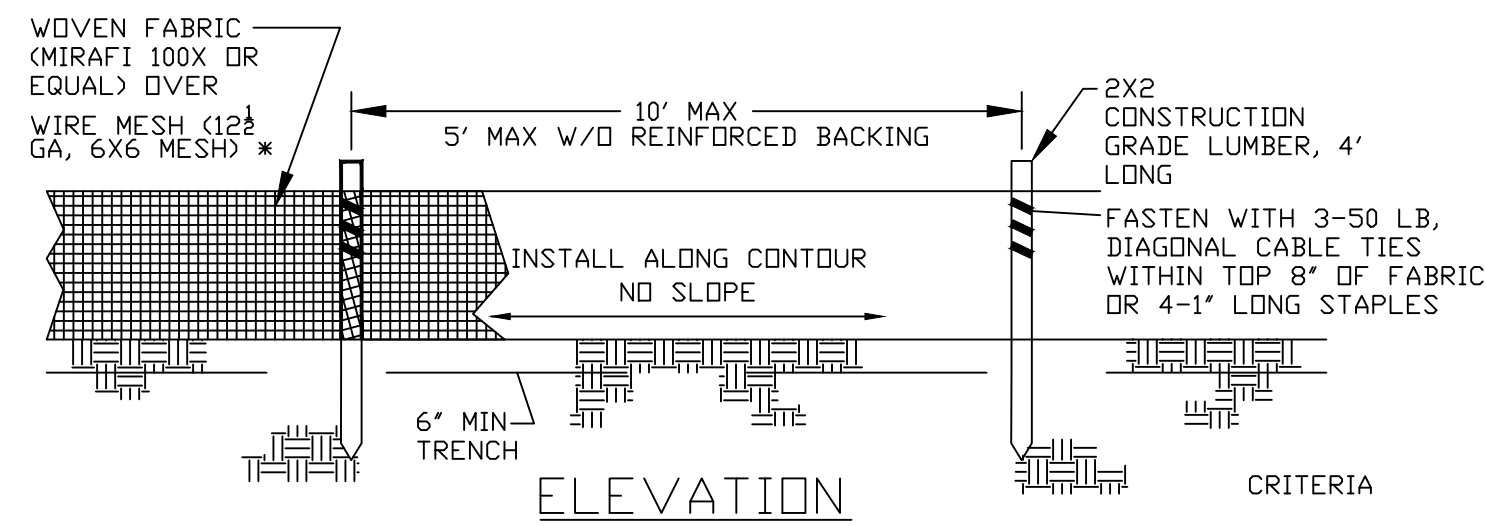


- DESIGN CRITERIA**
1. SILT FENCE FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 2. STRAW BALE BARRIERS FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 3. REFER TO INDIVIDUAL ESC FIGURE FOR INSTALLATION.
 4. TERRACING INCLUDES LOGS, WATTLES & FILTER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

