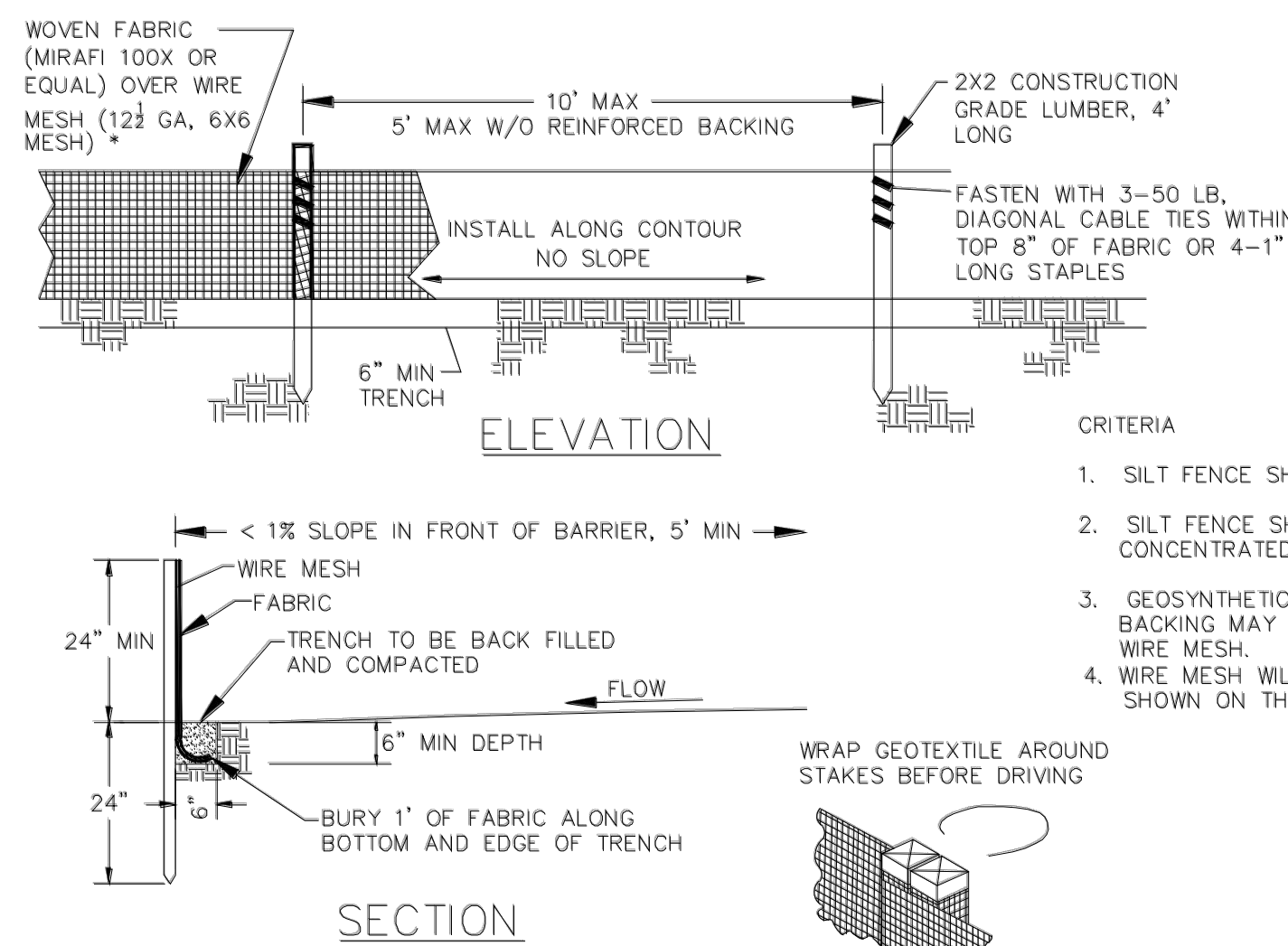


- DESIGN CRITERIA**
- SILT FENCE FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 - STRAW BALE BARRIERS FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 - REFER TO INDIVIDUAL ESC FIGURE FOR INSTALLATION.
 - TERRACING INCLUDES LOGS, WATTLES & FILTER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

