THE CITY OF
WATERTOWN

Building Safety & Zoning Department
106 Jones Street
Watertown WI 53094
920-262-4060

INFORMATION PACKET
FOR
BUILDING A NEW HOME



****** PLEASE NOTE THAT INSPECTIONS NEED TO BE PHONED IN AT LEAST 24 HOURS IN ADVANCE. ******

PLAN APPROVAL CHECK OFF LIST FOR NEW BUILDINGS
CITY OF WATERTOWN INSPECTION DEPARTMENT
106 JONES STREET, PO BOX 477, WATERTOWN WI 53094-0477
(920) 262-4060

1. **OWNER NAME, ADDRESS, PHONE #, ESTIMATED COST OF CONSTRUCTION and/or contractor name, address and phone #, if applicable, on plans or sheet of paper.**
2. **BUILDING PLANS** (Two Sets – Must be legible)
3. ***PLOT PLAN** (On paper no smaller than 8 ½ x 11" and must include setbacks and building dimensions)
4. **EXTERIOR ELEVATIONS** (All sides)
5. **FLOOR PLAN FOR EACH LEVEL** (Hall & stairway widths and actual room sizes)
6. **WALL SECTION DRAWINGS** (Must be detailed either State stamped or engineered showing any rafters, trusses or any braced wall lines)
7. ***FOOTING & FOUNDATION WALL DRAWING** (Depth 48" below grade) (Drain tile) (Stone cover) (Finish grade)
8. ***BEAMS** (Size & type, floor joist size, all Eng. & Calcs.) (Steel, LVL or Wood)
9. ***COLUMN SPACING**
10. **WINDOW & PATIO DOORS** (Glass size – sq. ft., vent, type of windows-manufacturer
11. **DOORS** (Size & type)
12. **FIRE SEPARATION** (Garage & house and draft stop for duplexes)
13. **ENERGY WORKSHEET**
14. **SMOKE DETECTORS** (Basement and each floor level within 6 feet of all sleeping areas)
15. **MECHANICAL EXHAUST** (All bathrooms)
16. **ATTIC ACCESS** (All attics)
17. **REQUIRED EXITS** (Each floor level)
18. **BEDROOM WINDOW EXIT** (Size & Height for the basement and second floor)
19. **BOLT SIZE & SPACING IN FOUNDATION** (Or specify leger board)
20. ***FLOOD PLAIN – WETLAND**
21. **VAPOR BARRIER UNDER BASEMENT FLOOR** (Minimum thickness – 4 mil. with 4" of gravel)
22. ***PLOT PLAN** (On at least 8 ½" x 11" paper showing slopes, slope direction and type of erosion control being used)
23. ***CHECK ON ASSESSMENTS AND DEED RESTRICTIONS**
24. ***EROSION CONTROL MUST BE INSTALLED BEFORE WORK CAN START**

***Required for permit to be issued for the start of construction.**

Dwelling Contractor Financial Responsibility Certification

Division of Professional Credentialing
Trades Unit
1400 East Washington Avenue
P.O. Box 7082
Madison, WI 53707

Phone: (608) 261-8467

Email: Madisoncred@commerce.state.wi
Web page: http://dsps.wi.gov/

BS&Z Fee Schedule

Code Section	Description			Fee amount
Plan Review Fees				
Commercial Construction Plan Review Fees				
§ 253-15B, Plan approval fees:	**Area (square feet)**	**Building Plans Only**	**Building and HVAC**	**HVAC or Illumination Plans**
	Less than 2,500	$250.00	$300.00	$180.00
	2,501 to 5,000	$300.00	$400.00	$230.00
	5,001 to 10,000	$500.00	$530.00	$300.00
	10,001 to 20,000	$700.00	$820.00	$400.00
	20,001 to 30,000	$1,100.00	$1,160.00	$500.00
	30,001 to 40,000	$1,400.00	$1,540.00	$800.00
	For plans approved by Department of Safety and Professional Services) prior to submitting to the City of Watertown	$105.00	$105.00	$105.00
	Commercial Early Start Permit	$175.00	(Footings and Foundations Only)	
Residential Construction Plan Review Fees				
	New House	$100.00		
	Remodel, Addition, Alteration and Accessory Structure less than 200 Square Feet	$25.00		
	Remodel, Addition, Alteration, and Accessory Structures 201 to 1,000 Square Feet	$75.00		
	Remodel, Addition, Alteration and Accessory Structure 1,001 Square Feet and up	$100.00		
	Residential Early Start Permit	$100.00	(Footings and Foundations Only)	
General Permit Fees				
	Inspections completed after hours (2 hr. min. chg.)			$65.00 per hour
	Reinspection Fee for Code Violations			$50.00 per inspection
	Work Started Before Obtaining Permit			Fees Doubled
§ 253-GA	Moving house permit			$120.00
§ 253-GB	Moving garage permit			$50.00
Building Permits - Residential and Commercial				
§ 253-20	Administrative Fee			$50.00
	Inspection Fee per square foot			$0.30
	Wisconsin building permit seal			Actual cost plus $5
	Occupancy Permit for all new residential construction			$50.00 per unit
	Accessory Structures (Sheds, Decks, etc.)			.30 per square foot (Min $100)
Heating, Ventilation and Air Conditioning Permits				
§ 253-22B	**Heating, Ventilation and Air Conditioning permits for New Construction, Additions, and Remodels**			
	Administrative fee			$50.00
	Inspection Fee per square foot			$0.06
	Heating, Ventilation and Air Conditioning Flat Fee Permits			
	Residential A/C or Furnace Replacement (Add Electrical if wiring is being installed or replaced)			$75.00 per unit (No Admin Fee)
	Commercial A/C or Furnace Replacement (Add Electrical id wiring is being installed or replaced)			$150.00 per unit (No Admin Fee)
Electrical Permits				
§ 282-GC	**Electrical Permits for New Construction, Additions, and Remodels**			
	Administrative Fee			$50.00
	Inspection Fee per square foot			$0.06
	Electrical Flat Fee Permits			
	Residential Electrical Service			$75.00 per unit
	Commercial Electrical Service			$150.00 per unit

