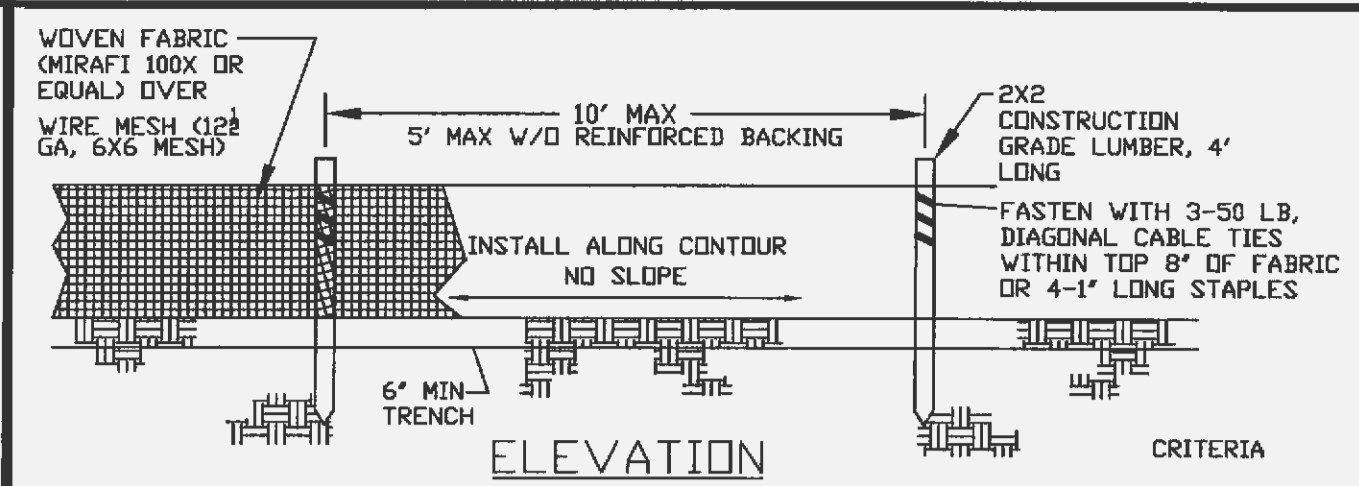
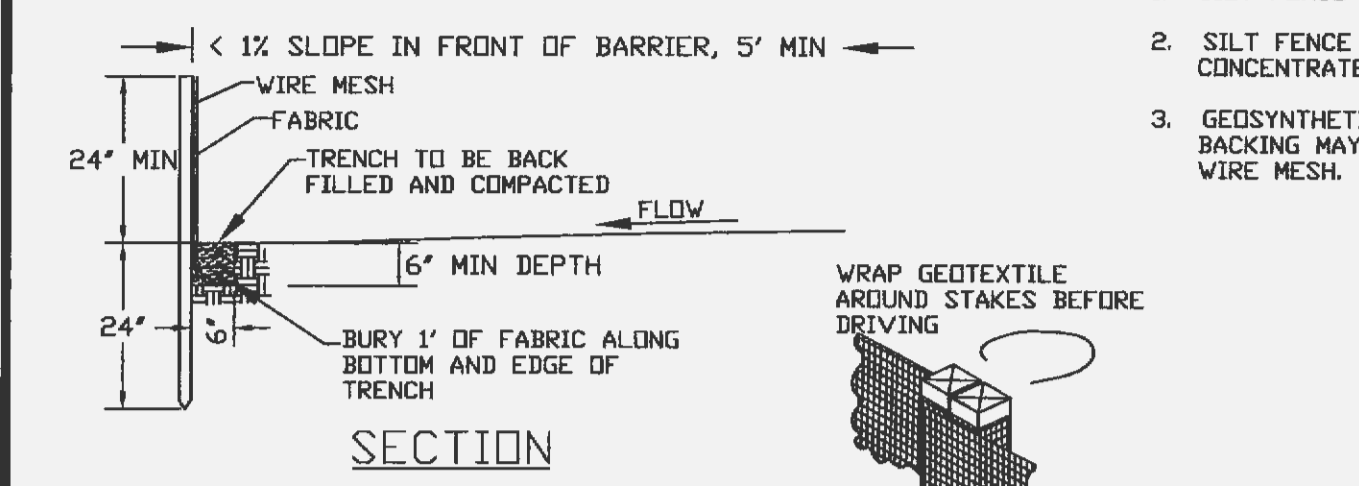


- DESIGN CRITERIA**
- SILT FENCE FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 - STRAW BALE BARRIERS FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 - REFER TO INDIVIDUAL ESC FIGURE FOR INSTALLATION.
 - TERRACING INCLUDES LOGS, WATTLES & FILTER SOCKS.

