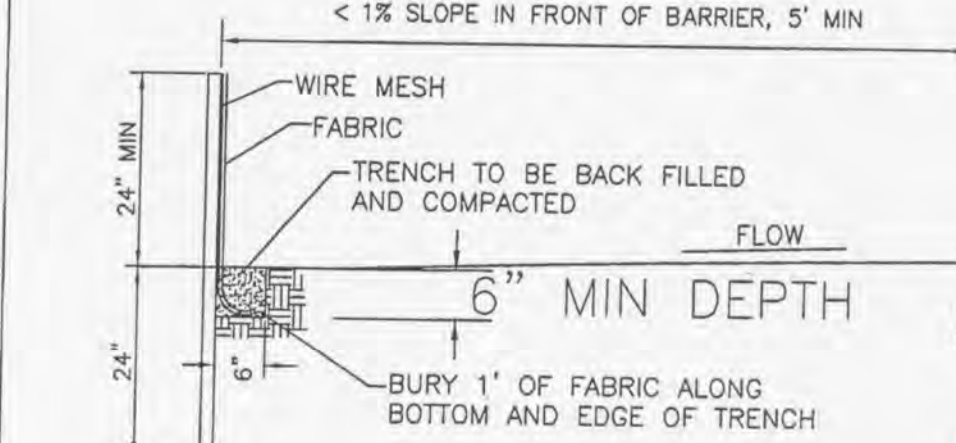
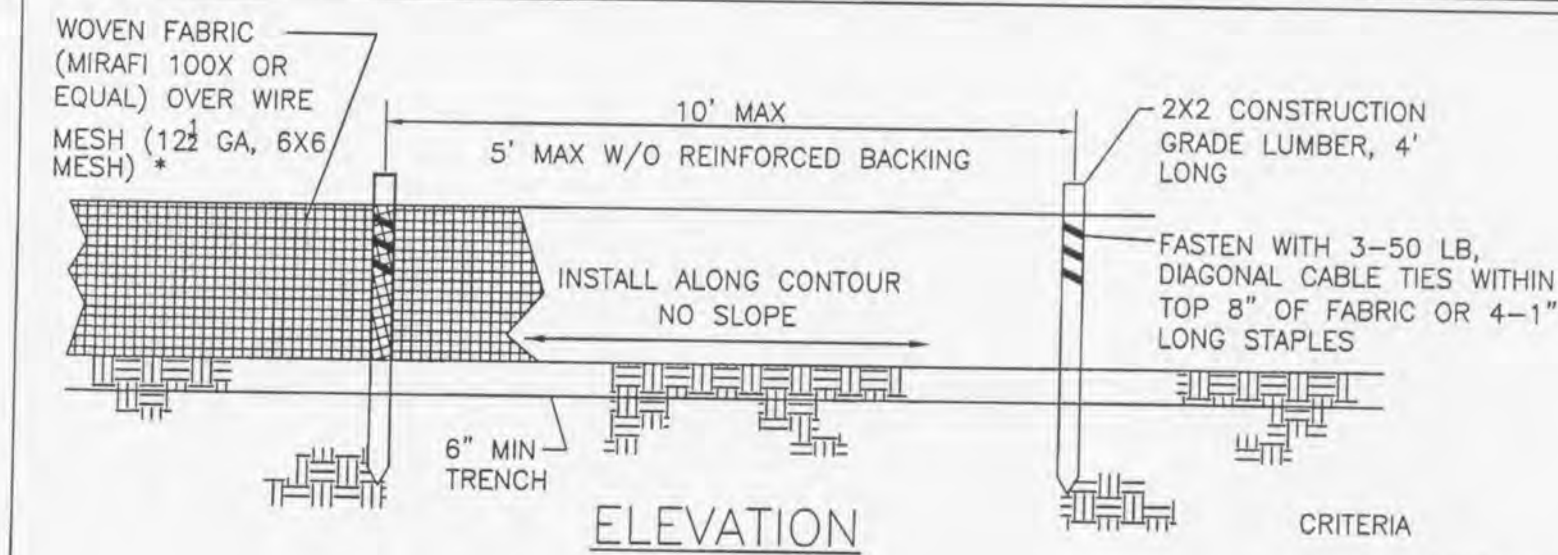


- DESIGN CRITERIA**
- SILT FENCE FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
  - STRAW BALE BARRIERS FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
  - REFER TO INDIVIDUAL ESC FIGURE FOR INSTALLATION.
  - TERRACING INCLUDES LOGS, WATLES & FILTER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

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**SPACING CHART  
FOR ESC DEVICES**