BS&Z Fee Schedule

Plumbing Permits		
§ 419-6B	**Plumbing Permit Fees for New Construction, Additions, and Remodels**	
	Administrative Fee	$50.00
	Inspection Fee per square foot	$0.06
	Plumbing Flat Fee Permits	
	Water Heater (New & Replacement)	$50.00
	Water Softener (New Only)	$50.00
	Sanitary Sewer and Water Lateral	$100.00
§ 419-8NN(2)	**Tapping of east side interceptor sanitary sewer**	$125.00
Housing Standards		
§ 332-6B(3)	**Vacant Property Registration Fee, Annual**	$50.00
Property Maintenance		
	Dangerous, Abandoned, Blighted, or Derelict Buildings	
§ 424-8C(2)(b)[3]	Administration/initial inspection fee, registration	$50.00
§ 424-8D(l)	Nonrefundable quarterly fee	$250.00
§ 424-8D(l)	Fee for buildings in excess of 10,000 square feet of floor space at ground level	$750.00
Subdivision of Land		
§ 545-13	Preliminary Plat Review	$100, plus $50 per acre.
§ 545-14	Final Plat Review	$100, plus $50 per Lot & Park Fees.
§ 545-15	Certified Survey Map (CSM) Review. (No Lot or Park Fees for adjacent lot line adjustments)	$100, plus $50 per Lot & Park Fees.
§ 545-16	Extraterritorial - Certified Survey Maps (CSM) Review	$50.00
§ 545-16	Extraterritorial - Plat Review	$100.00
§ 545-18	Condominium Plat Review	$100, plus $50 per Unit & Park Fees.
§ 545-42A	Parkland Fees in Lieu of Land Dedication or Parkland Dedication - Traditional Dwelling Unit	$641 per Unit or 1,005 sq ft of parkland.
§ 545-42A	Parkland Fees in Lieu of Land Dedication or Parkland Dedication - Institutional Dwelling Unit (40% of Traditional)	$256 per Unit or 402 sq ft of parkland.
§ 545-42B	Recreation Facilities Improvement Fees - Traditional Dwelling Unit	$1,264 per Unit
§ 545-42B	Recreation Facilities Improvement Fees - Institutional Dwelling Unit (40% of Traditional)	$506 per Unit
Planning		
	Comprehensive Plan Amendment	$500.00
Zoning		
§ 550-157	Annexation (fee shall include up to two (2) Site Plan Review meetings and one (1) Plan Commission meeting)	$500.00
§ 550-157	Zoning Board of Appeals - Variance	$500.00
§ 550-157	Conditional Use Permit (CUP) - (fee shall include up to two (2) Site Plan Review meetings and one (1) Plan Commission meeting)	$500.00
§ 550-157	Successor Conditional Use Permit (CUP)	$100.00
§ 550-157	Planned Development - General Development Plan (GDP) (fee shall include up to two (2) site plan review meetings and one (1) Plan Commission Meeting)	$500.00
§ 550-157	Planned Development - Precise Implementation Plan (PIP) (fee shall include up to two (2) site plan review meetings and one (1) Plan Commission Meeting)	$500.00
§ 550-157	Zoning Map Amendment (fee shall include up to two (2) site plan review meetings and one (1) Plan Commission Meeting)	$500.00
§ 550-157	Zoning Text Amendment (fee shall include up to two (2) site plan review meetings and one (1) Plan Commission Meeting)	$500.00
§ 550-157	Site Plan Review (fee shall include up to two (2) site plan review meetings and one (1) Plan Commission Meeting)	$300.00
§ 550-157	Street or Alley Vacations/Discontinuance of a Public Way (fee shall include up to two (2) site plan review meetings and one (1) Plan Commission Meeting)	$500.00
§ 550-157	Temporary Use	$300.00
§ 550-157	Sign Permit (new or modifications of sign face or structure)	$50.00
§ 550-157	Sign Permit - Auxiliary Signs	$10.00
§ 550-157	Swimming Pool Permits	$100.00
§ 550-157	Fence	$50.00



WATERTOWN WATER DEPARTMENT

800 HOFFMAN DRIVE, PO BOX 477
WATERTOWN WI 53094
TELEPHONE (920) 262-4075
FAX NO. (920) 262-4087

NOTICE

TAMPERING WITH ANY PART OF THE WATER SYSTEM IS ILLEGAL
Watertown Municipal Code provides as follows:

"Section 11.50 TAMPERING WITH WATER SYSTEM No person shall turn on, damage or otherwise tamper with any part of the water system of the City, without authority from the Watertown Water utility except temporarily at the meter for the purpose of protecting plumbing, or for the purpose of making repairs or improvements to any plumbing system."

ANYONE FOUND TAMPERING WITH THE WATER SYSTEM, INCLUDING TURNING THE WATER ON AT THE STREET, WILL BE PROSECUTED.

If water is found to be on at the street without the permission of the Watertown Water Utility or without a meter installed at the property:

- **The party to which the building permit was issued will be prosecuted and will be subject to a citation of not more than $500; and**
- **The party to which the building permit was issued or the property owner will be billed water usage charges, based on Public Service Commission Schedule Ug-1 Authorized Water Rates for the Watertown Water Commission, from the date that the building permit was issued; and**
- **The water will be turned off at the street and will not be turned back on until all citations/usage charges are paid.**

The Watertown Water Utility will have personnel available to turn water on for testing or construction purposes Monday through Friday from 7:00 a.m. to 2:30 p.m., except holidays, when the request is received 24 hours prior to the work being done.

Water turned on for testing purposes will be turned off by the Watertown Water Utility immediately after the test is finished.

Water turned on for construction purposes will be subject to usage charges from the date the water is turned on based on the Watertown Water Commission Authorized Water Rates in Schedule Ug-1.

CONTRACTOR/APPLICANT INSTRUCTIONS FOR ONE AND TWO FAMILY

ONLINE BUILDING PERMIT APPLICATION

Wisconsin DSPS has enacted Act 211, requiring municipalities to report one- and two-family homes in a digital format.

To comply with State regulations, the applicant must:

1) **Complete the online building permit at the following link: https://esla.wi.gov/apex/customer_portal_intro_page (follow the step-by-step instructions on the site).**

2) **Submit all required plans and data directly to the municipality per the municipality's instructions. The plans, data and permit must be reviewed, and the approved permit fee must be paid before the permit is considered an issued permit.**

Please feel free to contact our office at (920) 262-4060 with any questions you may have.

Electric, HVAC, and plumbing permits can be completed online utilizing the information in the pages following.

Online Permitting Instructions for Electric, HVAC, & Plumbing in

THE CITY OF
WATERTOWN

Building, Safety & Zoning Department
(920) 262-4060

Step 1: Visit the link which applies most to the type of permit you wish to apply for:

A) Electric Permit: https://portal.iworq.net/WATERTOWNWI/new-permit/600/9649

B) HVAC Permit: https://portal.iworq.net/WATERTOWNWI/new-permit/600/9650

C) Plumbing Permit: https://portal.iworq.net/WATERTOWNWI/new-permit/600/9651

Step 2: Complete the Contractor/Owner information and the application portion. If the permit is for a new building or a large project, you may simply place the square footage amount in the space next to the portion which states"****FOR NEW BUILDING, ADDITION & REMODELING 2 ROOMS OR MORE - If this fee applies for your application, do not fill out the remaining fees." Click on the "Submit" button when completed. **PLEASE NOTE** that once "Submit" is selected, you may not return to edit the permit. *Should you notice any errors on your permit application, please contact our office at (920) 262-4060 or nzimmerman@watertownwi.gov and we can fix the errors for you.

Step 3: Review the permit and print for your records. ***The Administrative Fee is automatically added in each permit.** An approved copy of the permit with a permit number will be provided once payment has been received and processed in our office.

