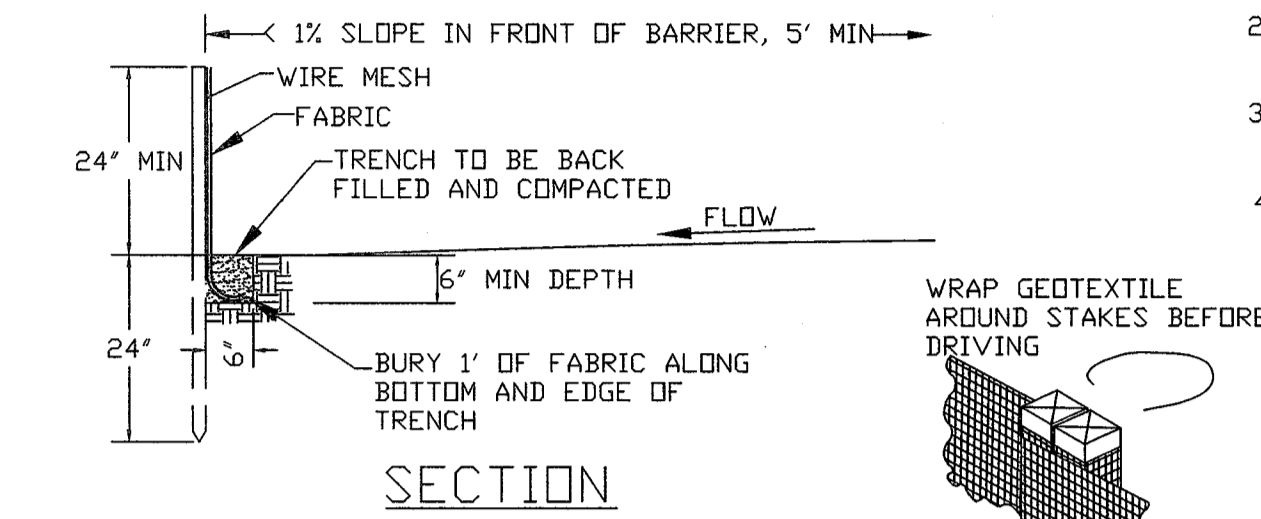
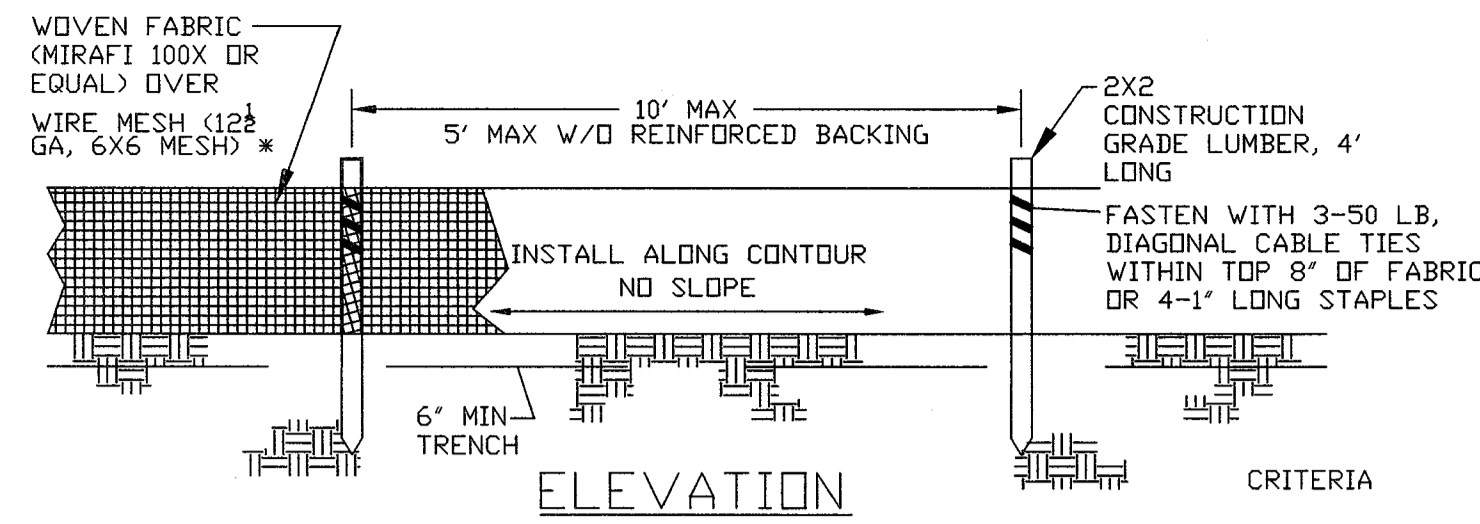