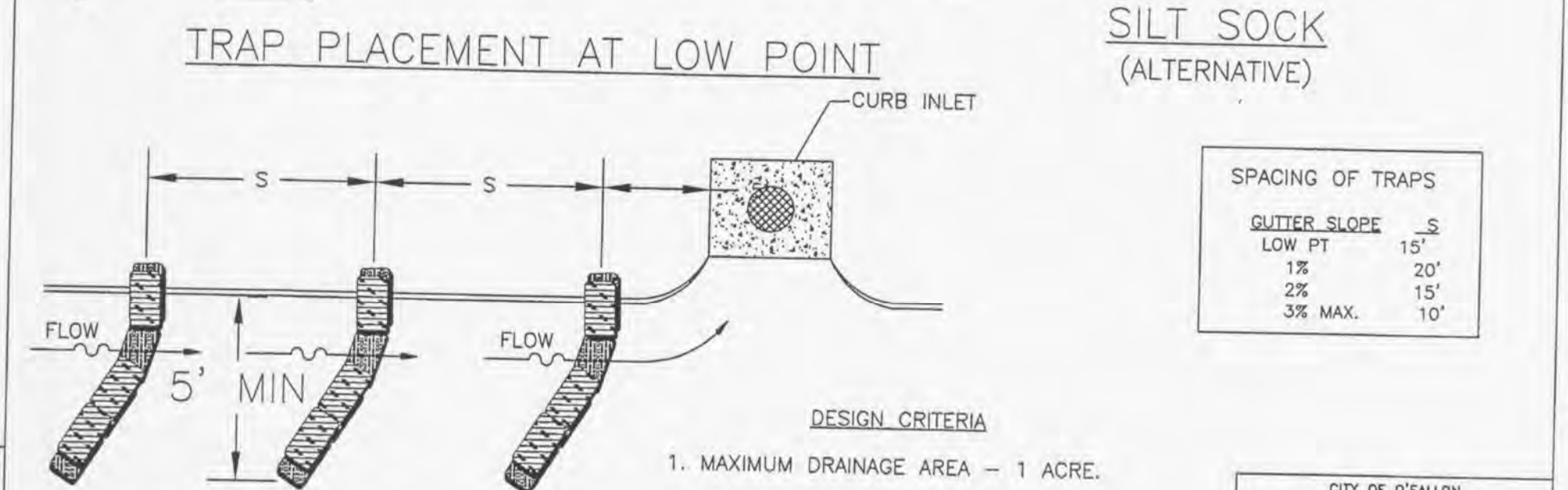
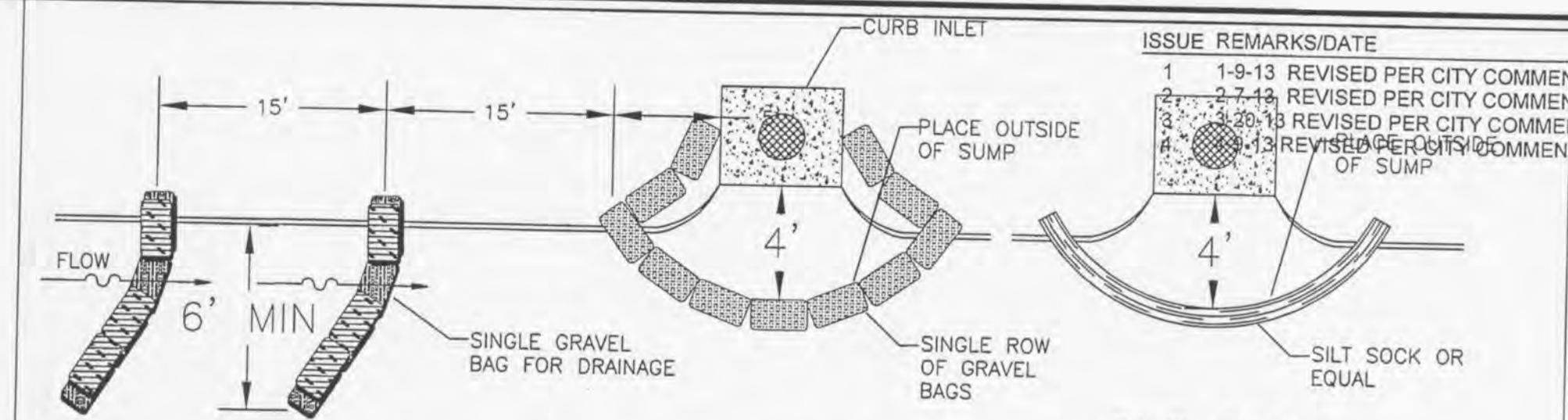


NOTE: IF FABRIC IS INSTALLED BY EQUIPMENT DESIGNED TO SLICE INTO THE GROUND, THE TRENCH IS NOT REQ'D.

