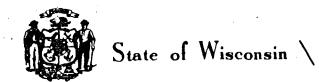
CR 90-242

RULES CERTIFICATE

STATE OF WISCONSIN)	RECEIVED
) SS DEPT. OF INDUSTRY,) LABOR & HUMAN RELATIONS)	JUN 2 5 1992 Revisor of Statutes Bureau
TO ALL TO WHOM THESE PRESENTS SHALL COME, (GREETINGS:
I, <u>Carol Skornicka</u>	, Secretary of the Department of Industry,
Labor and Human Relations, and custodian of the o	official records of said department, do hereby certify that
the annexed rule(s) relating tosoil_erosion were duly approved and adopted by this departmen	n control procedures (Subject) nt on June 25, 1992 (Date)
I further certify that said copy has been compar	ed by me with the original on file in the department
and that the same is a true copy thereof, and of the	whole of such original.
	IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the official seal of the department at 8:00 a.m. in the city of Madison, this 25th day of June A.D. 19 92

12-1-92



RULES in FINAL DRAFT FORM

RECEIVED

JUN 2 5 1992

Revisor of Statutes Bureau

Rule:

Chapter ILHR 20 and section ILHR 21.125

Relating to:

Soil erosion control procedures for one- and two-family dwelling construction sites

The Wisconsin Department of Industry, Labor and Human Relations proposes an order to amend ILHR 20.02 (5), 20.07 (16), 20.08, 20.09 (4) (a) 1., 20.09 (5) (a), 20.09 (5) (b) 2., 20.09 (6) (intro), and 20.10 (1) (c); and to create ILHR 20.06 (3) Note, 20.07 (intro), 20.07 (8m), 20.07 (28t), 20.07 (28v), 20.07 (63m), 20.07 (65r), 20.07 (77m), 20.21 (4), 21.125 and Appendix E, relating to erosion control procedures.

ANALYSIS OF PROPOSED RULES

Statutory authority: ss. 101.615, 101.651, and 101.653, Stats. Statutory interpreted: s. 101.60, Stats.

On May 1, 1992, the 1991 Wisconsin Act 309 relating to nonpoint source pollution was signed into law. Act 309 includes provisions for the department to address soil erosion prevention on construction sites of one— and 2-family dwellings. Uncontrolled soil erosion from building construction sites is considered nonpoint source pollution, which results in sedimentation and pollution of the surface waters of the state. Uncontrolled erosion is deposited in waters of the state, in public sewers or on adjacent land. Most construction—related erosion problems are concentrated in or around urban areas where sediments are carried into waterways through storm sewers. Sediment from erosion is deposited in waterways and results in the reduction of the quality of the surface waters of the state. It also increases property taxes as dredging or clearing of sewers may be required.

This proposed rule revision provides protection of waterways and for municipalities by providing erosion control practices which prevent or reduce soil from leaving the construction site, reduce overland flow and provide for on-site sediment trapping, until the site is stabilized. The proposed rule contains performance standards for the prevention and reduction of erosion. Best management practices, published by the Wisconsin department of natural resources in chapter 3, "Wisconsin Construction Site Best Management Practices Handbook", are recognized by the department as appropriate methods of erosion control. The rules allow the use of alternative practices which provide equivalent erosion prevention and additional practices on sites with slopes greater than 12 percent. The department, city, village, town or county may issue special orders directing the cessation of work until a site complies with these rules.

The proposed rule requires erosion control procedures to be implemented on one- and 2-family building sites. Erosion control procedures, which include silt fences, straw bales, tarps, riprap, berms, sediment basins or vegetative strips, are utilized to prevent soil movement to waters of the state, public sewers or off-site. The rule revision requires implementation of these procedures during building construction and maintenance of these procedures

until the site is stabilized, defined as making the site steadfast or firm and without soil movement. Erosion control plans will be reviewed by certified reviewers and construction sites will be inspected by certified inspectors. The department shall conduct performance audit of the erosion control program of the county, city, village or town and every 3 years issue written determinations of compliance.

Section 101.63 (1), Stats., requires that the department must take into account the cost of code provisions to home buyers in relation to the benefits of the code provisions. Cost estimates of \$400 to \$800 per building site have been calculated for compliance with the soil erosion control provisions. The long-term benefits of compliance will be soil and site stabilization and reduced cleanup costs associated with sedimentation and deposition to surface waters of the state and adjacent properties.

