



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 |

SEEDING AND MULCHING

| Temporary Seeding Species Selection | | | |
|-------------------------------------|--|-------------|---------|
| Seeding Dates | Species | Lb/1,000 ft | Per Ac. |
| March 1 to August 15 | Oats | 3 | 128 lb |
| | Tall Fesue | 1 | 40 lb |
| | Annual Ryegrass | 1 | 40 lb |
| | Perennial Ryegrass | 1 | 40 lb |
| | Tall Fesue | 1 | 40 lb |
| | Annual Ryegrass | 1 | 40 lb |
| August 16 to November 1 | Rye | 3 | 112 lb |
| | Tall Fesue | 1 | 40 lb |
| | Annual Ryegrass | 1 | 40 lb |
| | Wheat | 3 | 120 lb |
| | Tall Fesue | 1 | 40 lb |
| | Annual Ryegrass | 1 | 40 lb |
| | Perennial Ryegrass | 1 | 40 lb |
| | Tall Fesue | 1 | 40 lb |
| | Annual Ryegrass | 1 | 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 days 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.

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 | <p>Within seven days of the most recent disturbance within the area</p> <p>For residential subdivisions, disturbed areas must be stabilized at least seven days prior to transfer of permit coverage for the individual lot(s)</p> |
| 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.

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