SPACING CHART FOR ESC DEVICES



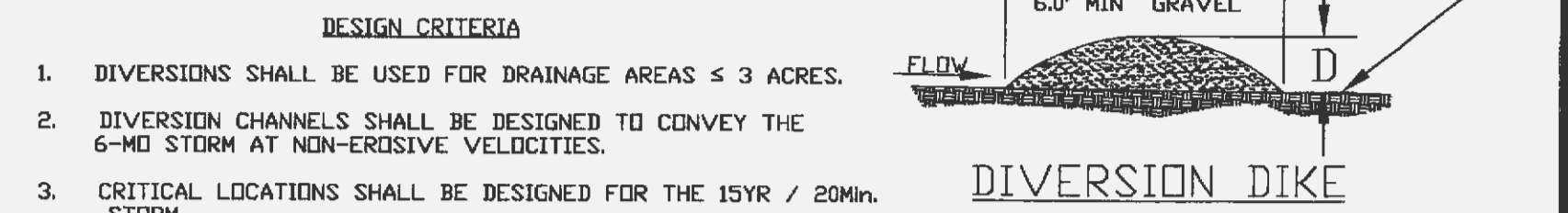
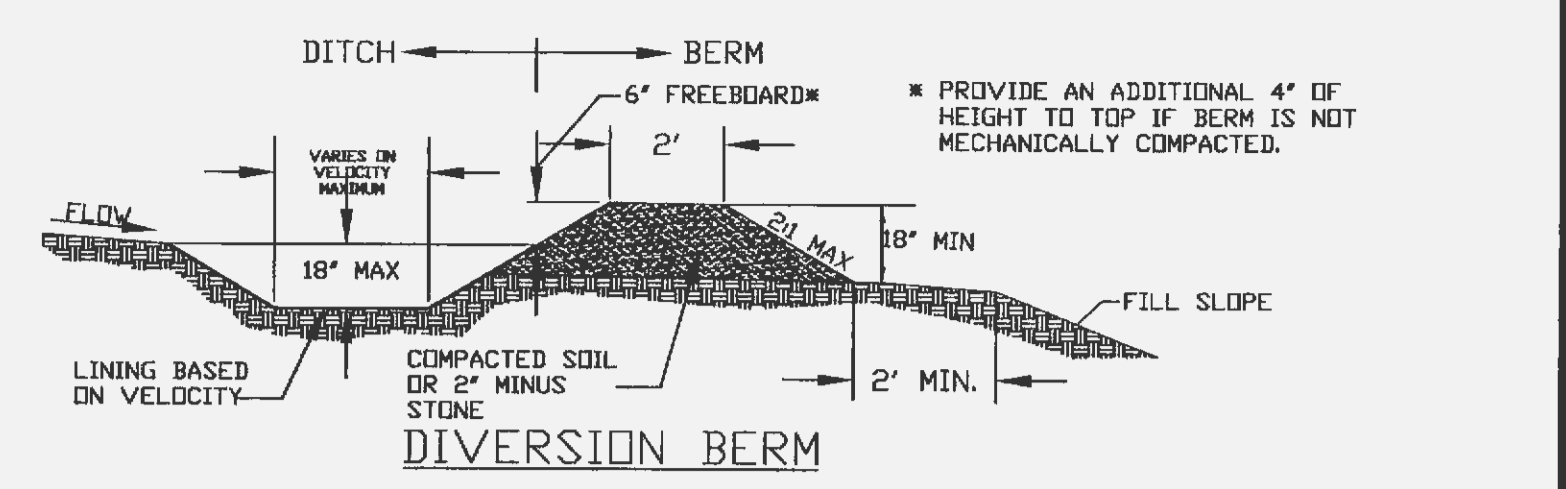
- CRITERIA**
- SILT FENCE SHALL BE 24 INCHES HIGH.
 - SILT FENCE SHALL NOT BE USED FOR CONCENTRATED FLOWS.
 - GEOSYNTHETIC REINFORCED SILT FENCE BACKING MAY BE USED IN LIEU OF WIRE MESH.



JOINING SECTIONS OF SILT FENCE

NOTE: IF FABRIC IS INSTALLED BY EQUIPMENT DESIGNED TO SLICE INTO THE GROUND, THE TRENCH IS NOT REQ'D.

SILT FENCE INSTALLATION SHEET FLOW (ONLY)



- DESIGN CRITERIA**
- DIVERSIONS SHALL BE USED FOR DRAINAGE AREAS ≤ 3 ACRES.
 - DIVERSION CHANNELS SHALL BE DESIGNED TO CONVEY THE 6-MO STORM AT NON-EROSIVE VELOCITIES.
 - CRITICAL LOCATIONS SHALL BE DESIGNED FOR THE 15YR / 20MIN. STORM.
 - MAXIMUM CHANNEL SLOPE OF 3% WITHOUT CHECK DAMS.
 - SWALE SEDIMENT TRAPS ARE TO BE USED IN HIGHLY ERODIVE AREAS.
 - CHANNELS SHALL BE PROTECTED USING APPROPRIATE CHANNEL LINERS.
 - CHANNEL OUTLETS MUST BE STABILIZED.
 - STORM SEVERS MAY BE USED IN LIEU OF OPEN CHANNELS.

DIVERSION BERMS + DIKES

VEGETATIVE ESTABLISHMENT FOR URBAN DEVELOPMENT SITES

APPENDIX A

SEEDING RATES

Permanent
Tall Fescue - 80 lbs./ac.
Smooth Brome - 100 lbs./ac.
Combined Fescue+Brome - 140 lbs./ac. and Brome#50 lbs./ac.

Temporary
Wheat or Rye - 150 lbs./ac. (3.5 lbs. per 1000 sq. ft.)
Fescue or Brome - 120 lbs./ac. (2.75 lbs. per 1000 sq. ft.)

