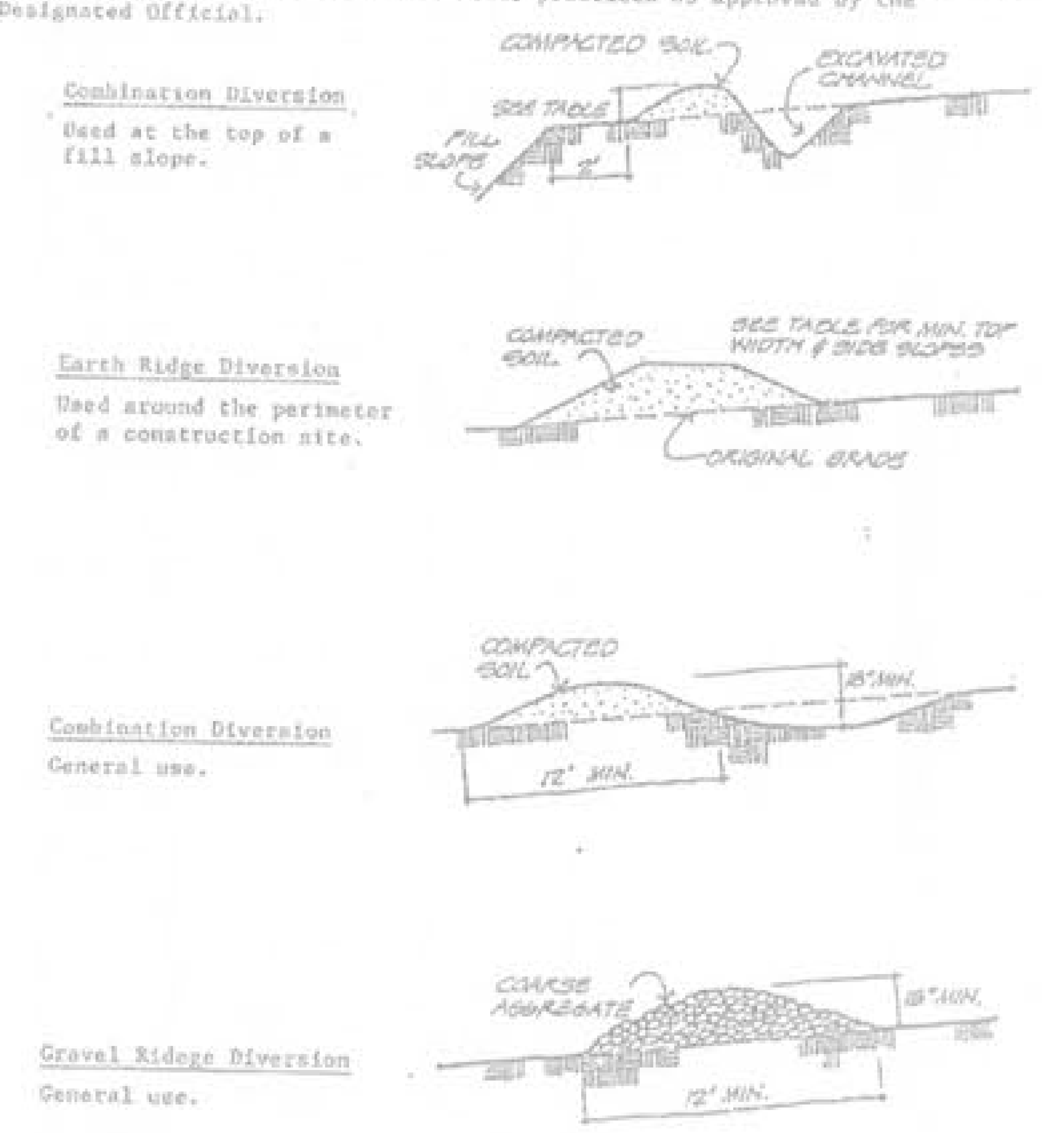
DIVERSIONS

For Urban Development Sites

APPENDIX B

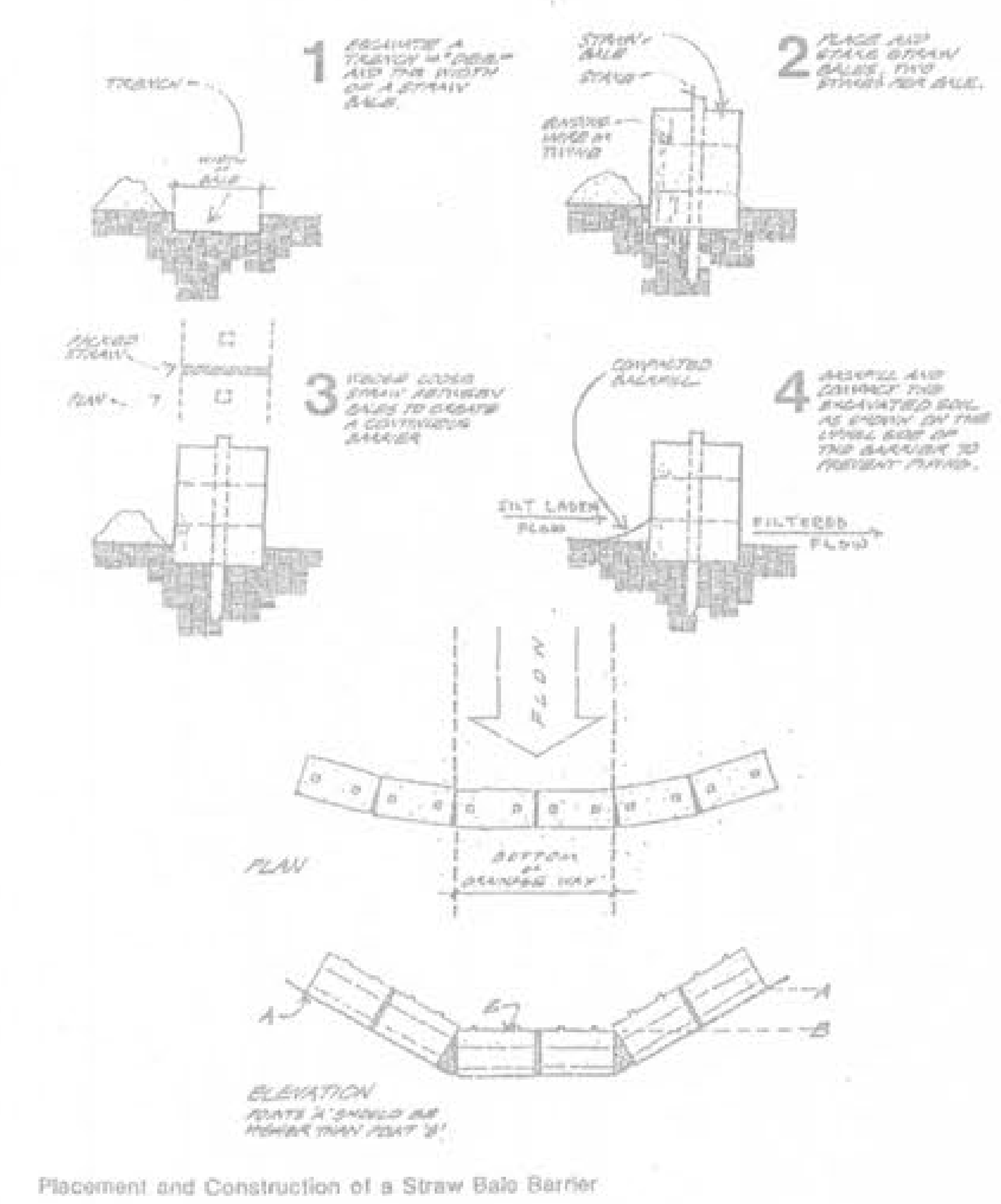
** Outlets for diversions must be stable. Stable outlets consist of grass waterways, earthen channels with capacity adequate to prevent gully erosion, grade stabilization structures or other practices as approved by the Designated Official.



