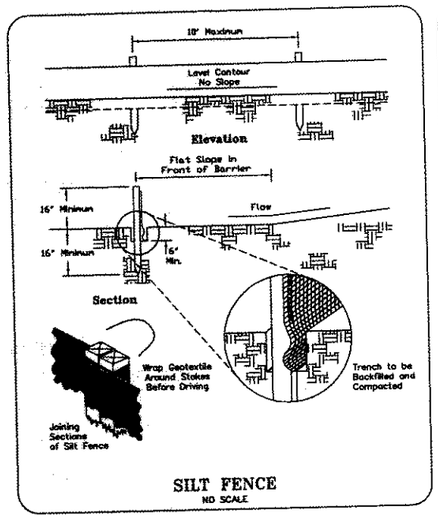
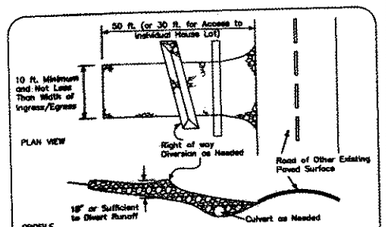


SILT FENCE
NO SCALE



1. Stone Size—Two inch shall be used, or recycled concrete equivalent.

2. Length—The construction entrance shall be as long as possible to stabilize high traffic areas but not less than 50 ft. (except single residence lot 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 ingress or egress occurs.

5. Bedding—A geotextile shall be placed over the entire 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 190 lb.

6. Culvert—A pipe or culvert shall be constructed under the entrance if needed to prevent surface water from flowing 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 lenght of the construction entrance and out onto the paved surfaces.

8. Maintenance—Top dressing of the additional stone shall be applied as conditions demand. Mud spilled, dropped, washed or tracked onto public roads, or any surface where runoff is not checked by sediment controls, shall be removed immediately. Removal shall be accomplished by scraping and sweeping.

9. Construction entrances shall not be relied upon to remove mud from vehicles and prevent off-site tracking. Vehicles that enter and leave the construction-site shall be restricted from muddy areas.

CONSTRUCTION ENTRANCE
NO SCALE

GENERAL EROSION AND SEDIMENT CONTROL NOTES:

Erosion control shall consist of temporary control measures as detailed on the plans or ordered by the governing agency during the life of the contract to control soil erosion and Sedimentation through use of erosion control best management practices (BMP's).

Sediment control shall be accomplished by seeding and mulching all disturbed areas immediately upon completion of excavation or fill and finish grading in accordance with specifications of the ODNR Rainwater and Land Development Manual.

Temporary erosion and sediment control items, the location and size of which are detailed on the plans, shall be installed by the contractor prior to commencement of any clearing or earthwork operations. Conditions that develop during construction that were not foreseen during design stage; that require additional or modified temporary or permanent BMP's shall be approved by the design engineer and reflected on the revised Water Management and Sediment Control Plan.

Erosion and sediment controls shall be implemented as the first step of grading and within 7 days from the start of grubbing. Upon completion of construction, seeding and mulching shall immediately follow to aid in the stabilization and minimize erosion and sediment. All erosion and sediment controls shall continue to function until disturbed areas are re-stabilized.

Other erosion and sediment control items may be necessary due to environmental conditions and may be required at the discretion of the City of Willowick or its representatives.

STABILIZATION

Site stabilization either permanent or temporary must follow the requirements as applicable on the following tables:

TABLE 1: PERMANENT STABILIZATION

Area requiring permanent stabilization	Time frame to apply erosion control
Any area that will lie dormant for one year or more	Within seven days of the most recent disturbance
Any area within 50 ft. Of a stream and at final grade	Within two days of reaching final grade
Any other areas at final grade	Within seven days of reaching final grade within that area

TABLE 2: TEMPORARY STABILIZATION

Area requiring temporary stabilization	Time frame to apply erosion control
Any disturbed areas within 50 ft. of a stream and not at final grade	Within two days of the most recent disturbance if the area will remain idle for more than 14 days
For all construction activities, any disturbed areas that will be dormant for more than 21 days but less than one year, and not within 50 ft. Of stream	Within seven days of the most recent disturbance within the area For residential subdivisions, disturbed areas must be stabilized at least seven days prior to transfer of permit coverage for the individual lot(s)
Disturbed areas that will be idle over winter	Prior to November 1 straw mulch 2 to 3 bales per 1000 sq.Ft. and or 2 tons per acre.