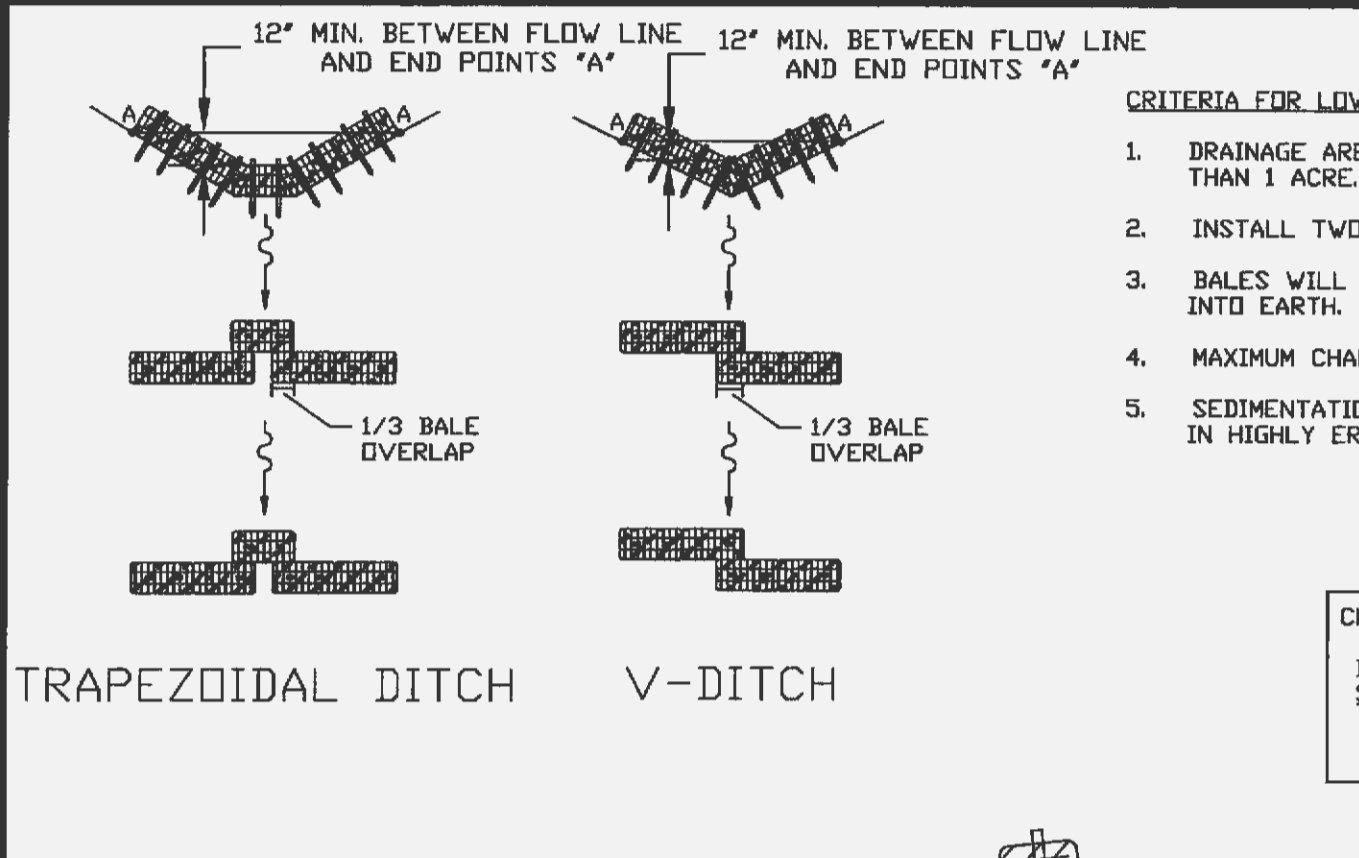
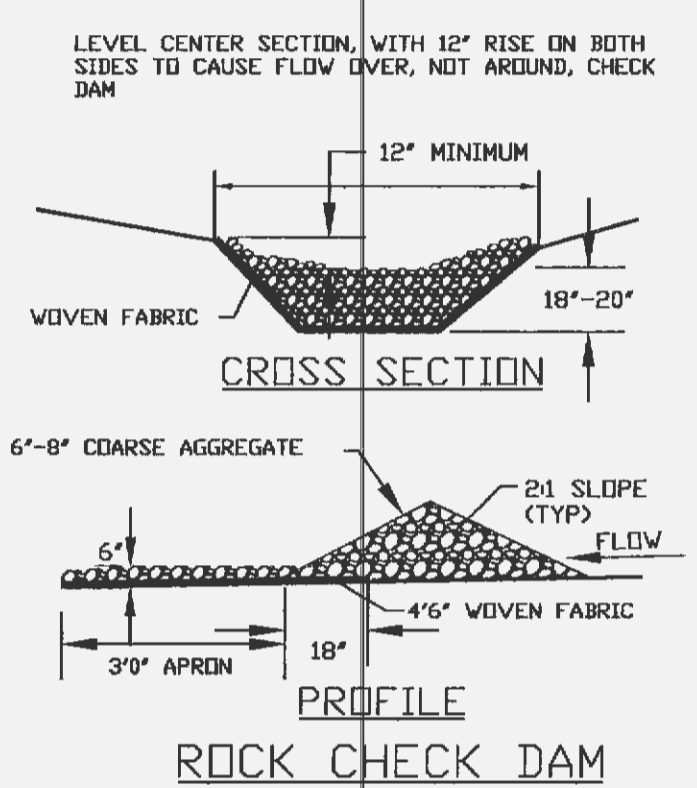
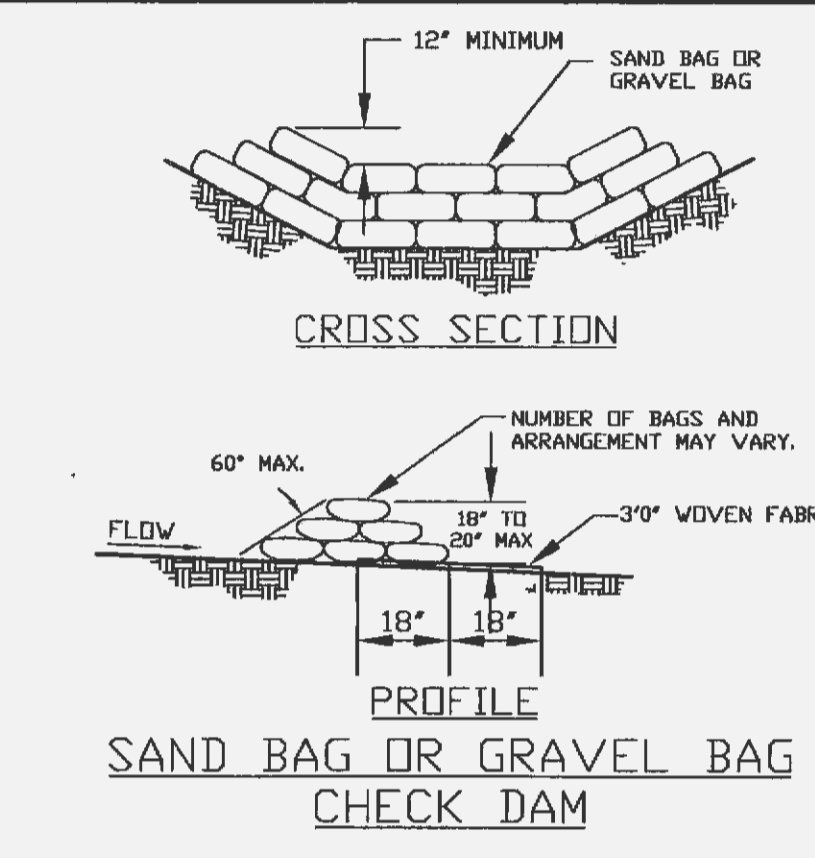
SEEDING PERIODS