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O'FALLON, MISSOURI**

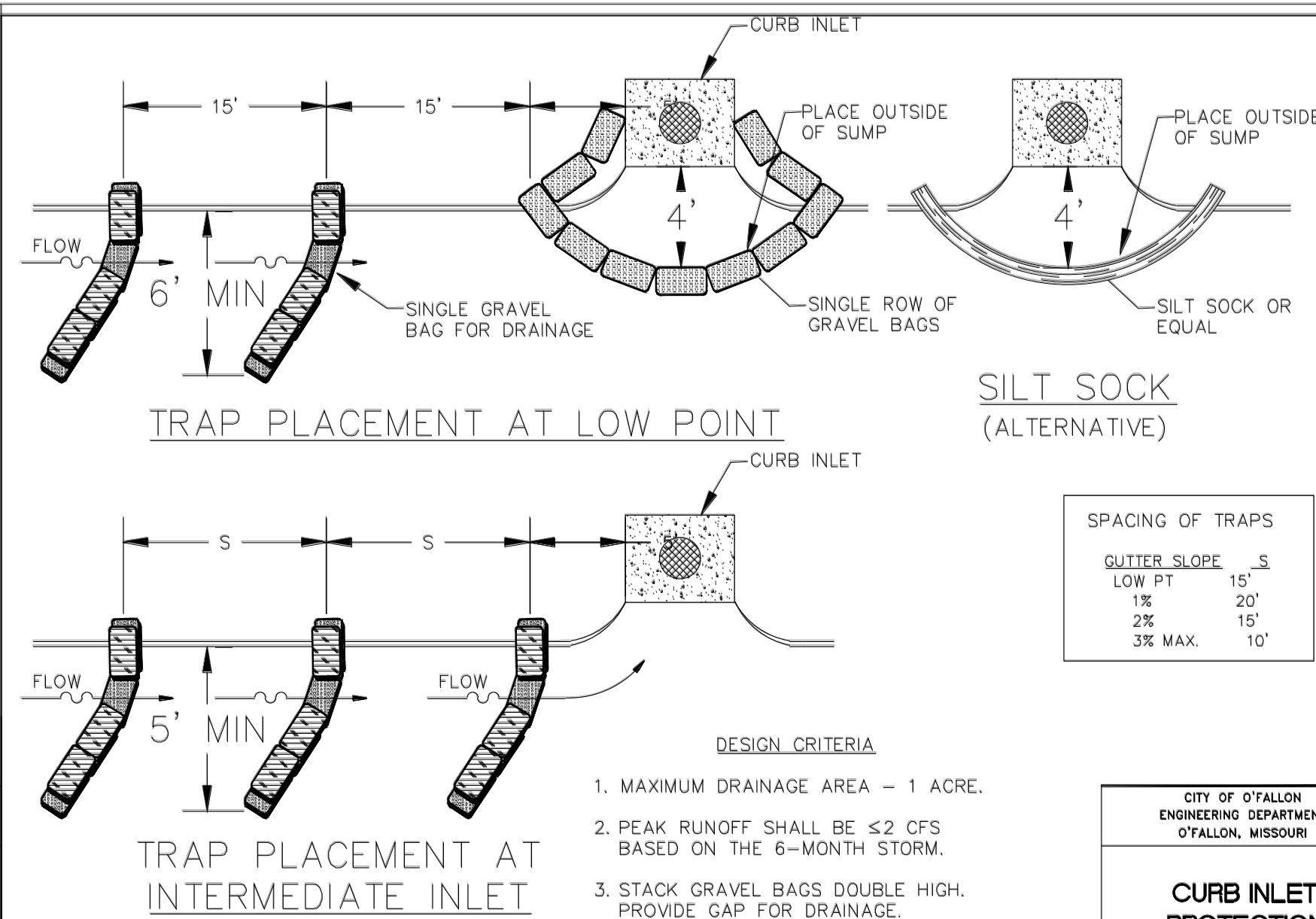
**SPACING CHART
FOR ESC DEVICES**



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