STRAW BALE BARRIERS

For Urban Development Sites

APPENDIX C



TYPICAL DITCH CHECK DETAIL

SYNTHETIC FILTER BARRIERS

For Urban Development Sites

APPENDIX D

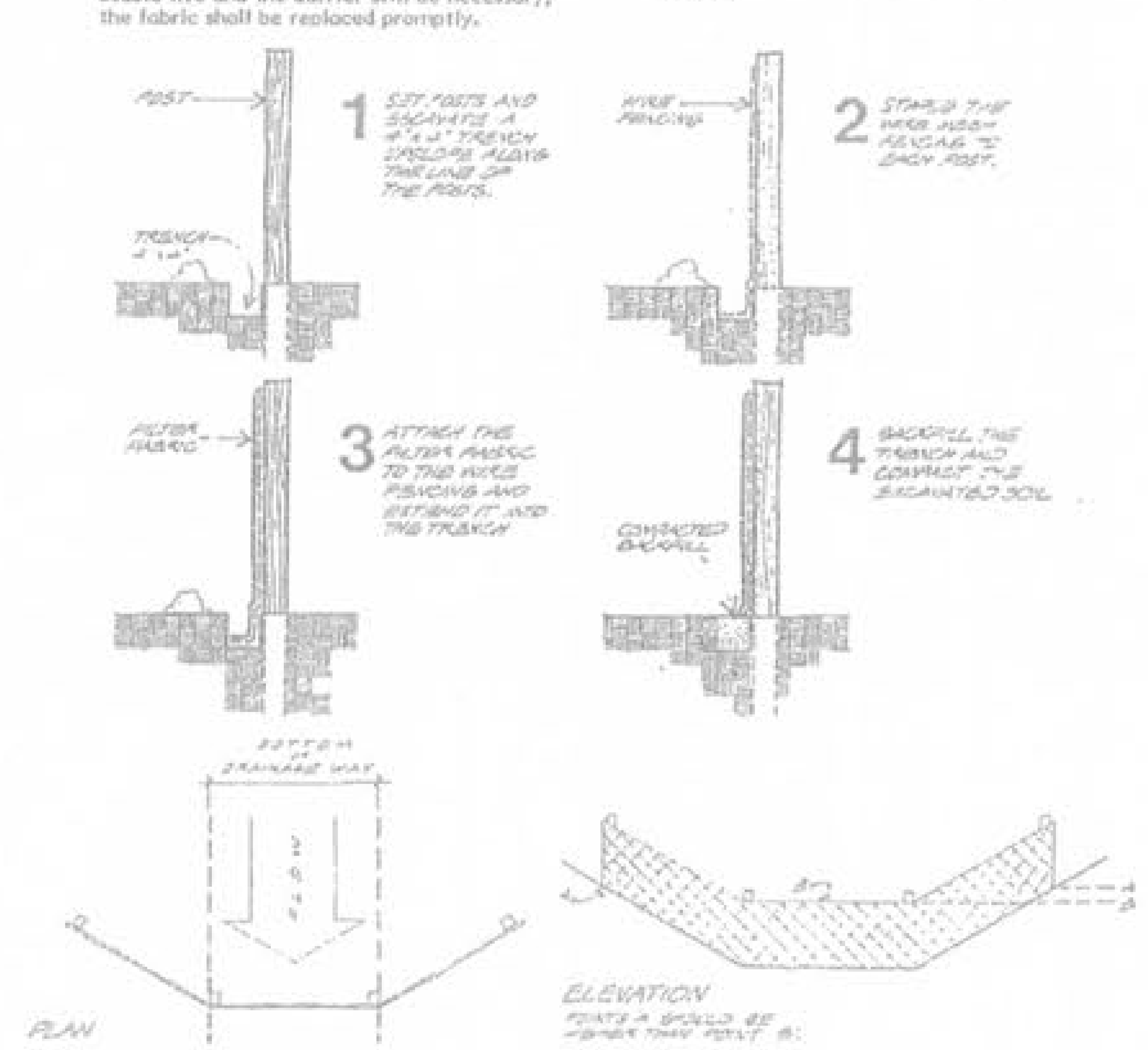
Maintenance

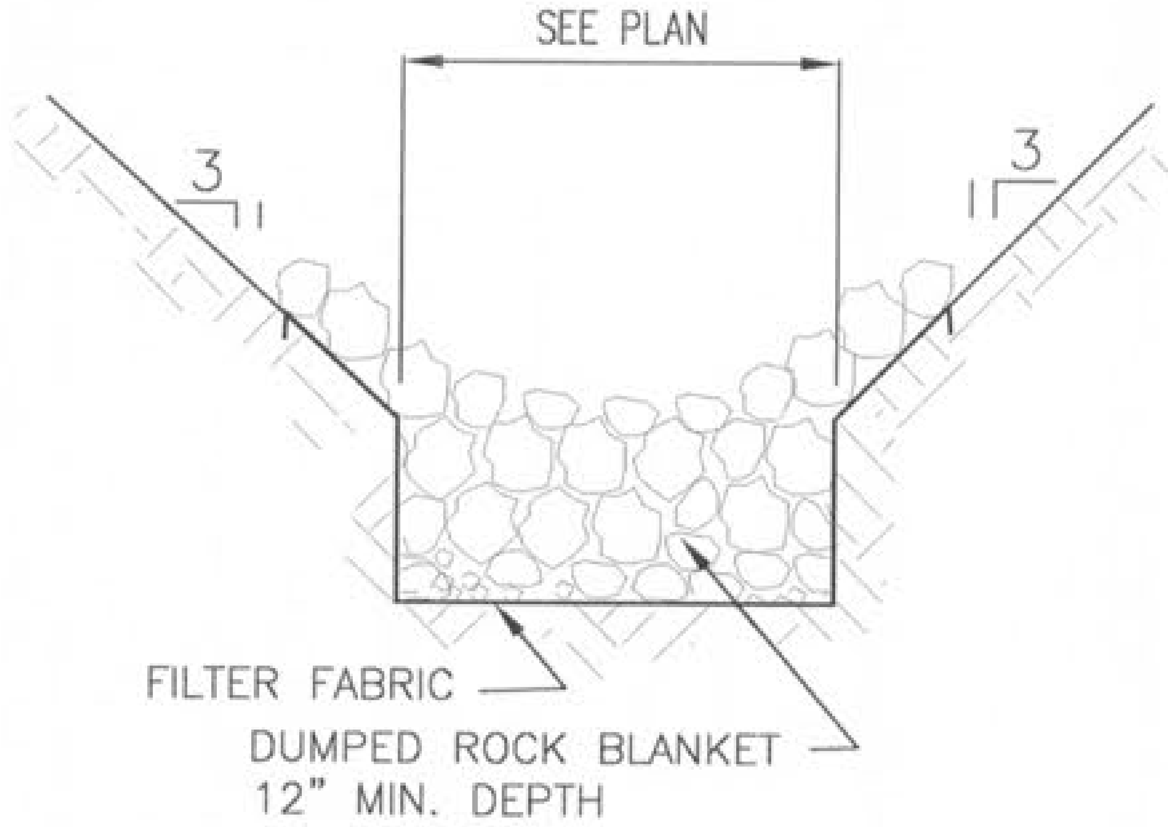
1. Filter barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. Any required repairs shall be made immediately.

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 promptly.

3. Sediment deposits should be removed after each storm event. They must be removed when deposits reach approximately half the height of the barrier.

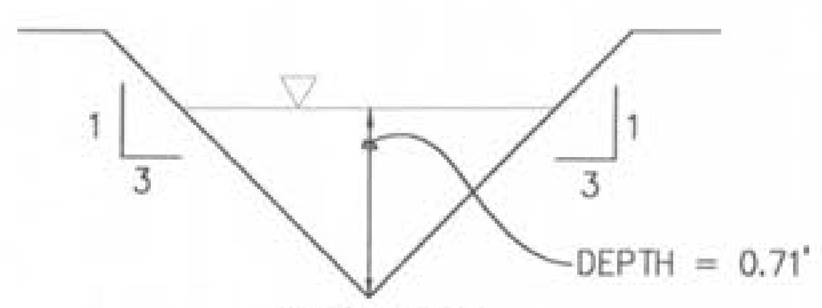
4. Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required shall be dressed to conform with the existing grade, prepared and seeded.





NOTE: DUMPED ROCK BLANKET TO BE A MIN. 12" DIA. QUARRY RUN STONE.

