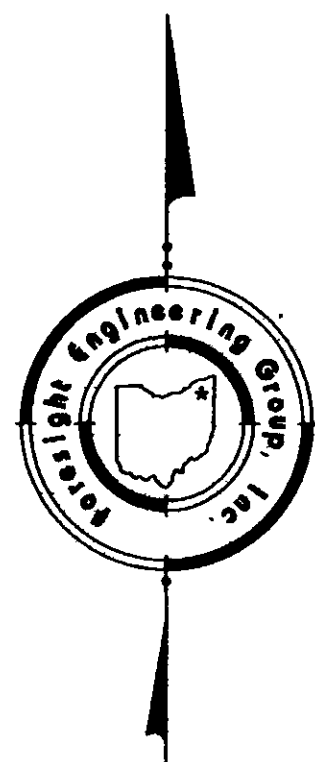
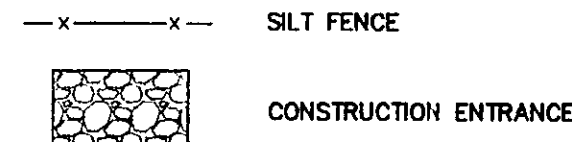




CONCORD TOWNSHIP ZONING OFFICE
Zoning Permit # 1106-12951
Date Issued 11/9/06
Subject to Approval By:
☒ Lake Co. Engineer/Storm Water Mgmt.
☒ Lake Co. Utilities Dept.
☒ Lake Co. Soil + Water District
☒ Lake Co. Health District
☒ Lake Co. Building Dept.

EROSION CONTROL SYMBOLS



LEGEND

	Curb Inlet
	Manhole
	Catch Basin
	Fire Hydrant
	Water Service Valve
	Telephone Box
	Electrical Box
	Iron Pin Set
	Light Pole

NOTES:

- 1.) Down spouts shall be splashblocked.
- 2.) Field verify depth of Existing Sanitary Lateral to determine availability of basement sanitary service.
- 3.) Utilities include Gas, Phone, Electric, and Cable. Contractor to field verify location and provide connection at utility.
- 4.) Water Lateral to be 3/4" Copper Type "K".
- 5.) Sanitary Lateral to be 6" Poly Vinyl Chloride SDR 28, 0 Ring Joints @ 1.0% min slope.
- 6.) 6" Storm Connection to "Daylight" with house construction.

Stormwater Management Plan
Approved as shown and/or noted
JAMES M. GILLS, P.E.
County Drainage Engineer
By L.S. Date 11/29/06

SITE PLAN

for : R.L. Moore Builders
CLIENT
1360 Madison Avenue Painesville OH 44077
ADDRESS CITY STATE ZIP
80 Nature Preserve North 50 4
SUBLOT No. SUBDIVISION NAME VOL. PAGE
2 2 Concord Township Ohio
LOT TRACT CITY STATE

Foresight Engineering Group

Engineers &
Surveyors

440 286-1010
440 286-1034 fax
320 Center Street, Unit F
Chardon, Ohio 44024

SCALE : 1" = 20'