Payment can be submitted to our office via:

-Cash

-Check made payable to "City of Watertown"

-Card by following the instructions at https://www.watertownwi.gov/page/online-payments

If mailing or hand delivering payment, please be sure to include the address of the property and the type of permit you are paying for (i.e. electric, HVAC, plumbing) with your payment.

THE CITY OF
WATERTOWN

Building Safety & Zoning & Engineering Departments

PO Box 477 * 106 Jones Street * Watertown WI 53094
(920) 262-4060
www.ci.watertown.wi.us
Office Hours: 8:00 AM - 4:30 PM Monday through Friday

Please plan ahead!! Many permits can be issued the same day. Other permits (i.e. building, fence, pool, etc.) require review by one of our inspectors before issuance. Due to a limited staff and inspection hours, we encourage submitting all paperwork at least 1 week prior to the date you would like to start a project.

PERMITS ARE REQUIRED FOR:

Additions
All alterations/repairs (unless approved by the Department Supervisor)
All electrical
All HVAC (heating, ventilation and air conditioning)
All plumbing
Change of occupancy for commercial buildings
Curb cuts (Completed by Office Staff) - $55 fee for a driveway, $25 fee for a sump pump
Decks
Dumpsters in the public right of way (street or sidewalk) - (Completed by Office Staff) – $35 fee/2 weeks - renewable
Egress Windows
Fences
Landings
Moving buildings
New buildings
Sidewalks – NO FEE (Completed by Office Staff)
Signs (Permanent AND Temporary)
Steps/Stairs
Swimming pools
Utility sheds
Dumpsters in the street
Sidewalk work done in the City sidewalk area

****PLANS/DRAWINGS ARE REQUIRED TO ISSUE A PERMIT****

NO PERMITS ARE REQUIRED FOR:

*Concrete driveways (call and ask about required setbacks) & check with the Engineering Department for information on driveway approaches
*Concrete patios
*Demolition (Please note that though there is no permit required for demolition, should installation begin on the premises, the proper permits ARE required.
*Installing kitchen cabinets
*Roofing
*Siding
*Windows and doors if going into the same space and size as what was originally there. If the size/area is different, then a permit will be required.

PLEASE NOTE

***You must locate your property stakes before starting your project. If you cannot locate, please contact a land surveyor for assistance.**
***Contact Diggers Hotline at 800-242-8511 before digging.**
***Be sure to check for any deed restrictions / subdivision covenants before starting work.**
***Check for any easements that would be on your property. These easements will require a minimum setback from the easement.**

Building a UDC Compliant Home

http://www.brianwert.com/udcquestions.html

The statewide code for newer homes in Wisconsin is the Uniform Dwelling Code(UDC), Chs. SPS 320-325 of the Wisconsin Administrative Code and its adopted references. It is a uniform building code that replaces numerous local or non-existent building codes for new homes. Municipalities may not adopt a more or less stringent code. The UDC was developed and is updated with input from a citizens' Dwelling Code Council.

The UDC is principally enforced by municipal building inspection departments. The Wisconsin Division of Safety and Buildings facilitates uniformity of its enforcement through code development, code interpretations, special investigations, inspector training and certification, processing of petitions for variance and monitoring manufactured dwelling firms.

Q: What is the purpose of the UDC?

A. The UDC is a uniform statewide code that sets minimum standards for fire safety; structural strength; energy conservation; erosion control; heating, plumbing and electrical systems; and general health and safety in new dwellings.

Q: What determines the cost of a building permit?

A. The value of a project determines the cost of a permit. Municipalities vary. Contact Brian Wert. When figuring the value of new home construction, the value is everything but the cost of the land.

Q: What buildings are covered by the UDC?

A. Basically it covers new one and two-family dwellings built since June 1, 1980 and their additions and alterations.

This includes:

- Seasonal and recreational dwellings (Electrical, heating or plumbing systems are not required, but if installed they shall comply with the applicable codes. If a home is heated, then it shall be insulated. Local sanitary requirements may require certain plumbing systems.)
- One- and two-family condominium buildings.
- A single-family residence connected to a commercial occupancy.
- Community-based residential facilities with up to 8 residents.
- Manufactured, modular or panelized dwellings regulated by the State (but not mobile or manufactured homes regulated by the Federal Government).
- Additions to mobile or manufactured homes produced after June 1, 1980.
- A non-residential building, such as a barn, that is converted to a dwelling.

Q: What structures are not covered by the UDC?

A. The following are not covered:

- Dwellings built before June 1, 1980 or additions and alterations to such dwellings.
- Mobile (manufactured) homes which are instead subject to Federal standards.

- Multi-unit (three or more) residential buildings which are regulated by the State Commercial Building Codes.
- Detached garages or accessory buildings.

Q: What about homes built before June 1, 1980?

A. The State does not have a construction or heating code for older homes or any accessory structures or outbuildings. However, the State Plumbing and Electrical Codes and smoke detector codes do apply to all dwellings, regardless of age.

For construction and heating standards for older homes, municipalities may adopt any or no code. Many use the UDC. Others use the Wisconsin Uniform Building Code, which is not a State code but rather a regional code in southeastern Wisconsin.

Q: How is the UDC enforced?

A. The UDC is principally enforced by municipal or county building inspectors who must be state-certified. They check for code compliance while construction is open for inspection. Municipalities of less than 2,500 population have the option of whether or not to enforce the code or to have the state provide enforcement. To determine if there is state enforcement, contact the Division of Safety and Buildings (address at end of brochure). In any case, state statutes require compliance with the UDC rules by owners and builders, even where there is no local enforcement.

Q:What are the typical steps in building, adding onto or altering a code-complying home?

A. The steps to be taken by an owner or builder can be summarized as follows. (Some steps may not apply to alterations or additions):

- Make initial contact with local zoning and building inspection departments to get an Energy Worksheet, Building Permit Application, zoning rules and other basic information. Determine if your alteration requires a permit or if you need your property surveyed.
- Design the home using standard design tables from the UDC or design a more customized home as long as it is demonstrated that the design meets the general engineering standards of the code. In addition to the UDC, the dwelling's design may also be subject to subdivision rules or restrictive covenants.
- Obtain sanitary or well permits from the county or municipality if the home will use a private sewage system or well.
- Obtain floodplain, zoning and land use approvals from the county and municipality having authority.
- Obtain driveway or other local permits.
- Obtain any necessary utility approvals.
- Submit complete plans including plot, erosion control, foundation, floor layout(s), building cross-section(s) and exterior building wall views (elevations); Energy Worksheet; Permit Application; fees and copies of the above permits to the municipal inspection department.
- Begin construction after plans are approved and building permit is issued and posted.
- Call for inspections of each phase of construction at least 2 business days prior to when work is to be covered up (check the local inspector's instructions). Inspectors will check for compliance with the code. Cosmetic or non-code workmanship items will not normally be ordered corrected. However, inspectors may also check that the approved plans are being followed, including items above the code minimums. Deviations from the original plans may require submittal of revised plans.
- Take occupancy after receiving a final inspection in which no health or safety violations are found. (Some municipalities will issue occupancy permits.) Also, the dwelling's exterior must be completed within two years after permit issuance.
- Correct any other code non-compliances, including stabilization by vegetation of any exposed soil.