- 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.
  - WIRE MESH WILL BE USED AT LOCATIONS SHOWN ON THE APPROVED SWPPP.

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**SILT FENCE INSTALLATION  
SHEET FLOW (ONLY)**



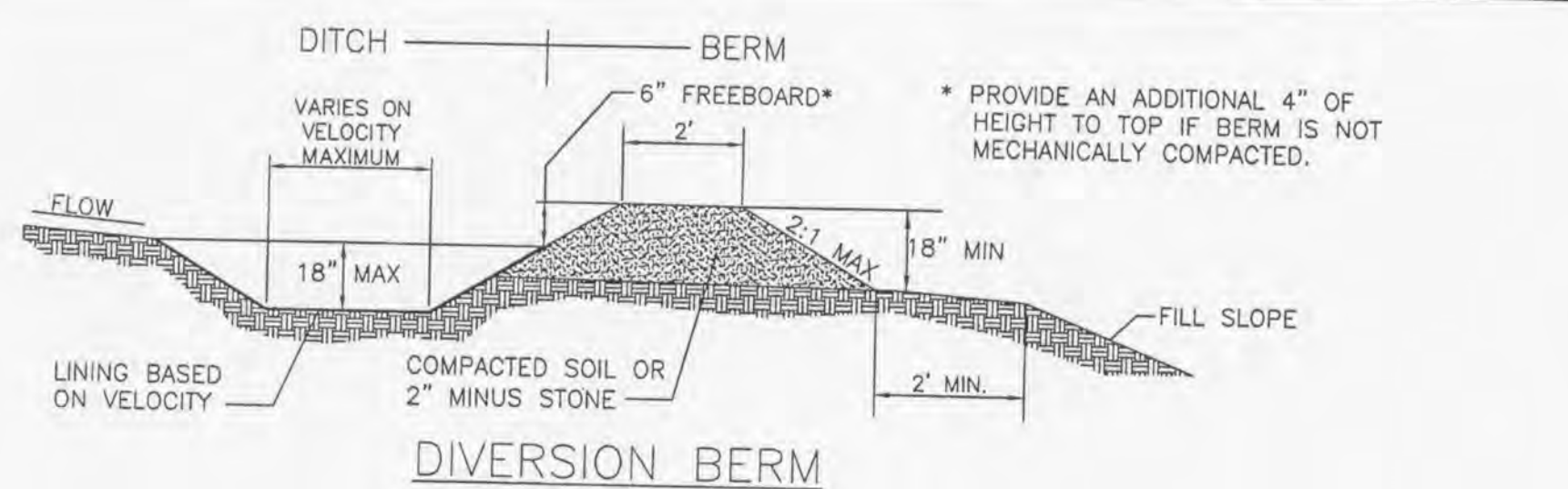
**SPACING OF TRAPS**

GUTTER SLOPE	S
LOW PT	15'
1%	20'
2%	15'
3% MAX.	10'

- DESIGN CRITERIA**
- MAXIMUM DRAINAGE AREA - 1 ACRE.
  - PEAK RUNOFF SHALL BE  $\leq 2$  CFS BASED ON THE 6-MONTH STORM.
  - STACK GRAVEL BAGS DOUBLE HIGH. PROVIDE GAP FOR DRAINAGE.

