alongside. Do not fill the container to overflowing. If debris escapes the container and is found on neighboring properties, the builder is responsible for retrieving the debris and cleaning up the property. Builders will be notified by the City of any complaints received and will be expected to correct the issue.

Portable Toilets

Builders are required to provide a portable toilet on-site.



Water and Sewer Inspection Requirements

Per the Joint Powers Water Board

Lack of familiarity with these specifications does not waive any of the requirements. Be sure that the appropriate party is notified of these requirements.

Inspections

Please call at least 24 hours prior to scheduling an inspection using the contact information below. During construction season, a 24 hour notice will not necessarily guarantee the desired inspection time and date as schedules fill quickly. Please plan ahead when scheduling the needed inspections.

Billing

Quarterly billing will be established at the time of inspection. Please be sure to contact the office when there are any ownership changes.

Water Service Specifications

Curbstops must be located at least three (3) feet from any paved surface and within the easement.

A one inch (1") Type K copper pipe may be used at minimum for standard residential services. A one and a half inch (1.5") pipe is recommended for runs between 150-300 feet.

Flared joints for copper couplings are acceptable if required for runs over 100 feet.

Joints next to the building wall **are not acceptable**.

There is a minimum bury depth of seven and a half (7.5) feet.

The remote reader must be installed per manufacturer's instructions including the use of **gelcaps**. The builder is responsible for correcting any inoperable remote reader.

When connecting to the curbstop, the curbstop standpipe **and** valve must be **completely exposed on both side of the valve**. This will allow the Water Department inspector to confirm that the fittings are tight, that there are no leaks, and that the unit has been properly bedded and supported. A concrete block is required for support.

The connection must then be checked for leaks under line pressure. If the temperature or conditions do not allow for water to be turned on, the line must be air tested at 150 psi for 15 minutes with no drop allowed in order to pass inspection.

Sewer Service Requirements

An air test is required at time of inspection under the observation of the inspector with a five (5) psi for 15 minutes.

Plumbing code or better is required with a **minimum** solid core SDR35.



Infrastructure – Landscaping – Erosion Control Escrows

Property Information:

Street Address: _____

PID Number: _____

Subdivision: _____

Description of proposed erosion control: _____

Description of proposed restoration: _____

Payor Information:

Name: _____

Address: _____

Contact Number: _____ Email: _____

I, the undersigned, hereby acknowledge that I have received the City Ordinances pertaining to required tree planting, sod or seed requirements, and erosion/sedimentation control and I understand that it is my responsibility to install said improvements and to contact the City for an inspection after said landscaping has been completely installed and permanent turf is established for erosion control. I further understand that the escrow will not be returned to me if I fail to comply with the Ordinance requirements and/or fail to contact the City for a final landscape and erosion control inspection.

Applicant's Signature Date

For Office Use Only

Building Permit: _____

Landscaping: \$ _____

Erosion Control: \$ _____

Infrastructure: \$ _____

Date Received: _____

Accepted by: _____

Pre-Construction Date and Inspector: _____

Comments:

Final Inspection Date and Inspector: _____

Comments:

Date of Request for Return of Funds and by whom: _____

Landscaping: \$ _____ 815-48200-810

Erosion Control: \$ _____ 811-48200-810

Infrastructure: \$ _____ 817-48200-810

Date for Council Approval of Release: _____

Check Number: _____



Erosion and Sediment Control

All applicants for building permit, subdivision, or land disturbing activities are required to provide erosion and sedimentation control at the site of construction and/or development. All grading plans and building site surveys must be reviewed by the City for effectiveness of erosion control measures in the context of site topography and drainage. No building permit, subdivision approval, or permit to allow land disturbing activities shall be issued until the City approves this plan.

The City of Hanover has been designated as a Municipal Separate Storm Sewer System (MS4) city. Chapter 9.26 through 9.30 of the Hanover City Code addresses the requirements to control or eliminate soil erosion and the prevention of sediment damage to adjacent properties and other designated areas such as streams, wetlands, lakes and unique vegetation. The sections establish standards and specifications for conservation practices and planning activities which minimize storm water runoff, pollution, soil erosion, and sedimentation.