3 ROCK BLANKET DETAIL
SCALE: N.T.S. REF. DWG.



TRAPEZOIDAL CHANNEL ANALYSIS
NORMAL DEPTH COMPUTATION
TYPICAL YARD SWALE WITH 1% SLOPE

September 21, 2007

PROGRAM INPUT DATA

DESCRIPTION	VALUE
Flow Rate (cfs)	4.0
Channel Bottom Slope (ft/ft)	0.01
Manning's Roughness Coefficient (n-value)	0.027
Channel Left Side Slope (horizontal/vertical)	3.0
Channel Right Side Slope (horizontal/vertical)	3.0
Channel Bottom Width (ft)	0.01

COMPUTATION RESULTS

DESCRIPTION	VALUE
Normal Depth (ft)	0.71
Flow Velocity (fps)	2.66
Froude Number	0.789
Velocity Head (ft)	0.11
Energy Head (ft)	0.82
Cross-Sectional Area of Flow (sq ft)	1.50
Top Width of Flow (ft)	4.25

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Phone:(281)440-3787, Fax:(281)440-4742, Email:software@dodson-hydro.com
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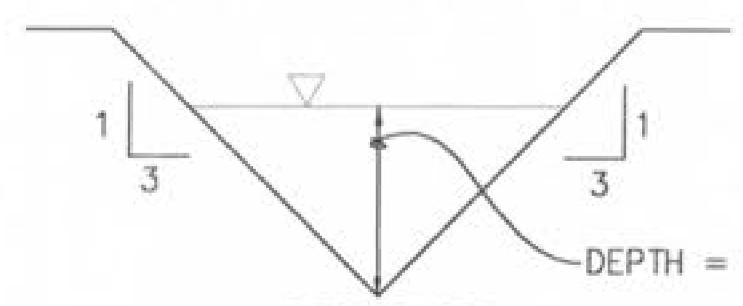

TRAPEZOIDAL CHANNEL ANALYSIS
NORMAL DEPTH COMPUTATION
TYPICAL YARD SWALE WITH 8% SLOPE

September 26, 2007

PROGRAM INPUT DATA

DESCRIPTION	VALUE
Flow Rate (cfs)	2.16
Channel Bottom Slope (ft/ft)	0.08
Manning's Roughness Coefficient (n-value)	0.027
Channel Left Side Slope (horizontal/vertical)	3.0
Channel Right Side Slope (horizontal/vertical)	3.0
Channel Bottom Width (ft)	0.01

COMPUTATION RESULTS

DESCRIPTION	VALUE
Normal Depth (ft)	0.38
Flow Velocity (fps)	4.99
Froude Number	2.02
Velocity Head (ft)	0.39
Energy Head (ft)	0.77
Cross-Sectional Area of Flow (sq ft)	0.43
Top Width of Flow (ft)	2.28

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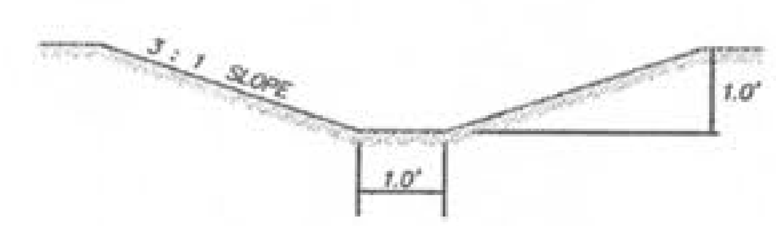
TYPICAL TEMPORARY DIVERSION SWALE

SWALE IS TO BE SEEDED.



DIVERSION SWALE
N.T.S.
n = 0.02

SWALE @ 1.0% – Q = 19.86 c.f.s.
SWALE @ 10.0% – Q = 62.79 c.f.s.

REVISIONS

DATE	DESC.
12/18/07	CITY COMMENTS/CITY COMMENTS
1/11/08	CITY COMMENTS

DEVELOPER/OWNER:
THE JONES COMPANY HOMES, L.L.C.
16640 CHESTERFIELD GROVE, SUITE 200
CHESTERFIELD, MO 63005
PHONE: (636) 537-7192

SEAL: MIKE E. VONDERHEIDE NUMBER E-23077

PRESTON WOODS - PHASE III
MASS GRADING PLANS + PARTIAL STORM SEWER
ST. CHARLES, MO. 63366

DETAILS

planning • engineering • surveying • landscape architecture
Cole and ASSOCIATES INCORPORATED
10777 sunset office dr.
saint louis, missouri 63127
p: 314 984 9887 f: 314 984 0587

DESIGNED BY JKW
DRAWN BY JKW
CHECKED BY JFH
DATE 8/13/07
Job Number 07-0178
Sheet Number G6.1