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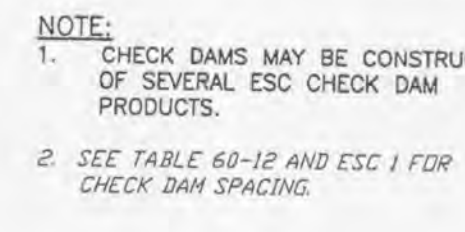
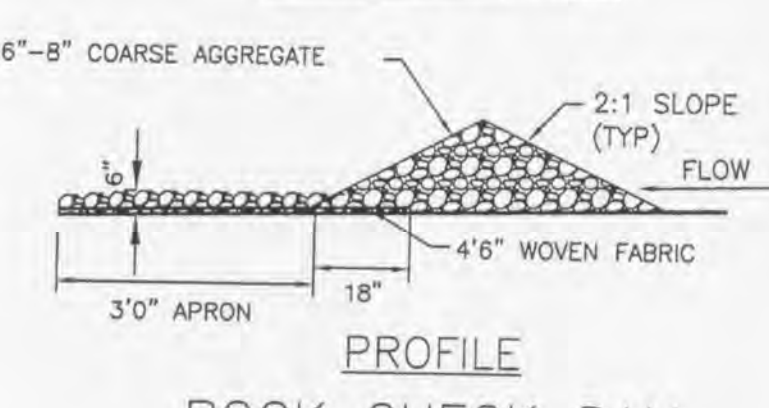
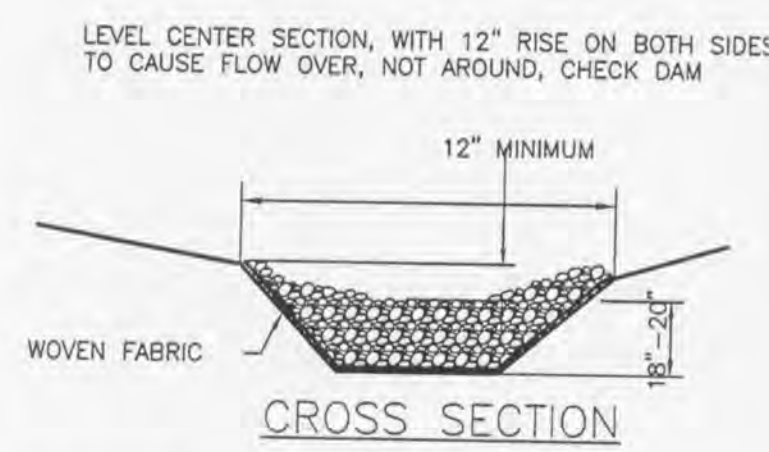
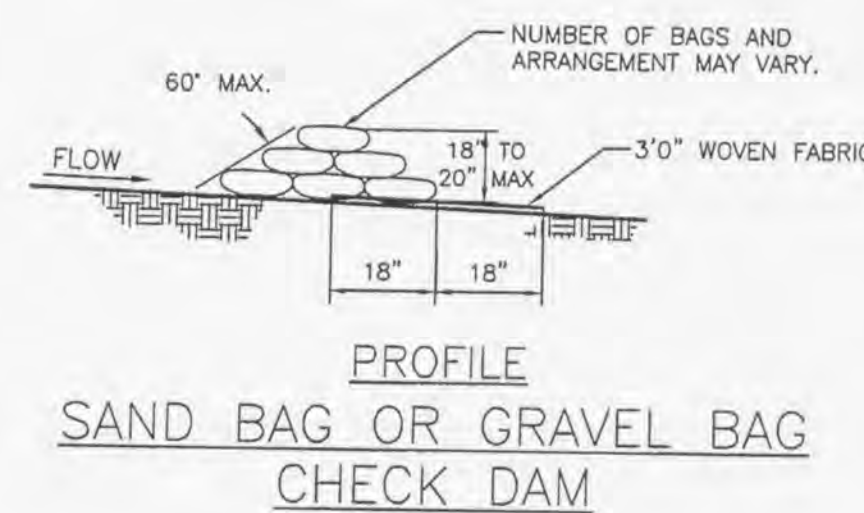
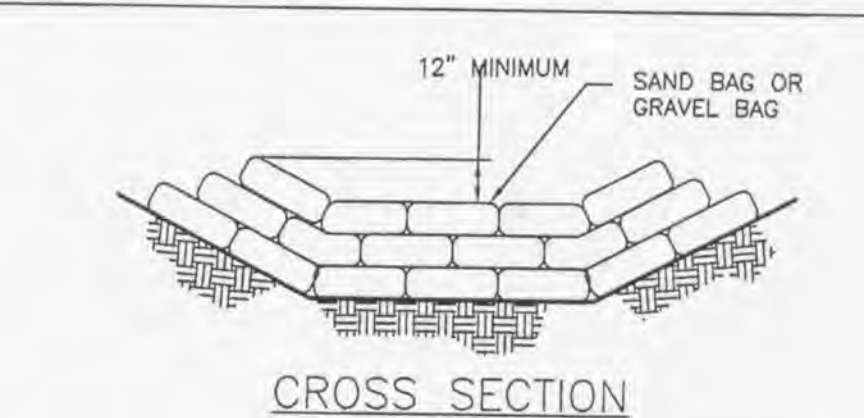
**CURB INLET  
PROTECTION**



- DESIGN CRITERIA**
- DIVERSIONS SHALL BE USED FOR DRAINAGE AREAS  $\leq 3$  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 EROSION AREAS.
  - CHANNELS SHALL BE PROTECTED USING APPROPRIATE CHANNEL LINERS.
  - CHANNEL OUTLETS MUST BE STABILIZED.
  - STORM SEWERS MAY BE USED IN LIEU OF OPEN CHANNELS.