- DESIGN CRITERIA**
1. SILT FENCE FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 2. STRAW BALE BARRIERS FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 3. REFER TO INDIVIDUAL ESC FIGURE FOR INSTALLATION.
 4. TERRACING INCLUDES LOGS, WATTLES & FILTER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

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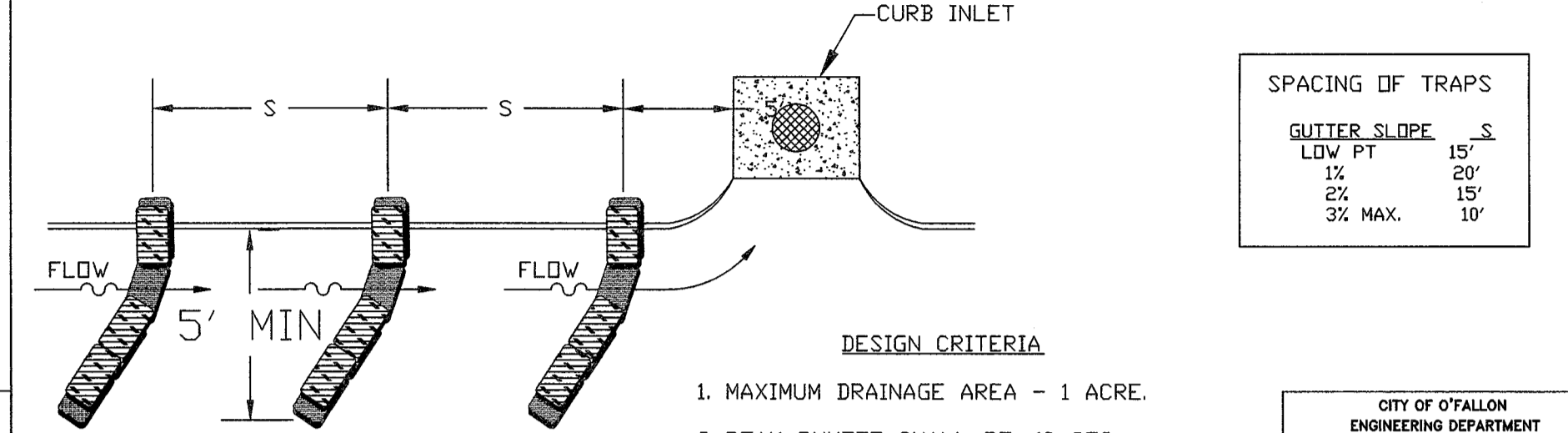
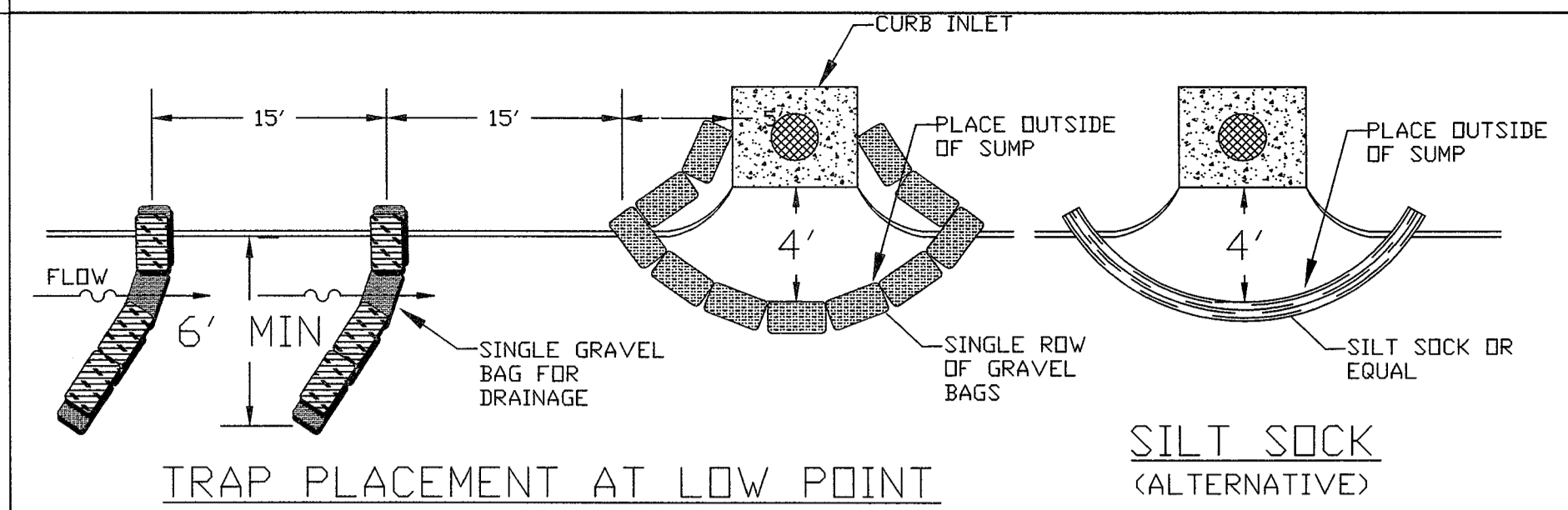
SPACING CHART FOR ESC DEVICES