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O'FALLON, MISSOURI**

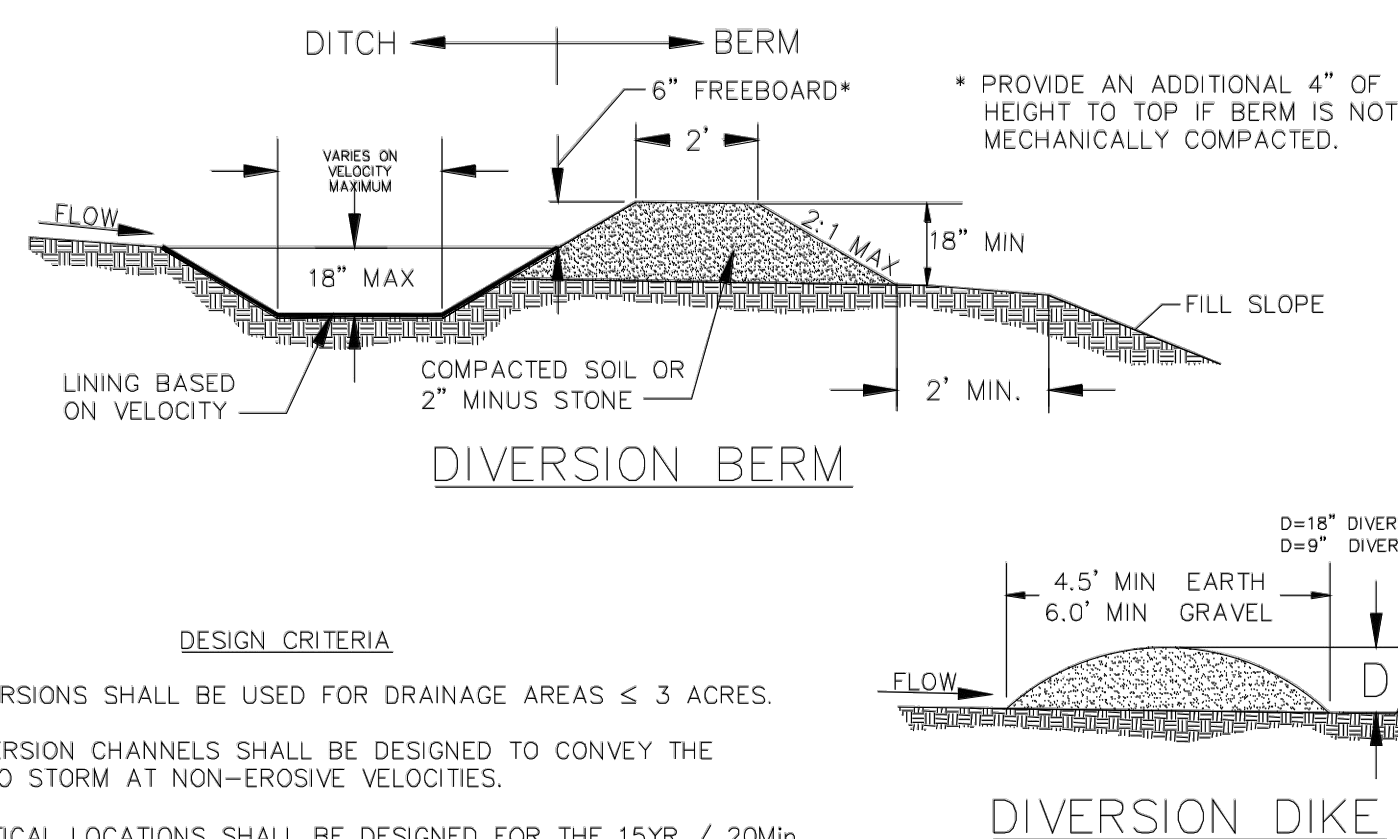
**SILT FENCE INSTALLATION
SHEET FLOW (ONLY)**