CITY OF O'FALLON
ENGINEERING DEPARTMENT
O'FALLON, MISSOURI

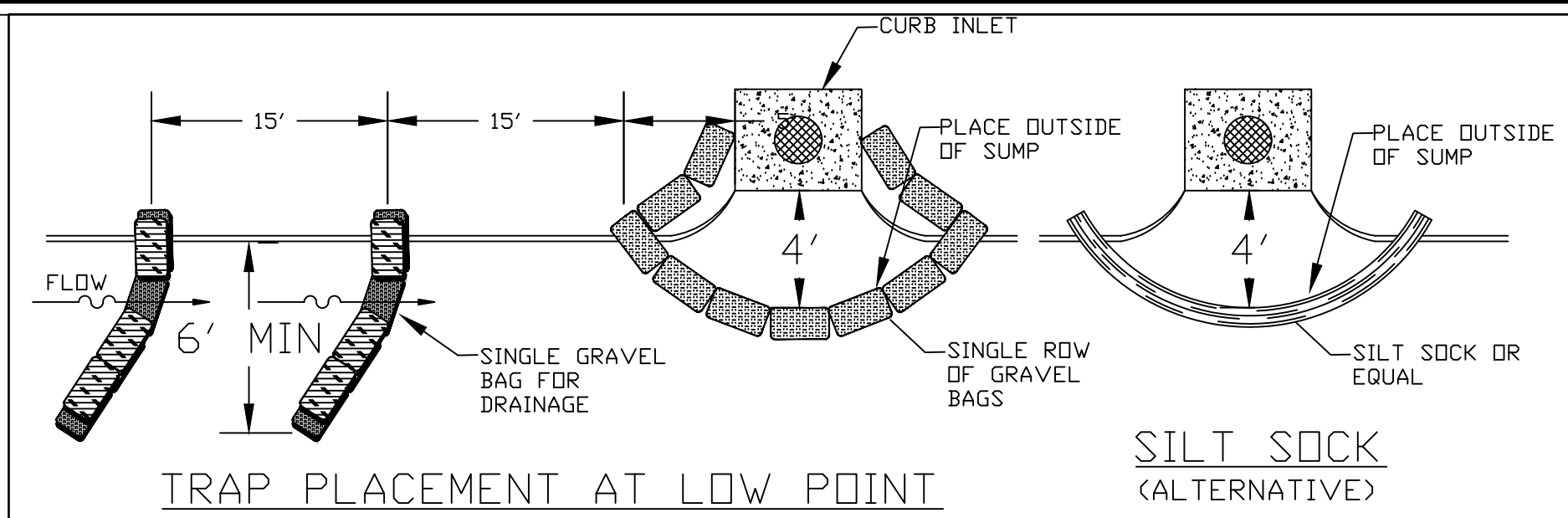
**SPACING CHART
FOR ESC DEVICES**



- CRITERIA**
1. SILT FENCE SHALL BE 24 INCHES HIGH.
 2. SILT FENCE SHALL NOT BE USED FOR CONCENTRATED FLOWS.
 3. GEOSYNTHETIC REINFORCED SILT FENCE BACKING MAY BE USED IN LIEU OF WIRE MESH.
 4. WIRE MESH WILL BE USED AT LOCATIONS SHOWN ON THE APPROVED SWPPP.

CITY OF O'FALLON
ENGINEERING DEPARTMENT
O'FALLON, MISSOURI

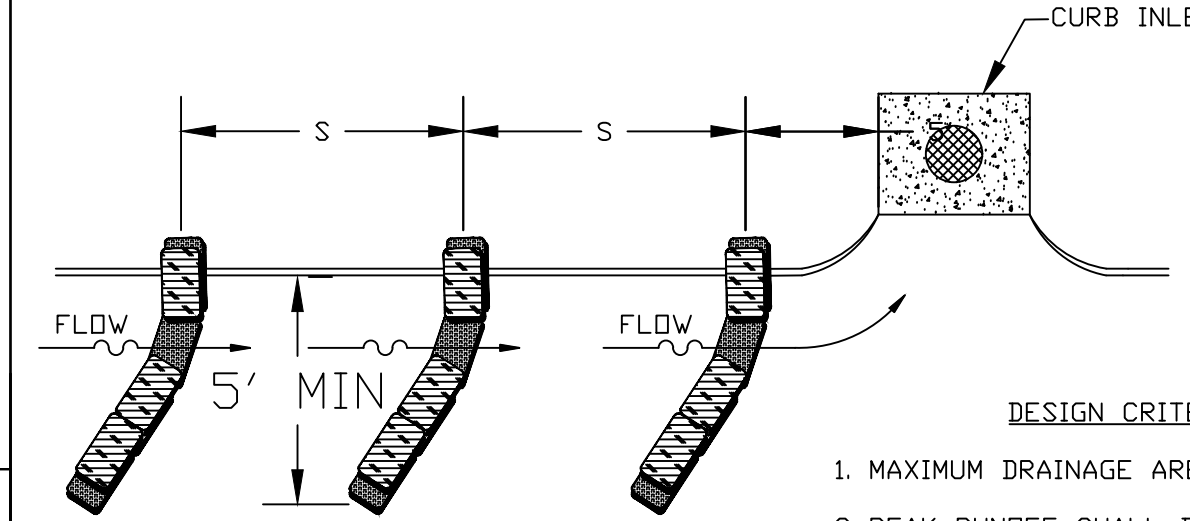
**SILT FENCE INSTALLATION
SHEET FLOW (ONLY)**