- 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.

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SILT FENCE INSTALLATION SHEET FLOW ONLY



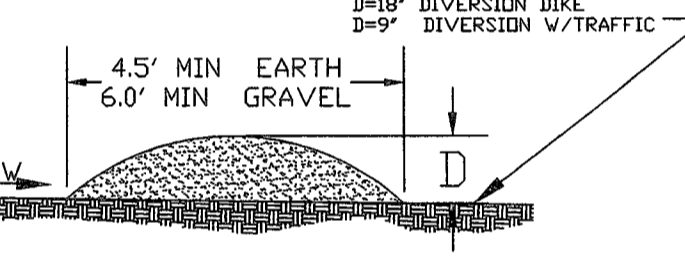
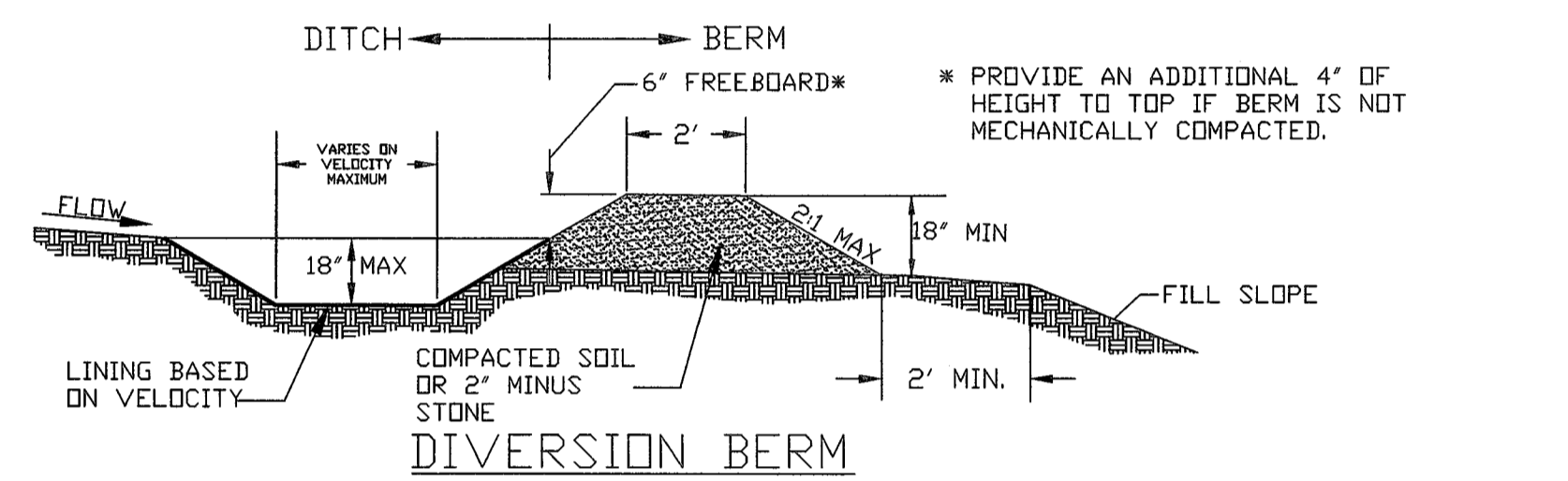
- DESIGN CRITERIA**
1. MAXIMUM DRAINAGE AREA - 1 ACRE.
 2. PEAK RUNOFF SHALL BE ≤ 2 CFS BASED ON THE 6-MONTH STORM.
 3. STACK GRAVEL BAGS DOUBLE HIGH. PROVIDE GAP FOR DRAINAGE.

