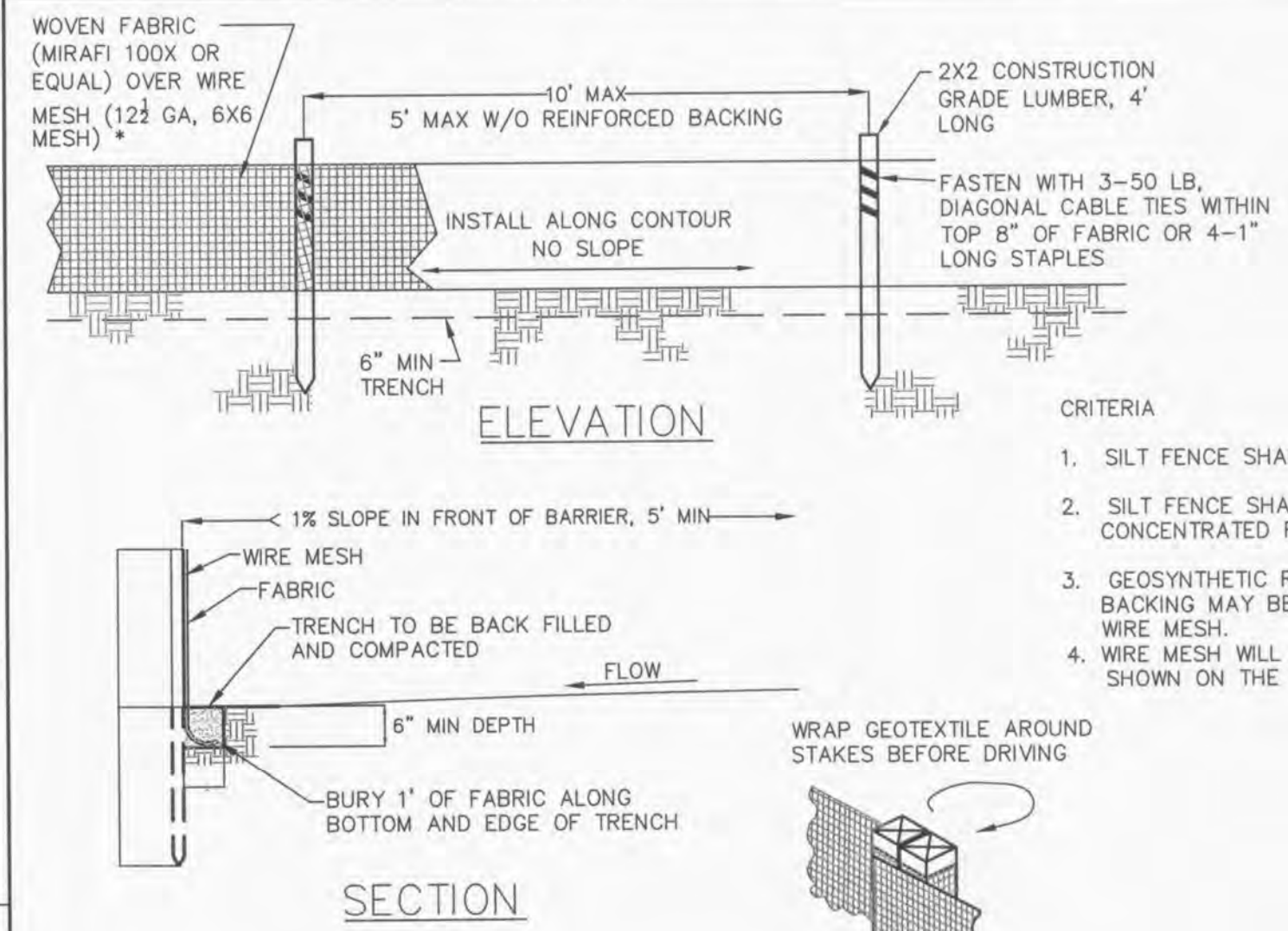


- DESIGN CRITERIA**
- SILT FENCE FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 - STRAW BALE BARRIERS FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 - REFER TO INDIVIDUAL ESC FIGURE FOR INSTALLATION.
 - TERRACING INCLUDES LOGS, WATTLES & FILTER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

