VEGETATIVE ESTABLISHMENT FOR URBAN DEVELOPMENT SITES

APPENDIX A

Seeding Rates:

Permanent:

Tall Fescue – 30 lbs./ac.
Smooth Brome – 20 lbs./ac.
Combined: Fescue @ 15 lbs./ac. and Brome @ 10 lbs./ac.

Temporary:

Wheat or Rye – 150 lbs./ac (3.5 lbs. per 1000 sq. ft.)
Oats– 120 lbs./ac (2.75 lbs. per 1000 sq. ft.)

Seeding Periods:

Fescue or Brome	March 1 to June 1 August 1 to October 1
Wheat or Rye	March 15 to November 1
Oats	March 15 to September 15

Mulch Rates:
100 lbs. Per 1,000 sq. ft. (4,356 lbs. per acre)

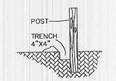
Fertilizer Rates:

Nitrogen	30 lbs./ac.
Phosphate	30 lbs./ac.
Potassium	30 lbs./ac.
Lime	600 lbs./ac. ENM*

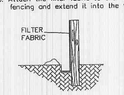
*ENM – Effective Neutralizing Material as per State evaluation of quarried rock.

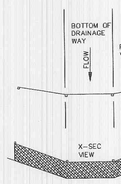
SYNTHETIC FILTER BARRIERS

1. Set posts and excavate a 4"x4" trench upslope along the line of the posts.
2. Staple the wire mesh fencing to each post.



3. Attach the filter fabric to the wire fencing and extend it into the trench.
4. Backfill the trench and compact the excavated soil.



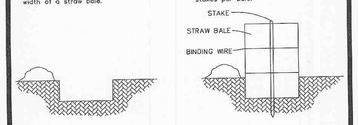


Elevation of points 'A' should be higher than 'B'

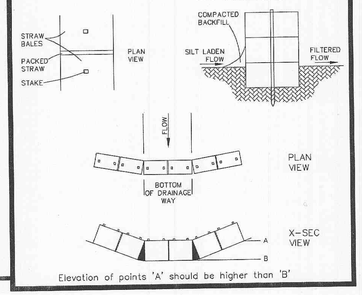
Maintenance
1. Filter barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. Any required repairs shall be made immediately.
2. Should the fabric decompose or become ineffective prior to the end of the expected usable life and the barrier still be necessary, the fabric shall be replaced promtly.
3. Sediment deposits should be removed after each storm event. They must be removed when deposits reach approximately half the height of the barrier.
4. Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required shall be dressed to conform with the existing grade, prepared and seeded.

STRAW BALE DETAIL

1. Excavate a trench 4" deep and the width of a straw bale.
2. Place and stake straw bales, two stakes per bale.



3. Wedge loose straw between bales to create a barrier.
4. Backfill and compact the excavated soil as shown on the uphill side of the barrier to prevent piping.



Elevation of points 'A' should be higher than 'B'

NOTES:
PRINCIPAL SPILLWAY
Clear the sediment pool to facilitate clean out.

Situate the spillway barrel and riser on a firm, even foundation.

Place around the barrel a 4–inch layer of moist, clayey, workable soil, and compact with hand tampers.

Perforate the lower half of the riser with 1/2 inch diameter holes spaced 3 inches apart.

Embed the riser in at least 12 inches of concrete.

Surround riser with 2 feet of clean, uniformly graded stone.

Place a steel trash rack around the riser inlet. Trash rack openings should be 4– to 6–inches square.

At the pipe outlet, install a riprap apron at least 5 feet wide and 10 feet long to stable grade.

EMBANKMENT
Use fill from predetermined borrow areas. fill should be clean, stable mineral soil free of organics, roots, woody vegetation, rocks and other debris, and must be wet enough to form a ball without crumbling, yet not so wet that water can be squeezed out.

Place the most permeable soil in the downstream toe and least permeable soil in the center portion of the dam.

Compact the fill material in 6 to 8–inch lifts (maximum) over the length of the dam.

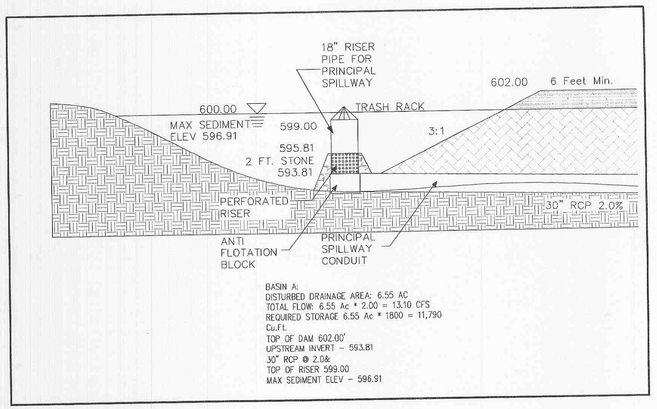
Protect the spillway barrel with two feet of fill that has been compacted with hand tampers before traversing over the pipe with equipment,

Construct and compact the dam to a height 10% above the design height.

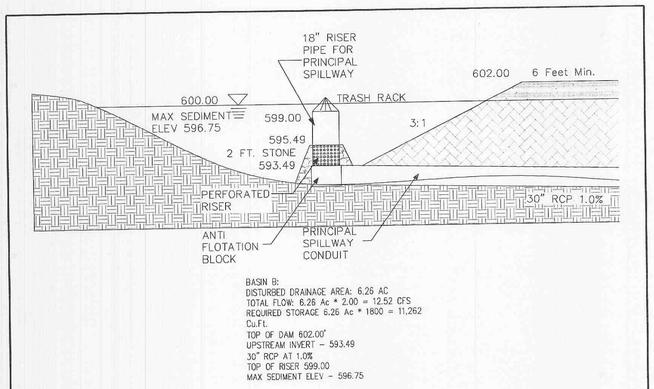
Place a reference stake at the sediment cleanout elevation.

EMERGENCY SPILLWAY
Construct the spillway in undisturbed soil around one end of the embankment, and locate it so that any flow will return to the receiving channel without damaging the embankment.

Stabilize the spillway as soon grading is complete with vegetation or erosion control blankets.



BASIN A:
DISTURBED DRAINAGE AREA: 6.55 AC
TOTAL FLOW: 6.55 Ac * 2.00 = 13.10 CFS
REQUIRED STORAGE 6.55 Ac * 1800 = 11,790 Cu.Ft.
TOP OF DAM 602.00'
UPSTREAM INVERT – 593.81
30" RCP @ 2.0%
TOP OF RISER 599.00
MAX SEDIMENT ELEV – 596.91



BASIN B:
DISTURBED DRAINAGE AREA: 6.26 AC
TOTAL FLOW: 6.26 Ac * 2.00 = 12.52 CFS
REQUIRED STORAGE 6.26 Ac * 1800 = 11,262 Cu.Ft.
TOP OF DAM 602.00'
UPSTREAM INVERT – 593.49
30" RCP AT 1.0%
TOP OF RISER 599.00
MAX SEDIMENT ELEV – 596.75

P & Z FILE NO. 3603.1

MAGNOLIA COMMERCIAL DETAILS

CISSELL MUELLER

ST. CHARLES ENGINEERING & SURVEYING, INC.
801 S. FIFTH STREET, SUITE 202
ST. CHARLES, MO 63301
TEL: (636) 947-0607 FAX: (636) 947-2448

SJC ES

STATE OF MISSOURI
KARL ANTHONY SCHOENIKE
NUMBER PE-2003015039
PROFESSIONAL ENGINEER

12-22-04

ORDER NO.
031486

DATE
08/26/04

#9