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

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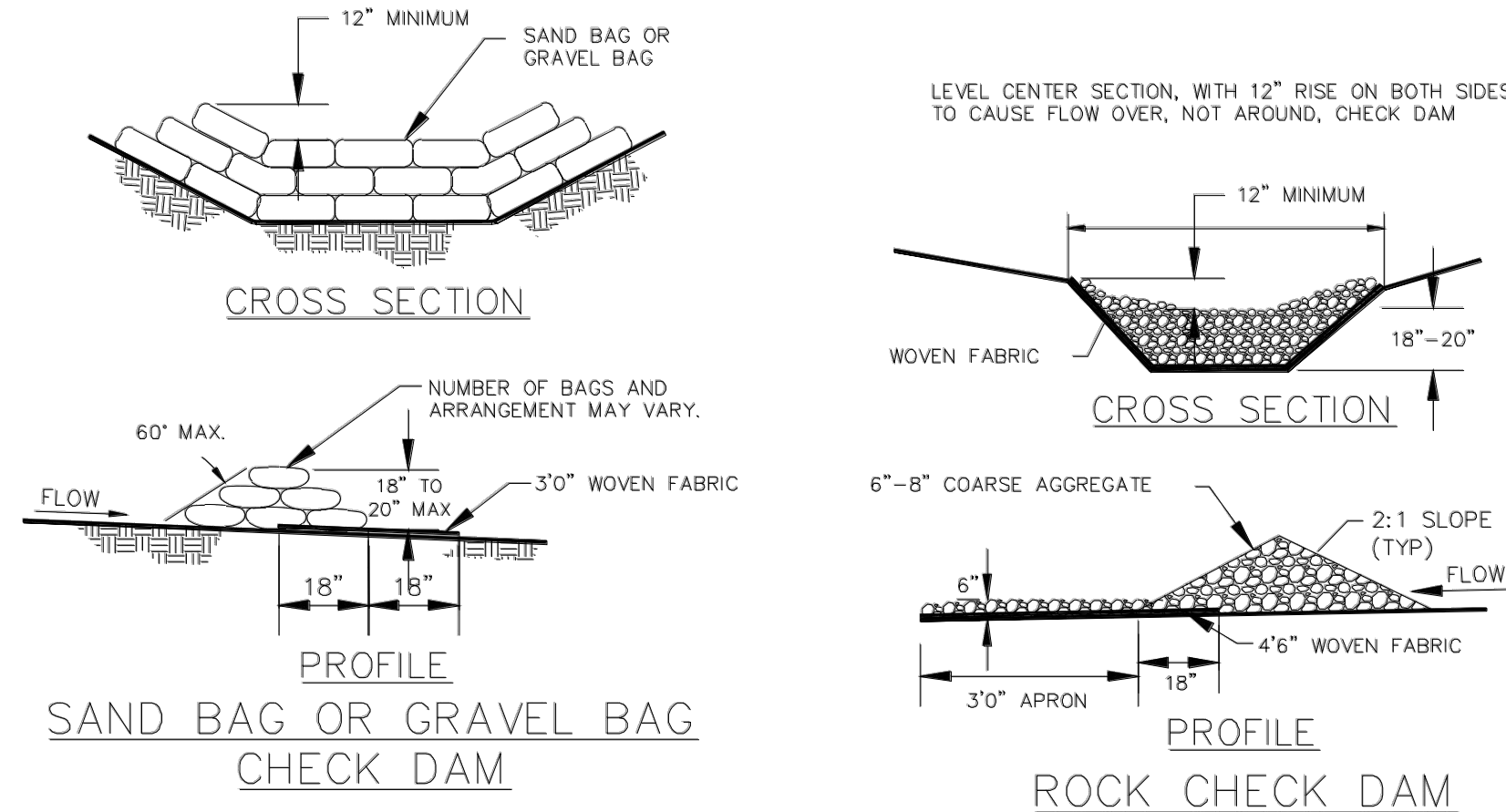
**CURB INLET
PROTECTION**



- DESIGN CRITERIA**
- DIVERSIONS SHALL BE USED FOR DRAINAGE AREAS <= 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.