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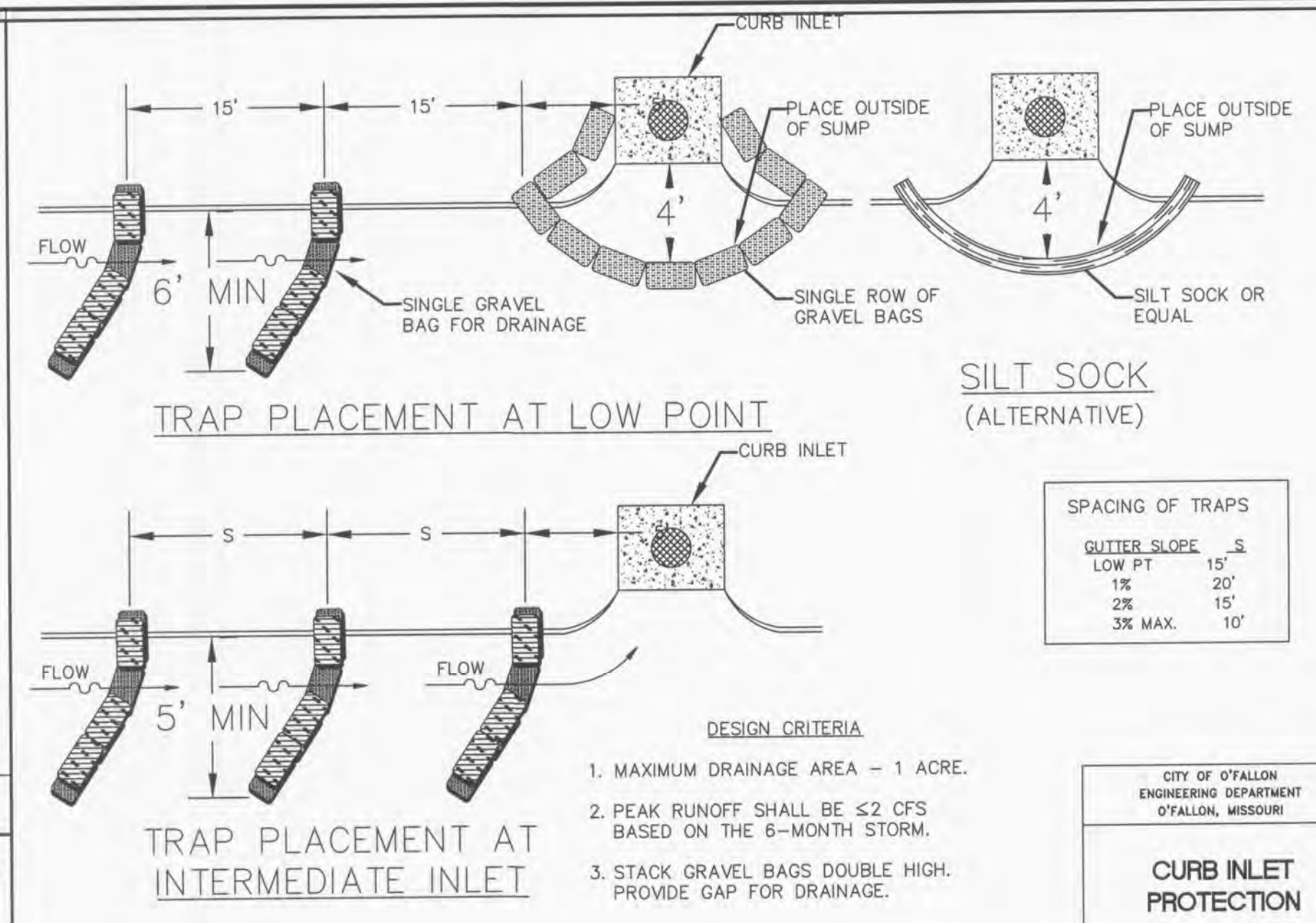
**SPACING CHART
FOR ESC DEVICES**