Note: Where vegetative techniques may cause structural instability or are otherwise unattainable, alternative stabilization techniques must be employed.

SEEDING AND MULCHING

Temporary Seeding Species Selection			
Seeding Dates	Species	Lb/1,000 ft	Per Ac.
March 1 to August 15	Oats Tall Fesue Annual Ryegrass	3 1 1	128 lb 40 lb 40 lb
	Perennial Ryegrass Tall Fesue Annual Ryegrass	1 1 1	40 lb 40 lb 40 lb
August 16 to November 1	Rye Tall Fesue Annual Ryegrass	3 1 1	112 lb 40 lb 40 lb
	Wheat Tall Fesue Annual Ryegrass	3 1 1	120 lb 40 lb 40 lb
	Perennial Ryegrass Tall Fesue Annual Ryegrass	1 1 1	40 lb 40 lb 40 lb
November 1 to Spring Seeding	Use mulch only, sodding practices or dormant seeding		
Note: Other approved seed species may be substituted			

Seeding areas shall be inspected and where the seed has not produced 80% cover shall be reseeded as necessary by the contractor. Areas shall be stabilized with mulch when conditions prohibit seeding.

Straw mulching shall be applied at a rate 2-3 standard 45 lb. Bales per 1000 sq.ft. of disturbed area or 2 tons per acre. All hydroseeding must be straw mulched according to the above specifications unless it is watered weekly.

All detention ponds, retention ponds, water quality structures, sediment ponds, sediment traps, earthen diversions or embankments shall be seeded and mulched within 7 days of completed construction.

Disturbed areas that will remain inactive for a period of 21 days or longer shall be stabilized with seeding and mulching or other appropriate means, within seven day after earth moving ceases. Permanent soils stabilization shall be installed within seven days after final grading is reached on any portion of the site.

Stabilize areas within fifty (50) feet of any wetland or stream, within two (2) days on all inactive disturbed areas that will remain inactive for fourteen (14) days or longer.

Permanent Seeding			
Seed Mix	Seeding Rate lb/ac	Seeding Rate lb/1,000 ft	Notes
General Use			
Creeping Red Fescue Domestic Ryegrass Kentucky Bluegrass	20-40 10-20 10-20	1/2-1 1/4-1/2 1/4-1/2	
Tall Fescue	40	1	
Dwarf Fescue	40	1	
Steep Banks or Cut Slopes			
Tall Fescue	40	1	
Crown Vetch Tall Fescue	10 20	1/4 1/2	Do not seed later than August
Flat Pea Tall Fescue	20 20	1/2 1/2	Do not seed later than August
Road Ditches and Swales			
Tall Fescue	40	1	
Dwarf Fescue Kentucky Bluegrass	90 5	2 1/4	
Lawns			
Kentucky Bluegrass Perennial Ryegrass	60 60	1 1/2 1 1/2	
Kentucky Bluegrass Creeping Red Fescue	60 60	1 1/4 1 1/4	For shaded areas
Note: Other approved seed species may be substituted			

Foresight Engineering Group
Engineers & Surveyors
440 288-1010
440 288-1034 fax
320 Center Street, Unit F
Chardon, Ohio 44024

SCALE: Horz. None
Vert. None

FILE NAME: Wop10601\Site Plan 41-42

DATE : May 14, 2012

REVISIONS:

LARIMAR LAKEFRONT NEIGHBORHOOD

City of Willowick - Lake County - Ohio
Erosion & Sediment Control Notes

SHEET NO.
2/2