Q: Who may do the work?

A. Following is a summary of applicable regulations:

- Anyone may design the home, other than for homes in a floodplain.
- The construction and erosion control permits must be taken out by a state-certified contractor or by the owner who occupies the home currently or after completion. Note that State UDC Contractor certification checks for general liability insurance only - it does not test the technical competency of the builder.
- The plumbing work must be supervised by a master plumber and installed by licensed plumbers. (Only after the dwelling is occupied, may an owner install additional plumbing beyond the pre-requisite kitchen sink and full bathroom, unless prohibited by municipal ordinance.)
- All heating contractors must be state-registered. Owners working on their own property are exempted.
- Municipalities may have additional licensing requirements as well as bonding or insurance requirements.
- In any case, we suggest that you:
- Check your contractors for proper liability and worker's compensation insurance to minimize your liability for injuries and damages to, or caused by, contractors.
- Check past customer references.
- Have a written contract.
- Obtain lien waivers from your subcontractors, so you are not financially responsible if your general contractor fails to pay them.

Q: What could happen if the code is not followed?

A. Failure to comply with the code could cause the following:

- Endangering the health and safety of self, family or guests.
- Levying of fines and/or refusal to grant occupancy permit by local building inspection department.
- Civil action by owners against builders.
- Difficulty in selling the home.
- Civil action by future owners or tenants against original owners or builders. (The average home is resold every 5 to 7 years.)
- Difficulty in obtaining mortgage loans or property insurance.
- Loss of building and community values.

Q: What if I am not able to exactly follow the Code?

A. If it would be difficult to comply with a particular code provision because of special site or design considerations, then you may submit a petition for variance with the required fees to the State. Your variance must show an equivalence to the code provision by different means. (Forms are available from your local building inspector or the Safety and Buildings Division.)

Q: What If I have a problem with my home?

A. Every situation is different, but possible actions include:

- Contact the responsible general contractor and/or subcontractor for resolution.
- Contact your homeowner's warranty program, if applicable.
- Contact the local building inspector if the problems are code-related. (Note that orders may be written against you as the owner.)
- Use the local homebuilder association's arbitration services, if applicable.
- Obtain a consulting engineer or private building inspector's report.
- Contact the Wisconsin Department of Agriculture, Trade and Consumer Protection (1-800-422-7128) for alteration and addition problems.
- Use the small claims court system.
- Contact an independent mediation/arbitration service.
- Obtain a lawyer.

Standard Erosion Control Plan
for 1- & 2-Family Dwelling Construction Sites

According to Chapters SPS 320 & 321 of the Wisconsin Uniform Dwelling Code, soil erosion control information needs to be included on the plot plan which is submitted and approved prior to the issuance of building permits for 1- & 2-family dwelling units in those jurisdictions where the soil erosion control provisions of the Uniform Dwelling Code are enforced. This Standard Erosion Control Plan is provided to assist in meeting this requirement.

Instructions:

1. Complete this plan by flling in requested information, completing the site diagram and marking appropriate boxes on the inside of this form.
2. In completing the site diagram, give consideration to potential erosion that may occur before, during, and after grading. Water runoff patterns can change signifcantly as a site is reshaped.
3. Submit this plan at the time of building permit application.

PROJECT LOCATION _____

BUILDER _ OWNER _ __

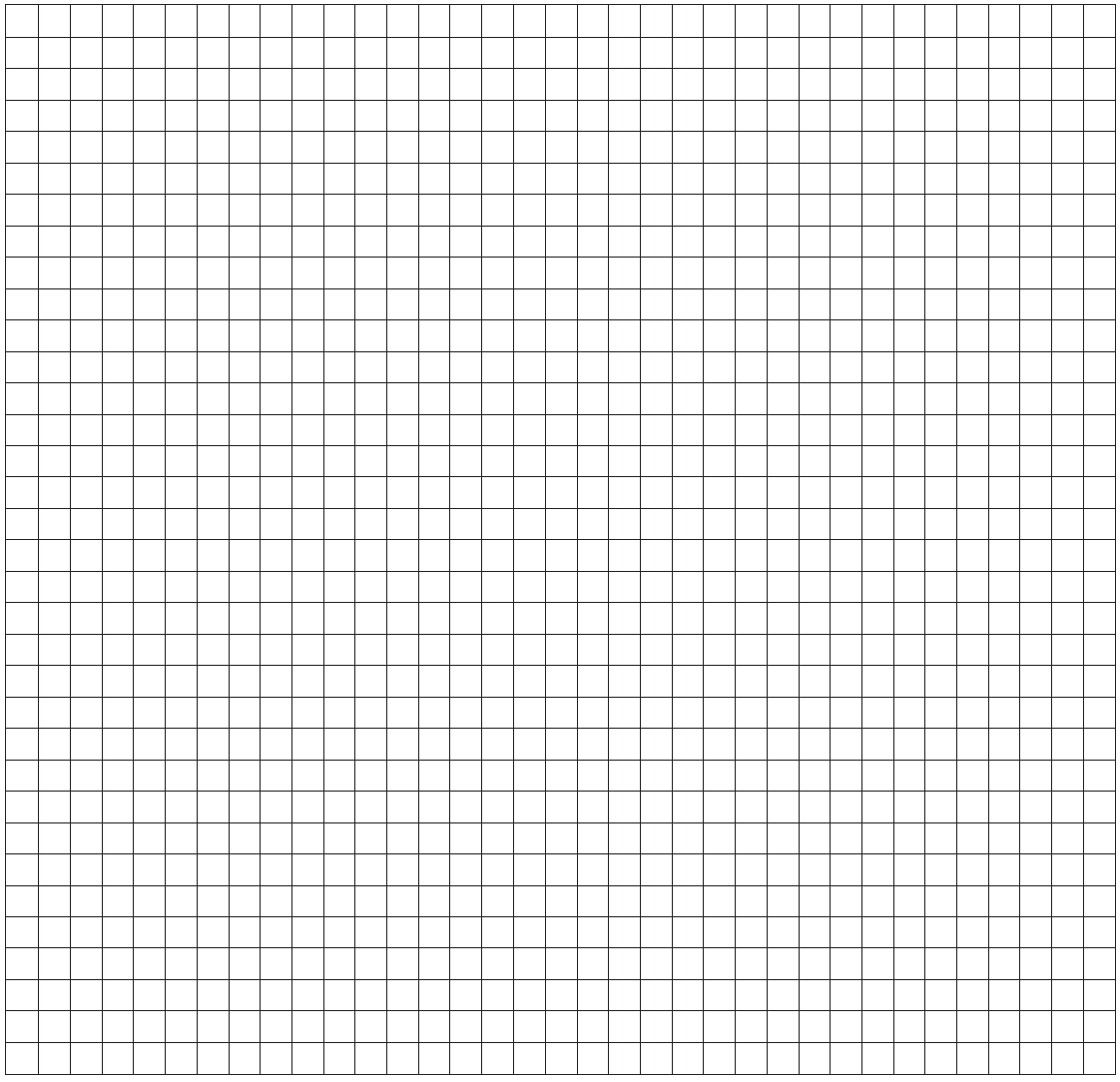
WORKSHEET COMPLETED BY _ DATE _ __

Please indicate north by completing the arrow.