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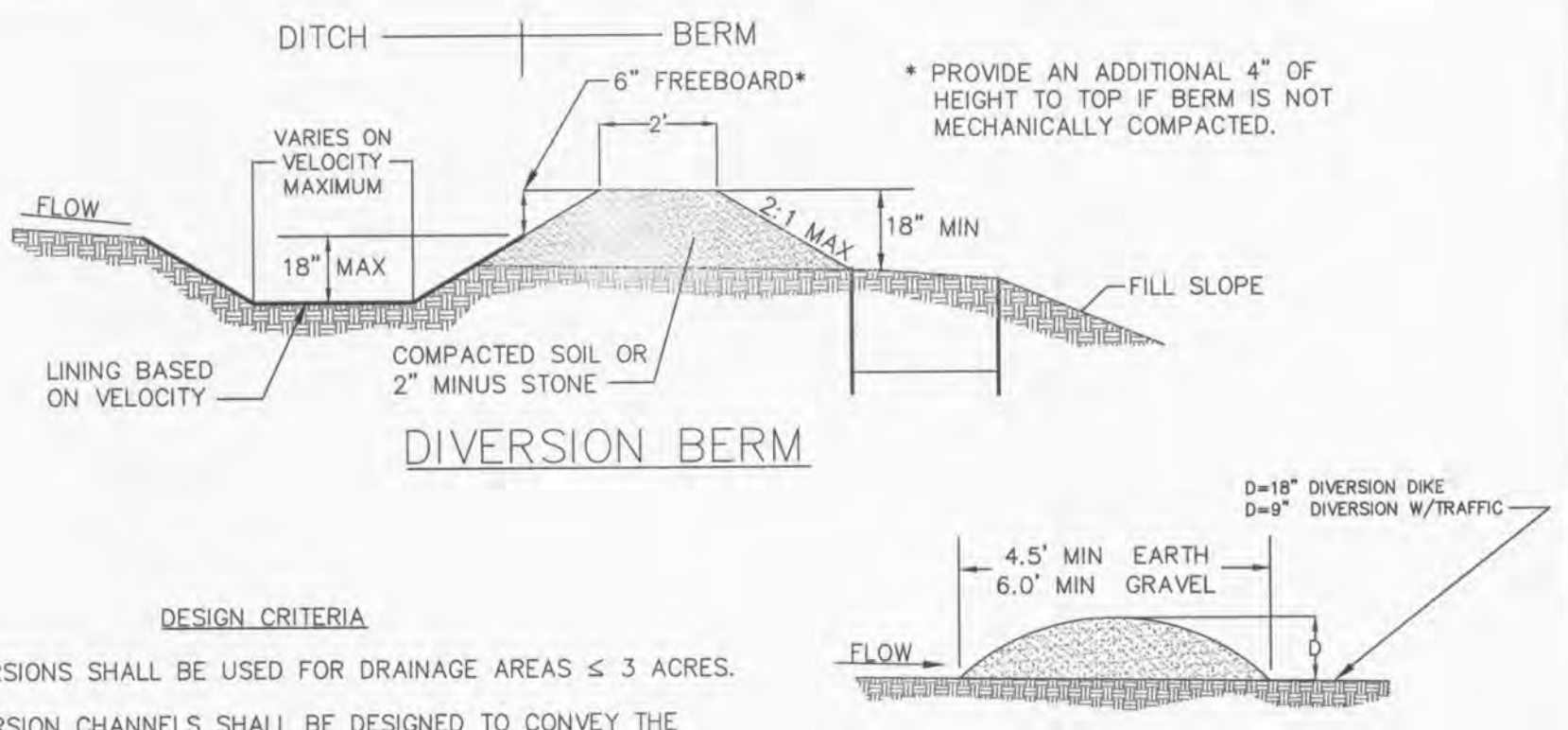
**SILT FENCE INSTALLATION
SHEET FLOW (ONLY)**