**SILT SOCK
(ALTERNATIVE)**

SPACING OF TRAPS

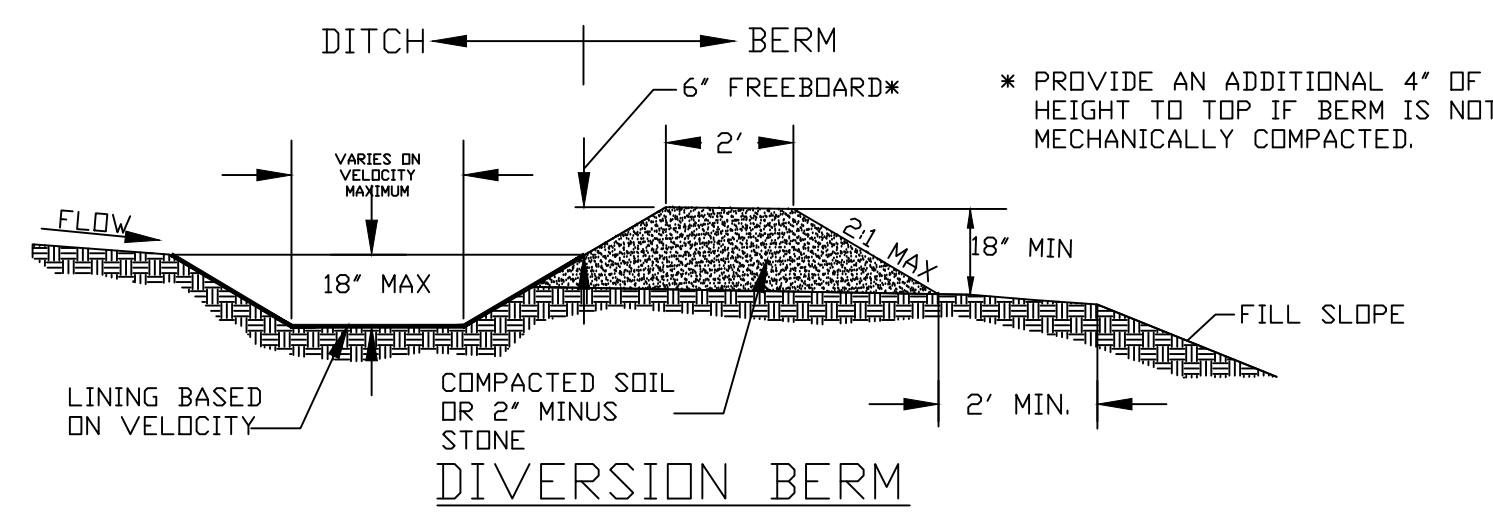
GUTTER SLOPE	S
1/2"	15'
2/3"	20'
3/4"	15'
3/4" MAX.	10'



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

CITY OF O'FALLON
ENGINEERING DEPARTMENT
O'FALLON, MISSOURI

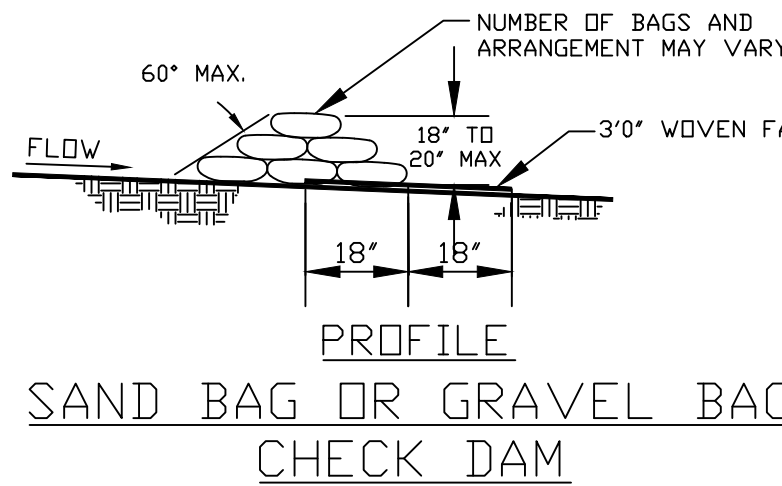
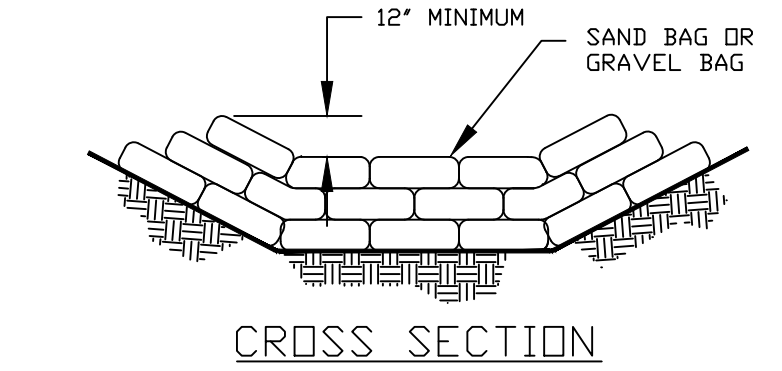
**CURB INLET
PROTECTION**