SITE DIAGRAM

Scale: 1 inch = _ feet



EROSION CONTROL PLAN LEGEND

- PROPERTY LINE
- EXISTING DRAINAGE
- TD TEMPORARY DIVERSION
- FINISHED DRAINAGE
- LIMITS OF GRADING
- SILT FENCE
- STRAW BALES
- GRAVEL
- 1 VEGETATION SPECIFICATION
- TREE PRESERVATION
- STOCKPILED SOIL

EROSION CONTROL PLAN CHECKLIST

Check (✔) appropriate boxes below, and complete the site diagram with necessary information.

COMPLETED	NOT APPLICABLE	
		Site Characteristics
❒		North arrow, scale, and site boundary. Indicate and name adjacent streets or roadways.
❒	❒	Location of existing drainageways, streams, rivers, lakes, wetlands or wells.
❒		Location of storm sewer inlets.
❒		Location of existing and proposed buildings and paved areas.
❒		The disturbed area on the lot.
❒		Approximate gradient and direction of slopes before grading operations.
❒		Approximate gradient and direction of slopes after grading operations.
❒	❒	Overland runoff (sheet flow) coming onto the site from adjacent areas.
		Erosion Control Practices
❒	❒	Location of temporary soil storage piles.
		Note: Soil storage piles should be placed behind a sediment fence, a 10 foot wide vegetative strip, or should be covered with a tarp or more than 25 feet from any downslope road or drainageway.
❒		Location of access drive(s).
		Note: Access drive should have 2 to 3 inch aggregate stone laid at least 7 feet wide and 6 inches thick. Drives should extend from the roadway 50 feet or to the house foundation (whichever is less).
❒	❒	Location of sediment controls (filter fabric fence, straw bale fence or 10-foot-wide vegetative strip) that will prevent eroded soil from leaving the site.
❒	❒	Location of sediment barriers around on-site storm sewer inlets.
❒	❒	Location of diversions.
		Note: Although not specifically required by code, it is recommended that concentrated flow (drainageways) be diverted (re-directed) around disturbed areas. Overland runoff (sheet flow)from adjacent areas greater than 10,000 sq. ft. should also be diverted around disturbed areas.
❒	❒	Location of practices that will be applied to control erosion on steep slopes (greater than 12% grade).
		Note: Such practices include maintaining existing vegetation, placement of additional sediment fences, diversions, and re-vegetation by sodding or seeding with use of erosion control mats.
❒	❒	Location of practices that will control erosion on areas of concentrated runoff flow.
		Note: Unstabilized drainageways, ditches, diversions, and inlets should be protected from erosion through use of such practices as in-channel fabric or straw bale barriers, erosion control mats, staked sod, and rock rip-rap. When used, a given in-channel barrier should not receive drainage from more than two acres of unpaved area, or one acre of paved area. In-channel practices should not be installed in perennial streams (streams with year round flow).
❒	❒	Location of other planned practices not already noted.

❒ COMPLETED	❒ NOT APPLICABLE

Indicate management strategy by checking (✔) the appropriate box.

Management Strategies

❒ ❒ Temporary stabilization of disturbed areas.

Note: It is recommended that disturbed areas and soil piles left inactive for extended periods of time be stabilized by seeding (between April 1 and September 15), or by other cover, such as tarping or mulching.

❒ Permanent stabilization of site by re-vegetation or other means as soon as possible (lawn establishment).

- Indicate re-vegetation method: ❒ Seed ❒ Sod ❒ Other _____
- Expected date of permanent re-vegetation: _____
- Re-vegetation responsibility of: ❒ Builder ❒ Owner/Buyer
- Is temporary seeding or mulching planned if site is not seeded by Sept. 15 or sodded by Nov. 15? ❒ Yes ❒ No

❒ ❒ Use of downspout and/or sump pump outlet extensions.

Note: It is recommended that fl from downspouts and sump pump outlets be routed through plastic drainage pipe to stable areas such as established sod or pavement.

❒ ❒ Trapping sediment during de-watering operations.

Note: Sediment-laden discharge water from pumping operations should be ponded behind a sediment barrier until most of the sediment settles out.

❒ Proper disposal of building material waste so that pollutants and debris are not carried off-site by wind or water.

❒ Maintenance of erosion control practices.

- Sediment will be removed from behind sediment fences and barriers before it reaches a depth that is equal to half the height o f the barrier.
- Breaks and gaps in sediment fences and barriers will be repaired immediately. Decomposing straw bales will be replaced (typical bale life is three months).
- All sediment that moves off-site due to construction activity will be cleaned up before the end of the same workday.
- All sediment that moves off-site due to storm events will be cleaned up before the end of the next workday.
- Access drives will be maintained throughout construction.
- All installed erosion control practices will be maintained until the disturbed areas they protect are stabilized.

EROSION CONTROL REGULATIONS

Erosion control and stormwater regulations can be complex. Local, state and, in some cases, federal regulations may apply. Before construction make sure you have the appropriate permits.

LOCAL ORDINANCES

Check with your county, city, village, or town for any local erosion control ordinances including shoreland zoning requirements. Except for new 1- & 2-family dwellings, local ordinances may be more strict than state regulations. They may also require erosion control on construction projects not affected by state or federal regulations.

UNIFORM DWELLING CODE (DEPT. OF COMMERCE)

CONTROLS REQUIRED

- Silt fences, straw bales, or other approved perimeter measures along downslope sides and side slopes.
- Access drive.
- Straw bales, filter fabric fences or other barriers to protect on-site sewer inlets.
- Additional controls if needed for steep slopes or other special conditions.

FOR MORE INFORMATION, CONTACT:

- Local building inspector
- Department of Commerce, Safety and Buildings Division, P.O. Box 7970, Madison, Wis. 53707-7970, (608) 267-5113.

STORMWATER PERMIT (DEPT. OF NATURAL RESOURCES)

CONTROLS REQUIRED

- Erosion control measures specified in the *Wisconsin Construction Site Best Management Practice Handbook*.
- Measures to control storm water after construction.

FOR MORE INFORMATION, CONTACT

- Department of Natural Resources, Storm Water Permits, P.O. 7921, Madison, WI 53707-7921, (608) 267-7694.

For more assistance on plan preparation, refer to the Wisconsin Uniform Dwelling Code, the DNR *Wisconsin Construction Site Best Management Handbook,* and UW–Extension publication *Erosion Control for Home Builders*. The *Wisconsin Uniform Dwelling Code* and the *Wisconsin Construction Site Best Management Handbook* are available through the State of Wisconsin Document Sales, (608) 266-3358.