- 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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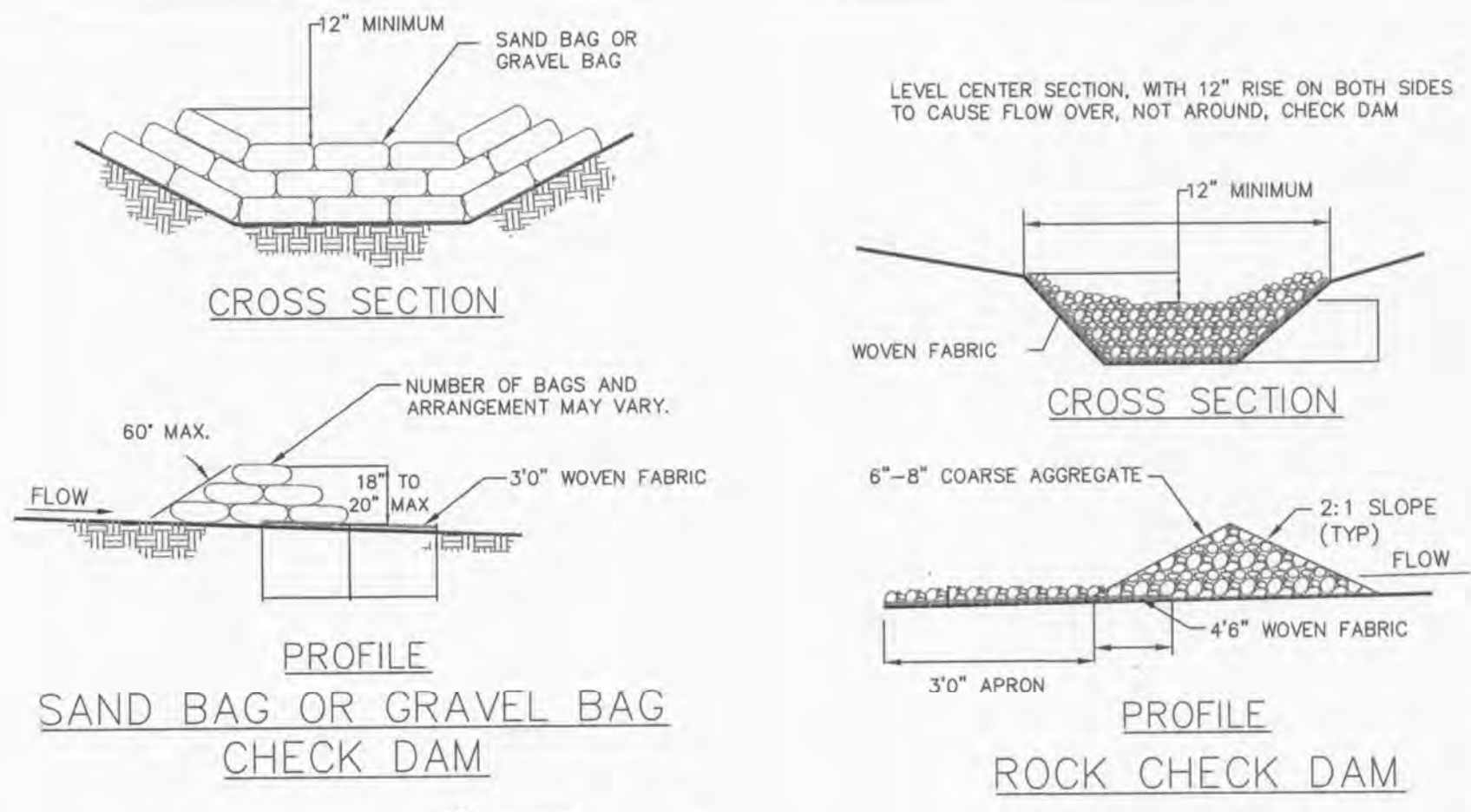
**CURB INLET
PROTECTION**



- 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.