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

MULCH RATES 100 lbs. per 1000 sq.ft. (4,356 lbs. per acre)

FERTILIZER RATES Nitrogen 30 lbs./ac.
Phosphate 30 lbs./ac.
Potassium 50 lbs./ac.
Line 600 lbs./ac. ENM*

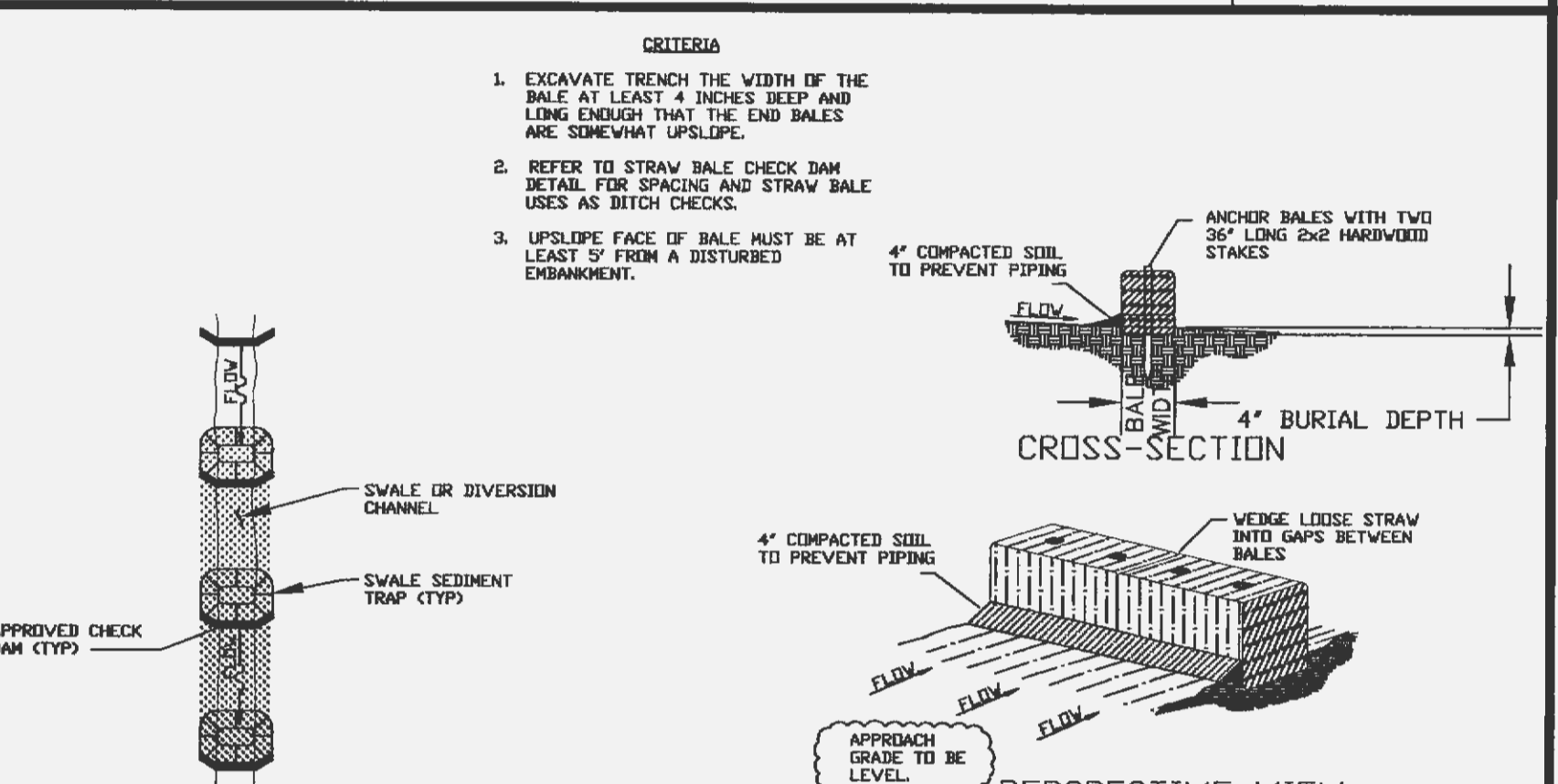
*ENM = effective neutralizing material as per State evaluation of quarried rock.