SPACING OF TRAPS

Gutter Slope	LDW PT	S
1%	15'	20'
2%	15'	15'
3% MAX.	10'	10'

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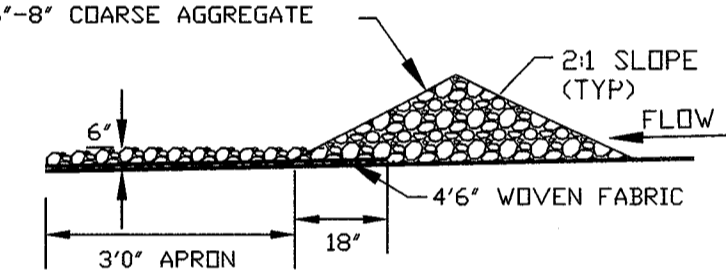
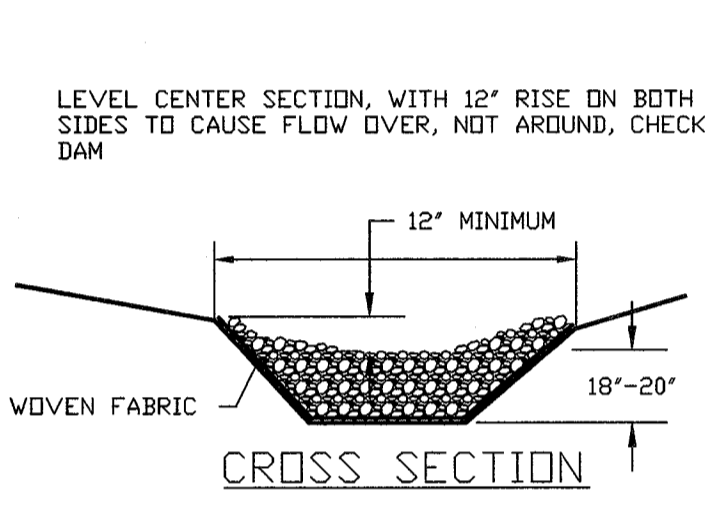
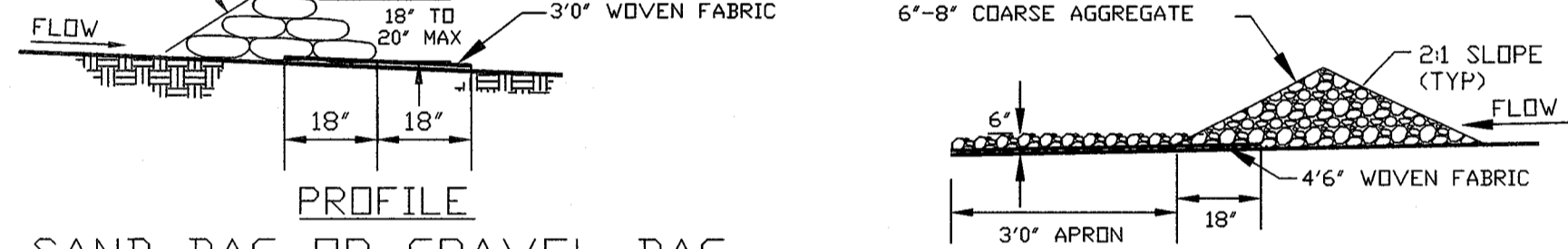
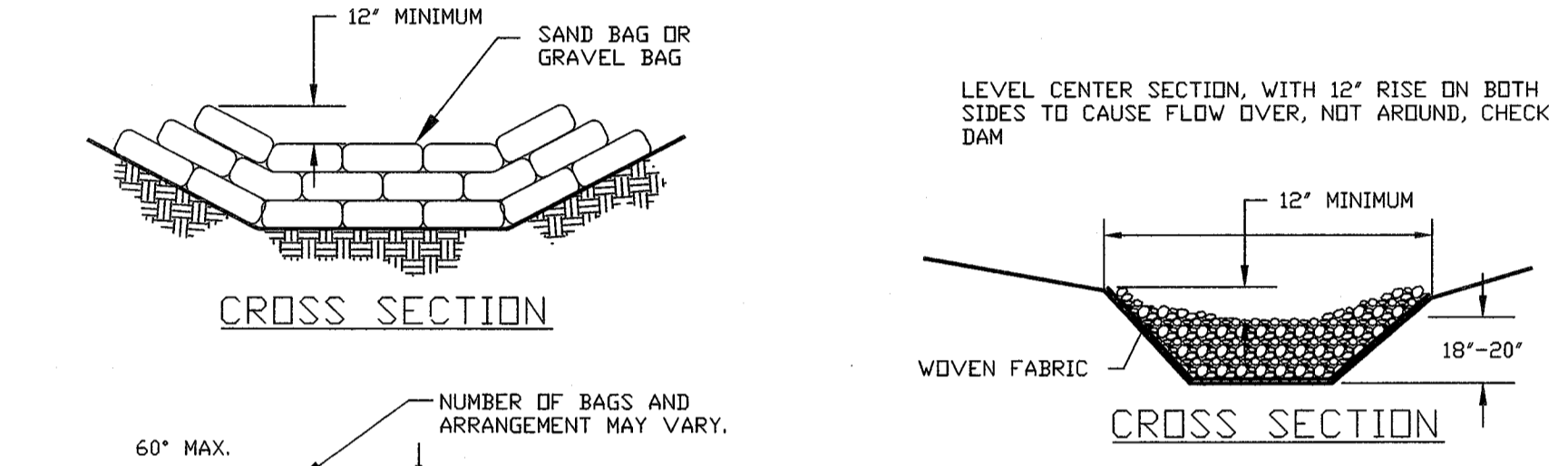
CURB INLET PROTECTION



- 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 SEWERS MAY BE USED IN LIEU OF OPEN CHANNELS.