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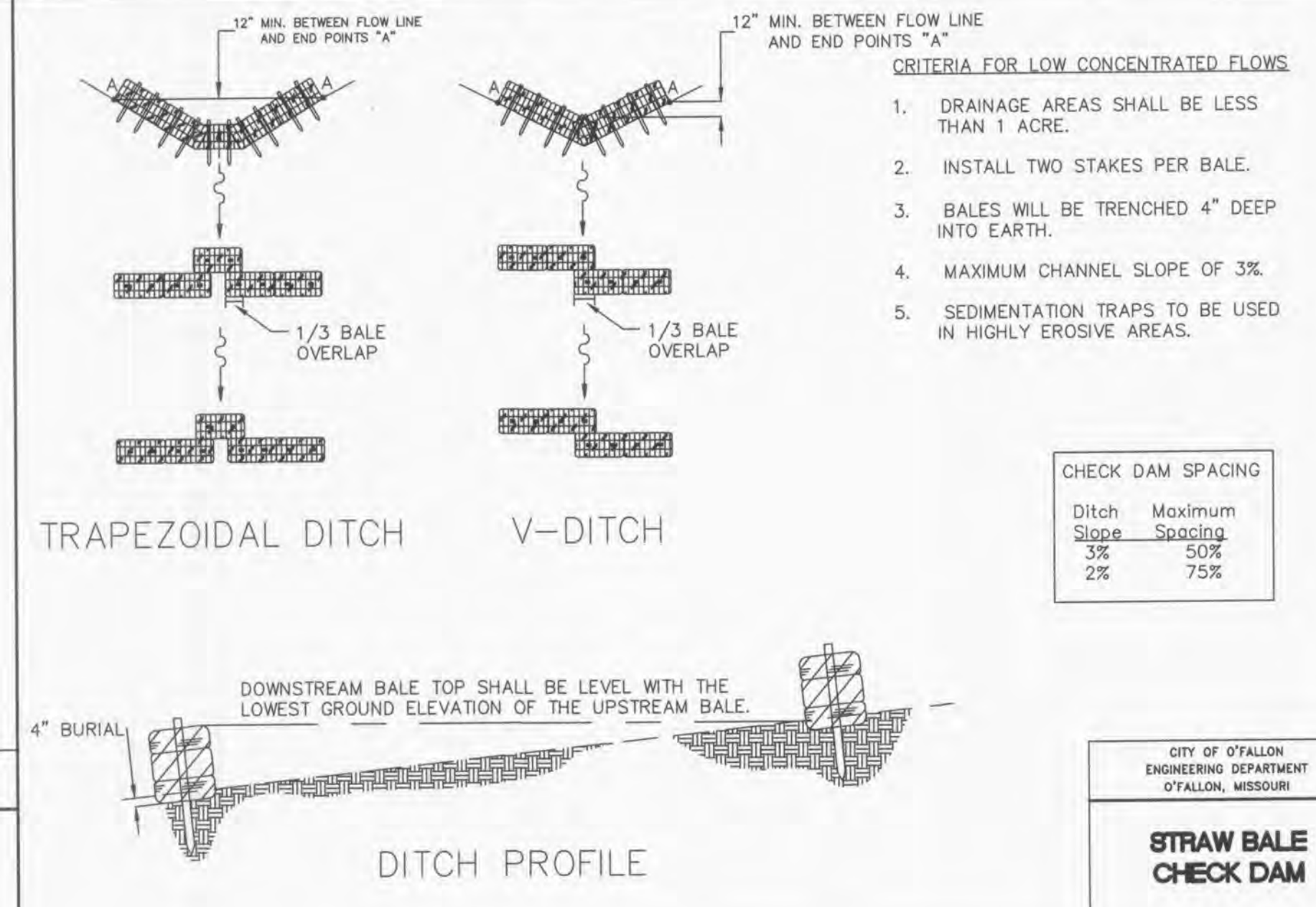
**DIVERSION BERMS
+ DIKES**