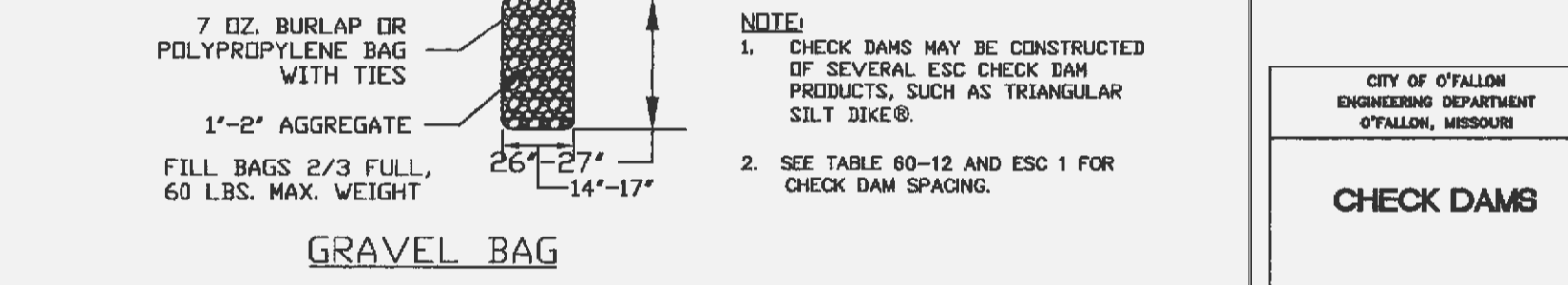
- CRITERIA FOR LOW CONCENTRATED FLOWS**
- DRAINAGE AREAS SHALL BE LESS THAN 1 ACRE.
 - INSTALL TWO STAKES PER BALE.
 - BALES WILL BE TRENCHED 4\"/>

CHECK DAM SPACING

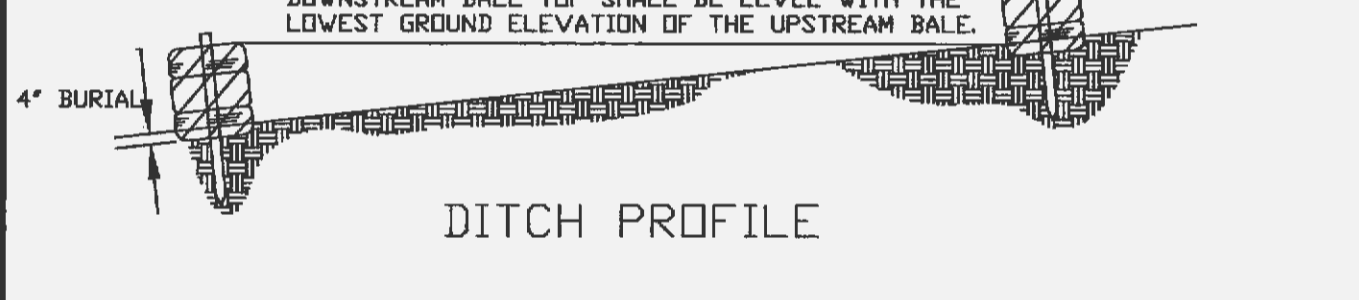
Ditch Slope	Maximum Spacing
3%	50%
2%	75%