**CITY OF O'FALLON
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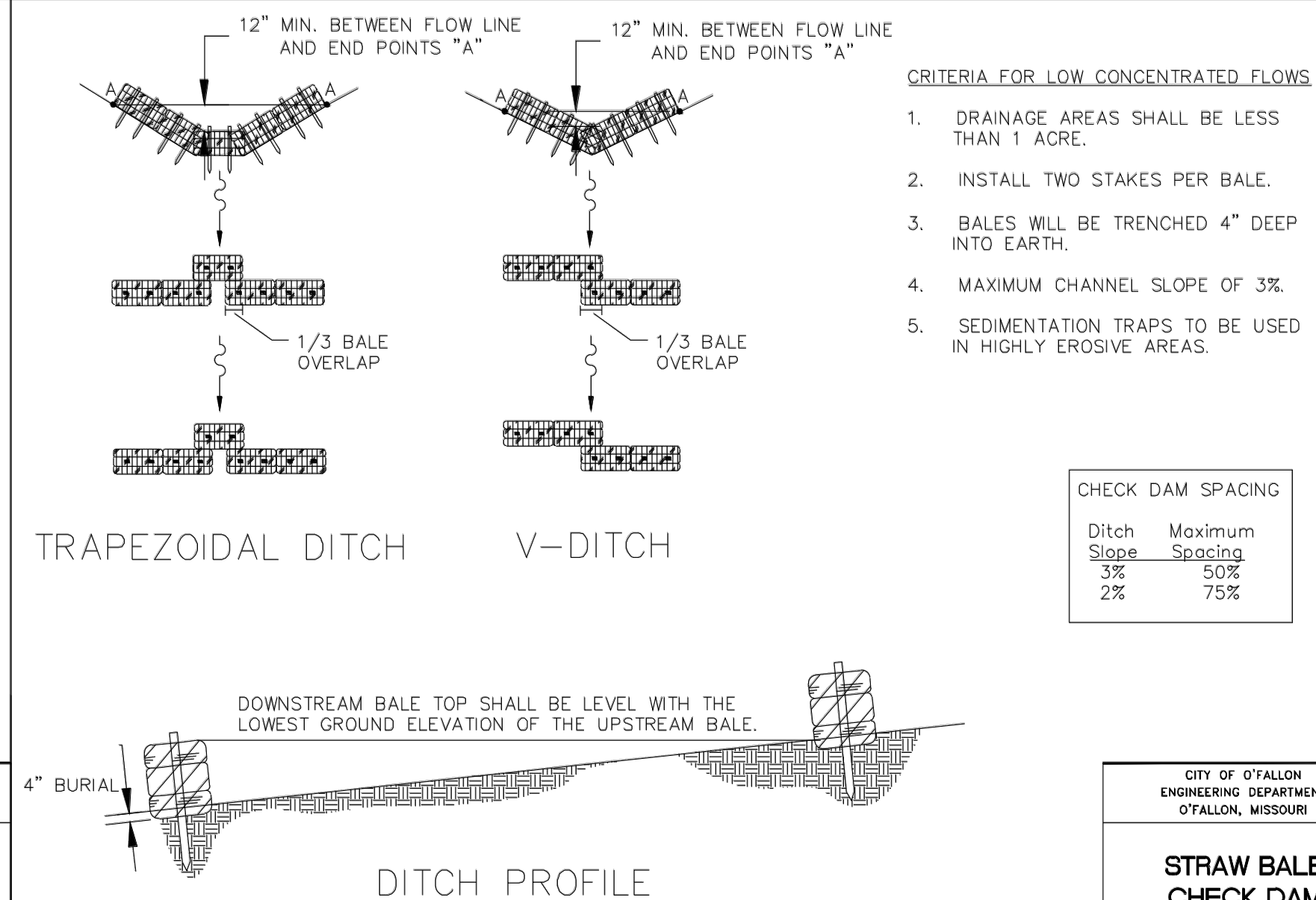
**DIVERSION BERMS
+ DIKES**