FILE NAME:
I:\RLM10605\Sublot 80

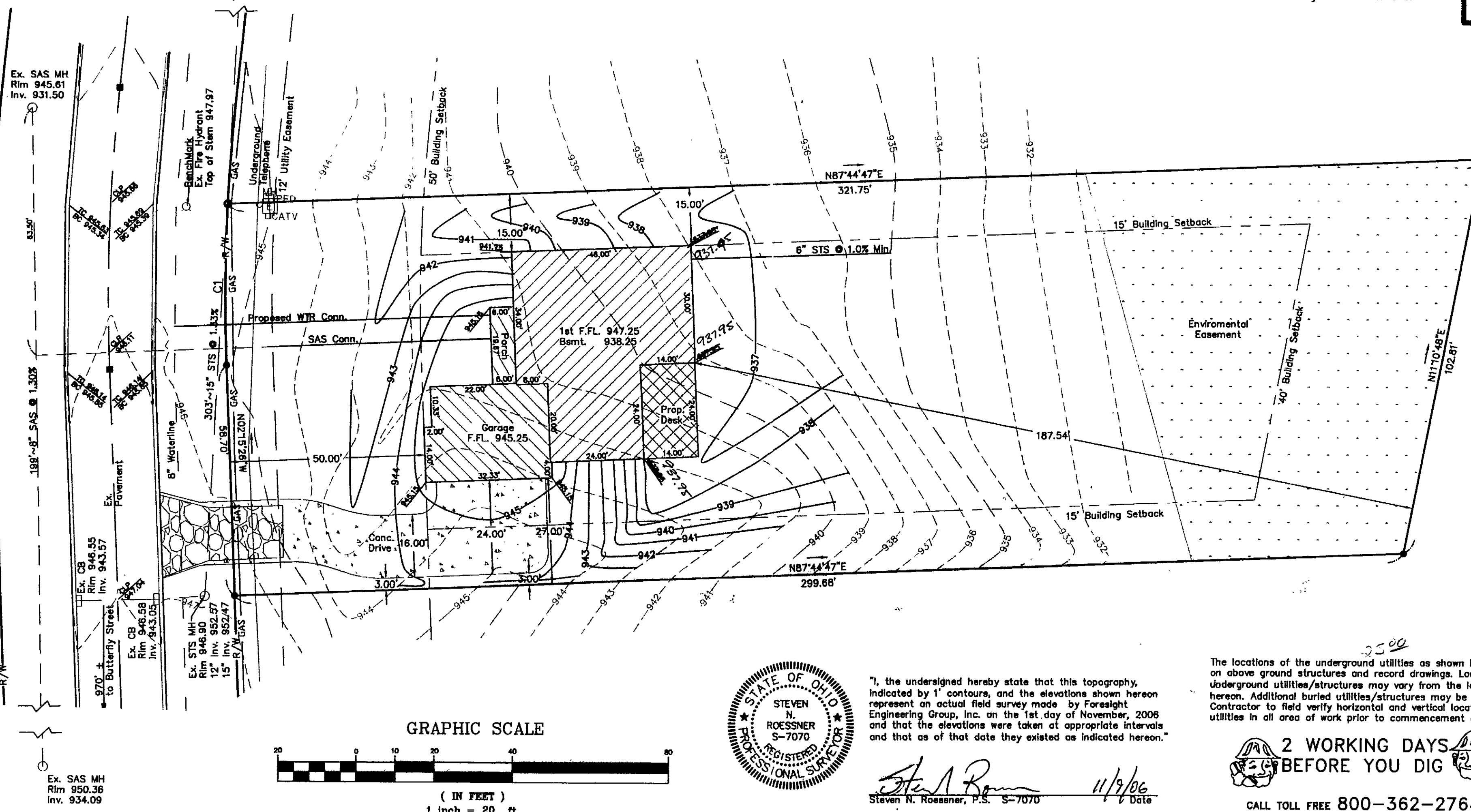
DATE : November 9, 2006

BENCHMARK: Fire Hydrant as noted.

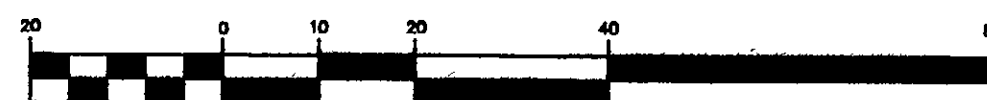
SHEET NO.

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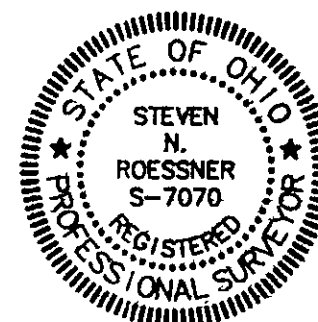
11463 Viceroy Street ~ 60'



GRAPHIC SCALE



(IN FEET)
1 inch = 20 ft.



"I, the undersigned hereby state that this topography, indicated by 1' contours, and the elevations shown hereon represent an actual field survey made by Foresight Engineering Group, Inc. on the 1st day of November, 2008 and that the elevations were taken at appropriate intervals and that as of that date they existed as indicated hereon."