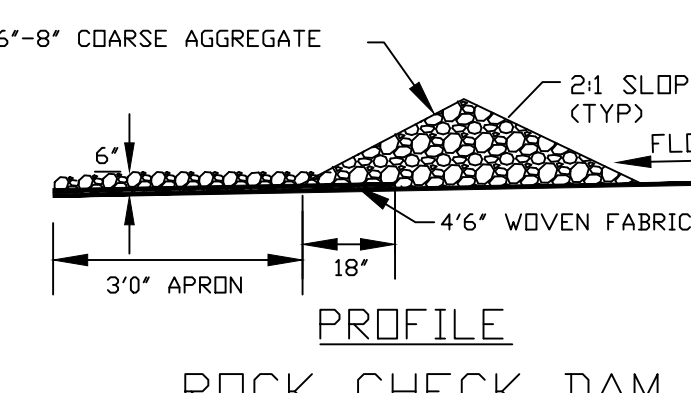
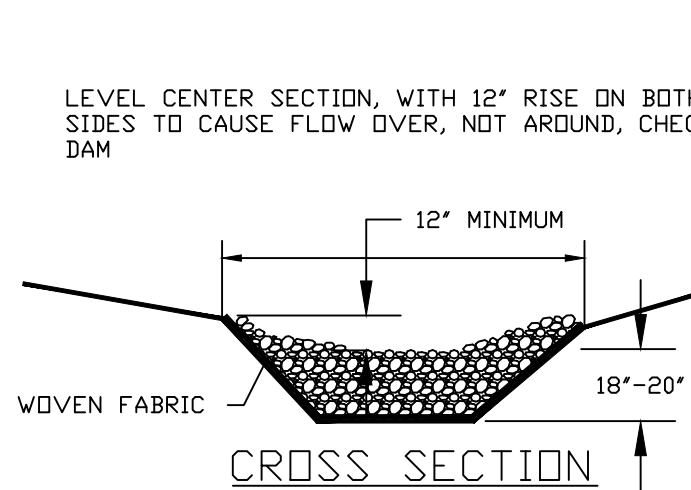
- DESIGN CRITERIA**
1. DIVERSIONS SHALL BE USED FOR DRAINAGE AREAS ≤ 3 ACRES.
 2. DIVERSION CHANNELS SHALL BE DESIGNED TO CONVEY THE 6-MO STORM AT NON-EROSIVE VELOCITIES.
 3. CRITICAL LOCATIONS SHALL BE DESIGNED FOR THE 15YR / 20MIN. STORM.
 4. MAXIMUM CHANNEL SLOPE OF 3% WITHOUT CHECK DAMS.
 5. SWALE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