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

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CHECK DAMS



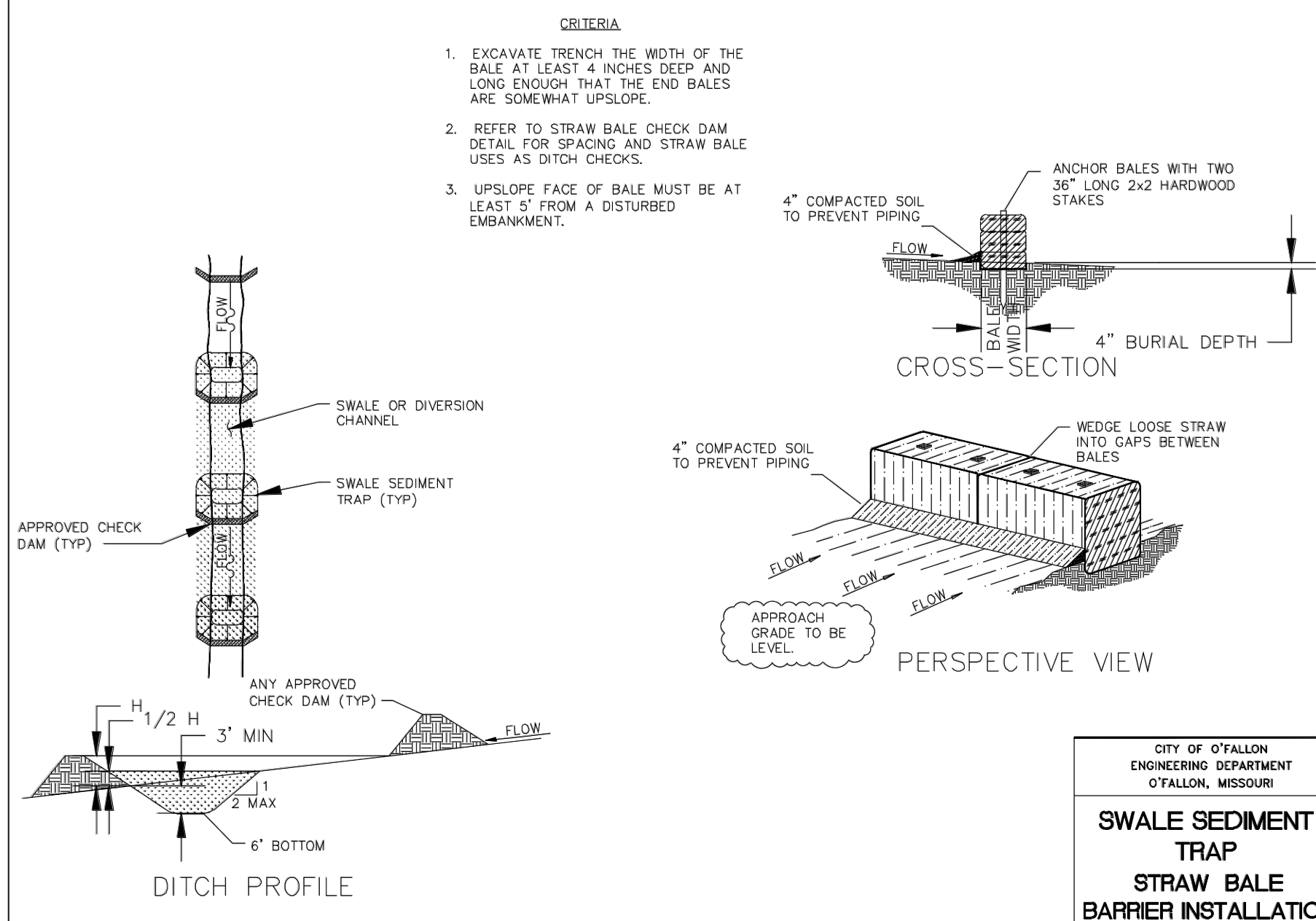
- CRITERIA FOR LOW CONCENTRATED FLOWS**
- DRAINAGE AREAS SHALL BE LESS THAN 1 ACRE.
 - INSTALL TWO STAKES PER BALE.
 - BALES WILL BE TRENCHED 4" DEEP INTO EARTH.
 - MAXIMUM CHANNEL SLOPE OF 3%.
 - SEDIMENTATION TRAPS TO BE USED IN HIGHLY EROSION AREAS.