Erosion Control for Home Builders (GWQ001) can be ordered through Extension Publications, (608) 262-3346 or the Department of Commerce, (608) 267-4405. A PDF version of *Erosion Control for Home Builders* (GWQ001) and *Standard Erosion Control Plan* are also available at http://clean-water.uwex.edu/pubs/sheets

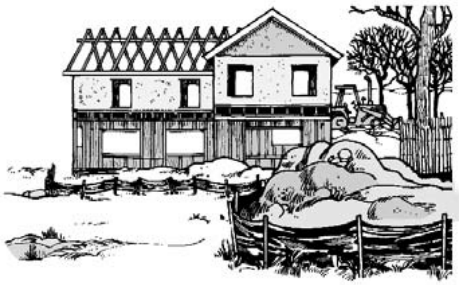
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GWQ001A Standard Erosion Control Plan for 1 & 2 Family Dwelling Construction Sites

DNR WT-458-96 R-03-02-2M-10-S Editing and design by the Environmental Resources Center, University of Wisconsin–Extension.

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Erosion Control for Home Builders

By controlling erosion, home builders help keep our lakes and streams clean.

Eroding construction sites are a leading cause of water quality problems in Wisconsin. For every acre under construction, about a dump truck and a half of soil washes into a nearby lake or stream unless the builder uses erosion controls. Problems caused by this sediment include:



Taxes
Cleaning up sediment in streets, sewers and ditches adds extra costs to local government budgets.

Lower property values
Neighboring property values are damaged when a lake or stream fills with sediment. Shallow areas encourage weed growth and create boating hazards.

Poor fishing
Muddy water drives away fish like northern pike that rely on sight to feed. As it settles, sediment smothers gravel beds where fish like smallmouth bass fi food and lay their eggs. Soil particles in suspension can act like a sand blaster during a storm and damage fish gills.

Nuisance growth of weeds and algae
Sediment carries fertilizers that fuel algae and weed growth.

Dredging
The expense of dredging sediment from lakes, harbors and navigation channels is paid for by taxpayers.

This fact sheet includes the diagrams and step-by-step instructions needed by builders on most home sites. Additional controls may be needed for sites that have steep slopes, are adjacent to lakes and streams, receive a lot of runoff from adjacent land, or are larger than an acre.

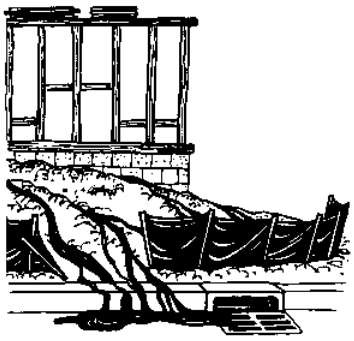
If you need help developing an erosion control plan or training your staff, contact your local building inspection, zoning or erosion control office.

Controlling Erosion is Easy

Erosion control is important even for home sites of an acre or less. The materials needed are easy to find and relatively inexpensive – straw bales or silt fence, stakes, gravel, plastic tubes, and grass seed. Putting these materials to use is a straightforward process. Only a few controls are needed on most sites:

- Preserving existing trees and grass where possible to prevent erosion;
- Revegetating the site as soon as possible;
- Silt fence or straw bales to trap sediment on the downslope sides of the lot;
- Placing soil piles away from any roads or waterways;
- Diversions on upslope side and around stockpilkes;
- Stone/rock access drive used by all vehicles to limit tracking of mud onto streets;
- Cleanup of sediment carried off-site by vehicles or storms; and
- Downspout extenders to prevent erosion from roof runoff.

GWQ001 Erosion Control for Home Builders. Additional copies are available from Cooperative Extension Publications, 45 N. Charter St., Madison, WI 53715, 608/262-3346 (toll-free 877-947-7827) or Dept. of Commerce, P.O. Box 2509, Madison, WI 53701-2509, 608/267-4405.



A poorly installed silt fence will not prevent soil erosion. Fabric must be buried in a trench and sections must overlap (see diagram on back of this fact sheet).

WARNING! Extra measures may be needed if your site:

- is within 300 feet of a stream or wetland;
- is within 1000 feet of a lake;
- is steep (slopes of 12% or more);
- receives runoff from 10,000 sq. ft. or more of adjacent land;
- has more than an acre of disturbed ground.

For information on appropriate measures for these sites, contact your local building inspection, zoning or erosion control office.

Straw Bale or Silt Fence

- Install within 24 hours of land disturbance.
- Install on downslope sides of site parallel to contour of the land.
- Extended ends upslope enough to allow water to pond behind fence.
- Bury eight inches of fabric in trench (see back page).
- Stake (two stakes per bale).
- Leave no gaps. Stuff straw between bales, overlap sections of silt fence, or twist ends of silt fence together.
- Inspect and repair once a week and after every ½-inch rain. Remove sediment if deposits reach half the fence height. Replace bales after three months.
- Maintain until a lawn is established.

Soil Piles

- Cover with plastic and locate away from any downslope street, driveway, stream, lake, wetland, ditch or drainageway.
- Temporary seed such as annual rye or winter wheat is recommended for topsoil piles.

Access Drive

- Install an access drive using two-to-three-inch aggregate prior to placing the first floor decking on foundation.
- Lay stone six inches deep and at least seven feet wide from the foundation to the street (or 50 feet if less).
- Use to prevent tracking mud onto the road by all vehicles.
- Maintain throughout construction.
- In clay soils, use of geotextile under the stone is recommended.

Sediment Cleanup

- By the end of each work day, sweep or scrape up soil tracked onto the road.
- By the end of the next work day after a storm, clean up soil washed off-site.

Sewer Inlet Protection

- Protect on-site storm sewer inlets with straw bales, silt fences or equivalent measures.
- Inspect, repair and remove sediment deposits after every storm.

Downspout Extenders

- Not required, but highly recommended.
- Install as soon as gutters and downspouts are completed to prevent erosion from roof runoff.
- Use plastic drainage pipe to route water to a grassed or paved area. Once a lawn is established, direct runoff to the lawn or other pervious areas.
- Maintain until a lawn is established.