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**DIVERSION BERMS  
+ DIKES**

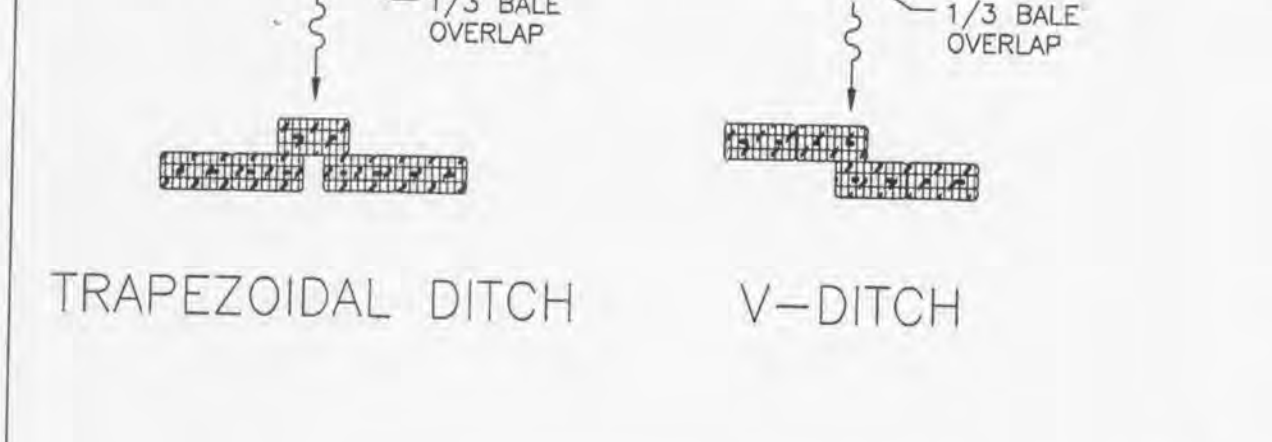
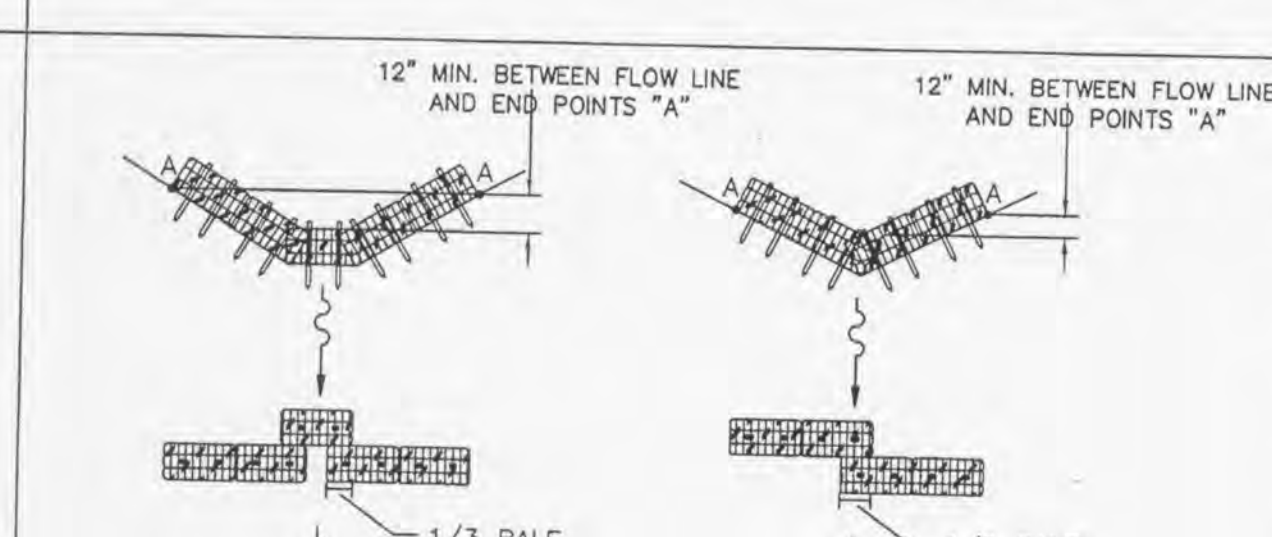


**GRAVEL BAG**

NOTE:  
1. CHECK DAMS MAY BE CONSTRUCTED OF SEVERAL ESC CHECK DAM PRODUCTS.  
2. SEE TABLE 60-12 AND ESC 1 FOR CHECK DAM SPACING.