SECTION 1. ILHR 20.02 (5) is amended to read:

ILHR 20.02 (5) LANDSCAPING. The Except for construction erosion control, the scope of this code does not extend to driveways, sidewalks, landscaping and other similar features not having an impact on the dwelling structure.

SECTION 2. ILHR 20.06 (3) Note is created to read:

Note: Every three years the department will perform performance audits of the erosion control programs of the municipalities administering the program and issue a written determination on whether the municipality complies with the erosion control ordinances and the erosion control standards.

SECTION 3. ILHR 20.07 (intro) is created to read:

ILHR 20.07 DEFINITIONS. In chs. ILHR 20 to 25:

SECTION 4. ILHR 20.07 (8m) is created to read:

ILHR 20.07 (8m) "Best management practices" is defined in s. 101.653, Stats., and means practices, techniques or measures that the department determines to be effective means of preventing or reducing pollutants of surface water generated from construction sites.

SECTION 5. ILHR 20.07 (16) is amended to read:

ILHR 20.07 (16) "Code" means, chs. ILHR 20 to 25, the Wisconsin uniform dwelling code.

SECTION 6. ILHR 20.07 (28t) is created to read:

ILHR 20.07 (28t) "Erosion" means the detachment and movement of soil, sediment or rock fragments by water, wind, ice or gravity.

SECTION 7. ILHR 20.07 (28v) is created to read:

ILHR 20.07 (28v) "Erosion control procedure" means a practice or a combination of practices implemented to prevent or reduce erosion and the resulting deposition of soil, sediment or rock fragments into waters of the state, public sewers or off the owner's land. These procedures include, but are not limited to, silt or filter fences, straw or hay bales, tarps or riprap, berms, sediment basins or vegetative strips.

Note: See Appendix E for examples and illustrations.

SECTION 8. ILHR 20.07 (63m) is created to read:

ILHR 20.07 (63m) "Site" means all contiguous property under single ownership where land-disturbing activity has been proposed for the purpose of constructing a dwelling.

SECTION 9. ILHR 20.07 (65r) is created to read:

ILHR 20.07 (65r) "Stabilized" means action taken at a site to minimize erosion by mulching and seeding, sodding, landscaping, concrete, gravel or other erosion control measures.

SECTION 10. ILHR 20.07 (77m) is created to read:

ILHR 20.07 (77m) "Waters of the state" includes those portions of Lake Michigan and Lake Superior within the boundaries of Wisconsin, and all lakes, bays, rivers, streams, springs, ponds, wells, impounding reservoirs, marshes, watercourses, drainage systems and other surface waters or groundwaters, natural or artificial, public or private, within the state or its jurisdiction.

SECTION 11. ILHR 20.08 is amended to read:

ILHR 20.08 WISCONSIN UNIFORM BUILDING PERMIT. A Wisconsin uniform building permit shall be obtained from the department or the municipality administering and enforcing this code before any on-site construction, including excavation for a structure, within the scope of this code is commenced, except where a permit to start construction has been issued in accordance with s. ILHR 20.09 (5) (b) 2. A Wisconsin uniform building permit shall not be required for repairs.

Note: Section ILHR 20.09 (5) (b) 2. permits the issuance of a footing and foundation permit prior to the issuance of the Wisconsin uniform building permit.

SECTION 12. ILHR 20.09 (4) (a) 1 is amended to read:

ILHR 20.09 (4) (a) 1. 'Plot plan.' <u>a.</u> The plot plan shall show the location of the dwelling and any other buildings, wells, <u>surface waters</u> and disposal systems on the site with respect to property lines. <u>For sites greater than 5 acres</u>, the plot plan shall indicate the area of land-disturbing activity within the site.

b. For sites with slopes greater than 12%, the plot plan shall show the direction of slopes on the site and indicate areas with slopes greater than 12% within the area of land disturbing activity. The plot plan shall indicate initial erosion control procedures as specified in s. ILHR 21.125 based on slopes existing immediately prior to building construction.

