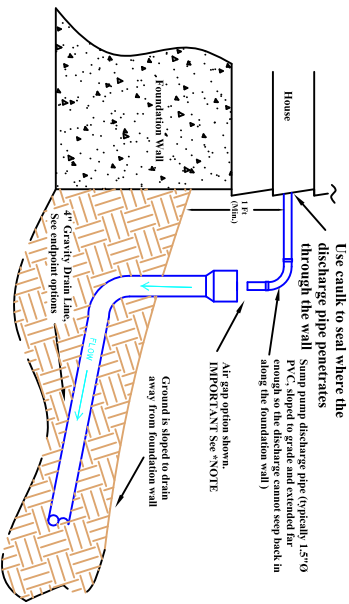


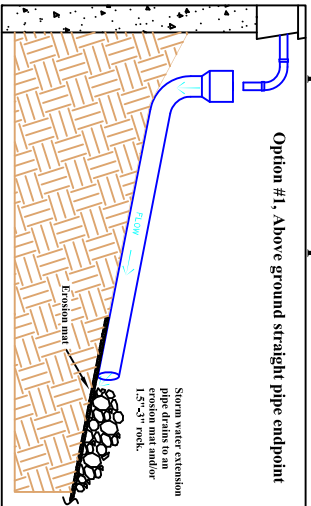
Recommended Sump Pump Discharge End Point Options for Sloped Areas

Sump Pump Discharge Example

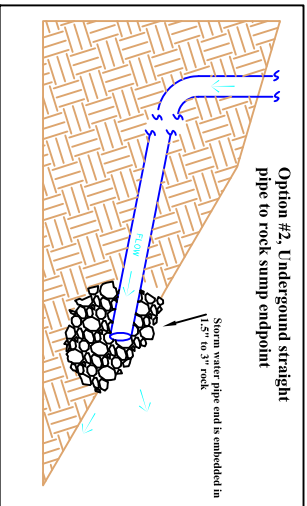


- *NOTE:**
1. An air gap of at least two (2) inches is *required* between the sump pump discharge pipe and any connection to a underground gravity drain line. (Ref: Vts. Plumbing Code).
 2. An air gap is *recommended* if the discharge path is extended aboveground, to prevent freezing damage to the fixed discharge pipe, fittings and/or sump pump.
 3. Consider the following before attaching an extension hose to your sump pump system without using an air gap:
 - a. The extension hose or pipe diameter should be larger than the fixed sump discharge pipe, to assure the system is self draining and to provide room for expansion of freezing water to prevent damage.
 - b. The slope of the extension hose should be uniform throughout its length; trapped water at a sig in the hose will slow drainage and increase chances of freezing damage.
 - c. Remove the extension hose or pipe during winter months when sump discharge is minimal; reconnect the extension before the sump pump flow increases, such as during the spring thaw.

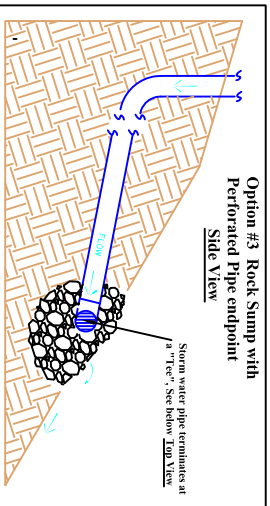
Option #1. Above ground straight pipe endpoint



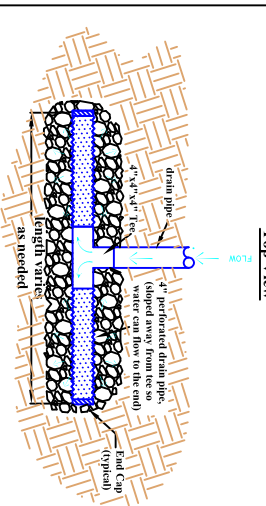
Option #2. Underground straight pipe to rock sump endpoint



Option #3 Rock Sump with Perforated Pipe endpoint



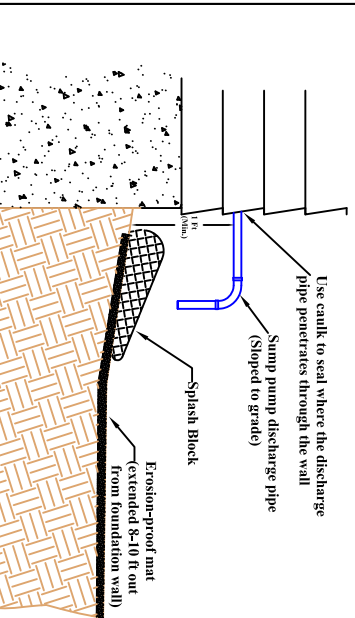
Option #3 Rock Sump with Perforated Pipe endpoint



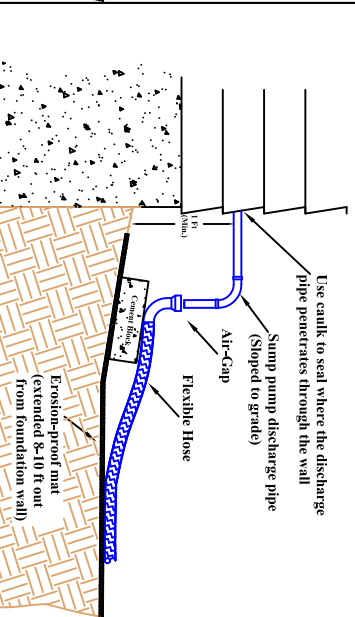
Recommended Sump Pump Discharge End Point Options for Relatively Flat Areas


3 BUSINESS DAYS BEFORE YOU DIG. CALL DIGGERS HOT LINE

Splash Block Option



Splash Block Option





Learning to do it better.

Consider creating a rain garden at the sump discharge end point. Numerous types of native perennial plants are available locally that are attractive to look at, thrive in wet soil, and clean water naturally. For more information or questions contact: City of Superior Environmental Services Division of Public Works 715-394-0392 or www.ci.superior.wi.us/step

The options shown are for illustration of concepts only and are not intended as a plan. Each homeowner must develop their own plan that is suitable to all special conditions for each project and is compliant with the City of Superior building code and ordinances. In offering these options, the ESD/VP assumes no liability for their application.

Title block	Date: July 6, 2005	Drawn by: CSR, WDPW	
Path: c:\p\42\c\sf6 pp shared\SF6 PP Drawings\Drainage Dwg\ssump discharge endpoint options.dwg			