CITY OF O'FALLON
ENGINEERING DEPARTMENT
O'FALLON, MISSOURI

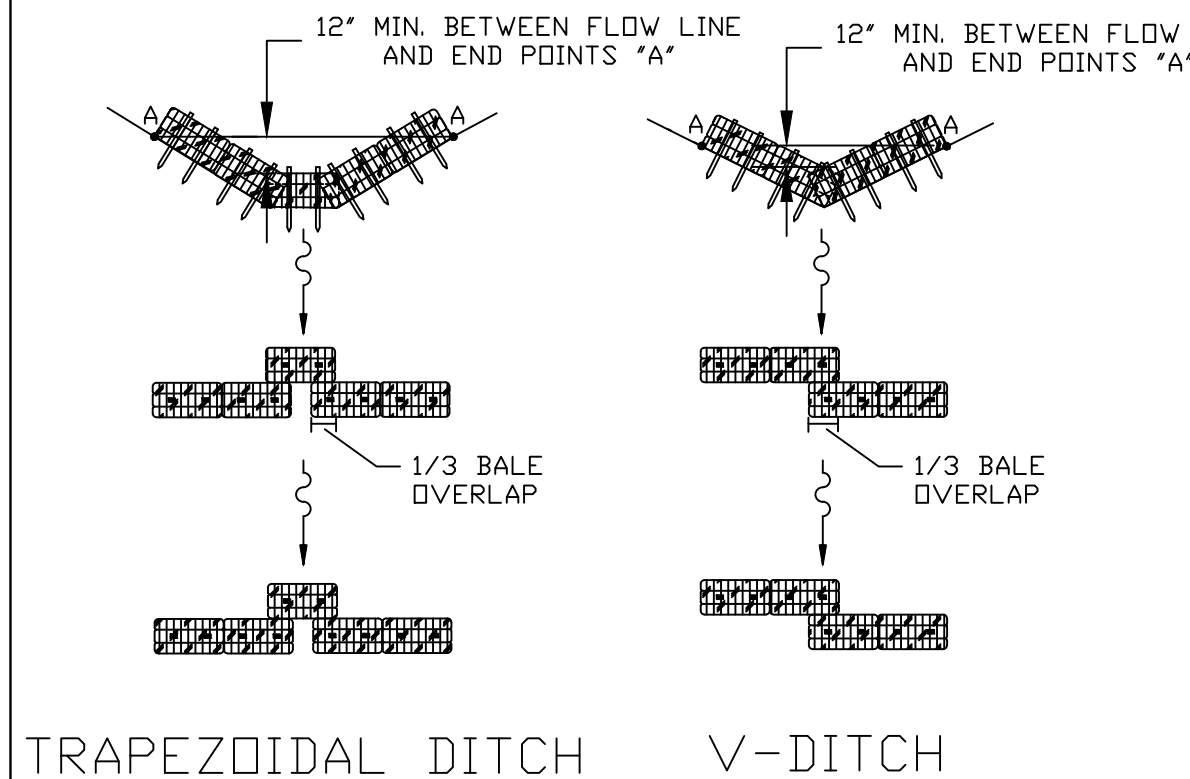
**DIVERSION BERMS
+ DIKES**



GRAVEL BAG



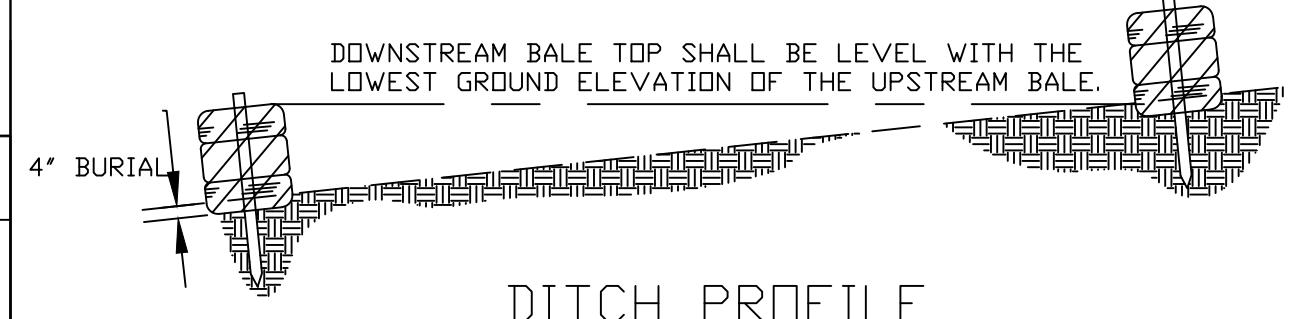
CHECK DAMS



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

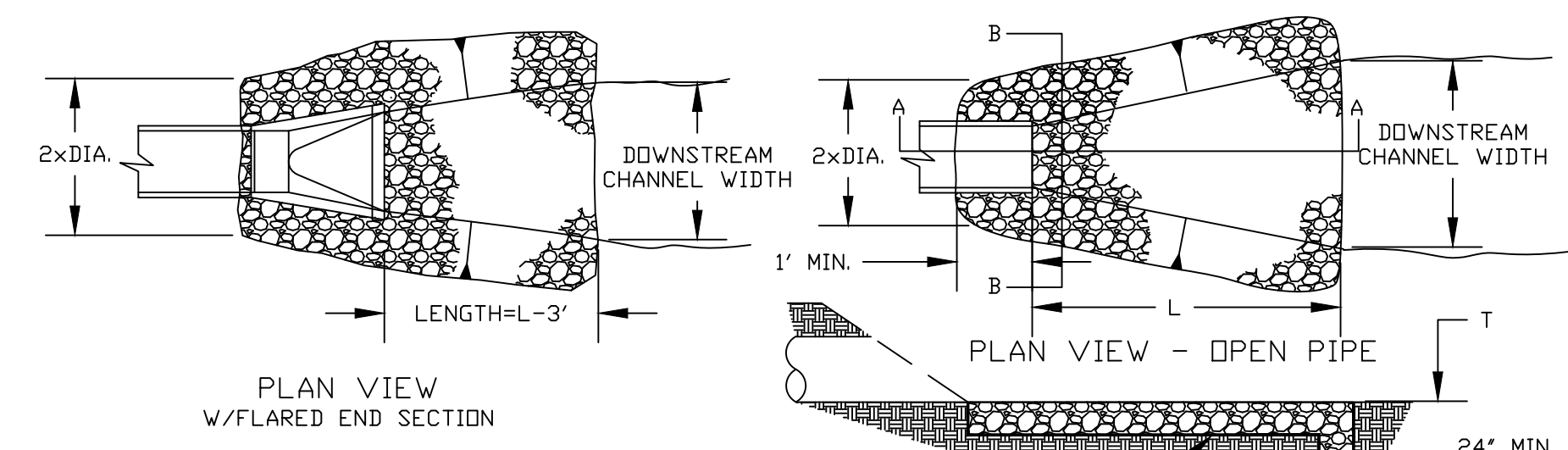
CHECK DAM SPACING

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



CITY OF O'FALLON
ENGINEERING DEPARTMENT
O'FALLON, MISSOURI

