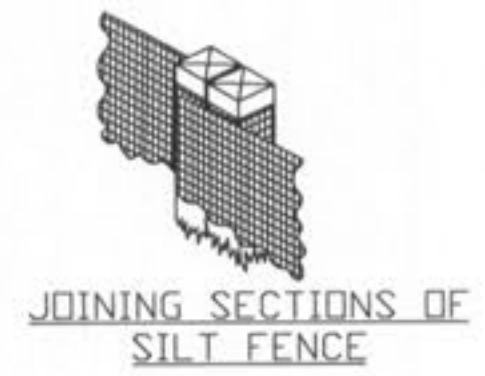
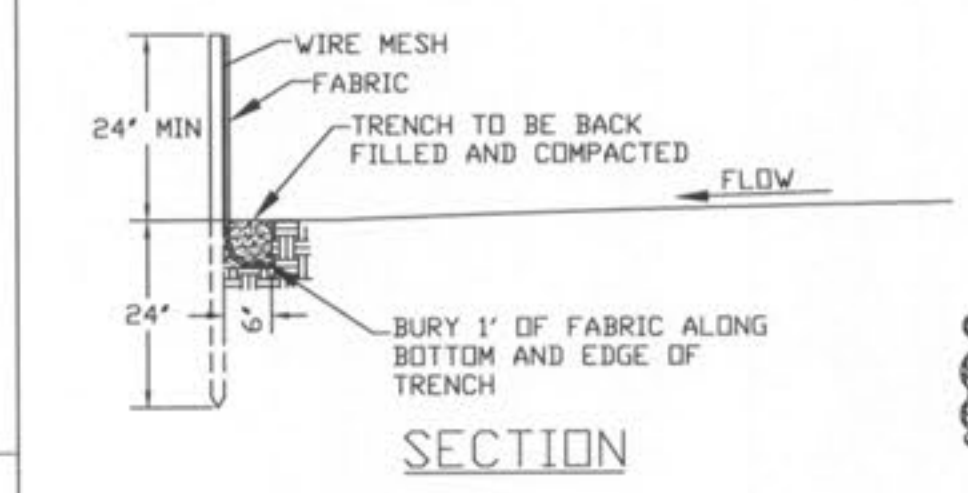
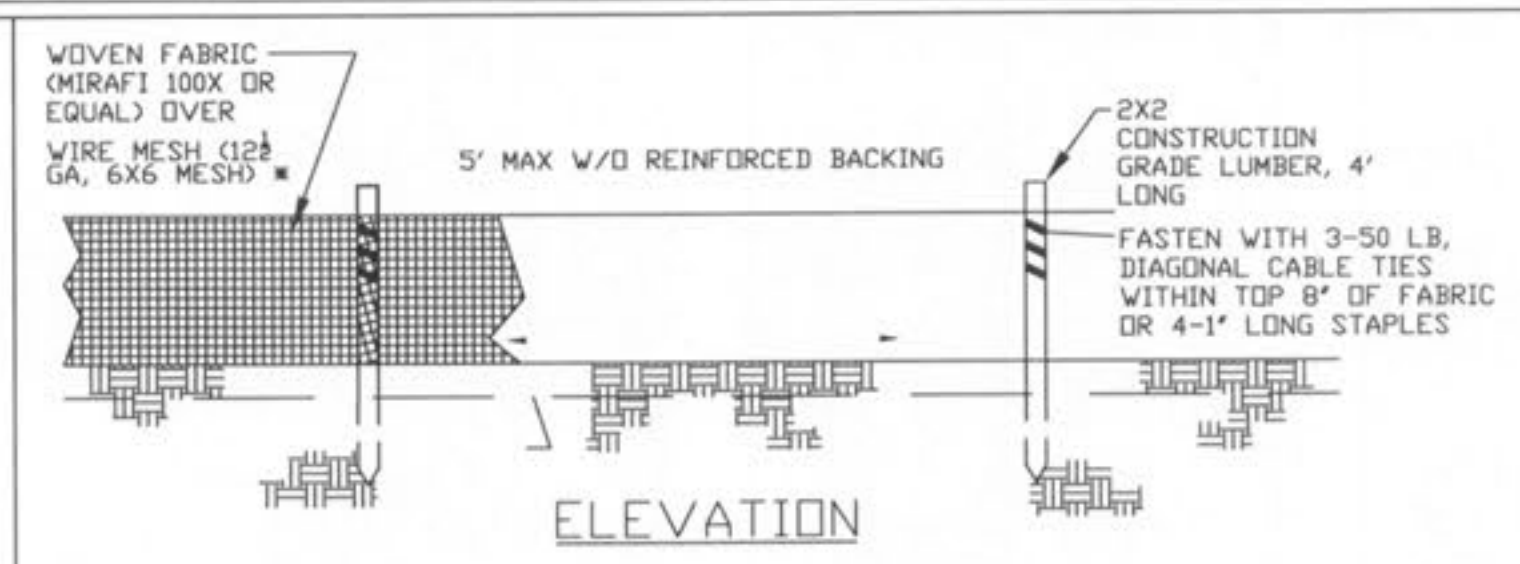