CHECK DAM SPACING

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

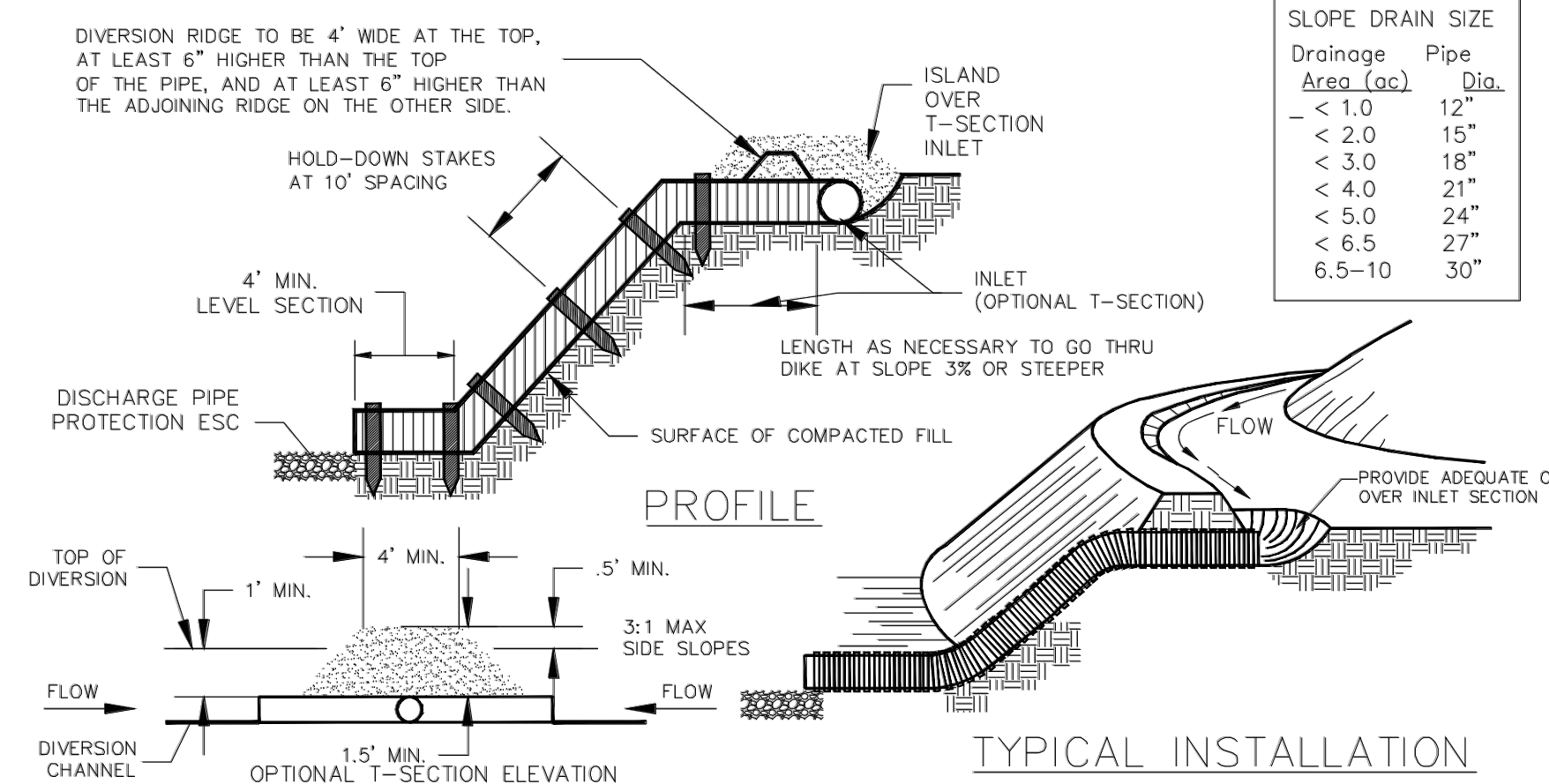
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ENGINEERING DEPARTMENT
O'FALLON, MISSOURI**