- c. For sites with slopes less than 12%, the plot plan shall show the direction of all slopes on the site. The plot plan shall indicate initial erosion control procedures as specified in s. ILHR 21.125 based on slopes existing immediately prior to building construction.
- d. Dwelling sites within subdivisions with subdivision erosion control plans approved by the local municipality are exempt from erosion control plot plan requirements when the subdivision erosion control plan includes adequate best management practices as specified in s. ILHR 21.125 (2) for each site to be developed.

Note: See Appendix E for examples of plot plans indicating erosion control procedures as specified in sub. (4) (a).

SECTION 13. ILHR 20.09 (5) (a) is amended to read:

ILHR 20.09 (5) APPROVAL OF PLANS AND ISSUANCE OF PERMITS. (a) <u>Plan approval</u>. If the department, or the municipality administering and enforcing the code, determines that the plans, including the plans indicating the <u>erosion control procedures as specified in sub. (4)</u>, submitted for a one- or 2-family dwelling substantially conform to the provisions of this code and other legal requirements, an approval shall be issued. The plans shall be stamped "conditionally approved" by a certified inspector or certified independent inspection agency. One copy shall be returned to the applicant; one copy shall be retained by the department or the municipality administering and enforcing the code. The conditions of approval shall be indicated by a letter or on the permit. All conditions of the approval shall be met during construction.

SECTION 14. ILHR 20.09 (5) (b) 2 is amended to read:

ILHR 20.09 (5) (b) 2. 'Permit to start construction of footings and foundation.' Construction may begin on footings and foundations prior to the issuance of the Wisconsin uniform building permit where a permit to start construction is obtained. Upon submittal of the application for a permit to start construction, a plot plan as specified in sub. (4) (a) 1, complete footing and foundation information including exterior grading, and a fee, the department or the municipality enforcing this code may issue a permit to start construction of the footings and foundation. The issuance of a permit to start construction shall not influence the approval or denial of the <u>Wisconsin uniform building permit</u> application.

SECTION 15. ILHR 20.09 (6) (intro) is amended to read:

ILHR 20.09 (6) DISAPPROVAL OF PLANS AND DENIAL OF PERMITS. If the department, or the municipality administering and enforcing the code, determines that the Wisconsin uniform building permit application or the plans including the plans indicating the erosion control procedures as specified in sub. (4), do not substantially conform to the provisions of this code or other legal requirements are not met, approval shall be denied.

SECTION 16. ILHR 20.10 (1) (c) is amended to read:

ILHR 20.10 (1) (c) Notice of compliance or noncompliance. Notice of compliance or noncompliance shall be written on the building permit and posted at the job site. Upon finding of noncompliance, the department or the municipality enforcing this code shall notify the applicant and the owner, in writing, of the violations to be corrected. All The department or municipality shall order all cited violations shall-be-ordered corrected within 30 days after written notification, unless an extension of time is granted pursuant to s. ILHR 20.21. The department or municipality shall order all cited violations of erosion control procedures under s. ILHR 21.125 corrected within 72 hours after written notification and may issue a special order directing an immediate cessation of work for failure to comply with the corrective order. Work may progress if the conditions of the cessation orders have been met.

SECTION 17. ILHR 20.21 (4) is created to read:

ILHR 20.21 (4) APPEALS OF SOIL EROSION CONTROL ORDERS BY A MUNICIPALITY FOR CESSATION OF WORK. (a) Appeals of orders for cessation of work issued under s. ILHR 20.10 (1)(c) may be made to the authority issuing the cessation of work order. The authority shall make a determination on such appeal within three business days. Determination of appeals by a municipality may be conducted in consultation with the department.

- (b) Appeals of a final determination by a municipality on cessation of work orders may be made to the department. The department shall issue a final determination on the appeal within three business days after receipt of such appeal.
- (c) If the issuing authority determines the site to be compliant with s. ILHR 21.125, orders shall be rescinded and work may commence.

SECTION 18. ILHR 21.125 is created to read:

ILHR 21.125 EROSION CONTROL PROCEDURES. (1) PERFORMANCE STANDARDS.