**STRAW BALE
CHECK DAM**



**PLAN VIEW
W/ FLARED END SECTION**

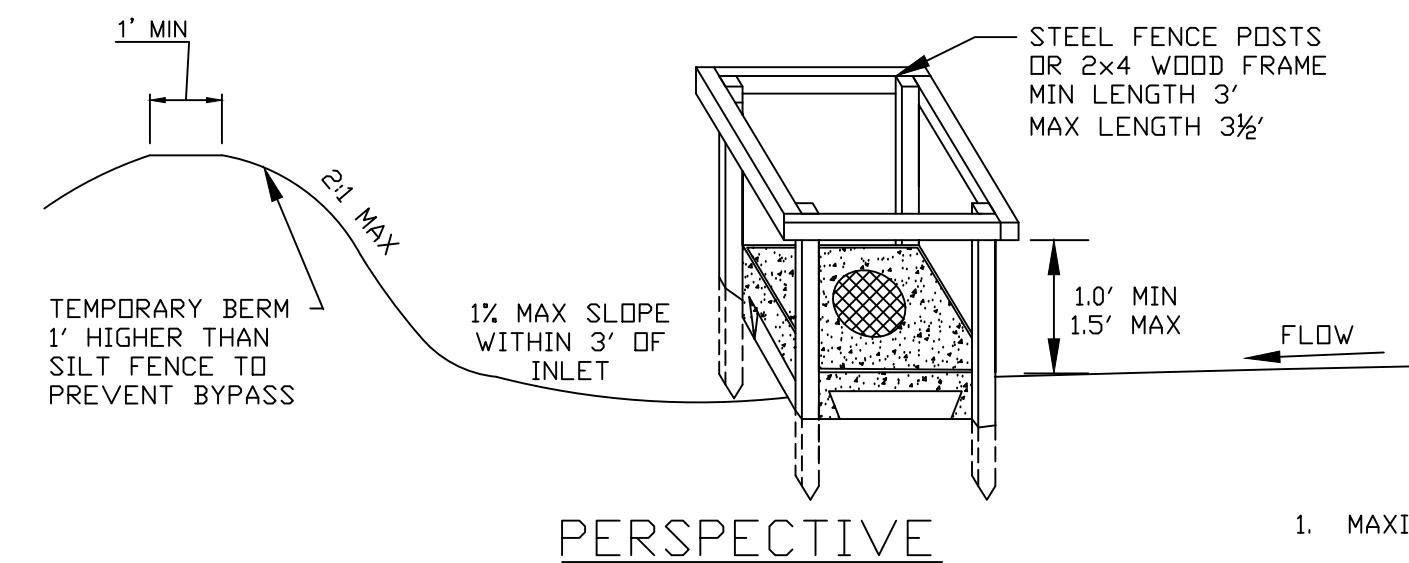
PIPE SIZE	RIPRAP SIZE & APRON DIMENSION			
	VELOCITY < 5 FPS		VELOCITY < 10 FPS	
	ROCK SIZE	APRON DIM	ROCK SIZE	APRON DIM
	d ₅₀	d _{max}	T	L
(inch)	(inch)	(inch)	(inch)	(ft)
12	5	9	15	12
15	5	9	15	14
18-24	5	9	15	16
27-30	5	9	15	18
36-42	8	14	24	22
48-54	8	14	24	26
60-66	12	18	27	34
72-84	15	24	30	42
96	18	27	30	50