Steven N. Roessner
Steven N. Roessner, P.E. S-7070

11/9/06
Date

The locations of the underground utilities as shown hereon are based on above ground structures and record drawings. Locations of underground utilities/structures may vary from the locations shown hereon. Additional buried utilities/structures may be encountered. Contractor to field verify horizontal and vertical location of all utilities in all area of work prior to commencement of work.

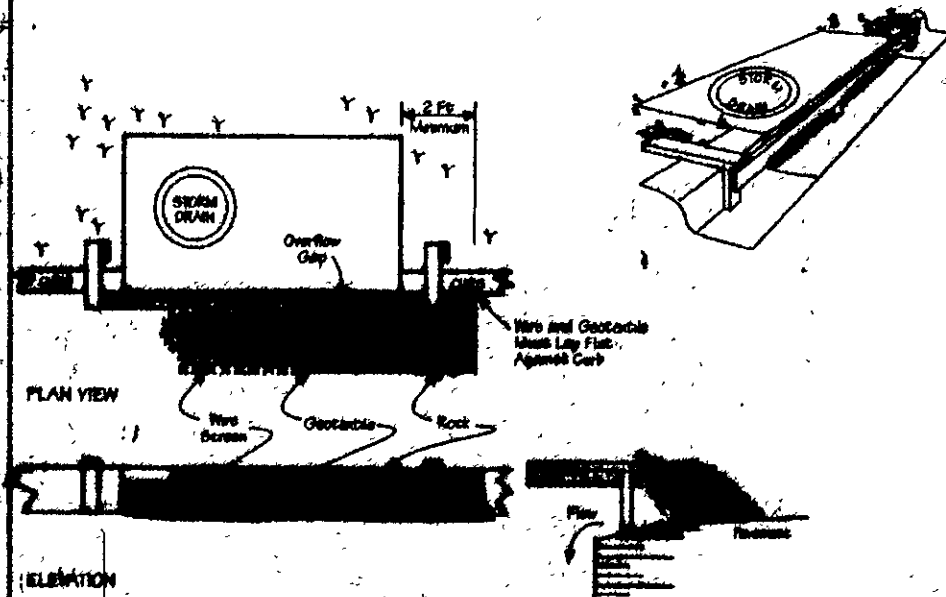


2 WORKING DAYS
BEFORE YOU DIG



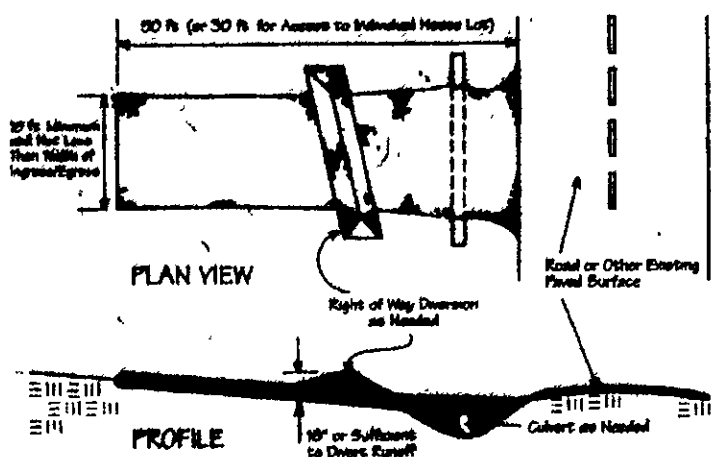
CALL TOLL FREE 800-362-2764

Curb Inlet Protection



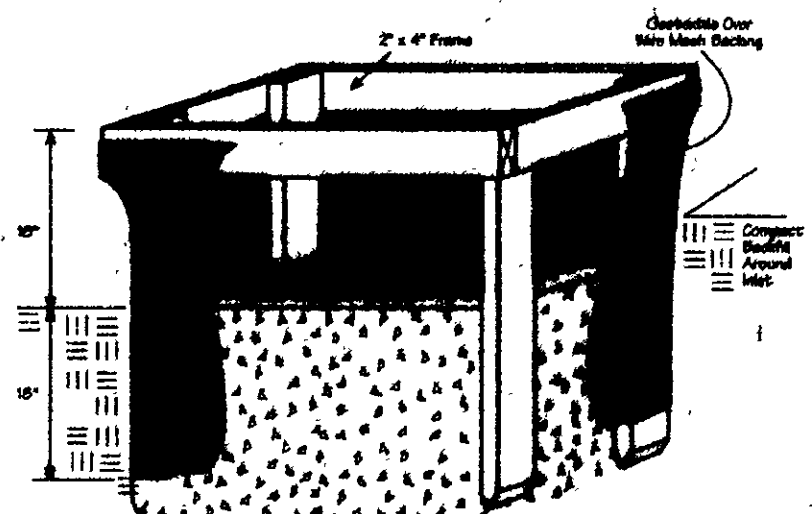
1. Inlet protection shall be constructed either below upstroke land disturbance bays or inside the storm drain between operational.
2. The erosion frame (a) is to be constructed of 2-by-4-in. corrugated-steel barbed. The end spacers shall be a minimum of 1 ft beyond both ends of the throat opening. The spacers shall be nailed to 2-by-4-in. timbers driven on the opposite side of the curb.
3. The wire mesh shall be of sufficient strength to support debris and stones. It shall be a continuous piece with a minimum width of 36 in. and 4 ft longer than the throat length of the pipe, 2 ft on each side.
4. Geotextile cloth shall cover an equivalent opening area (EOPA) of 36-48 sq ft and be resistant to tearing. It shall fit at least the same size as the wire mesh.
5. The wire mesh and geotextile cloth shall be formed to the concrete gutter and against the face of the curb on both sides of the curb and securely fastened to the 2-by-4-in. frame.
