

Erosion Control Planning Sheet

*This erosion control planning sheet is a necessary attachment for all land use/building permit applications in shoreland and residential zoning districts. Because of the impact of uncontrolled storm water runoff from construction sites to surface water, the Kandiyohi County Zoning Office requires that an erosion control plan be submitted with applications for permits in shoreland and residential areas. In order to protect surface water quality, a **comprehensive and detailed plan** is needed that ensures the control of storm water runoff.*

If you feel that an erosion control plan is not necessary because of the nature of your lot and/or the limited scope of your project (e.g. small deck or moved in yard shed), please provide a brief explanation for the Zoning Administrator to consider. _____

Below is a list of erosion and sediment control methods and practices. Please read the list carefully. Circle the numbers of the corresponding erosion control practices that are appropriate and will be implemented at your project site.

1. Maintain existing vegetation whenever possible and minimize the area of disturbance. Retain and protect trees to enhance future landscaping efforts and to reduce raindrop impact. (Vegetation is the best and most cost-effective erosion control practice.) Stake and flag areas before construction.
2. Install all erosion and sediment control practices prior to any upland soil disturbing activities.
3. Divert run-on around the site, if practical (avoids treating clean water).
4. Phase construction activities to minimize the areas disturbed at one time. This will also allow completed areas to be stabilized and re-vegetated before disturbing adjacent sites.
5. Maintain and protect all natural waterways. Retain at least a 20-foot wide strip of natural vegetation along all waterways to filter out sediment and other pollutants.
6. Minimize the use of impervious surfaces such as roofs, driveways, parking lots, and roads. Disconnect impervious surfaces whenever possible (e.g. direct downspouts to lawn areas, not driveways.)
7. Use rock rip-rap at both the outlet and inlet ends of culverts to prevent scour erosion and use energy dissipaters at the outlet ends (e.g. plunge pools).
8. Limit construction equipment to designated areas to control soil compaction. Keep equipment away from existing trees, future sewage treatment areas, and infiltration basins.
9. Install silt fence and/or fiber log products on the down-slope perimeter of all disturbed areas according to the attached installation instructions prior to any soil disturbing activities (including clearing and grubbing). Protect sensitive areas such as wetlands, drainage swales and shoreland areas with silt fences or fiber logs.
10. Install rock dam checks, bale checks, or fiber logs in areas of concentrated flow.
11. Use temporary slope drains or rock chutes to move water down steep slopes.
12. Construct sediment basins and/or infiltration basins for areas with a large (5-10 acres or more) contributing watershed.
13. Line waterways with erosion control blankets.
14. Protect storm drain inlets with a combination of silt fencing, fiber logs, straw bales, and rock dams.
15. Cover any stockpiled soil with plastic or use a temporary seed mix.
16. Use stockpiled topsoil as earthen berms to direct runoff or to create temporary sediment basins.

- 17. Apply fertilizer according to soil test recommendations.
- 18. Mulch all disturbed areas at the rate of one 50-pound bale of straw per 500 square feet and disc anchor. On slopes greater than 10 feet in length and 4:1 or steeper, use the following erosion control blankets that have been properly anchored to the slope according to the manufacturer's instructions:

2:1 slopes or steeper	straw/coconut blanket or high velocity wood blanket
3:1 slopes or steeper	wood or straw blanket with net on both sides
4:1 slopes or steeper	wood or straw mulch blanket with net on one side
Flat areas	straw mulch with disc anchoring

- 19. Seed all disturbed areas within seven days of final grading and seed/mulch areas that will be left inactive for more than seven days. Do not seed later than September 1st. Areas that need to be seeded later than this date should be dormant seeded in late October or early November. The use of native plant materials is encouraged.
- 20. Install a rock construction site entrance to reduce the amount of mud tracked onto to the adjacent street. A rock construction entrance should be fifty feet in length and should consist of six inches of clean 1-3 inch rock underlain by geo-textile fabric.