(a) General. Erosion control procedures shall be placed along downslope areas and along sideslope areas as required to prevent or reduce erosion where erosion during construction will result in a loss of soil to waters of the state, public sewer inlets or off-site. The best management practices as defined in s. 20.07 (8m) or alternative measures that provide equivalent protection to these standards may be utilized to satisfy the requirements of this section. When the disturbed area is stabilized, the erosion control procedures may be removed. Sites within subdivisions with approved subdivision erosion control plans are exempt from erosion control procedures specified in this section when the subdivision erosion control plan includes adequate best management practices specified in sub. (2) for erosion control on individual construction sites.

- (b) <u>Tracking</u>. Sediment tracked by construction equipment from a site onto a public or private paved roadway or sidewalk shall be minimized by providing a gravel access roadway where possible.
- (c) <u>Sediment cleanup</u>. Off-site sediment deposition occurring as a result of a storm event shall be cleaned up by the end of the next work day following the occurrence. All other off-site sediment deposition occurring as a result of construction activities shall be cleaned up at the end of the work day.
- (d) <u>Public sewer inlet protection</u>. Downslope, on-site public sewer inlets shall be protected with erosion control procedures.
- (e) <u>Building material waste disposal</u>. All building material waste shall be properly managed and disposed of to prevent pollutants and debris from being carried off the site by runoff.

Note: For proper disposal of flammable, combustible and hazardous liquids, contact the local fire department.

(2) BEST MANAGEMENT PRACTICES. (a) <u>General</u>. Appropriate best management practices, as defined in s. ILHR 20.07 (8m) or specified in chapter 3, Wisconsin Construction Site Best Management Practices Handbook, published by the department of natural resources, may be selected, installed, maintained and remain in place until the site is stabilized to meet the performance standards specified in sub. (1).

Note: The best management practices for slopes is covered under section B.1, chapter 3, Wisconsin Construction Site Best Management Practices Handbook. For a reprint, see Table E-1 in Appendix E.

- (b) <u>Exceptions and clarification</u>. All references to a model ordinance and planning considerations within chapter 3, Wisconsin Construction Site Best Management Practices Handbook, are not adopted by the department.
- (3) MAINTENANCE OF EROSION CONTROL PROCEDURES. (a) <u>General</u>. During the period of construction at a site, all erosion control procedures necessary to meet the performance standards of this section shall be properly implemented, installed and maintained by the building permit applicant or subsequent landowner. If erosion occurs after building construction activities have ceased, some or all of the erosion control procedures shall be maintained until the site has been stabilized.
- (b) <u>Exceptions and clarification</u>. The maintenance procedures and inspection sequences within chapter 3, Wisconsin Construction Site Best Management Practices Handbook, are not adopted as a part of this code.

Note: The handbook is available from Document Sales, 202 South Thornton Avenue, P.O. Box 7840, Madison, Wisconsin 53707-8480; phone (608) 266-3358.

APPENDIX E EROSION CONTROL PROCEDURES EXAMPLES, ILLUSTRATIONS AND GUIDELINES

The following examples and illustrations of some erosion control procedures are provided for your information. Many of these examples and accompanying illustrations are excerpted from the "Wisconsin Construction Site Best Management Practices Handbook," developed by the Wisconsin department of natural resources. The illustrations, Figures E-1 to E-7, depict the materials, excavations and placement necessary for construction of some erosion control procedures outlined in this code.

Note: The handbook is available from Document Sales, 202 South Thornton Avenue, P.O. Box 7840, Madison, Wisconsin 53707-8480; phone (608) 266-3358.

Also included in this appendix are examples of plot plans depicting the requirements as specified in ss. ILHR 20.09 (4) (a) 1 and 21.125. Figure E-8 is an example of a site with a simple slope (all slopes occurring in one general direction); Figure E-9 is an example of a plot having complex slopes (slopes occurring in more than one direction). Figure E-10 is an example of a plot plan in which the location of the erosion control procedures are clearly indicated on the plot plan. Figure E-11 is an example of a large lot, greater than 5 acres, with slopes greater than 12% and where the area of land disturbing activity is indicated.

Guidelines for timing the implementation of the erosion control practices and procedures in order to stabilize areas disturbed during construction of one-and 2-family dwellings are also included in this appendix.