6. Two-inch stones shall be placed over the wire mesh and geotextile in each a minimum to prevent wind from blowing the mesh under or around the geotextile cloth.

Construction Entrance



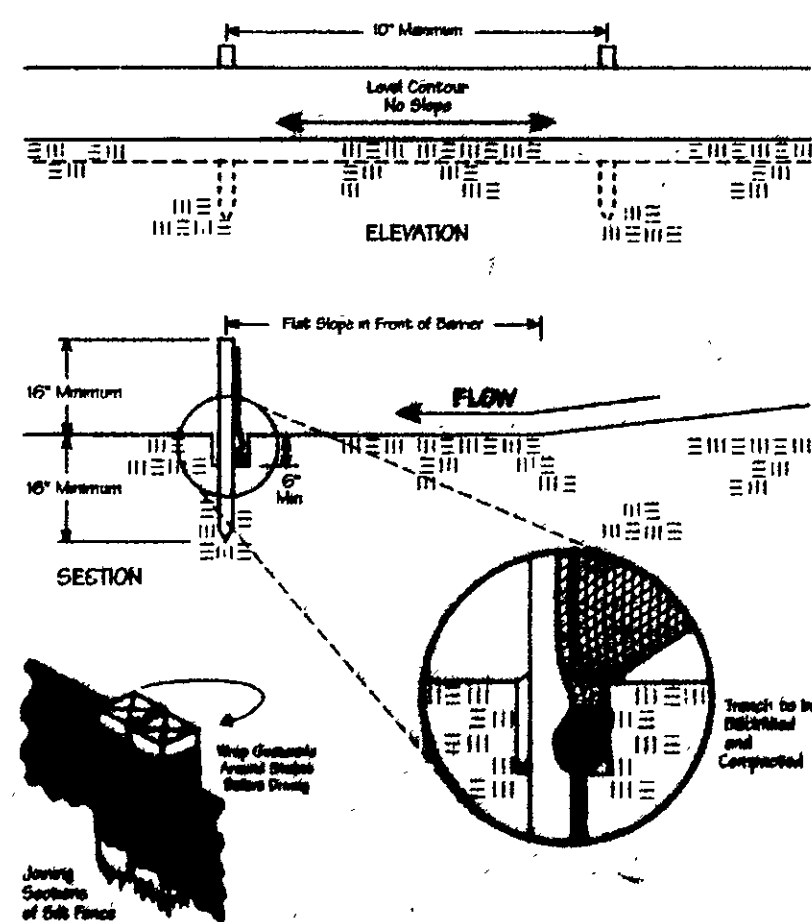
- 1 Stone Shot-Two-inch stone shall be used, or recycled concrete equivalent
- 2 Length-The construction entrance shall be no long as required to stabilize high traffic areas but not less than 80 ft (except on single roadways let where a 30-ft minimum length applies)
- 3 Thickness-The stone layer shall be at least 6 in. thick
- 4 Width-The entrance shall be at least 10 ft wide, but not less than the full width at points where upgrades or access occurs
- 5 Grading-A geotextile cloth be placed over the stone area prior to placing stone. It shall have a Grab Tensile Strength of at least 200 lb and a Mullen Burst Strength of at least 150 lb
- 6 Culvert-A pipe or culvert shall be constructed under the entrance if needed to prevent surface water flowage across the entrance from being directed out onto paved surfaces
- 7 Water Bar-A water bar shall be constructed as part of the construction entrance if needed to prevent surface runoff from flowing the length of the construction entrance and out onto paved surfaces
- 8 Maintenance-Top dressing of additional stone shall be applied as necessary during final grading, compaction, or applied over public roads, or any surface (water runoff is not allowed by adjacent property), shall be removed immediately. Removal shall be accomplished by sweeping or blasting
- 9 Segregation-Entrances shall not be used for other than their intended purpose. No material off-site loading. Vehicles that enter shall leave the construction area and be delivered from muddy areas