Land Disturbance Activity

Land disturbance activity is defined as any land change that may result in soil erosion from water or wind and the movement of sediments into or upon waters or lands within the City of Hanover. This includes cleaning and grubbing, grading, excavation, transporting and filling on any land surface. Within the context of this rule, land disturbance activity **does not** mean:

- Minor land disturbance activities such as home gardens and an individual's home landscaping, repairs and maintenance work.
- Construction, installation, and maintenance of electric, telephone, and cable television; and utility lines or individual service connections to these utilities which results in creating under five thousand (5,000) square feet of exposed soil.
- Tilling, planting, and harvesting of agricultural, horticultural, or silvicultural crops.
- Installation of fence, sign, telephone, electrical and other kinds of poles or posts which results in creating under five thousand (5,000) square feet of exposed soil.
- Emergency work to protect life, limb and property and emergency repairs, unless the land disturbing activity would have required an approved erosion and sediment control plan, except for the emergency, then the land area disturbed must be shaped and stabilized in accordance with the City's requirements as soon as possible.

Time Frame for Erosion Control

Erosion and sediment control measures must be properly installed by the builder **before** construction activity starts. Such structures may be adjusted during dry weather to accommodate short-term activities such as those that require very large vehicles. As soon as this activity is finished or before a rainfall, the erosion and sediment control structures must be returned to the configuration specified by the City.

A sediment control inspection must be scheduled and passed before a footing inspection can be done.

Areas Subject to Erosion Control

All areas of the construction site where the vegetation—trees, shrubs, brush, etc.—has been removed is subject to erosion control measures. This includes stockpile areas, borrow areas, and disposal areas within the construction site.

Requirements

The following requirements for erosion and sediment control are to be followed and will be enforced:

- ❖ Place silt fence around all excavation areas and stockpile within the property lines as required by the City Building Official and City Engineer. Please refer to the handout provided by the City Engineer.
- ❖ Silt fence is the City's accepted erosion and sediment control method. Alternate methods need to be approved prior to construction activity.
- ❖ Sufficient silt fence will be required to hold all sheet flow runoff generated at an individual site until it can either infiltrate or seep through the silt fence's pores.
- ❖ A temporary rock construction entrance made up of aggregate 1.5 to 3 inches in size and placed in a layer 6 inches deep is required wherever vehicles enter and exit a site. An additional entrance may be approved by the City in cases of larger construction activities.
- ❖ All storm drain inlets must be protected during construction until control measures are in place with a silt fence.
- ❖ All storm water street drains located near the construction activity must be lined to prevent sediment from entering the storm water system.
- ❖ **Erosion Affecting Streets, Wetlands, or Waterbodies:** If eroded soils—including **tracked soils from construction activities**—enter or appear likely to enter streets, wetlands, or other waterbodies, prevention strategies, clean up and repair **must be immediate**. The permittee shall provide all traffic control and flagging required to protect the traveling public during the cleanup operations.
- ❖ For soil stockpiles greater than ten (10) cubic yards, the toe of the pile must be more than 25 feet from a road, drainage channel or storm water inlet. If for any reason a soil stockpile is located closer than this requirement, it must be covered with tarps or controlled in some other manner in which to prevent entry into the storm water system.
- ❖ Temporary stockpiling of fifty (50) or more cubic yards of excess soil on any lot or other vacant area will not be allowed without issuance of a grading permit for the earth moving in question.
- ❖ Parking is prohibited on all bare lots and temporary construction entrances except where street parking is not available. Rock entrances are to be used for deliveries only as per the development contract.
- ❖ Roof drain leaders: All newly constructed and reconstructed buildings must route roof drain leaders to pervious areas—**not natural wetlands**—where the runoff can infiltrate. The discharge rate shall be controlled so that no erosion occurs in the pervious areas.
- ❖ The builder shall provide a Storm Water Pollution Control Plan if required by the City Building Official or the City Engineer.
- ❖ The site must be restored following the completion of construction activity. See Final Site Stabilization and Landscaping Handout.

Final Site Stabilization and Landscaping

What is considered to be Final Site Stabilization?

- Sod
- Established lawn
- Established landscaping
- Riprap
- Other permanent material that prevents erosion from occurring.
- Simply sowing grass seed is not considered final site stabilization.