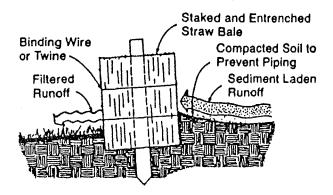
For sites with steeper slopes using either straw bales or silt fences, Table E-1 is included as a guide for determining the distance between parallel fences constructed on these slopes. On complex or steep slopes, fencing should be at right angles to the direction of flow, and placed parallel to the contour on other slopes.

Table E-1 DISTANCE BETHEEN PARALLEL STRAW BALES OR SILT FENCES

Slope Percent *	Slope Distance (feet)
12 to 20 20 or more	25 15

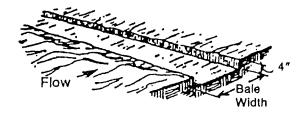
^{*} Steep slopes are identified as having gradients greater than 12 percent.

(Note to Revisor: Insert Figures E-1 to E-12 here.)

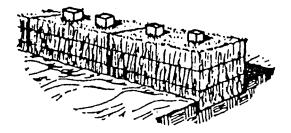


Source: Michigan Soil Erosion and Sedimentation Control Guidebook, 1975.

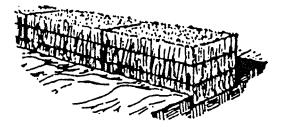
1. Excavate a 4" deep trench.



 Anchor bales using two steel rebars or 2" x 2" wood stakes per bale. Drive stakes into the ground at least 8".



Place bales in trench with bindings around sides away from the ground. Leave no gaps between bales.



4. Backfill and compact the excavated soil.

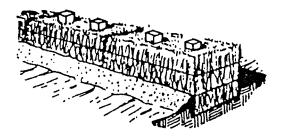
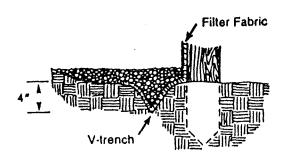
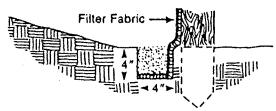


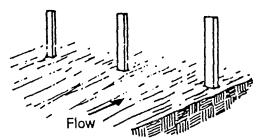
Figure E-1. Straw Bale Fences





Source: North Carolina Erosion and Sediment Control Planning and Design Manual, 1988.

1. Set stakes no more than 3 ft. apart and drive them into the ground at least 8".



3. Staple filter material on upslope side of stakes and extend it into the trench. When joints are necessary, overlap material between two stakes and fasten securely.

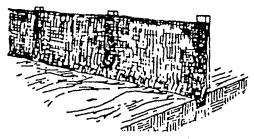
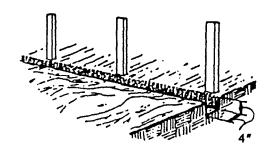
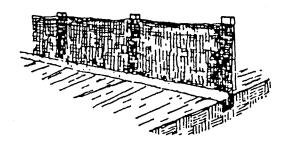