Inlet Protection in Swales, Ditch Lines or Yard Inlets



1. Inlet protection shall be constructed after both upstream and downstream barge or barge the cover shall be removed immediately
2. The earth around the inlet shall be excavated completely to a depth of about 1.5 m
3. The wooden frame shall be constructed of 2-by-4-in construction-grade lumber. The 2-by-4-in boards will be driven 1 ft into the ground at four corners of the inlet and the top portion of 2-by-4-in lumber connected using the end joint method. The top of the frame shall be at least 6 in below adjacent roads if parallel water would pass a safety hazard to traffic
4. Wire mesh shall be of sufficient strength to support fabric with water fully supported against it. It shall be fastened securely around the frame and fastened securely to the frame
5. Grounds shall have an equivalent opening size of 20-40 mesh and be resistant to sunlight. It shall be stretched tightly against the frame and fastened securely. It shall extend from the top of the frame to 1.5 m below the inlet water elevation. The grounds shall overlap across the side of the inlet so the ends of the cloth are not fastened to the second post
6. Boards shall be placed around the inlet in compacted 8-in layers until the earth is even with inlet elevation on ends and top elevation on sides
7. A compacted earth dike or a sheet dam shall be constructed in the ditch line below the inlet if the inlet is not in a depression and if runoff bypassing the inlet will not flow to a standing pond. The top of earth dike shall be at least 8 in higher than the top of the frame

Specifications for Silt Fence



Specifications for Permanent Seeding

DATA PREPARATION

- 1 A sander, blow or water implement shall be used to remove wet vegetation and allow maximum aeration. (Blowmowing operation will help control both snuff rats and water quality.) Sanding should be done when the soil moisture is low enough to allow soil to crack or fracture. Sanding shall not be done in open areas where soil compaction should be limited to what is necessary for establishing vegetation.
- 2 The site shall be graded as needed to permit the use of environmental equipment for seedbed preparation and seeding.
- 3 Seed shall be applied where needed to establish Sedgegrass.
- 4 Where feasible, except when a cutspreader type applicator is used, the seedbed should be tined following seeding operations with a cutspreader, roller, or light drag. On shaping land, seeding operations should be on the same or better vehicle finish.
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SECRET (U//FOUO)