- 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



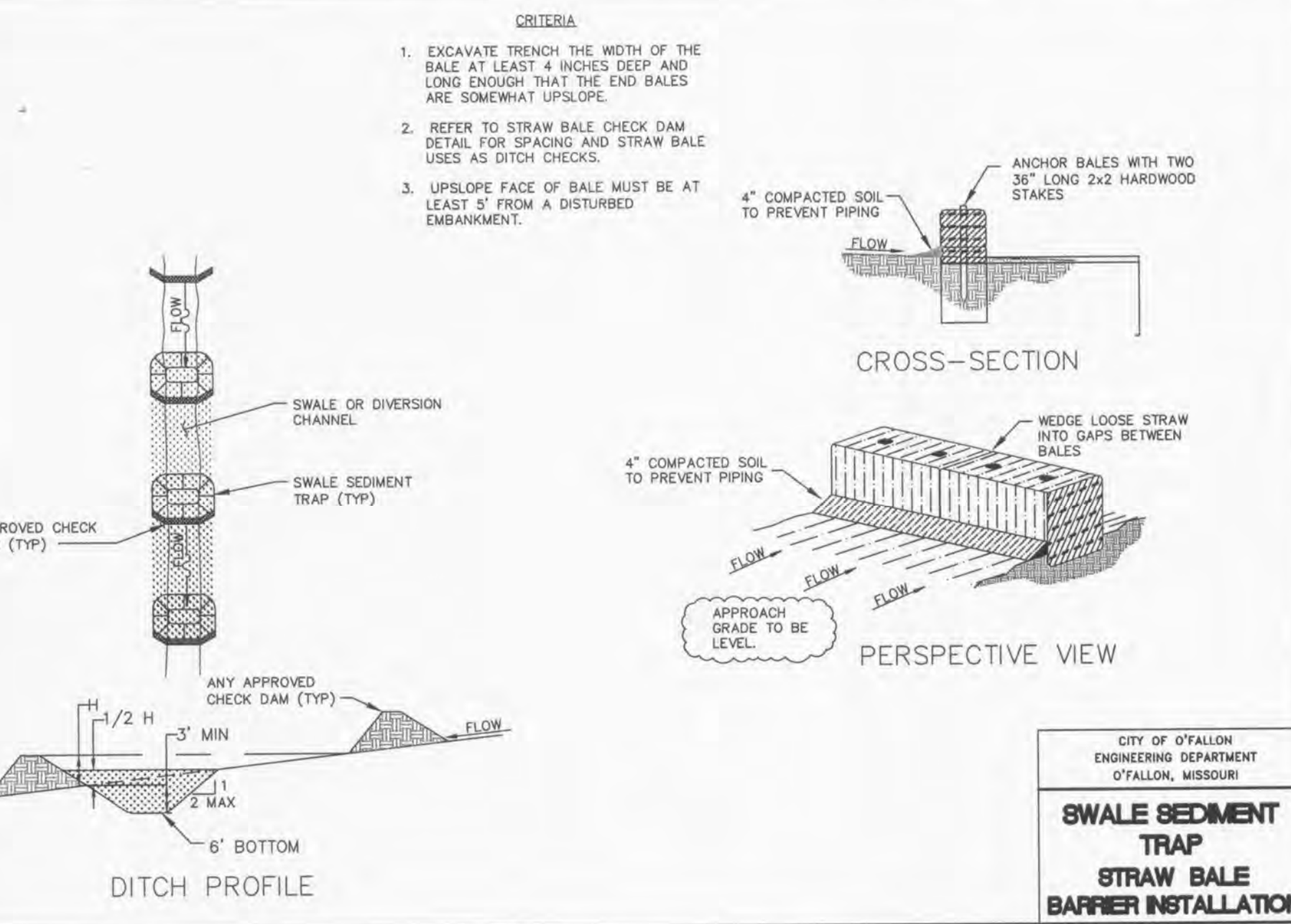
- CRITERIA FOR LOW CONCENTRATED FLOWS**
- DRAINAGE AREAS SHALL BE LESS THAN 1 ACRE.
 - INSTALL TWO STAKES PER BALE.
 - BALES WILL BE TRENCHED 4" DEEP INTO EARTH.
 - MAXIMUM CHANNEL SLOPE OF 3%.
 - SEDIMENTATION TRAPS TO BE USED IN HIGHLY EROSION AREAS.