Figure E-2. Silt Fences

2. Excavate a 4" × 4" trench upslope along the line of stakes.



4. Backfill and compact the excavated soil.



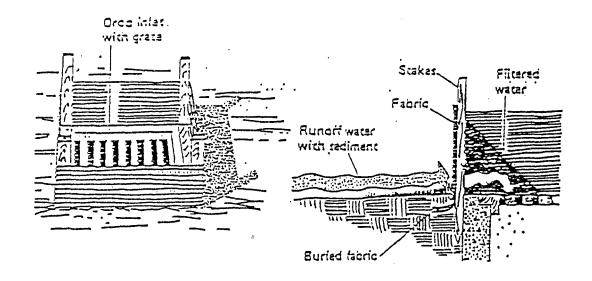


Figure E-3. Drop Inlet with Burlap or Filter Fabric

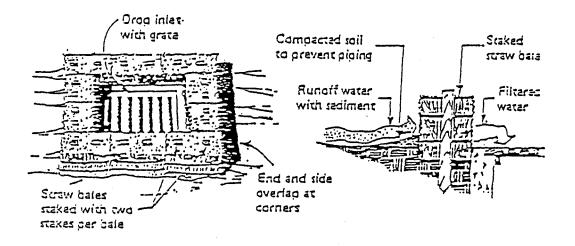


Figure E-4. Drop Inlet with Straw Bales

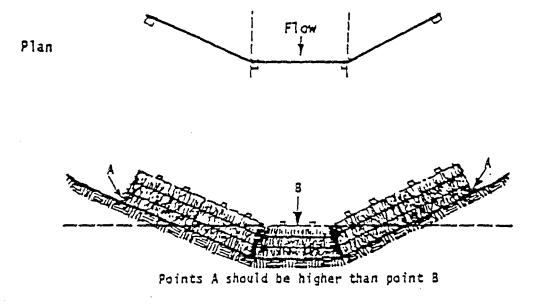


Figure E-5. Straw Bale Barrier in Drainageway

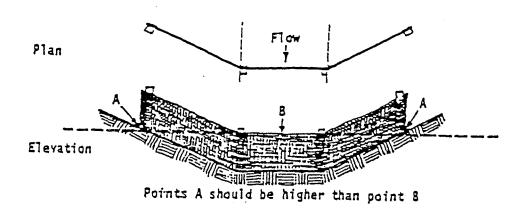


Figure E-6. Filter Barrier in Drainageway

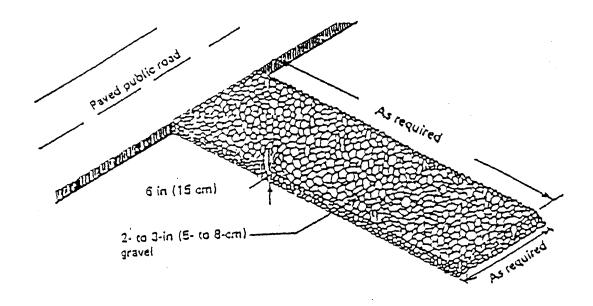


Figure E-7. Gravel Access Roadway

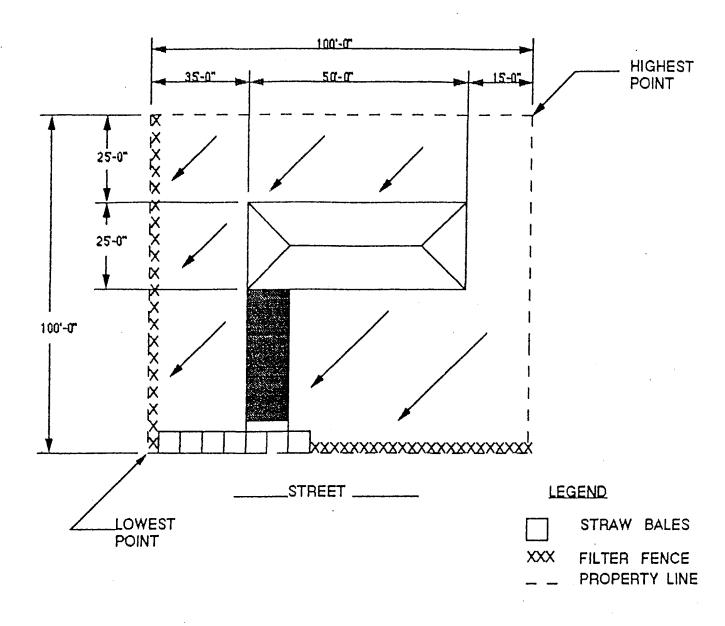


Figure E-8. Plot Plan for Simple Slopes.

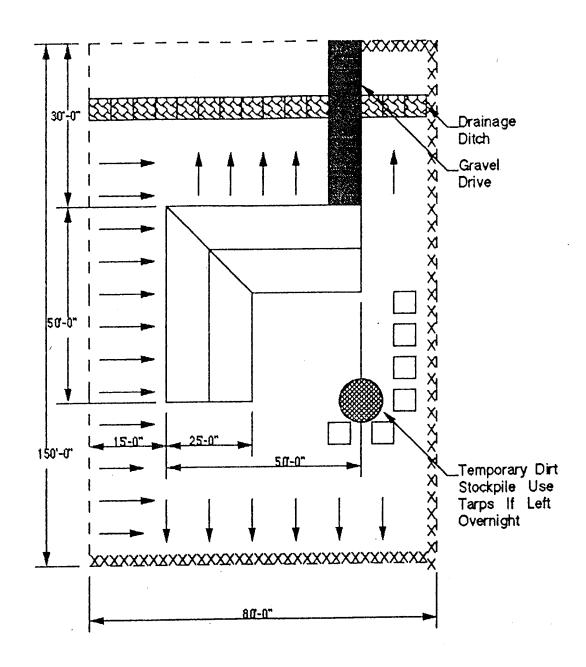
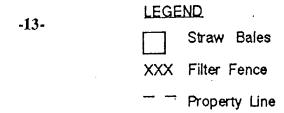


Figure E-9. Plot Plan for Complex Slopes.