- DESIGN CRITERIA**
1. SILT FENCE FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 2. STRAW BALE BARRIERS FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 3. REFER TO INDIVIDUAL ESC FIGURE FOR INSTALLATION.
 4. TERRACING INCLUDES LOGS, WATTLE & FILTER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

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O'FALLON, MISSOURI

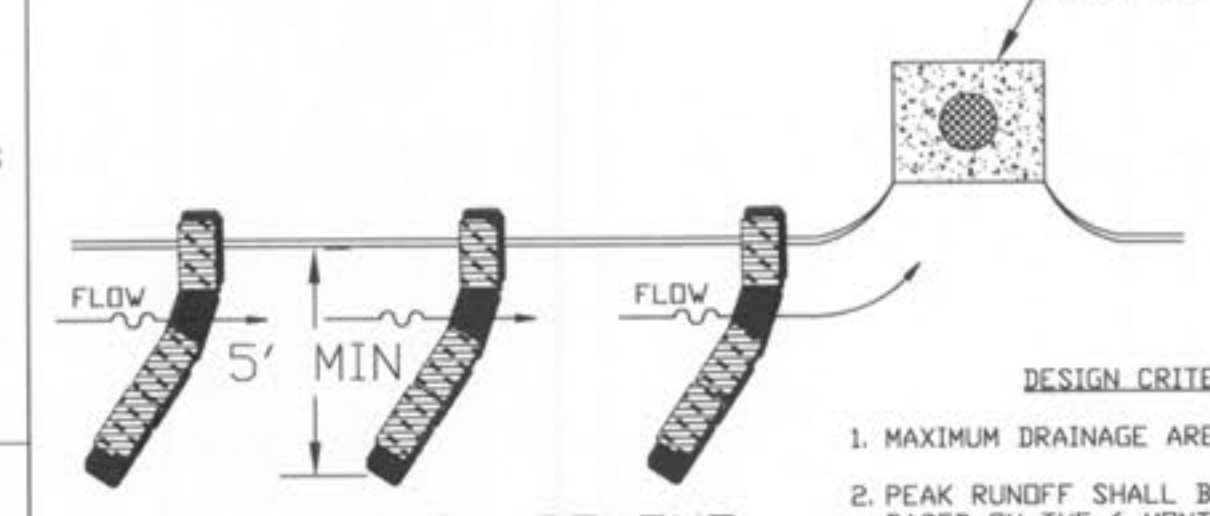
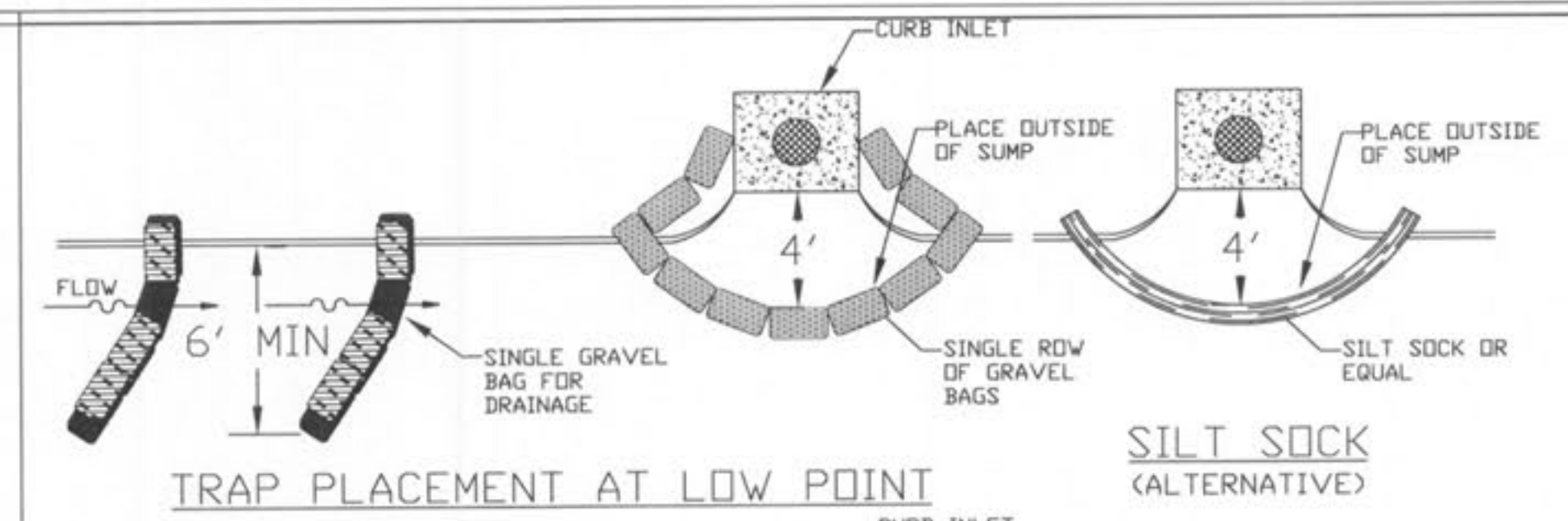
SPACING CHART FOR ESC DEVICES