Grading:

- Lots shall be graded so as to provide drainage away from building locations and shall conform to the approved final grading plan. Storm water drainage from an improved lot shall not be directed at an adjoining property at a rate above a predevelopment condition except where drainage is directed to a designed drainage easement.
- No existing ditch, stream, drain or drainage channel shall be deepened, widened, re-routed or filled without written permission from the City and other governmental agencies.

Landscaping:

- For lots established prior to 2011, landscaping needs to be completed as outlined in the Developer's Agreement.
- Future platted developments will have landscaping plans and requirements.
- When inspecting landscaping for escrow release, the City looks for the following:
 - ❖ Established turf.
 - ❖ Two (2) trees in the front yard.
 - ❖ Bushes near the front of the house. A third tree may be substituted for the bushes.

Acceptance and Return of Cash Escrows:

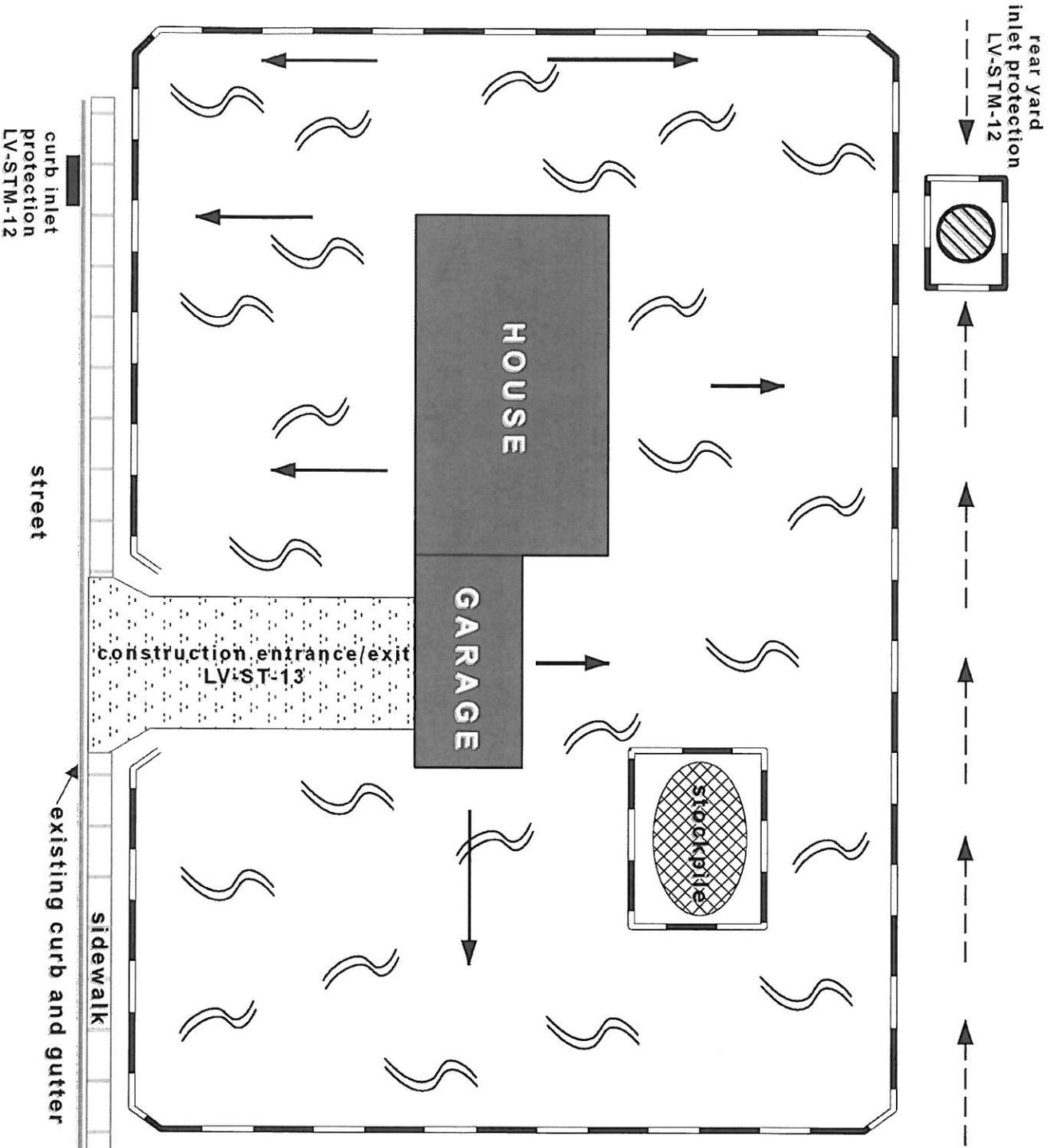
- At the time of building permit issuance, cash escrows will be collected within the building permit fee for infrastructure, erosion control and landscaping. These escrows will be returned upon completion of the permit and inspection by the City.
- If issues arise, the permittee will be given opportunity to make corrections. If noncompliance continues, the City will use said escrow to make corrections.
- Upon completion of the site restoration, the permittee shall contact City Hall to request a final erosion and sedimentation control and landscape inspection. The escrow will only be returned if all requirements of the Zoning and Subdivision Ordinances relating to erosion and sedimentation control have been met and turf is well established and alive.
- **Cash escrows will be retained until restoration of the site is complete and turf is established.**
- **It is the responsibility of the permittee to contact the City for final landscape and erosion control inspections.**