d₅₀ - NOMINAL DIAMETER
d_{max} - MAXIMUM DIAMETER
T - THICKNESS
L - LENGTH

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

CITY OF O'FALLON
ENGINEERING DEPARTMENT
O'FALLON, MISSOURI

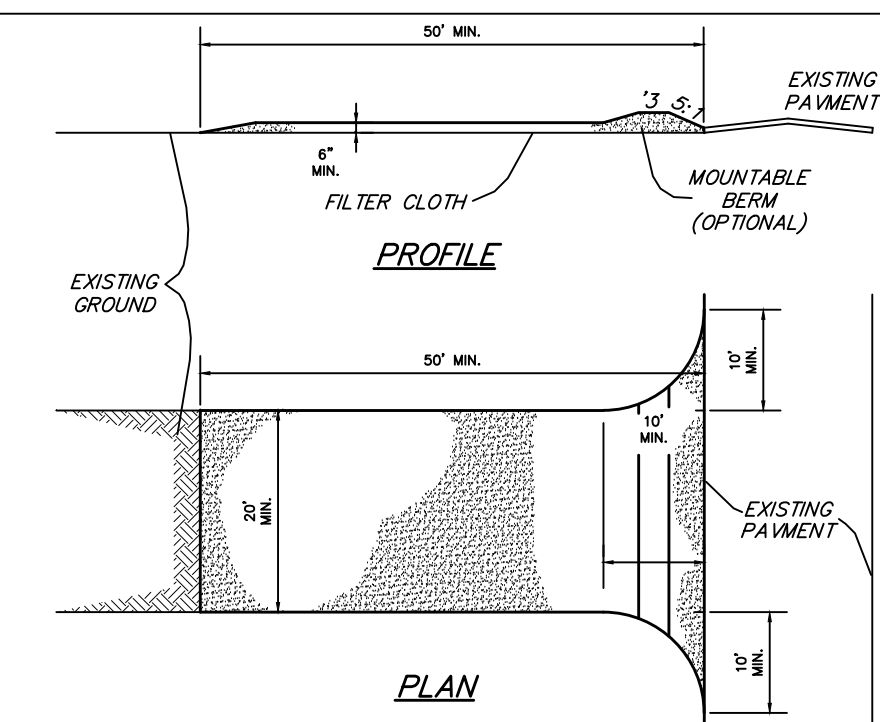
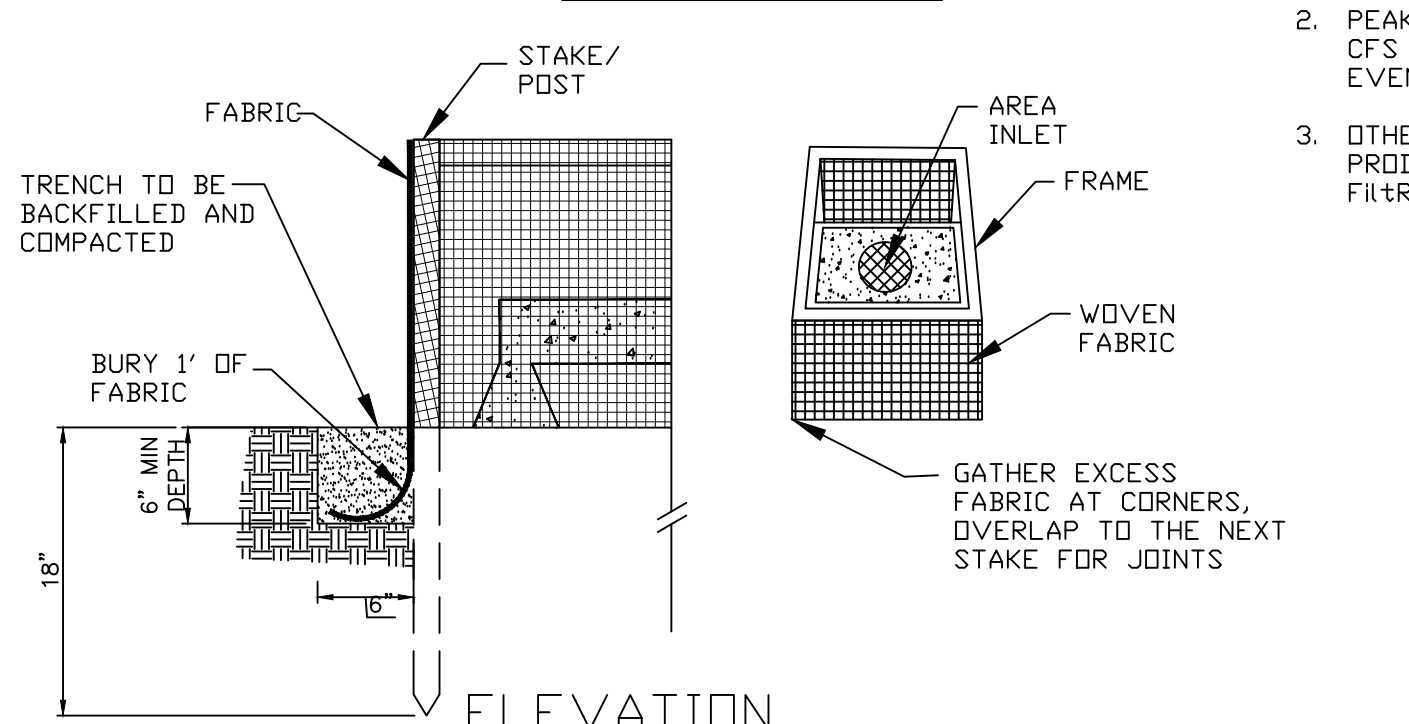
**TEMPORARY OUTLET
PIPE DISCHARGE
PROTECTION**