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**CHECK DAMS**



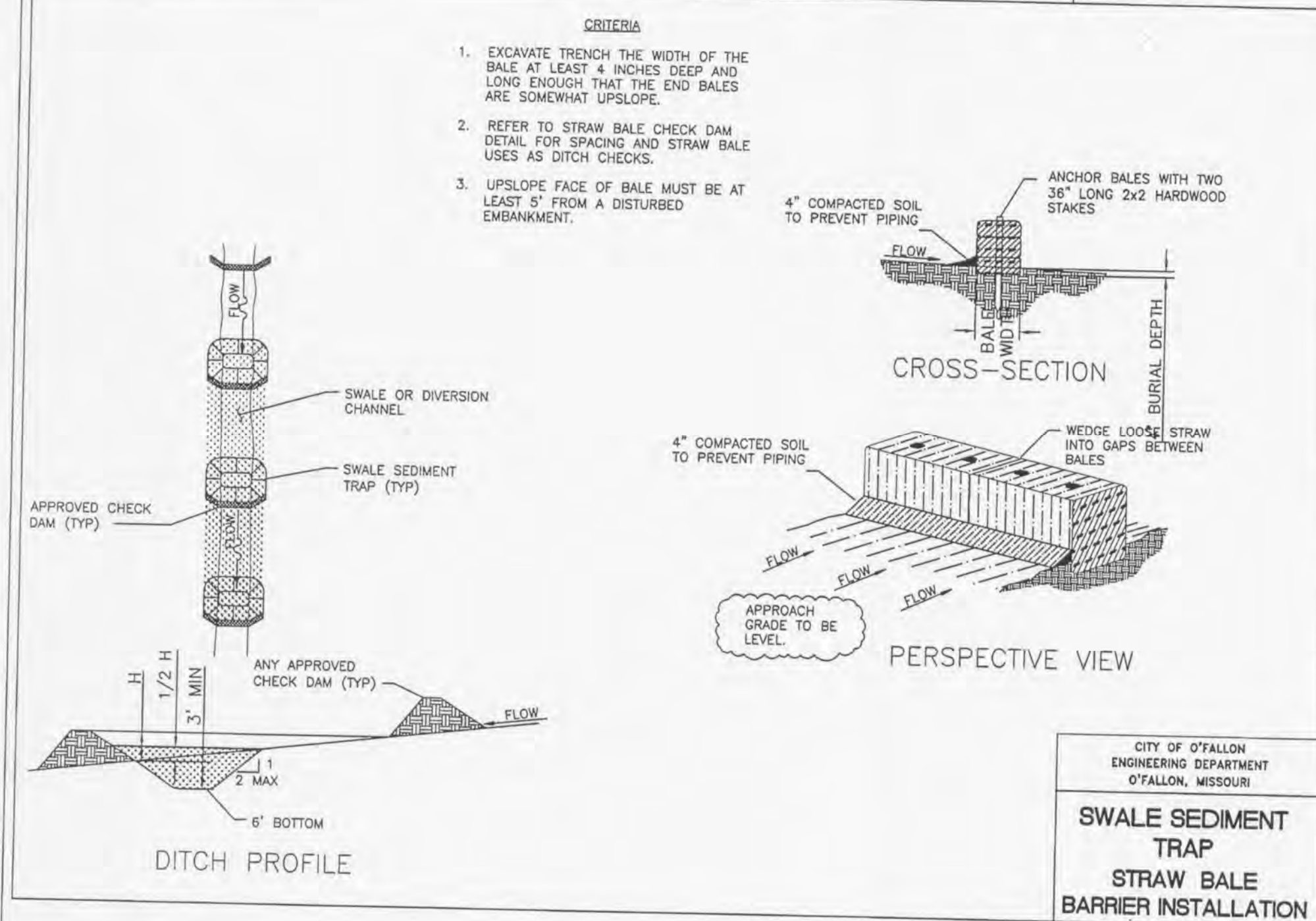
- CRITERIA FOR LOW CONCENTRATED FLOWS**
- DRAINAGE AREAS SHALL BE LESS THAN 1 ACRE.
  - INSTALL TWO STAKES PER BALE.
  - BALES WILL BE TRENCHED 4\"/>