EROSION AND SEDIMENT CONTROL REMINDER

- Erosion and sediment control measures for single-family residential construction must be in place before any clearing and grading is performed.
- Erosion and sediment control measures must be installed to City of Hanover standards. These requirements are in the engineering guidelines attached to your permit package. Additional site-specific erosion control measures may be necessary for your project. Winter site stabilization controls for erosion and sedimentation are in effect from October 1st to April 30th.
- If erosion and sediment control measures are in need of repair, a correction notice will be issued. If corrections are not made and/or if sediment is leaving your project, a Stop Work order may also be issued.
- Stop Work orders and code enforcement inspections will be billed at the hourly rate.
- Foundation inspection approval will not be granted until erosion and sediment control measures are in place.
- Minor corrections to erosion and sediment control measures that are in place must be completed in the timeframes outlined in NPDES permit requirements. If corrections are not completed within that timeframe, a Stop Work order will be posted and code enforcement fees will be charged.
- Sites must be vegetated either temporarily or permanently with appropriate sediment controls prior to being transferred to the homeowner. Failure to complete this task will result in the City executing the security and completing the necessary activities to provide stabilization of the site.
- Homeowner's must receive the MPCA "Homeowner" fact sheet that describes the importance of maintaining erosion and sediment control until final stabilization is achieved.
- Please contact your building inspector if you have any erosion and sediment control questions.

Individual Lot Erosion and Sediment Control



Erosion Control Legend

- direction of drainage
- finished grade
- silt fence
- stockpile
- temporary/permanent cover

Notes

1. It is the responsibility of the builder to comply with State laws and local ordinances regarding construction site erosion and sediment control.
2. This plan is only a sample plan and is not intended to be all inclusive or address every situation, additional or modified practices may be required.
3. Erosion and sediment control measures must be functional and maintained throughout construction.
4. Maintain positive drainage away from the structure(s).
5. Streets must be cleared of all debris at the end of each day.
6. Temporary/permanent cover is required on all exposed soils through out the building process.
7. Stockpiles must not be placed near waterbodies or on streets or sidewalks.



Minnesota
Pollution
Control
Agency

Homeowner fact sheet

Erosion prevention and sediment control

wq-strm2-07 • Nov. 2008

If your new home is like most, the builder did some grading of your lot, removing some or all of the existing vegetation or ground cover. You may have new sod, or you might just have a bare soil yard.

When rain falls on exposed soil, it can wash soil away from the land. This runoff can erode bare ground, wash away valuable topsoil and make landscaping more difficult. It also carries soil, nutrients and other pollutants into streets, gutters and ditches, where it then travels untreated to lakes, rivers, streams or wetlands. Polluted runoff can cause excessive growth of weeds and algae in water bodies and reduce recreational opportunities such as swimming and fishing. Sediment-laden runoff can also clog ponds and wetlands and reduce floodwater retention.