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

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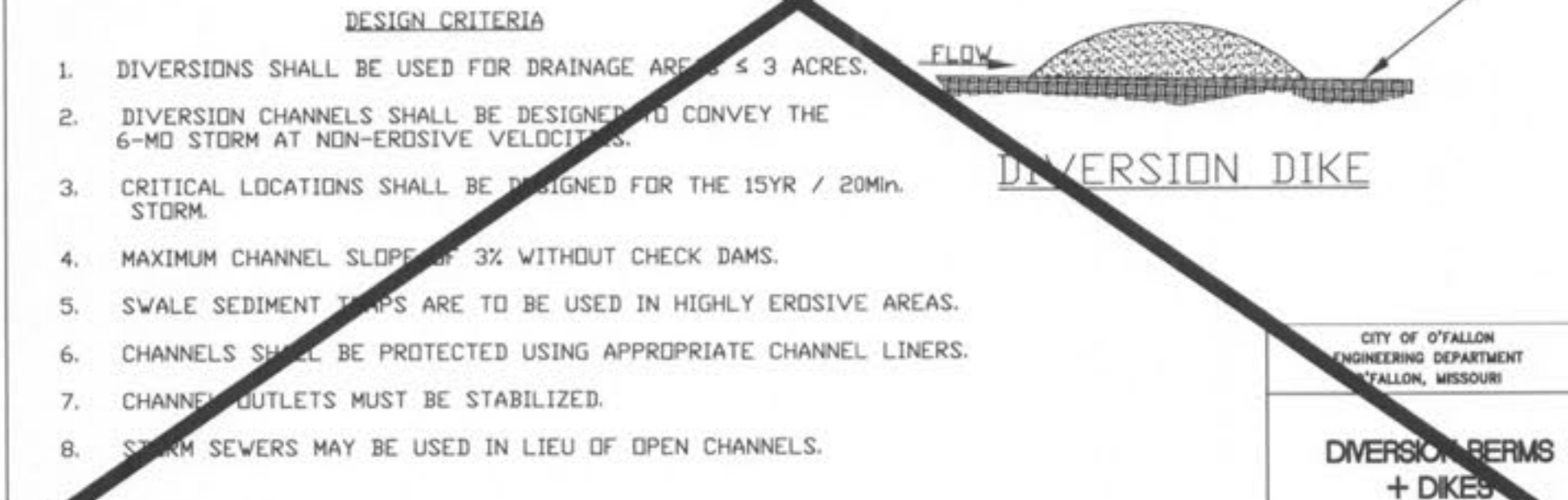
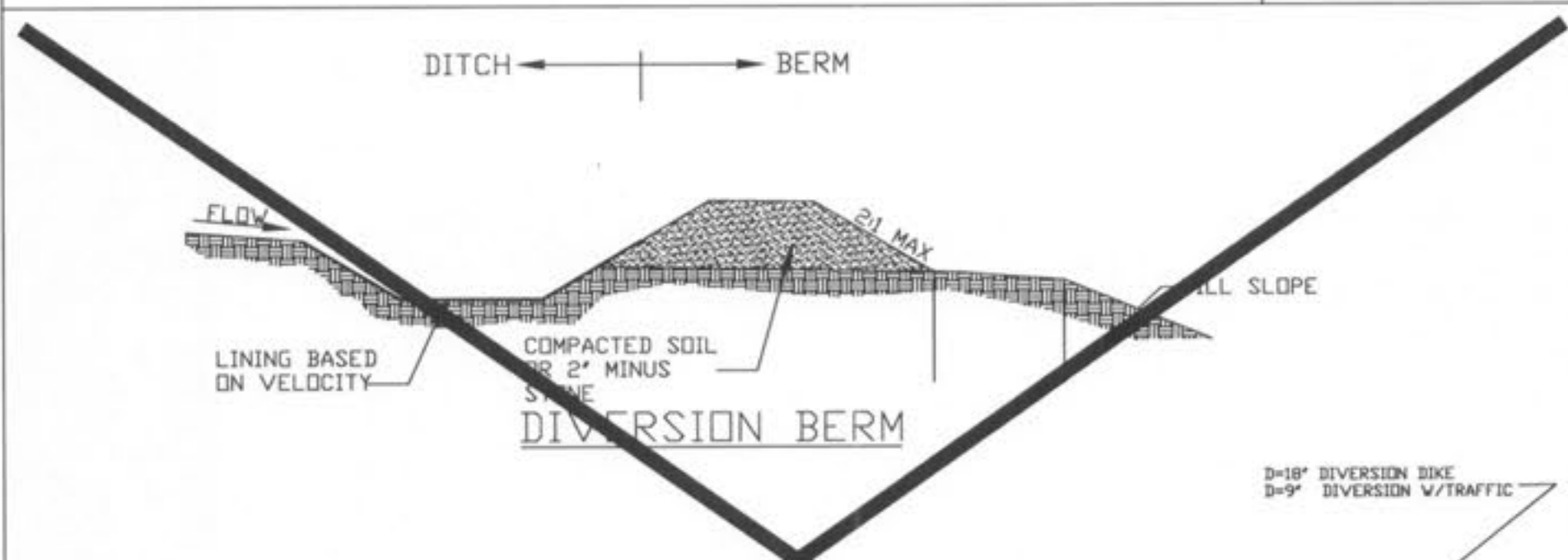
SILT FENCE INSTALLATION (SHEET FLOW ONLY)