**CHECK DAM SPACING**

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

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**STRAW BALE  
CHECK DAM**

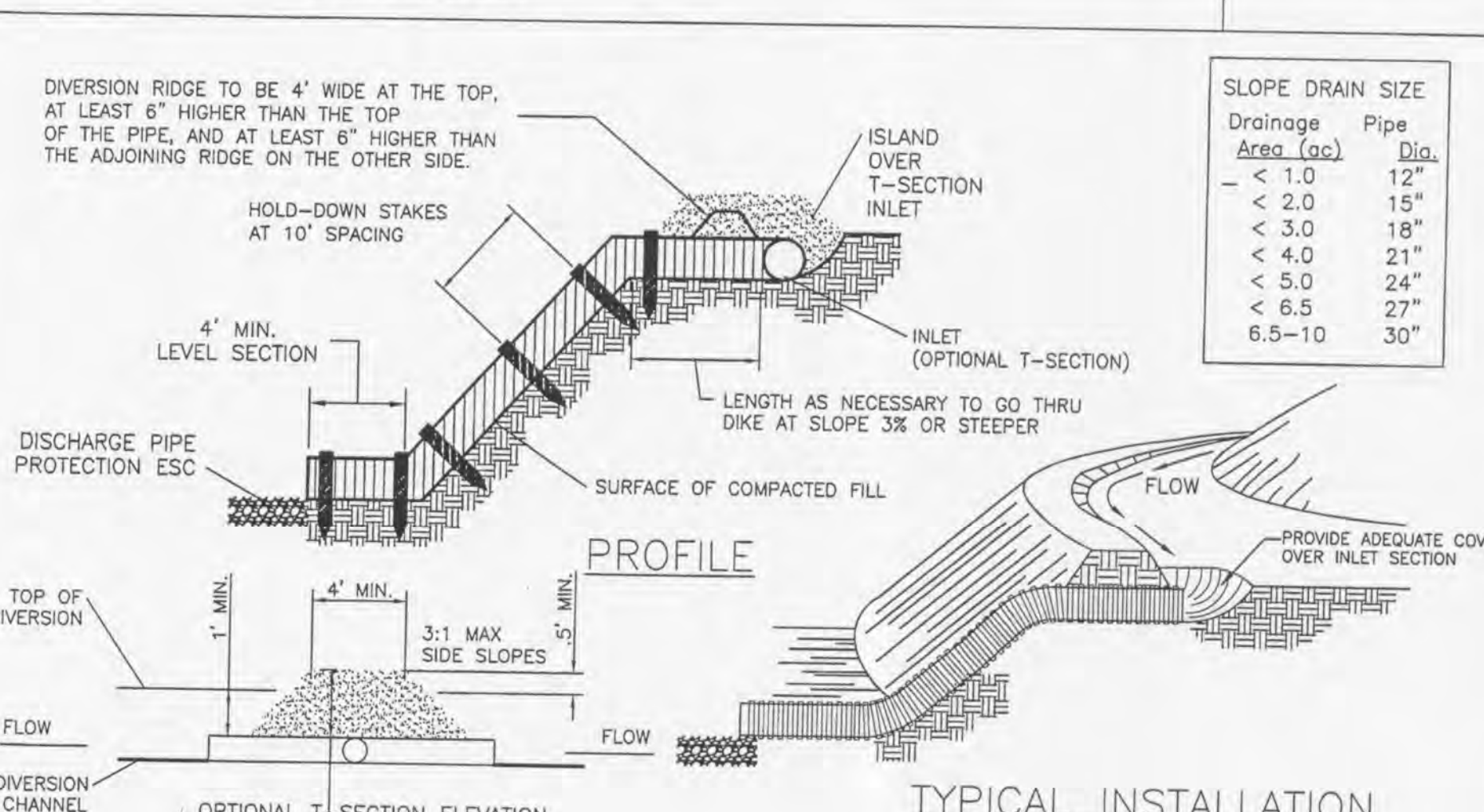


**DITCH PROFILE**

- CRITERIA**
- EXCAVATE TRENCH THE WIDTH OF THE BALE AT LEAST 4 INCHES DEEP AND LONG ENOUGH THAT THE END BALES ARE SOMEWHAT UPSLOPE.
  - REFER TO STRAW BALE CHECK DAM DETAIL FOR SPACING AND STRAW BALE USES AS DITCH CHECKS.
  - UPSLOPE FACE OF BALE MUST BE AT LEAST 5\"/>