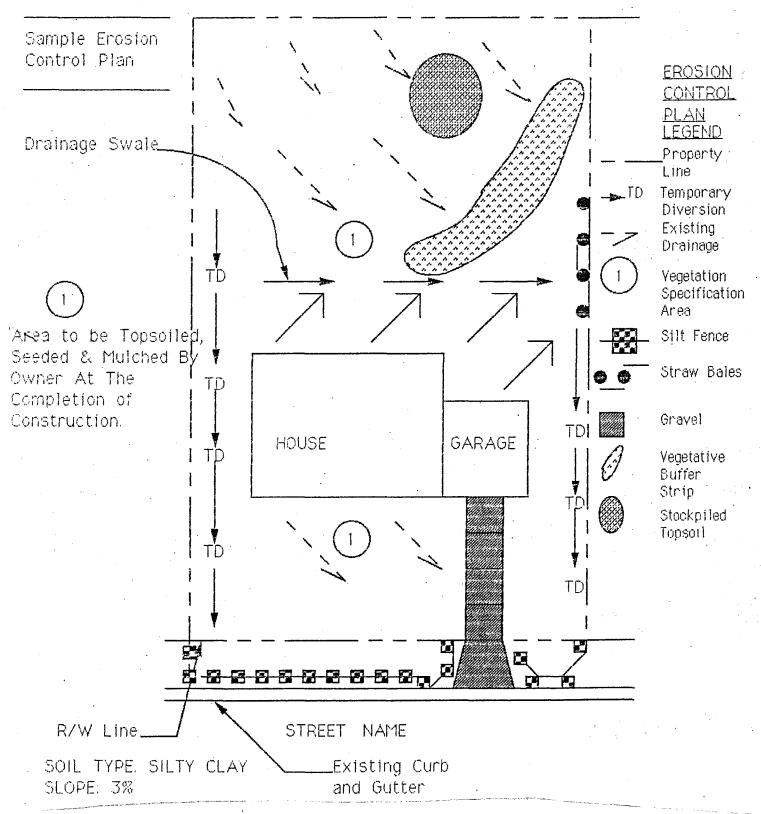
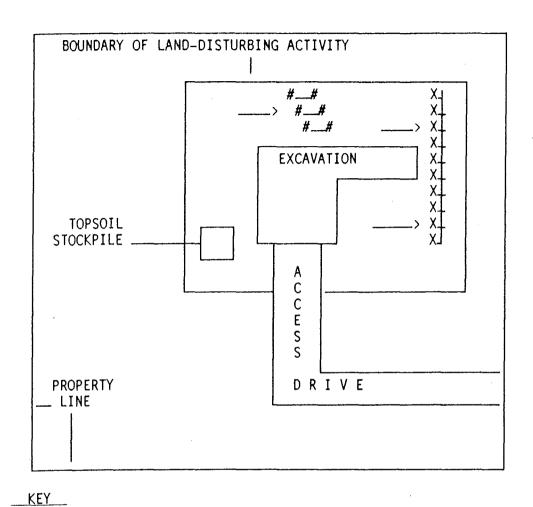


Figure E-10. Plot Plan with Erosion Control Procedures Indicated.



X_X_X_X Slopes greater than 12%

#--#-- Vegetative Buffer Strip

---> Direction of Slope

Figure E-11. Plot plan with area of land-disturbing activity indicated for one-family dwelling on large lot (greater than 5 acres).

Guidelines for Stabilizing the Site and Construction of Erosion Control Procedures

REVEGETATION

. Seed, sod or mulch bare soil as soon as possible.