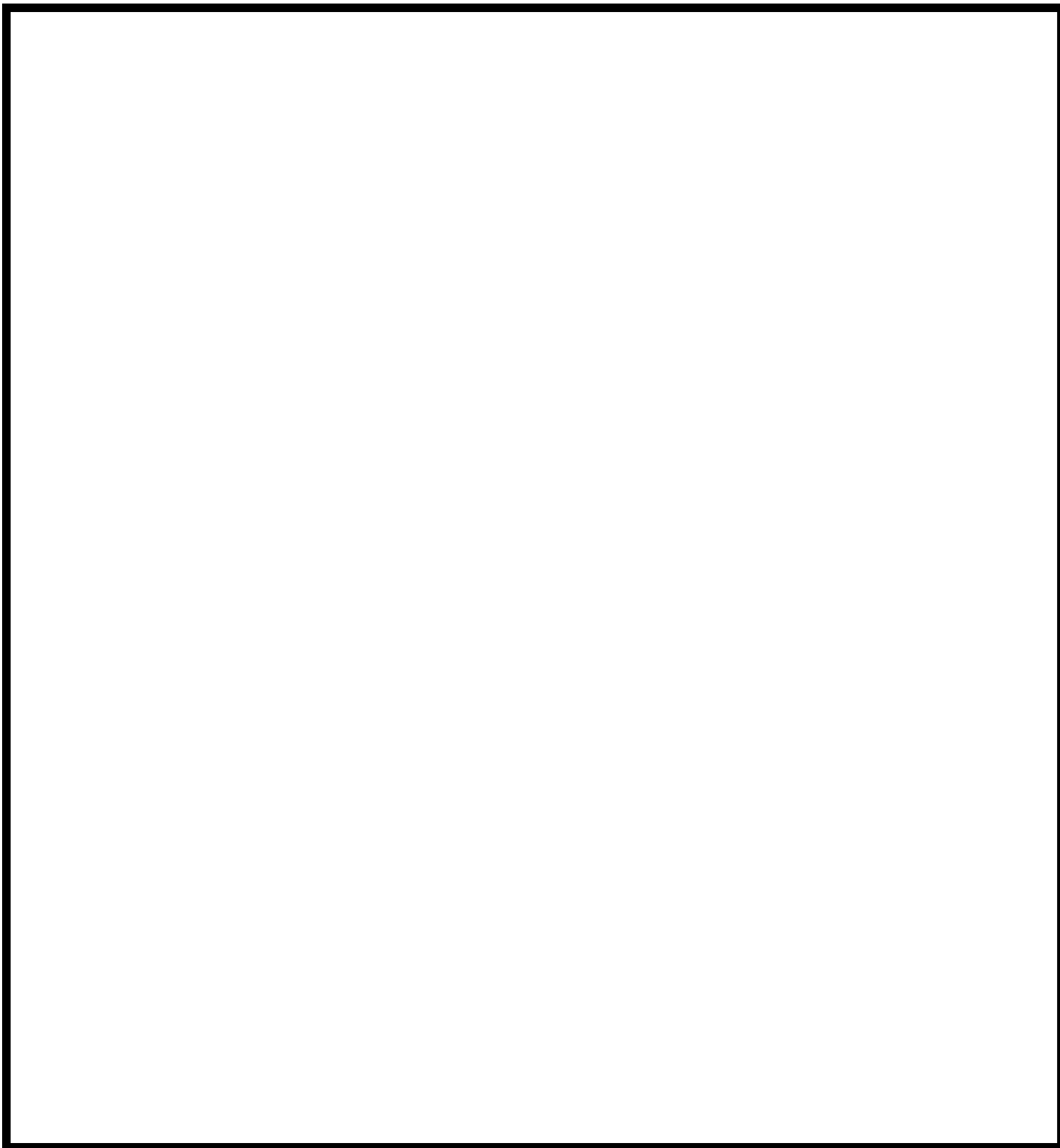
Describe the lot, including the approximate amount of ground to be disturbed and a description of the natural features and water flow patterns: _____

Briefly describe the erosion control measures that you plan to implement: _____

Briefly describe the phasing and timing of erosion control measures: _____

In the box below (or on an attached sheet) draw a sketch of the proposed lot showing the following:

- Existing and proposed structures
- Surface water (lake, stream, etc.)
- Area to be disturbed
- Water intakes or control structures
- Runoff flow pattern (use arrows to indicate direction of flow)
- Location and layout of proposed erosion control measures
- Distances from disturbed areas and structures to surface waters
- Natural drainage features such as ravines, draws, washes, swales, etc.



EROSION CONTROL TIPS AND REMINDERS

- **EROSION CONTROL MEASURES NEED TO BE IN PLACE BEFORE THE GROUND IS DISTURBED – PROACTIVE, NOT REACTIVE**
- **EROSION CONTROL MEASURES NEED TO REMAIN IN PLACE UNTIL THE PROJECT IS FINALIZED AND THE SOIL IS STABILIZED**
- **PROPER PLANNING REQUIRES CAREFUL CONSIDERATION OF THE LOT’S NATURAL FEATURES AND FLOW PATTERNS**
- **SILT FENCING MUST BE PROPERLY INSTALLED IN ORDER TO BE EFFECTIVE – MUST BE TRENCHED INTO THE GROUND!**
- **SILT FENCING IS BEST SUITED TO MANAGE SHEET FLOW, NOT CHANNELIZED FLOW – FLOWS ANTICIPATED TO BE GREATER THAN ONE INCH DEEP SHOULD BE MANAGED OR TREATED BY OTHER CONTROL MEASURES SUCH AS ROCK DAMS, BALE CHECKS FIBER LOGS, ETC.**
- **EROSION CONTROL PLANNING FOR A SITE INCLUDES RUNOFF THAT GOES TO THE ROAD – MANY TIMES THIS RUNOFF WATER GOES UNTREATED TO THE LAKE OR STREAM THROUGH STORMWATER COLLECTION SYSTEMS**
- **PROPER PLANNING WILL INCLUDE MEASURES TO KEEP DIRT FROM BEING TRACKED ONTO THE ROAD AND PLANS TO CLEAN UP DIRT THAT DOES GET TRACKED ONTO THE ROAD**
- **EROSION CONTROL PLANNING PROTECTS YOUR WATER QUALITY!**

Contact Information

Person Responsible for Plan Implementation: _____

Address: _____

Phone Number: _____ Cell Phone Number: _____

Applicant Certification

I have read and understand this erosion control plan and agree that the measures laid out in this plan will be installed or implemented in close conformity with this plan upon approval by the Zoning Office. I understand that failure to implement this plan may result in immediate stoppage of the proposed project and possible further consequences, including restoration and mitigation measures, when surface waters have been impacted. I understand that this plan represents the minimum that will be required and the Zoning Office may at times require additional measures upon inspection of the property during the project.

Applicant Signature

Date