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**SWALE SEDIMENT  
TRAP  
STRAW BALE  
BARRIER INSTALLATION**



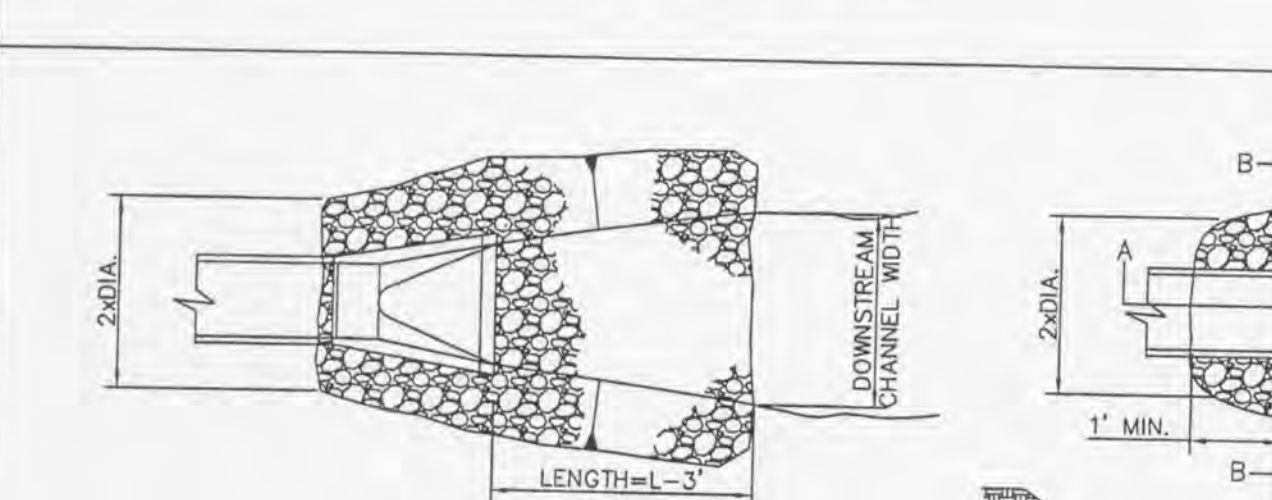
- NOTE:
- PIPE CAN BE CMP, PVC, FLEXIBLE TUBING, OR SIMILAR.
  - THIS METHOD MUST BE USED IN CONJUNCTION WITH OTHER ESC DEVICES. THIS IS NOT A STAND ALONE CONTROL DEVICE.

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**TEMPORARY  
SLOPE DRAIN**

**SLOPE DRAIN SIZE**

Drainage Area (ac)	Pipe Dia.
< 1.0	12"
< 2.0	15"
< 3.0	18"
< 4.0	21"
< 5.0	24"
< 6.5	27"
6.5-10	30"



**PLAN VIEW W/FLARED END SECTION**

PIPE SIZE	RIPRAP SIZE & APRON DIMENSION				VELOCITY < 5 FPS				VELOCITY < 10 FPS			
	ROCK SIZE	APRON DIM	ROCK SIZE	APRON DIM	d50	dmax	T	L	d50	dmax	T	L
12	5	9	15	12	5	9	15	16	5	9	15	16
15	5	9	15	14	5	9	15	18	5	9	15	18
18-24	5	9	15	16	9	14	24	20	9	14	24	22
27-30	5	9	15	18	9	14	24	22	9	14	24	22
36-42	9	14	24	22	12	18	27	26	12	18	27	26
48-54	9	14	24	26	12	18	27	30	12	18	27	30
60-66	12	18	27	34	15	24	30	38	15	24	30	46
72-84	15	24	30	42	15	24	30	46	15	24	30	46
96	18	27	30	50	18	27	30	54	18	27	30	54

d50 - NOMINAL DIAMETER  
dmax - MAXIMUM DIAMETER  
T - THICKNESS  
L - LENGTH

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**TEMPORARY OUTLET  
PIPE DISCHARGE  
PROTECTION**

- DESIGN CRITERIA**
- FROUDE NUMBER MUST BE  $\leq 2.50$ .
  - USE 3 TIMES PIPE DIAMETER FOR DOWNSTREAM CHANNEL WIDTH IF THERE IS NO DEFINED CHANNEL.
  - BANK PROTECTION HEIGHT TO BE 2/3 TIMES PIPE DIAMETER.
  - ROCK SLOPES SHALL BE NO STEEPER THAN 3:1.

**PROJECT TITLE**

**WEATHERBY  
LANDING**

O'FALLON, MISSOURI

**THE STERLING CO.**  
ENGINEERS & SURVEYORS  
5055 New Baumgartner Road  
St. Louis, Missouri 63129  
Ph: 314-487-0440 Fax: 314-487-8944  
www.sterling-eng-survey.com  
Corporate Certificate of Authority #001348

**STATE OF MISSOURI**  
RODNEY ARNOLD  
Professional Engineer  
PE-2002016612

Date: 4/9/2013  
RODNEY ARNOLD  
License No. PE-2002016612  
Civil Engineer

**MCBRIDE & SON HOMES LAND DEVELOPMENT, INC.**  
16091 SWINGLEY RIDGE ROAD, STE. 300  
CHESTERFIELD, MISSOURI 63017  
Ph: 636-637-2000  
www.mcbridehomes.com

**CITY OF O'FALLON EROSION CONTROL DETAILS**

P+Z No. 1305.05  
City No.  
Date: 11/12/2012  
Job No. 12-05-127  
Page No.

**CD1**

City of O'Fallon Standard Subdivision Notes and Details - June 2010