- 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.

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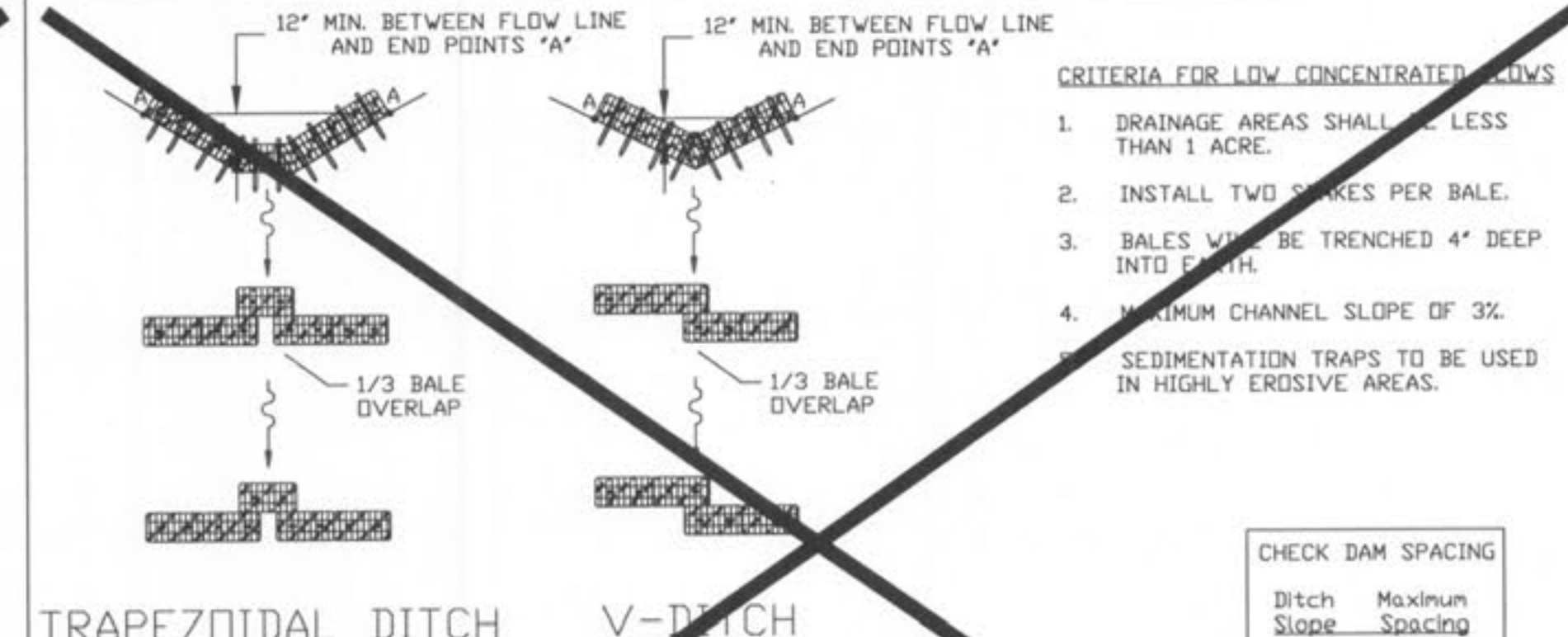
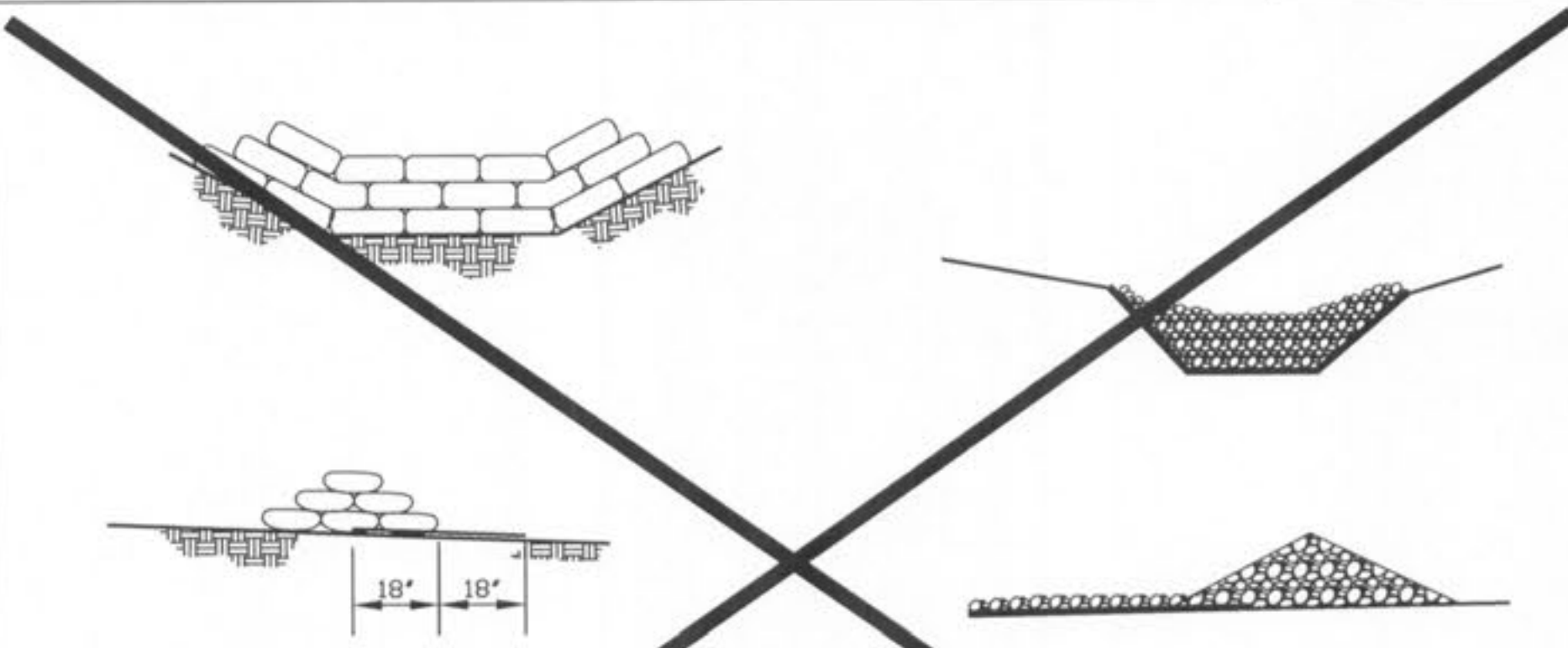
CURB INLET PROTECTION



- 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 ERODITIVE AREAS.
 6. CHANNELS SHALL BE PROTECTED USING APPROPRIATE CHANNEL LINERS.
 7. CHANNEL OUTLETS MUST BE STABILIZED.
 8. STORM SEVERS MAY BE USED IN LIEU OF OPEN CHANNELS.