Preserving Existing Vegetation

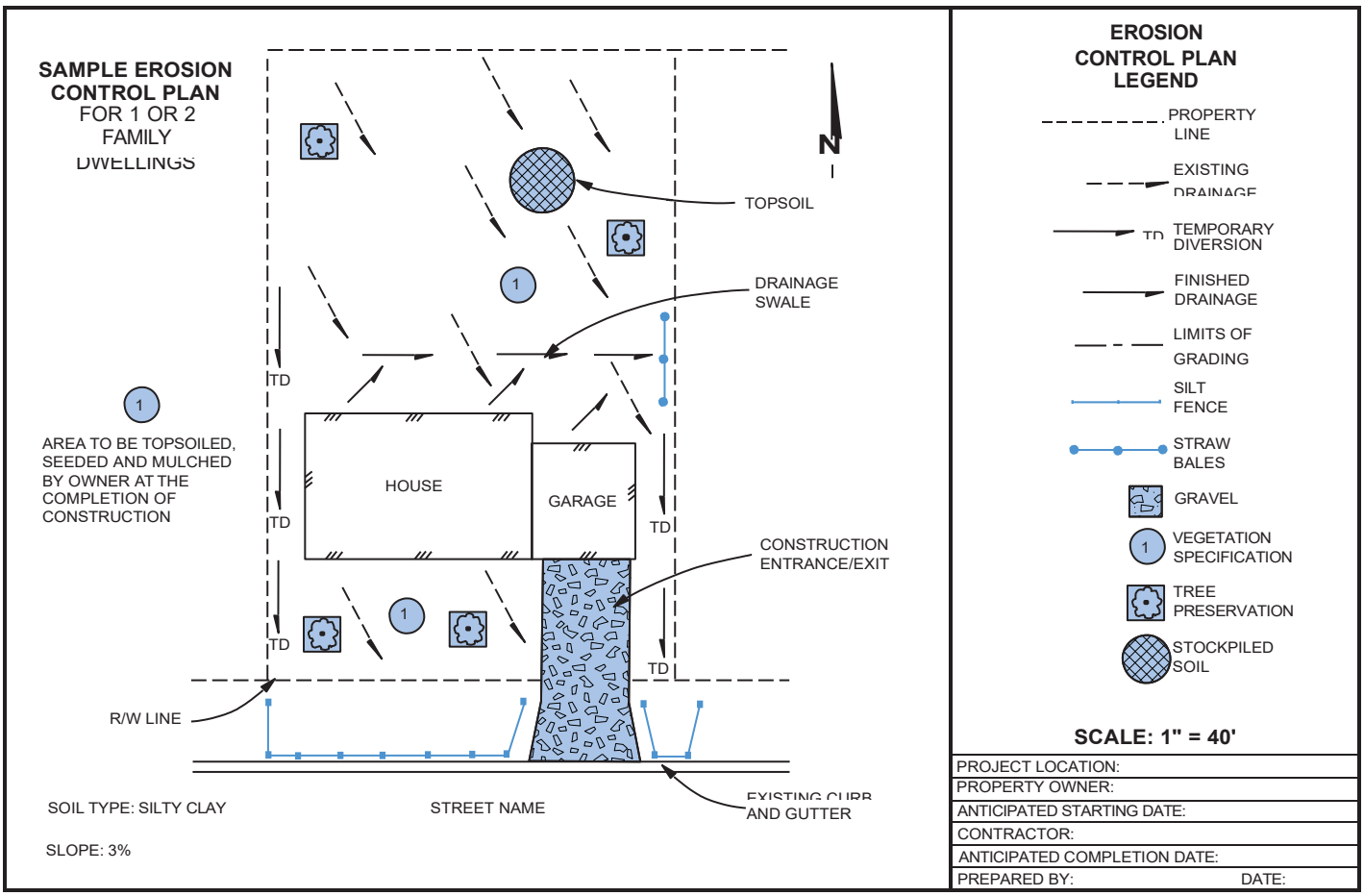
- Wherever possible, preserve existing trees, shrubs, and other vegetation.
- To prevent root damage, do not grade, place soil piles, or park vehicles near trees marked for preservation.
- Place plastic mesh or snow fence barriers around trees to protect the root area below their branches.

Revegetation

- Seed, sod or mulch bare soil as soon as possible. Vegetation is the most effective way to control erosion.

Seeding and Mulching

- Spread four to six inches of topsoil.
- Fertilize and lime if needed according to soil test (or apply 10 lb./1000 sq. ft. of 10-10-10 fertilizer).
- Seed with an appropriate mix for the site (see table).
- Rake lightly to cover seed with 1⁄4" of soil. Roll lightly.
- Mulch with straw (70-90 lb. or one bale per 1000 sq. ft.).
- Anchor mulch by punching into the soil, watering, or by using netting or other measures on steep slopes.
- Water gently every day or two to keep soil moist. Less watering is needed once grass is two inches tall.



Sodding

- Spread four to six inches of topsoil.
- Fertilize and lime if needed according to soil test (or apply 10 lb./1000 sq. ft. of 10-10-10 fertilizer).
- Lightly water the soil.
- Lay sod. Tamp or roll lightly.
- On slopes, lay sod starting at the bottom and work toward the top. Laying in a brickwork pattern. Peg each piece down in several places.
- Initial watering should wet soil six inches deep (or until water stands one inch deep in a straight-sided container). Then water lightly every day or two to keep soil moist but not saturated for two weeks.
- Generally, the best times to sod and seed are early fall (Aug. 15-Sept. 15) or spring (May). If construction is completed after September 15, final seeding should be delayed. Sod may be laid until November 1. Temporary seed (such as rye or winter wheat) may be planted until October 15. Mulch or matting may be applied after October 15, if weather permits. Straw bale or silt fences must be maintained until final seeding or sodding is completed in spring (by June 1).

Concrete Wash Water

- Dispose of concrete wash water in an area of soil away from surface waters where soil can act as a filter or evaporate the water. Dispose of remaining cement. Be aware that this water can kill vegetation.

De-Watering

- Dispose of de-watering water in a pervious area. Prevent the discharge of sediment from de-watering operations into storm sewers and surface waters.

Material Storage

- Manage chemicals, materials and other compounds to avoid contamination of runoff.

Typical Lawn Seed Mixtures

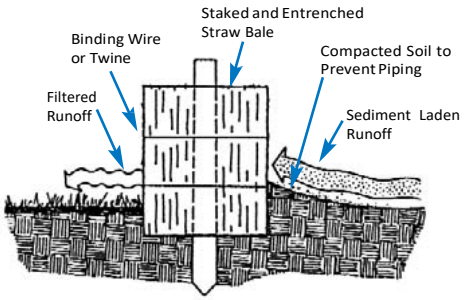
Grass	Percent by Weight Sunny Site	Shady Site
Kentucky bluegrass	65%	15%
Fine fescue	20%	70%
Perennial ryegrass	15%	15%
Seeding rate (lb./1000 sq. ft.)	3-4	4-5

Source: R.C. Newman, Lawn Establishment, UW-Extension, 1988.

COMMONLY USED EROSION CONTROLS

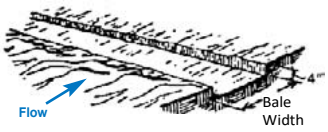
Straw Bale Fences

Cross Section of Straw Bale Installation



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

How to Install a Straw Bale Fence



1. Excavate a 4" deep trench.



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



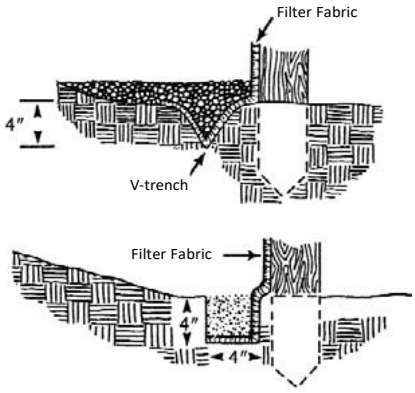
3. Anchor bales using two steel rebars or 2" x 2" wood stakes per bale. Drive stakes into the ground at least 8".