SEEDING AND MULCHING

- . Spread 4 to 6 inches of topsoil.
- Fertilize according to soil test (or apply at a rate of 10 lb./1000 sq. ft.)
- . Seed with appropriate see mixture for site conditions.
- . Rake area lightly to cover seed with 1/4 inch of soil. Roll lightly.
- . Mulch with hay or straw.
- . Anchor mulch or use netting on steep slopes.
- . Water and keep soil moist every day or two until grass is 2 inches tall.

SODDING

- . Spread topsoil 4 to 6 inches.
- . Fertilize according to soil test.
- . Lightly water the soil.
- . Lay sod; tamp or roll lightly.
- . On slopes, begin laying sod at bottom and work up the slope. Peg in place.
- Initial watering should dampen soil 6 inches. Continue watering every day for two weeks.

SOIL PILES

- Locate away from any downslope street, driveway, stream, lake, wetland, ditch or drainageway, or inlets.
- . For topsoil piles, temporary seed with annual ryegrass or use tarp for cover.

GRAVEL ACCESS DRIVE

- . Install a single access drive using 2- to 3-inch aggregate.
- . Lay gravel to a depth of 6 inches and at least 7 feet wide from street to area of disturbance.
- . Maintain throughout construction.

SEDIMENT CLEANUP

- . Sweep or scrape up soil and sediment tracked into the street daily.
- . Cleanup sediment washed off-site by a storm event shall be removed by the end of the next work day.

DOWNSPOUT EXTENDERS

- . Not required, but highly recommended.
- . Install as soon as gutters and downspouts are completed.
- . Route water to a grassed or paved area.
- . Maintain until lawn is established.

(End)

EFFECTIVE DATE

Pursuant to s. 227.22 (2) (intro.), Stats., these rules shall take effect on December 1, 1992.

24431/27981draft#15:06/02/92

CODES1#80:ILHR20-21

ORDER OF ADOPTION

Pursuant to authority vested in the Departm	nent of Industry, Labor and Human Relations by section(s)
101.653, Stats., as created by	1991 Wis. Act 309
Stats., the Department of Industry, Labor an	nd Human Relations X creates; X amends;
repeals and recreates; repeals	and adopts rules of Wisconsin Administrative Code chapter(s):
ILHR 20 and s. ILHR 21.125 Ur	niform Dwelling Code
(Number)	(Title)
The attached rules shall take effect on	ecember 1, 1992
	pursuant to section 227.22, Stats.
	RECEIVED
, and the contract of the cont	JUN 2 5 1992
	Revisor of Statutes Bureau
	Adopted at Madison, Wisconsin this
A Commence of the Commence of	date: June 25, 1992
Marine Services	DEPARTMENT OF INDUSTRY, LABOR AND HUMAN RELATIONS
	200400 mar

Tommy G. Thompson Governor Carol Skornicka Secretary



Mailing Address: 201 E. Washington Avenue Post Office Box 7946 Madison, WI 53707-7946 Telephone (608) 266-7552

State of Wisconsin Department of Industry, Labor and Human Relations

June 25, 1992

Gary Poulson
Assistant Revisor of Statutes
2nd Floor
119 Martin Luther King Blvd.
Madison, Wisconsin 53703

Douglas LaFollette Secretary of State 10th Floor 30 West Mifflin Street Madison, Wisconsin 53703

RECEIVED

JUN 2 5 1992
Revisor of Statutes
Bureau

Dear Messrs. Poulson and LaFollette:

TRANSMITTAL OF RULE ADOPTION

CLEARINGHOUSE RULE N	O. 90-242
RULE NO. Chapter	ILHR 20 and s. ILHR 21.125
RELATING TO:Soi	1 Erosion Control Procedures for One- and
Two	-Family Dwelling Construction Sites

Pursuant to section 227.20, Stats., agencies are required to file a certified copy of every rule adopted by the agency with the offices of the Secretary of State and the Revisor of Statutes.

At this time, the following material is being submitted to you:

- 1. Order of Adoption.
- 2. Rules Certificate Form.
- 3. Rules in Final Draft Form.

Pursuant to section 227.114, Stats., a summary of the final regulatory flexibility analysis is included for permanent rules. A fiscal estimate and fiscal estimate worksheet is included with an emergency rule.

Respectfully submitted,

Carol Skornicka

Secretary -