Your homebuilder was required to take steps to keep soil and sediment from leaving your lot. Permanent stabilization such as sod may have been installed on part or all of your property. If not, you can help protect the environment by ensuring that soil and sediment are not washed off your property and that grass or other ground cover become well established.

Temporary stabilization

When construction on your home is complete, verify that your builder installed temporary stabilization measures to minimize erosion and prevent sediment-laden runoff from discharging into streets, gutters, ditches, streams, lakes and wetlands. Silt fence or other sediment control should be in place on the down slope perimeter, and near curb and gutters, ditches, streams, lakes and

wetlands. Mulch or similar material must cover exposed soil. In addition, any piles of soil on your lot must be at least 200 feet from surface water and curb and gutters. Soil piles must also be stabilized.

As a homeowner, you are responsible for inspecting and maintaining temporary stabilization measures until permanent ground cover is established on your yard.

Commonly used temporary stabilization methods include:

Temporary vegetation includes annual grasses that sprout quickly such as annual rye, oats and winter wheat. These grow quickly with little care and can protect the soil from rain, slow runoff, and act as a filter. They will not provide permanent cover. You may need to fertilize, water or reseed to ensure the vegetative cover is maintained until permanent cover is installed.

Mulching (straw, wood chips, wood fiber blanket, and so on) provides temporary cover to protect the soil from rain. Mulching may be the only option during the winter when seeding or sodding is not possible. Mulch must stay in place to be effective. Netting, stakes or chemical binders are used to anchor some types of mulch. Be sure to reinstall washed-out mulch and anchor if necessary until permanent cover is established.

Silt fences are curtains of permeable fabric erected on stakes to restrict runoff. The silt fence slows runoff and allows it to puddle or pond, so soil and sediment can settle out before water leaves a site. Other sediment control devices include berms, biologs, and

Effective Individual Lot Best Management Practices

Temporary Mulching & Seeding

◆ Establish vegetation to protect soils from erosion and keep sites clean.

◆ Protect exposed soils from erosion until vegetation is established.

◆ Use straw or wood mulch, compost, hydroseeding, or RECPs when temporary seeding is not practical. Mulch can be utilized in any weather at any time.



Wood mulch from lumber waste covers bare ground.

Sediment Control Practices

◆ Install straw wattles (fiber rolls), silt fences, compost socks, or other sediment controls on the contour to prevent concentrated flow and protect perimeters.



Construction Entrances & Tracking

◆ As vehicles leave construction sites, sediment is tracked onto adjacent roads. Those pollutants can get washed into storm drains, are a nuisance to drivers and vehicles, and can cause accidents.

◆ Stabilize driveway with a rock base over geotextile fabric to prevent tracking onto roadways.

◆ Immediately clean up tracking in streets with brooms, shovels, or a skid loader. Do not use water to clean pavements.



Without a proper entrance, sediment was tracked into the street and inlets carry sediment to the river.

Inlet Protection

◆ Protect drainage inlets from receiving polluted storm water through the use of inlet protection devices.

Concrete Washout

◆ Use a designated concrete washout area to avoid wash water from concrete tools or trucks from entering storm drains.

◆ Maintain washout area and dispose of concrete waste on a regular basis.

Waste Containment

◆ Keep your site clean. Pick up construction waste each day. Potential pollutants should be stored so they do not become sources of storm water contamination.

Soil Stockpile Placement and Protection

◆ Place stockpiled soil away from critical areas such as streams, drainage ways, and storm drain inlets. Temporarily seed or mulch stockpiles immediately to protect against erosion. Use sediment control around the base of stockpiled soil.

Training & Inspections

◆ Site must be inspected weekly and after each storm event greater than 1/2 inch. Maintain BMPs on a regular basis and replace as necessary.

◆ Train and educate construction crews to better understand the effects of storm water pollution from construction projects and learn ways to prevent or minimize pollution on the job.



This designated concrete washout keeps pollutants from entering inlets and surface water.

Sediment is the biggest source of pollution from construction sites, but other pollutants include concrete washout, petroleum products, construction chemicals and construction debris.