4. Backfill and compact the excavated soil.

Silt Fences

Cross Sections of Trenches for Silt Fences

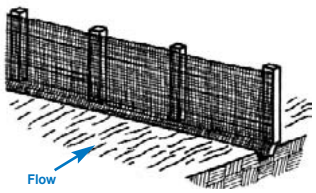


Sources: North Carolina Erosion and Sediment Control Planning and Design Manual, 1988.

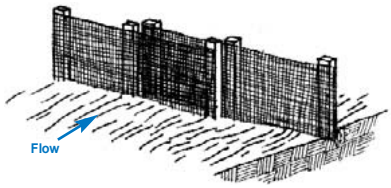
How to Install a Silt Fence



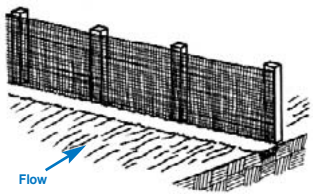
1. Excavate a 4" x 4" trench along the contour.



2. Stake the silt fence on downslope side of trench. Extended 8" of fabric into the trench.



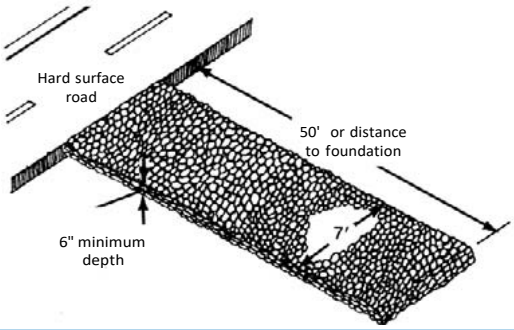
3. When joints are necessary, overlap ends for the distance between two stakes.



4. Backfill and compact the excavated soil.

Access Drive

How to Install an Access Drive



1. Install as soon as possible after start of grading.
2. Use two-to-three-inch aggregate stone.
3. Drive must be at least seven feet wide and 50 feet long or the distance to the foundation, whichever is less.
4. Replace as needed to maintain six-inch depth.

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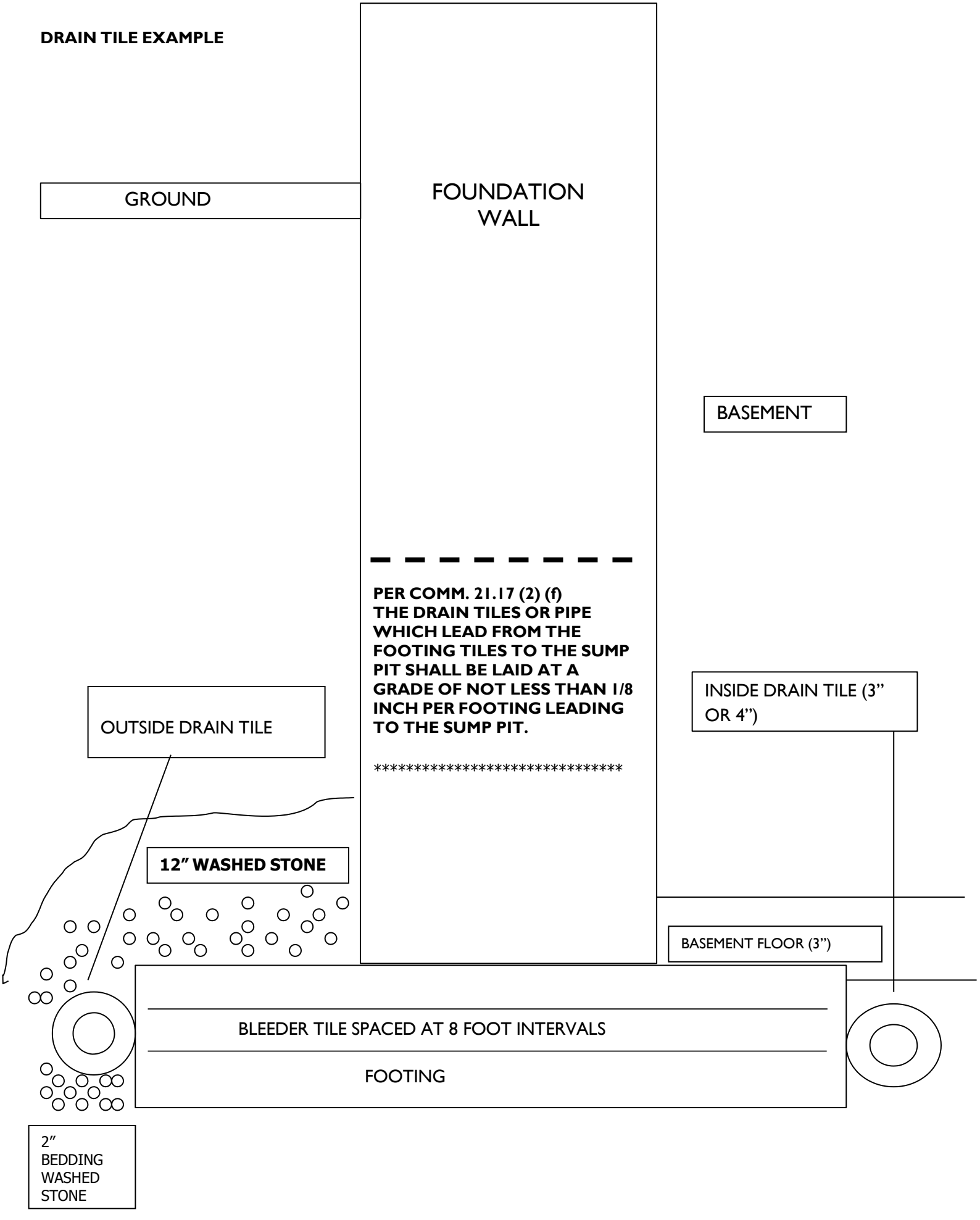
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Author: Carolyn Johnson, UW–Extension.

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DRAIN TILE EXAMPLE



Attention Homeowners

Exterior handrails & guardrails for decks or porches

- Guardrail shall be provided on all open sides more than 24 inches above the floor or exterior grade.

- Handrails or guardrails shall be constructed to prevent the passage of a sphere with a diameter of 4 inches or larger. See example below.

- Handrails for stairs of more than three (3) risers, shall be provided with at least one handrail for the full length of the stairs.

- Handrails with round or truncated design shall have a maximum whole diameter of 2 inches – rectangular gripping surface – perimeter of 6 ¼ inches with a maximum cross sectional dimension of 2 7/8 inches.

- Handrail height shall be 30 to 38 inches above nosing of tread.

- Guardrail height shall be 36 inches above the floor minimum.

Additional Information

*Be sure to contact the Watertown Water Department at (920) 262-4075 for additional information on beginning or changing service.

*Please call the Watertown Building, Safety & Zoning Department at (920) 262-4060 with any questions you may have. The only stupid question is the one not asked!