- 1 Larve - Aggravated if and immature shall be applied to still and as recommended by a soil test in line of a soil test, being shall be applied at the rate of 100 to 17,000 sq ft or 2 inches
- 2 Potatoes - Potatoes shall be applied as recommended by a soil test in line of a soil test, being shall be applied at a rate of 12 to 17,000 sq ft or 200 to 400 lbs of 10-10-10 or 12-12-12 analysis
- 3 The time and fertilizer shall be worked into the soil with a disk harrow, spring-tooth harrow, or other suitable field implement to a depth of 3 in. On sloping land the soil shall be worked on the contour
- 4 Phosphorus - If used otherwise than as stated it shall be used at 2,000 lb/acre or 400 to 17,000 sq ft
- 5 Other - Other acceptable mulches include: mulch matings applied

STANDARD BATHING AND SUN CONDITIONS

Seeding should be done March 1 to May 31 or Aug 1 to September 30. These seeding dates are typical but, with the use of additional nitrogen and irrigation, seedings may be made any time throughout the growing season. Tillage/seedbed preparation should be done when the soil is dry enough to crumble and not form ribbons when compressed by hand. For winter seedings, and the following seasons on dormant seedbeds.

CONFIDENTIAL

- 1 Seedlings shall not be planted from October 1 through November 20. During this period the seeds are likely to germinate but probably will not be able to survive the winter.
- 2 The following methods may be used for "Damaged Seeding":
 - From October 1 through November 20, prepare the seedbed, and the required amounts of lime and fertilizer, then smuth and seeder. After November 20, and before March 15, broadcast the selected seed mixture increase the seeding rates by 50% for this type of seeding.
 - From November 20 through March 15, when soil conditions permit, prepare the seedbed, lime and fertilizer, apply the selected seed mixture, smuth and seeder increase the seeding rates by 50% for this type of seeding.

CONCLUSIONS

- 1 Permanent seeding shall include irrigation to establish vegetation during dry or hot weather or in adverse site conditions as needed for adequate moisture for seed germination and plant growth.
- 2 Excessive irrigation rates shall be avoided and irrigation monitored to prevent erosion and damage from runoff.

General Notes			
Seed Size	Germination Date		Notes
	5/1/80	5/1/1980	
General Use			
Compost High Protein	50-60	5-1	
Seaweed Fertilizer	10-20	3-5	
Seaweed Fertilizer	10-20	3-5	
Yell. Phase	40	1	
Dark Phase	40	1	
Shade Shade & Cut Shade			
Yell. Phase	40	1	
Good Yield	10	5	
Yell. Phase	20	5	Do not seed later than August
Pha. Pha	20	5	
Yell. Phase	20	5	Do not seed later than August
Plant Shade and Shade			
Yell. Phase	40	1	
Dark Phase	40	25	
Seaweed Fertilizer	5		
Light			
Seaweed Fertilizer	50	15	
Seaweed Fertilizer	50	15	
Seaweed Fertilizer	50	15	
Seaweed Fertilizer	50	15	For shaded area

NOTE: 100% germination and sprout rate is not guaranteed.

EROSION CONTROL DETAILS

Foresight Engineering Group

440 286-1010
440 286-1034 fax
320 Center Street, Unit F.
Chardon, Ohio 44024

**Engineers &
Surveyors**

SCALE : NONE

Page: 2/2

Specialized Small Lot Building Sites

1. Preexisting vegetation shall be retained on site percent of the building lot to be sold as construction equipment enters. Existing shall be there so long as no working areas are bare.
2. Temporary cover (typical eye, shade, etc.) and/or mulch shall be applied to areas, such as driveways, that are bare and causing being water. The cover shall be in place until it is reseeded for 14 days or more.
3. Structures excavated from basements shall be treated away from streets, alleys, or other waterways and shall be seeded and/or mulched.
4. Site shall contain control about four runoff from the building lot. It shall not be constructed on channels or areas of concentrated flow. Other sediment controls such as silt protection and sediment traps shall also be used as needed to control sediment runoff.
5. Construction vehicle access shall be limited to one turn, to the greatest extent practical. The access shall be gravel or crushed rock applied to the driveway area.
6. Mud tracked onto the street or highway shall be removed within 24 hours of detection or shall be removed daily or as needed to prevent it from accumulating. It shall be removed by sweeping and vacuuming and shall not be washed off paved surfaces or into storm drains.