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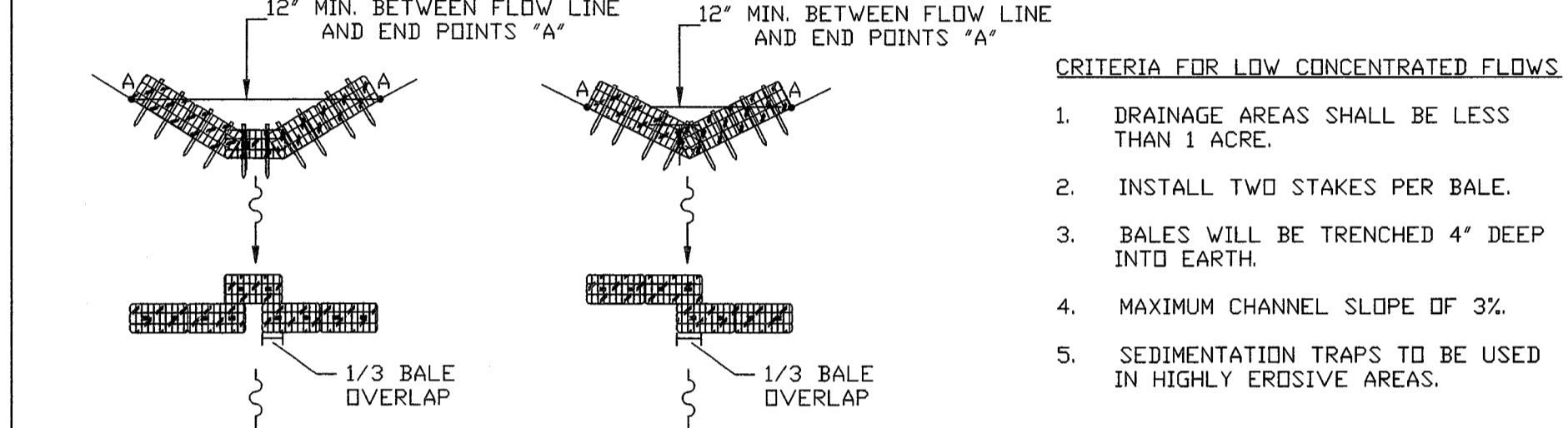
DIVERSION BERMS + DIKES