More information at:

www.cleanwatermn.org/MS4 toolkit



MINNESOTA WATER
LET'S KEEP IT CLEAN

Thanks to Iowa Storm Water Education Program for the original design of this brochure.

Erosion and Sediment Control

A Guide for Individual Building Sites

Protecting Water Quality

Construction activities without proper erosion and sediment control protection can contribute large amounts of sediment and other pollutants to streams, rivers, and lakes.

Following the Law

It is illegal to discharge sediment-laden water and other construction-related pollutants to the storm sewers or waterways.



Understanding Your Legal Liability

Construction projects that disturb more than one acre or are part of a larger development plan are subject to permit requirements. A storm water pollution prevention plan (SWPPP) is required to receive a permit. SWPPPs must identify practices that will reduce erosion, prevent sediment loss from construction sites and address pollution prevention.

While the ownership of residential property may change hands during development, compliance is required until all house construction is completed. Storm water permits require that erosion and sediment controls are in place on each lot during the home construction phase.

Developers can transfer storm water permit and pollution prevention plan responsibility to the home builder or new lot owners. But to do this, the new owner must sign a contract agreeing to the terms of the existing storm water permit. Signing a contract requires that the new owner implement all necessary erosion and sediment control measures. Without a contract transfer, the developer remains responsible for compliance on any lot that has been sold.



The lack of controls at these individual home sites will result in water quality degradation and may result in compliance violations.

Understanding The Differences

Erosion Control Prevents

Erosion control practices are used to prevent erosion from occurring at construction sites with bare soils. Practices include mulch, compost blankets, temporary and permanent seeding, minimized land clearing, and rolled erosion control products (RECPs).

Sediment Control Captures

Sediment control practices are used to capture eroded or eroding sediments and keep them on-site and away from surface waters. Practices include silt fences, sediment basins, compost berms, and compost socks.

Both erosion and sediment control practices are required on construction sites to prevent excessive sediment from leaving the site.

Common Pollutants at Construction Sites

- ◆ sediment from grading operations and bare soil
- ◆ concrete wash from tools and trucks
- ◆ sanitary waste and pathogens from porta-potties
- ◆ debris from discarded building materials
- ◆ oil and grease from equipment and vehicles
- ◆ paint, chemicals and solvents
- ◆ litter

Recommended Single Family Lot Erosion and Sediment Control Plans

Preventing Erosion

Evaluate the Site

This diagram illustrates the key points to protecting individual building sites. Every building site is unique and should be evaluated for potential erosion and sediment loss. It is not difficult to predict where soil will erode. Rain falling and water flowing over bare ground will create erosion. Understanding the drainage on the site and where storm water runoff will flow is critical in planning for erosion control.