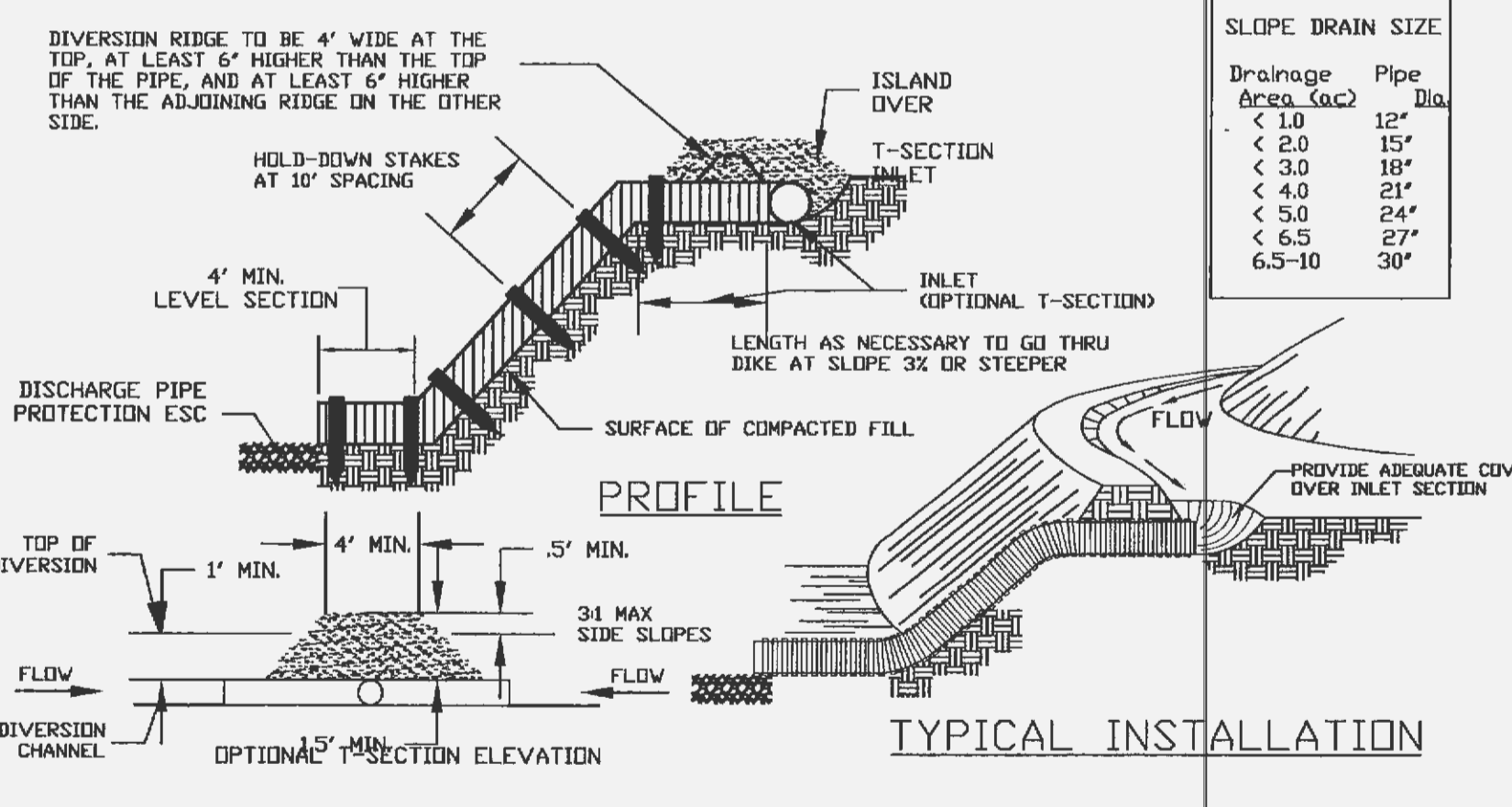
SWALE SEDIMENT TRAP STRAW BALE BARRIER INSTALLATION



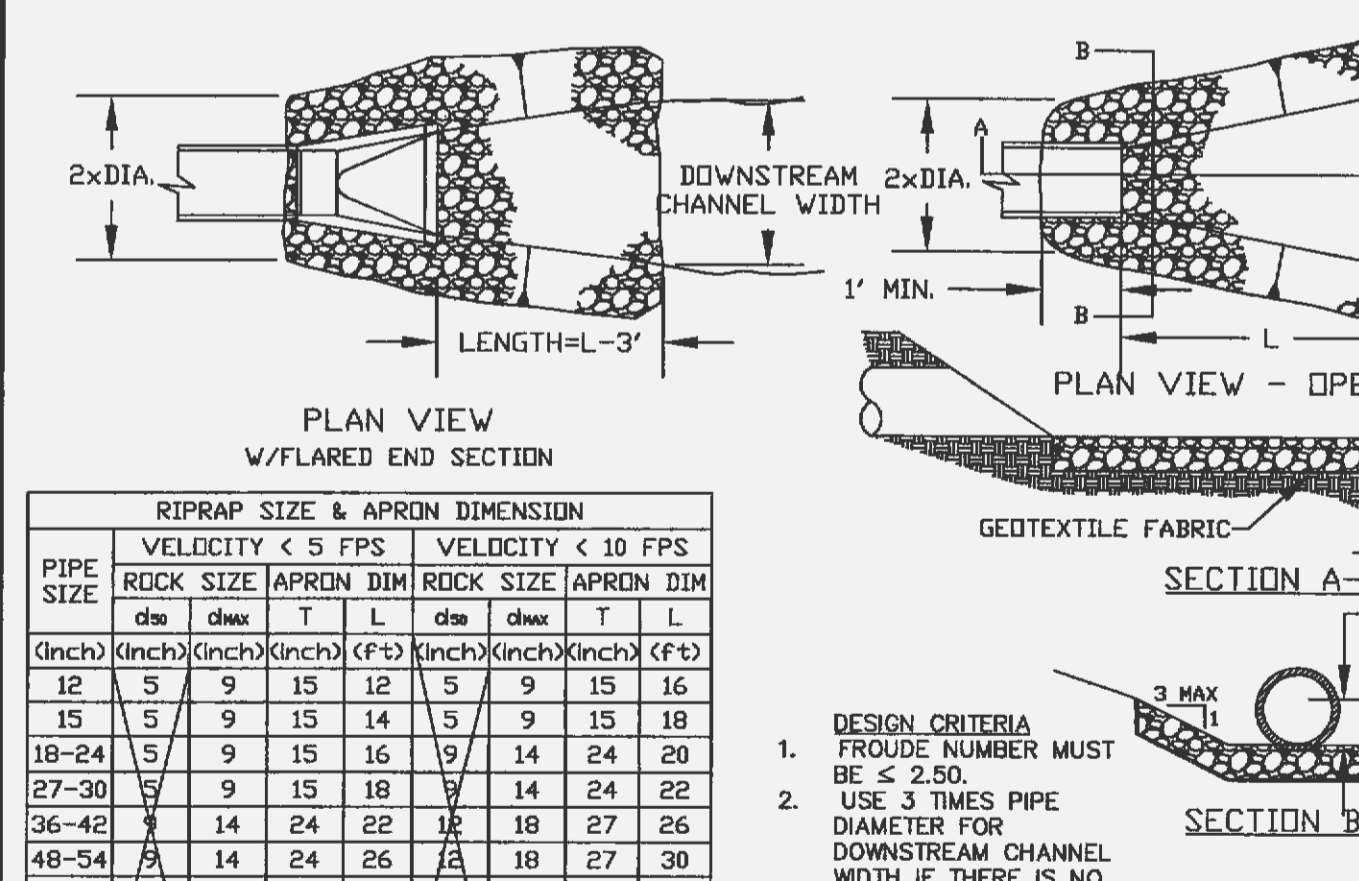
CHECK DAMS



STRAW BALE CHECK DAM



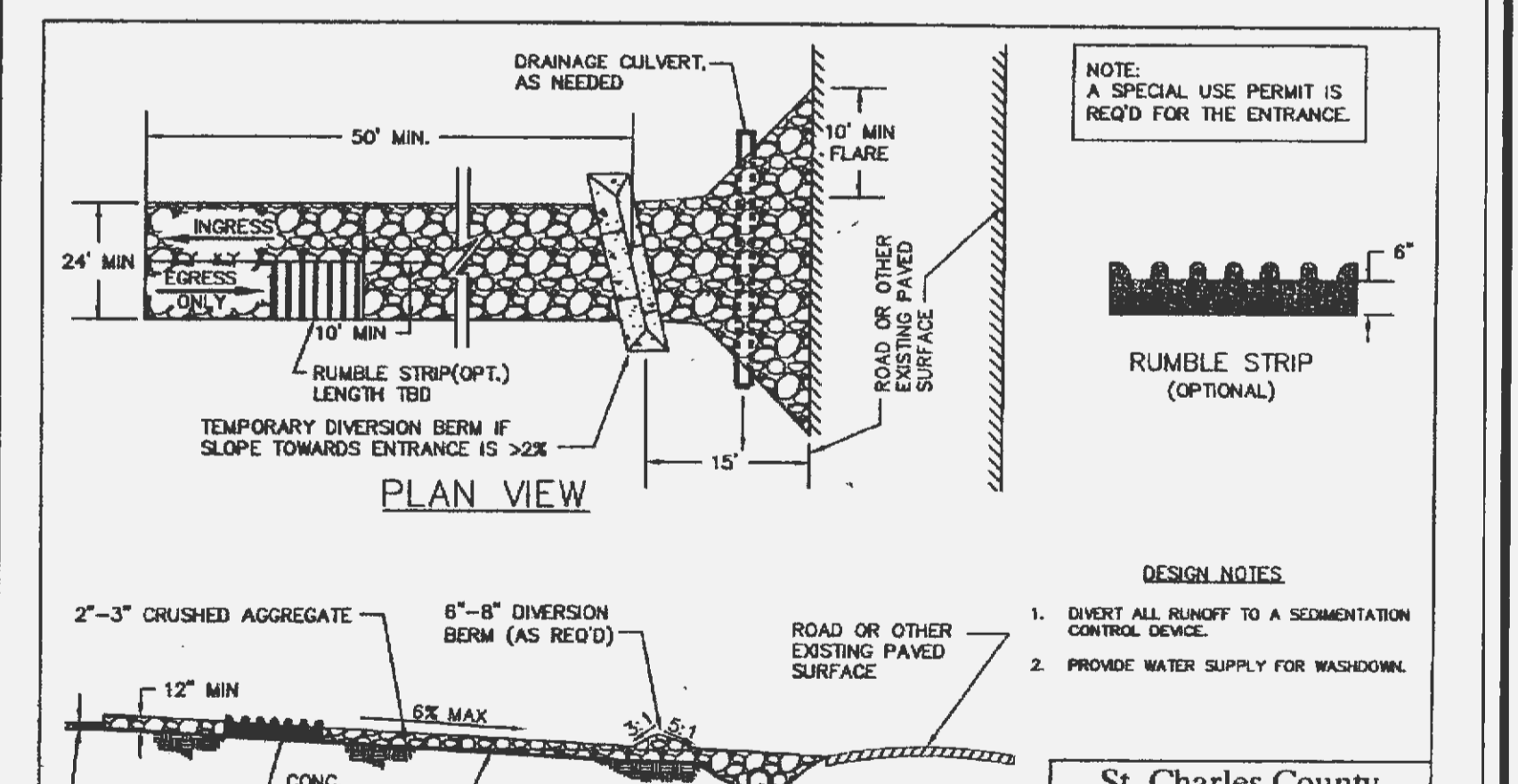
TEMPORARY SLOPE DRAIN



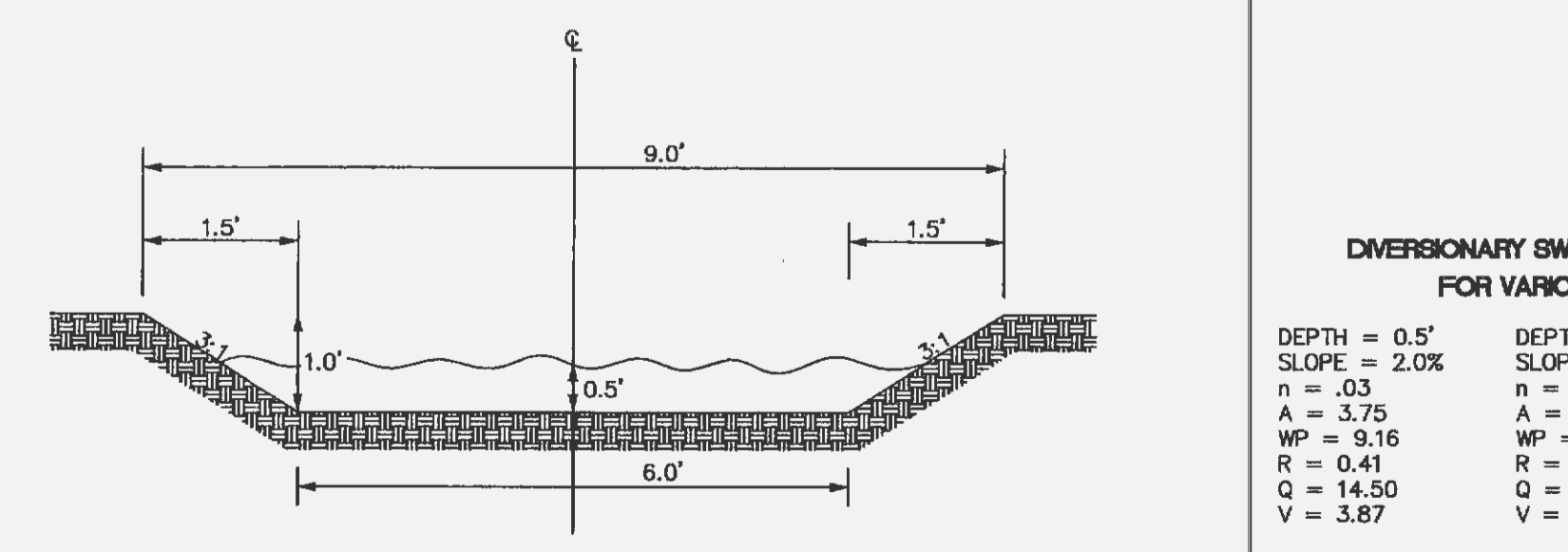
RIPRAP SIZE & APRON DIMENSION

PIPE SIZE (in)	VELOCITY < 5 FPS				VELOCITY < 10 FPS			
	ROCK SIZE (in)	APRON DIM (in)	ROCK SIZE (in)	APRON DIM (in)	ROCK SIZE (in)	APRON DIM (in)	ROCK SIZE (in)	APRON DIM (in)
12	5	9	15	12	5	9	15	16
15	5	9	15	14	5	9	15	18
18-24	5	9	15	16	9	14	24	20
27-30	5	9	15	18	9	14	24	22
36-42	5	9	15	22	12	18	27	26
48-54	5	9	15	26	14	18	27	30
60-66	12	18	27	34	15	24	30	38
72-84	15	24	30	42	15	24	30	46
96	18	27	30	50	18	27	30	54

TEMPORARY OUTLET PIPE DISCHARGE PROTECTION



St. Charles County Erosion & Sediment Controls Standard Drawings CONSTRUCTION TRAFFIC WASH-OFF PAD