CHECK DAM SPACING

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

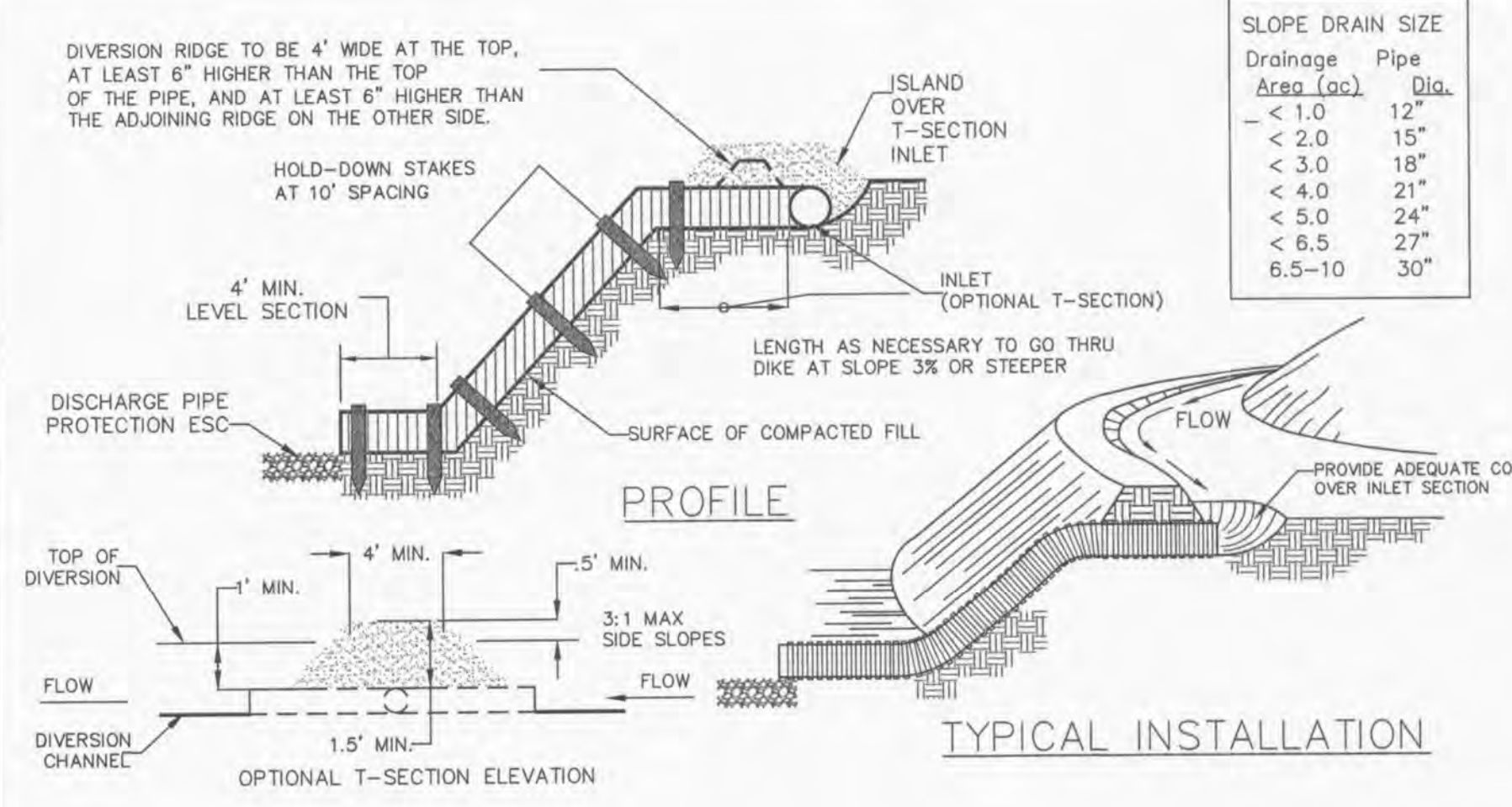
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**STRAW BALE
CHECK DAM**