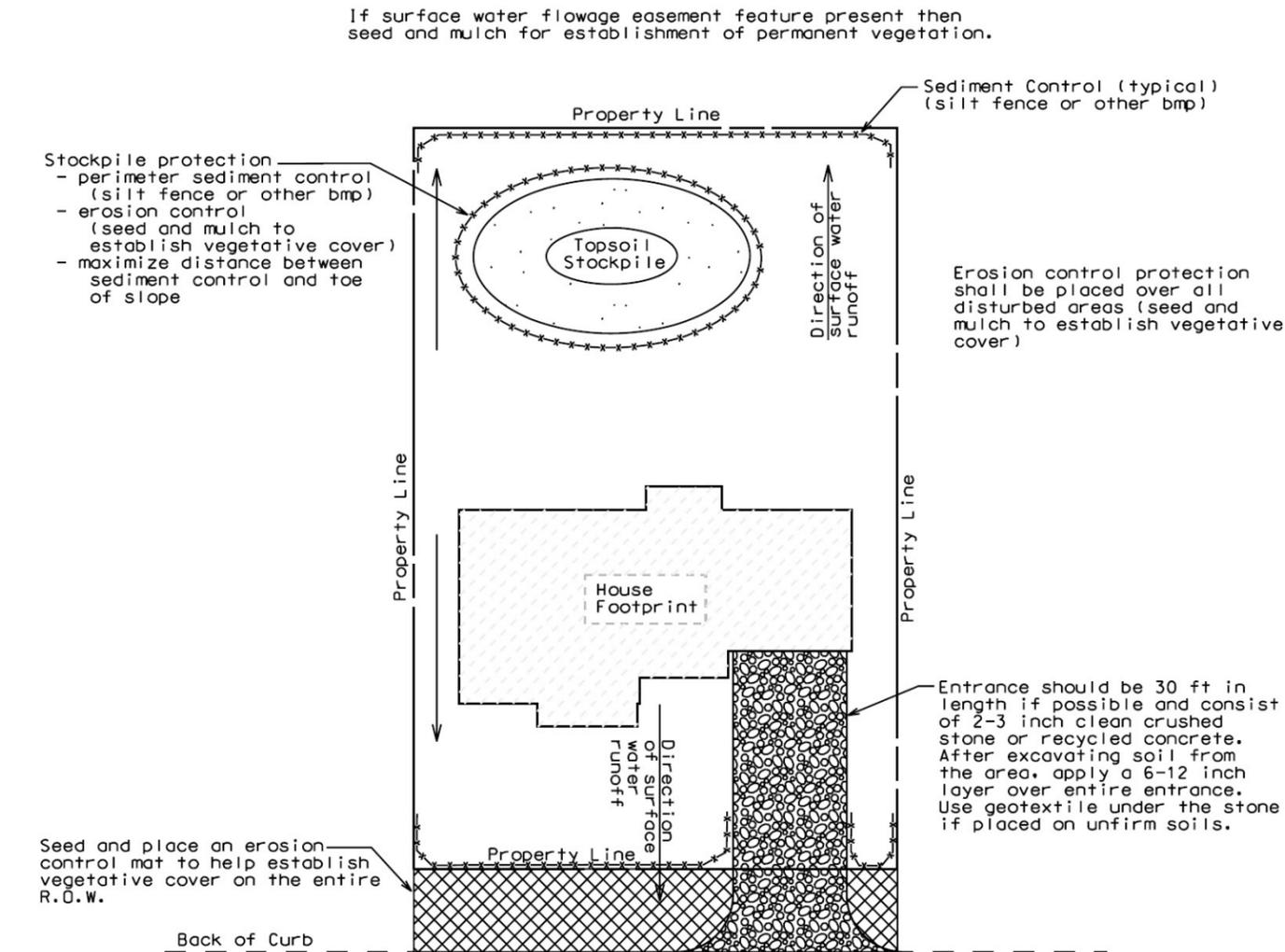


Revegetate the Site

Prevent erosion on individual lots with ground cover. The soils are not left bare during home construction. Sites are covered with straw mulch and/or vegetation to prevent erosion from occurring.



This rolled erosion control product (RECP) is used to prevent erosion and keep the streets clean while homes are being built. A sediment barrier is needed until vegetative cover is established.



Clean Streets
 - No sediment or tracking onto streets

X-X-X-X-X Sediment Control (silt fence, compost socks, wattles, or other similar bmps)
 Note: Additional rows of sediment control may be needed on steeper slopes to break-up slope length. Place controls on the contour. When installing on the contour, the base of each end of silt fence should be at the same elevation as the top of the center of the fence in order to impound water.

Gravel construction entrance
 Note: Install the entrance immediately following the placement of footing and foundation structures.

Direction of surface water runoff

Erosion control mat and vegetation

Waste containment
 Note: Indicate where wastes will be contained on-site (construction debris, concrete washout, sanitary waste, paint and other chemicals or indicate that you will use regional/development structures)

Final Stabilization and Soil Quality Restoration
 It is recommended that post construction soils have a minimum of 5% organic matter and 40% soil pore space. This can be achieved by incorporating a minimum of 2 inches of organic material such as compost while tilling to a minimum depth of 12 inches.

Protecting Streets & Inlets

Rock Entrances are a best management practice used to reduce tracking of sediment onto roadways. All traffic off and onto a home site should use the rock entrance. Routing traffic onto the driveway



will protect areas with seed and mulch along the curb and prevent sediment loss into the street and storm drain inlets.



This rock entrance provides mud-free access for construction workers and building materials.

Special care should be given to street inlets, as they are a direct conduit to local waterways. Inlet protection should be the last line of defense for protecting local streams and surface water.



A street view and the inside of one type of inlet protection device.