DIVERSIONARY SWALE COMPUTATIONS FOR VARIOUS SLOPES

DEPTH = 0.5'	DEPTH = 0.5'	DEPTH = 0.5'
SLOPE = 2.0%	SLOPE = 3.0%	SLOPE = 6.0%
n = .03	n = .03	n = .03
A = 3.75	A = 3.75	A = 3.75
WP = 9.16	WP = 9.16	WP = 9.16
R = 0.41	R = 0.41	R = 0.41
Q = 14.50	Q = 17.76	Q = 17.76
V = 3.87	V = 4.74	V = 6.70

- SEDIMENT & EROSION CONTROL NOTES:**
- SITE SILTATION CONTROL SHALL BE INSTALLED PRIOR TO GRADING ACTIVITIES AND MAINTAINED IN ACCORDANCE TO ALL CITY, STATE AND FEDERAL REQUIREMENTS. ANY VIOLATION OF THESE REQUIREMENTS MAY RESULT IN ISSUANCE OF STOP WORK ORDERS, VIOLATION NOTICES AND/OR CITATIONS.
 - ADDITIONAL SILTATION CONTROL MAY BE REQUIRED, PER DIRECTION OF CITY.
 - A COPY OF THE SWPPP PLAN SHEET MUST BE PROVIDED AT THE PRE-CONSTRUCTION MEETING AND SHOULD BE AVAILABLE ON SITE AT ALL TIMES. A WEEKLY LAND DISTURBANCE CHECKLIST OR SITE INSPECTION REPORT IS TO BE PROVIDED BY THE CITY VIA EMAIL TO micheleg@ofallon.mo.us. THIS REPORT IS ALSO TO BE SUBMITTED AFTER 1/2\"/>

PROJECT TITLE: **S.A.K. HQ PARKING ADDN**

REVISION: **MUSLER ENGINEERING COMPANY**

CIVIL ENGINEERING - PLANNING - LAND SURVEYING
32 Portwest Court, St. Charles, Missouri 63303
Telephone: (636) 916-0444
FAX: (636) 916-0444
CERTIFICATE OF AUTHORITY: LS-244-D
DATE: 11-18-2016
DRAWN: J.R.S.
CHECKED: J.R.S.
PROJECT NO.: 11-182016
SHEET NO.: 7 OF 7

DISCLAIMER OF RESPONSIBILITY

I hereby specify that the documents intended to be authorized by my seal are limited to this sheet, and I hereby disclaim any responsibility for all other Drawings, Specifications, Estimates, Reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

JEFFREY R. SMITH, P.E.
MO. P.E. # 2001004672

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P & Z No. 12-10.01 & 12-10.02
City No. CSP16-000034

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