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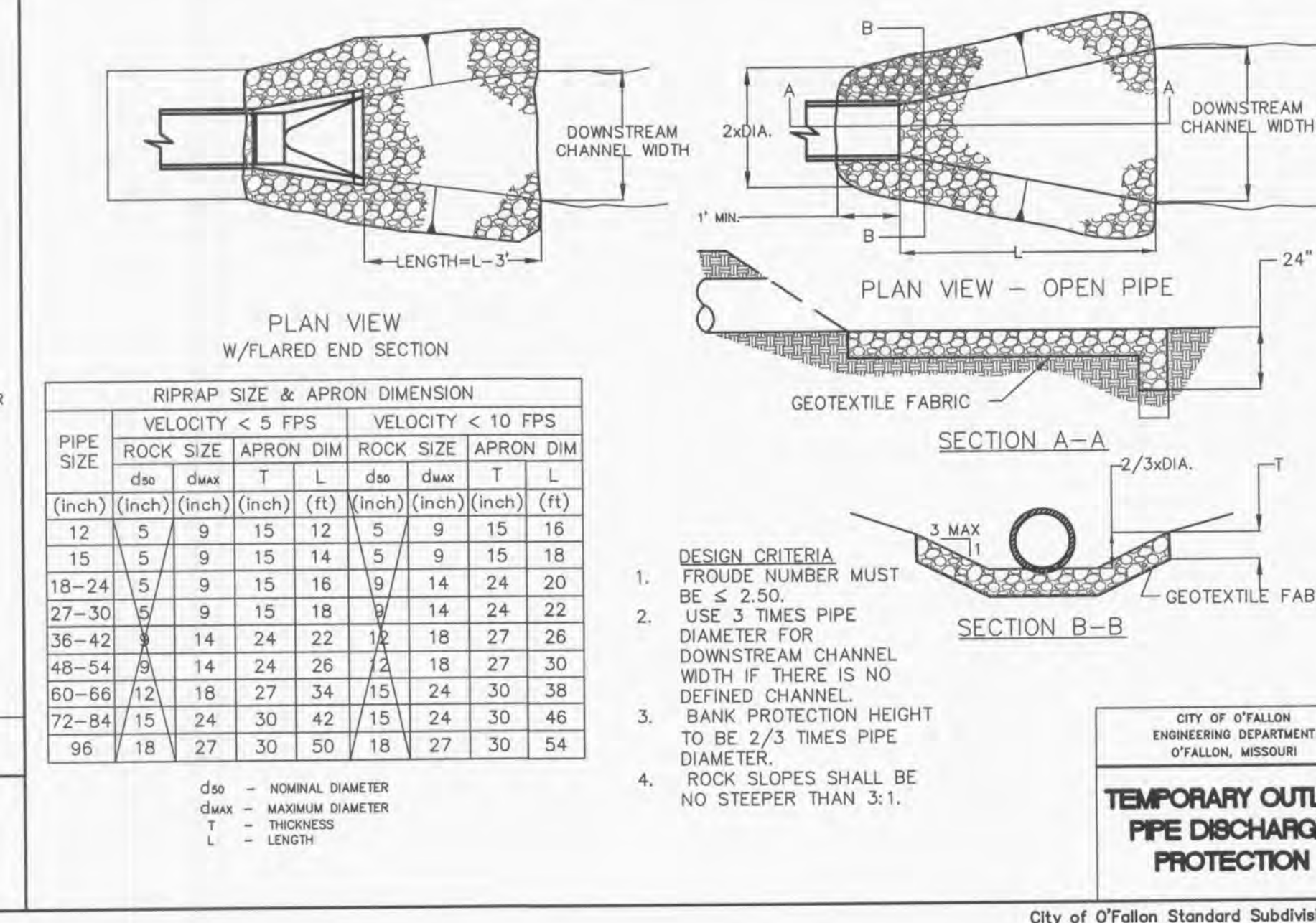
**SWALE SEDIMENT
TRAP
STRAW BALE
BARRIER INSTALLATION**



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

- 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.

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O'FALLON, MISSOURI

**TEMPORARY OUTLET
PIPE DISCHARGE
PROTECTION**

PROJECT TITLE
BROOKSIDE VILLAGE A

PROJECT TITLE
PICKETT, RAY & SILVER INC
CIVIL ENGINEERING, LAND SURVEYING,
AND NATURAL RESOURCES SERVICES
Ernstson
St. Peters
22 Richmond Center Court
St. Peters, MO 63376
Phone (636) 397-1211 Fax (636) 397-1104
www.prs3.com 1-800-708-3918

DESIGNER AUTHENTICATION
THE RESPONSIBILITY FOR PROFESSIONAL ENGINEERING LIABILITY ON THIS PROJECT IS SOLELY LIMITED TO THE SET OF PLANS AUTHORIZED BY THE SEAL, SIGNATURE, AND DATE HEREON ATTACHED. RESPONSIBILITY IS EXCLUDED FOR ALL OTHER ENGINEERING PLANS ENCLOSED IN THIS PROJECT AND SPECIALLY DELIVERED REVISIONS AFTER THIS DATE UNLESS REAUTHENTICATED.
PICKETT, RAY & SILVER, INC. MO LICENSE #000325
DOUGLAS S. TIEMANN
NUMBER E-23345
PROFESSIONAL ENGINEER LICENSE E-23345

Developer / Owner Information
50 YEARS
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O'Fallon, Missouri 63368
OF EXCELLENCE
CITY OF O'FALLON Erosion Control Details

P+Z No. 2603.04
City No.
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