- DESIGN CRITERIA**
1. MAXIMUM DRAINAGE AREA - 1 ACRE.
 2. PEAK RUNOFF SHALL NOT EXCEED 2 CFS BASED ON A 6-MONTH STORM EVENT.
 3. OTHER SEDIMENT PROTECTION PRODUCTS MAY BE USED, SUCH AS FILTER FENCE™.

CITY OF O'FALLON
ENGINEERING DEPARTMENT
O'FALLON, MISSOURI

**AREA INLET
PROTECTION
FABRIC DROP**



CONSTRUCTION SPECIFICATIONS

1. Stone Size - Use 2\"/>

STABILIZED CONSTRUCTION ENTRANCE/WASHDOWN AREA
NOT TO SCALE

ENGINEERS SEAL DOES NOT APPLY TO CITY OF O'FALLON DETAILS ON THIS SHEET.

PROJECT TITLE:

**SOMMERSET
ESTATES**

ENGINEERING
PLANNING
SURVEYING

221 Point West Blvd.
St. Charles, MO 63301
636-928-5562
FAX 636-928-1718



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.

REVISIONS

DATE	BY	COMMENTS
09/02/21	PWSD#2 & DUCKETT	COMMENTS
09/10/21	PWSD#2	COMMENTS
09/27/21	CITY	COMMENTS
10/11/21	CITY	COMMENTS

Developer / Owner:

KAPB, L.L.C.
410 Crestview Drive
O'Fallon, MO 63366
636-272-4200

EROSION CONTROL DETAILS

P+Z No. #21-003778

Approval Date: 09/23/2021

City No. RSP21-000005

Page No.

17 of 23

Box Project # 21-18318 Issue Date: 07/28/2021