**STRAW BALE
CHECK DAM**



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ENGINEERING DEPARTMENT
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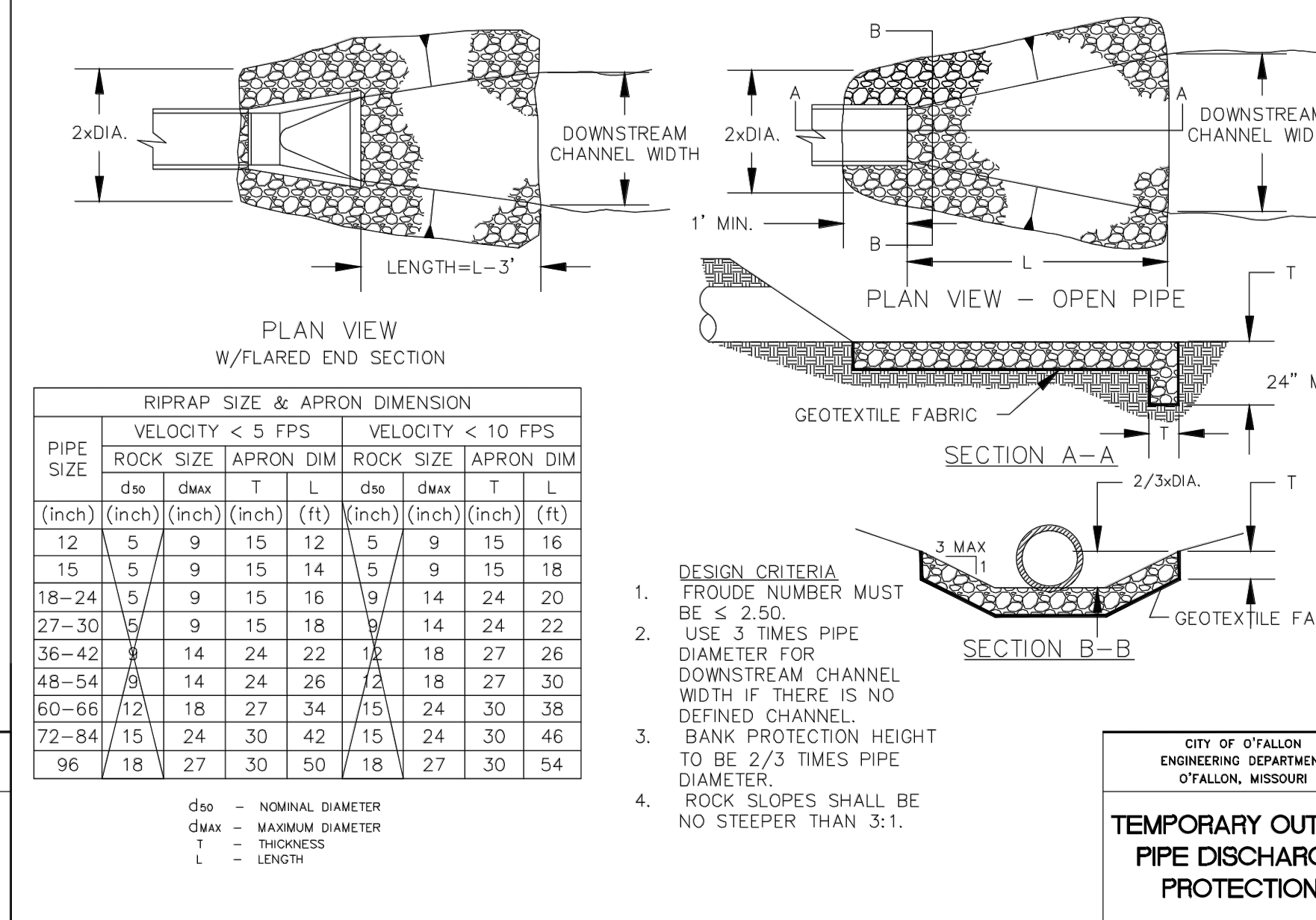
**SWALE SEDIMENT
TRAP
STRAW BALE
BARRIER INSTALLATION**



- 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**



RIPRAP SIZE & APRON DIMENSION

PIPE SIZE	VELOCITY < 5 FPS				VELOCITY < 10 FPS			
	ROCK SIZE	APRON DIM	ROCK SIZE	APRON DIM	ROCK SIZE	APRON DIM	ROCK SIZE	APRON DIM
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	9	14	24	22	12	18	27	26
48-54	9	14	24	26	12	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

- DESIGN CRITERIA**
- FROUDE NUMBER MUST BE <= 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.

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

**TEMPORARY OUTLET
PIPE DISCHARGE
PROTECTION**

**PROJECT TITLE
SITE PLAN
FRONTIER INTEGRATED HEALTH
CENTER, INC**

**St. Peters
22 Richmond Center Court
St. Peters, MO 65276
Phone (636) 397-1211
Fax (636) 397-1104
www.prs8.com**

**Pickett
Ray & Silver
Civil Engineering
& Land Surveying
Beyond Standard**

ENGINEERS AUTHORIZATION
BY PROFESSIONAL SEAL FOR PROFESSIONAL ENGINEERING
LIABILITY ON THIS PROJECT IS LIMITED TO THE
SET OF PLANS AUTHORIZED BY THE SEAL, ENGINEER,
AND DATE HEREON ATTACHED. RESPONSIBILITY IS
RESERVED FOR ALL OTHER ENGINEERING PLANS
EMPLOYED IN THIS PROJECT AND SPECIALLY EXCLUDED
HEREON AFTER THIS DATE UNDER REQUIRMENTS.



**WILL SCHEIDT, P.E.
PROFESSIONAL ENGINEER LICENSE 2018007869**

Developer / Owner Information
RJO Enterprises Inc.
2011 Highway K
O'Fallon, Missouri 63366

**P+Z No. 19-000007
City No. 19-002258**

**EROSION
Page No. 12 of 14**

*** 11/12/2019 IMPROVEMENT PLAN SUBMITTAL - NOT APPROVED ***