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O'FALLON, MISSOURI

DIVERSION BERMS + DIKES



- 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

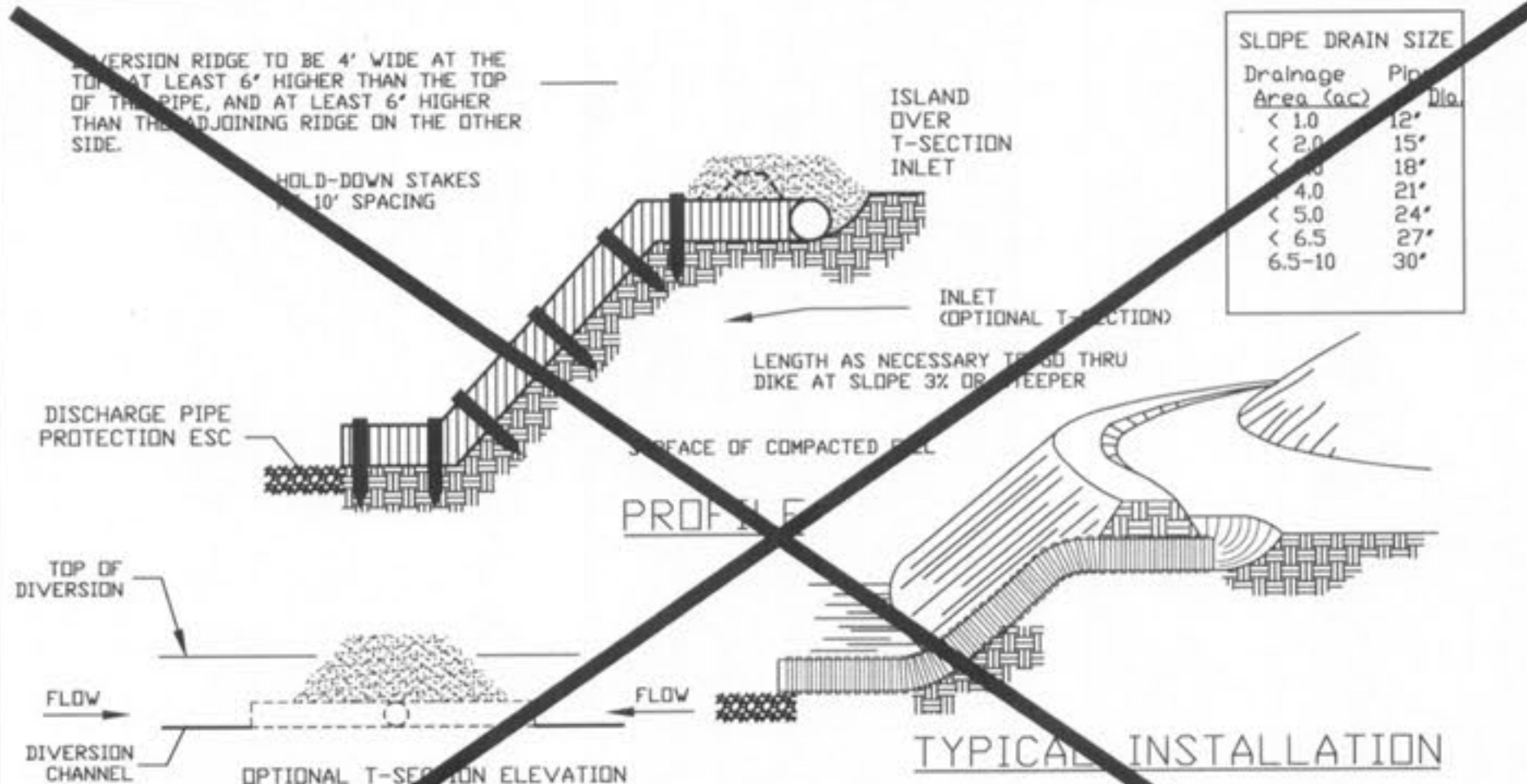
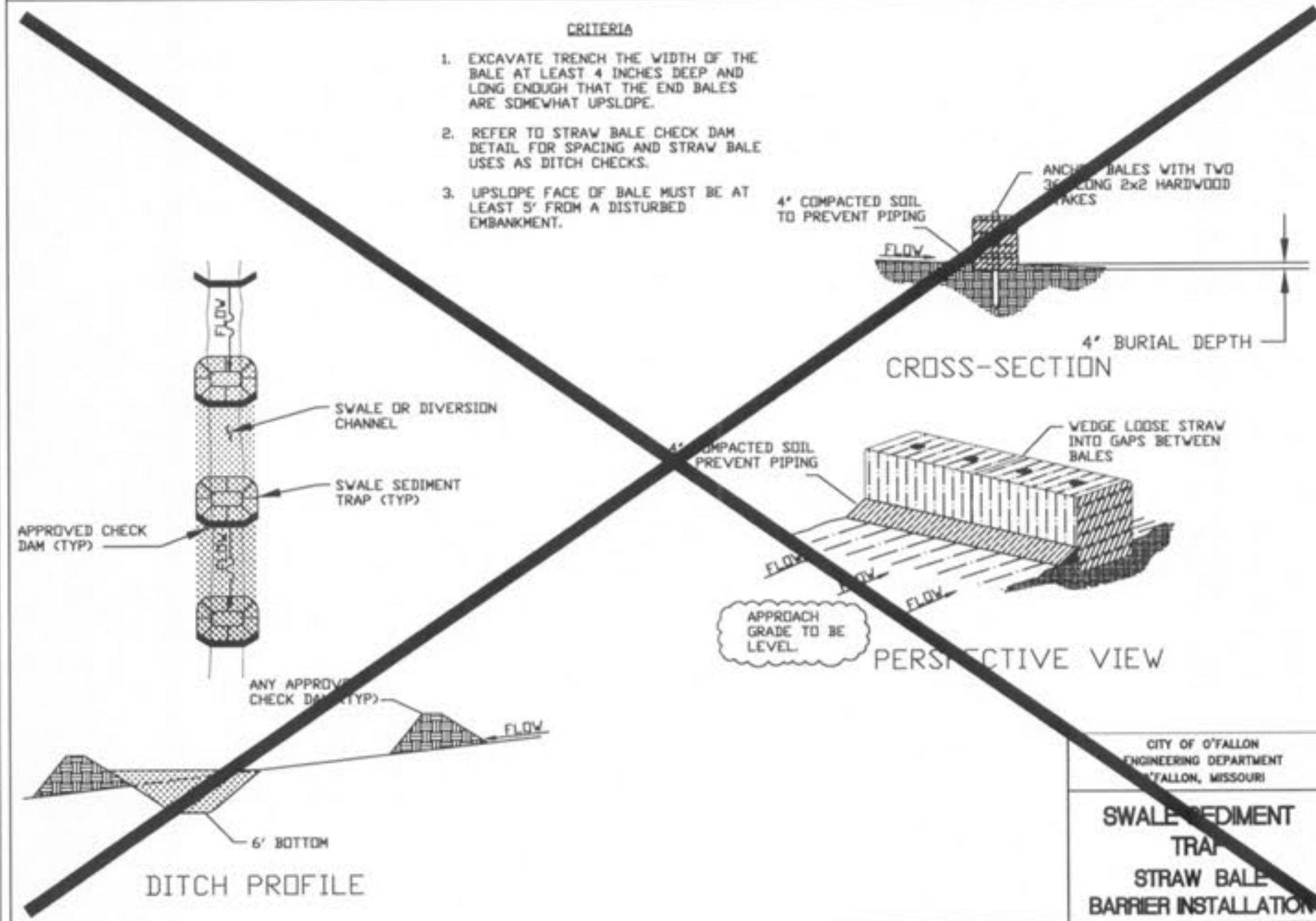
Ditch Slope	Maximum Spacing
3%	50'
2%	75'