Specifications for Temporary Seeding

TIMOTHY BENDING SERVICE RECORD			
Bending Dates	Species	LB /1,000 ft ²	Per Acre
March 1 to August 15	Grass	3	4 bushels
	Tall Fescue	1	40 lb
	Annual Ryegrass	1	40 lb
	Perennial Ryegrass	1	40 lb
	Tall Fescue	1	40 lb
	Annual Ryegrass	1	40 lb
August 15 to November 1	Rye	3	2 bushels
	Tall Fescue	1	40 lb
	Annual Ryegrass	1	40 lb
	Wheat	3	2 bushels
	Tall Fescue	1	40 lb
	Annual Ryegrass	1	40 lb
	Perennial Ryegrass	1	40 lb
	Tall Fescue	1	40 lb
	Annual Ryegrass	1	40 lb
November 1 to Spring Bending		Use small seed, making progress or not	

Note: Other approved cold season may be substituted

- 1 Structural erosion- and sediment-control problems such as ditches and sediment traps shall be installed and established with temporary seeding prior to grading the rest of the construction site.
 - 2 Temporary seed shall be applied between construction operations on soil that will not be graded or reseeded for 60 days or more. The seed rate shall be applied at the highest as possible after grading or soil that is seeded within 7 days. Several applications of temporary seeding are necessary on typical construction projects.
 - 3 The seedbed should be prepared and tamed to ensure the success of establishing vegetation. However, temporary seeding shall not be proposed if final seeded preparation is not possible.
 - 4 Soil Amendments--Applications of temporary vegetation shall ensure adequate stands of vegetation which may require the use of soil amendments. Soil tests should be taken on the site to predict the need for lime and fertilizer.
 - 5 Seeding Method--Seed shall be applied uniformly with a cyclone seeder, shot, catapault seeder, or hydroseeder. When feasible, seed that has been stabilized shall be covered by raking or dragging and then lightly tamped into place using a roller or lightcaster. If hydroseeding is used, the seed and fertilizer will be mixed on-site and the seeding shall be done immediately and without interruption.
- SEEDING TEMPORARY SEEDS**
- 1 Applications of temporary seeding shall include match which shall be applied during or immediately after seeding. Seedings made during optimum seeding dates and with favorable soil conditions and on very flat areas may not need match to ensure adequate establishment.
 - 2 Materials
 - Straw--If straw is used, it shall be unweeded small-grain straw applied at the rate of 1 ton/acre of 50 lb/1,000 sq ft (two to three bales). The match shall be spread uniformly by hand or mechanically as the soil surface is covered. For uniform distribution of hand-spread match, divide total into approximately 1,000-sq-ft sections and spread two 45-lb bales of straw in each section.
 - Hydroseeder--If wood mulch is used, it shall be applied at 2,000 lb/acre or 40 lb/1,000 sq ft.
 - Other--Other acceptable matches include mulch matting applied according to manufacturer's recommendations or weed cloth applied at 3 ton/acre.
 - 3 Straw Match shall be anchored sufficiently to remain laid by wind or water. Anchoring Methods
 - Mechanical--A disk, corner, or angle type seed shall be cut straight to point or anchor the match material into the soil. Straw mechanically anchored shall not be freely draped but, generally, be left longer than 6 in.
 - Match Hitting--Hitting shall be used according to the manufacturer's recommendation. Hitting may be necessary to hold match in place in areas of construction runoff and on steep slopes.
 - Asphalt Stratum--Asphalt shall be applied as recommended by the manufacturer or at the rate of 100 gal/acre.
 - Synthetic Binders--Synthetic binders such as Acrylic BLA (Agi-Tect, DCA-70, Petro-Tect, Terra Tect, or equal) may be used at rates recommended by the manufacturer.
 - Wood-Chip/Stone Fiber--Wood-chip/stone fiber binder shall be applied at a net dry weight of 750 lb/acre. The wood-chip/stone fiber shall be mixed with water and the mixture shall contain a minimum of 50 lb/100 gal.