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CHECK DAMS

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STRAW BALE CHECK DAM

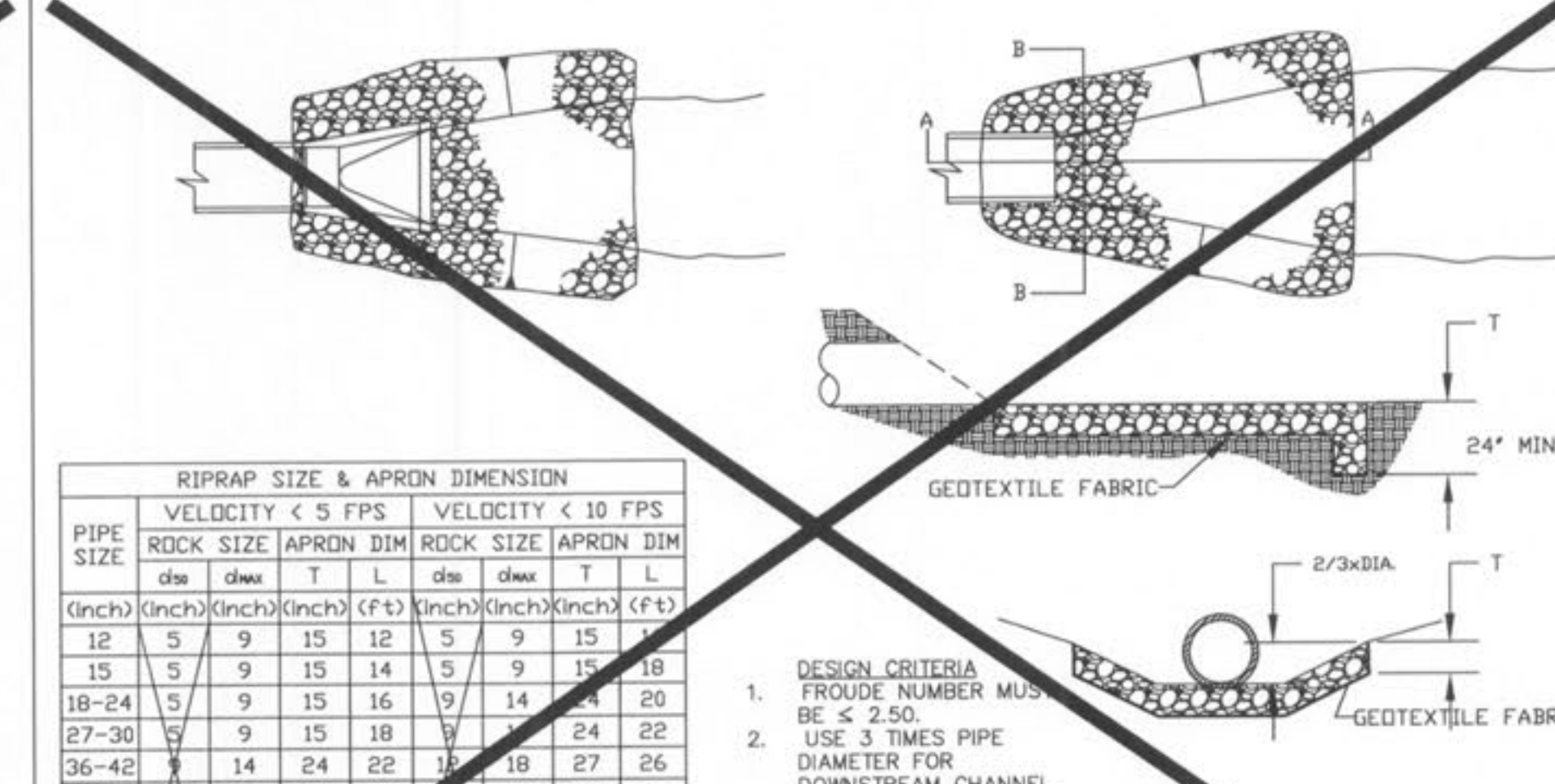


SLOPE DRAIN SIZE

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

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O'FALLON, MISSOURI

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
	dia	thick	T	L	dia	thick	T	L
12	5	9	15	12	5	9	15	12
15	5	9	15	14	5	9	15	18
18-24	5	9	15	16	9	14	24	20
27-30	9	15	18	18	14	24	22	
36-42	14	24	22	18	27	26		
48-54	14	24	26	18	27	30		
60-66	18	27	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**
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

CHICK-FIL-A
O'FALLON, MO
(#2645)
FSR S08N-144-R
2106 HIGHWAY K
O'FALLON, MO
63366

GBC DESIGN, INC.
3378 W. Market St.
Akron, OH 44333-3956
Phone 330-836-0228
Fax 330-836-5782

CONTACT:
GARY R. ROUSE

ENGINEER SIGNATURE BLOCK

GARY R. ROUSE
STATE OF MISSOURI
REGISTERED PROFESSIONAL ENGINEER
NUMBER PE-2007035780
3/21/11

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

Chick-fil-A
5200 BUFFINGTON RD.
ATLANTA, GA 30349-2998
24 HOUR EMERGENCY CONTACT:
SCOTT D. FATMAN PH-404-305-4594

P+Z No. 1810.01

City No.

Page No.

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