- 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



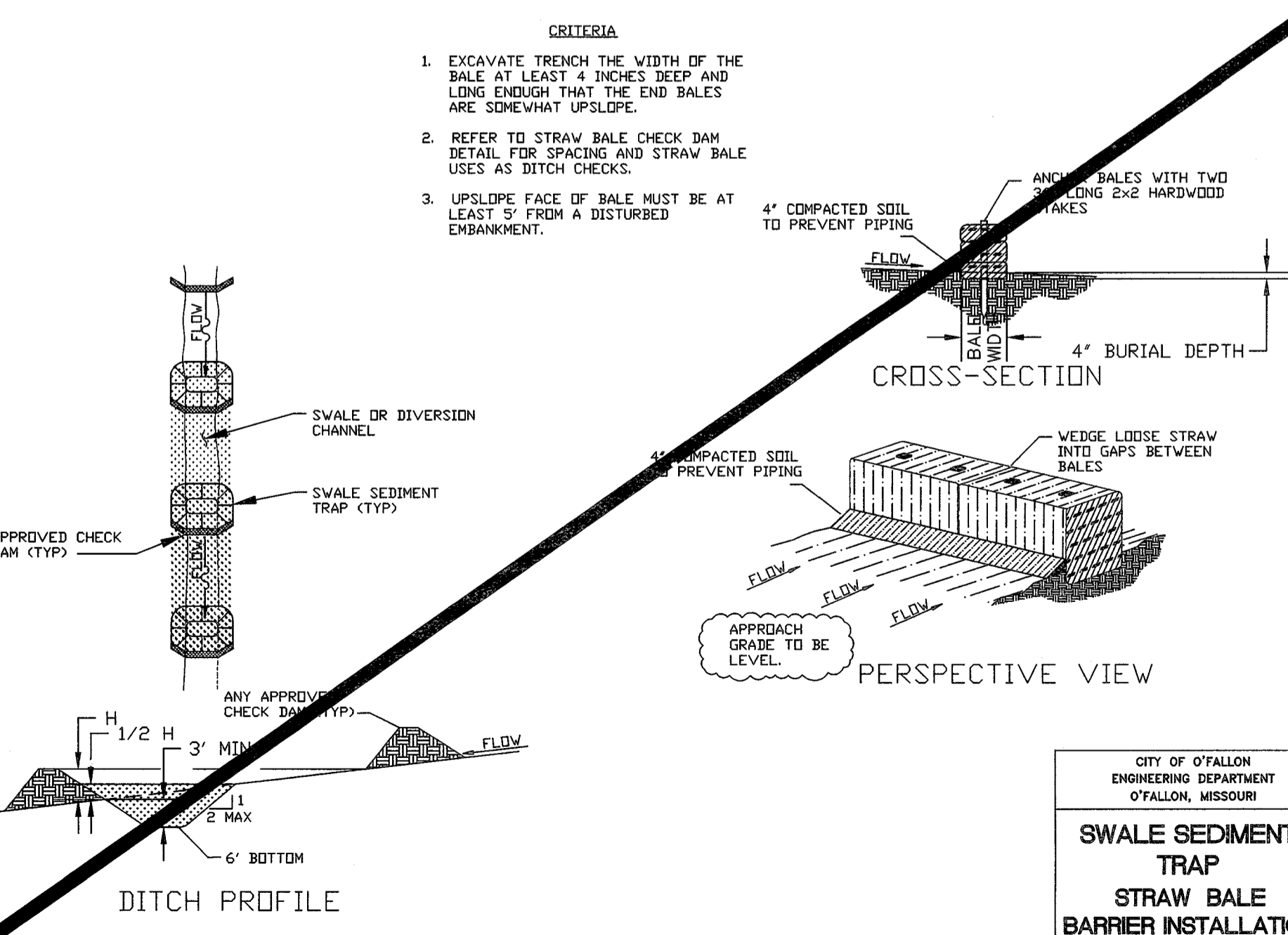
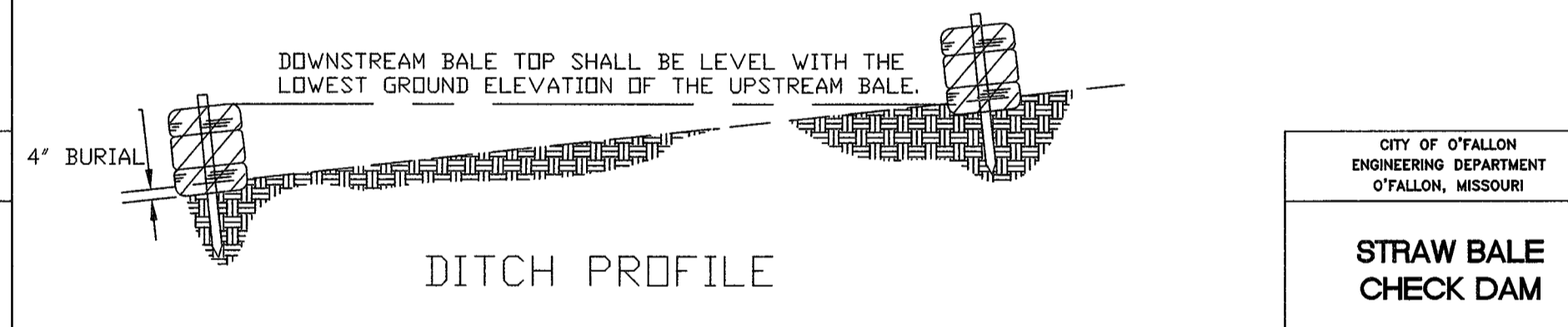
- CRITERIA FOR LOW CONCENTRATED FLOWS**
1. DRAINAGE AREAS SHALL BE LESS THAN 1 ACRE.
 2. INSTALL TWO STAKES PER BALE.
 3. BALES WILL BE TRENCHED 4" DEEP INTO EARTH.
 4. MAXIMUM CHANNEL SLOPE OF 3%.
 5. SEDIMENTATION TRAPS TO BE USED IN HIGHLY ERODITIVE AREAS.

CHECK DAM SPACING

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

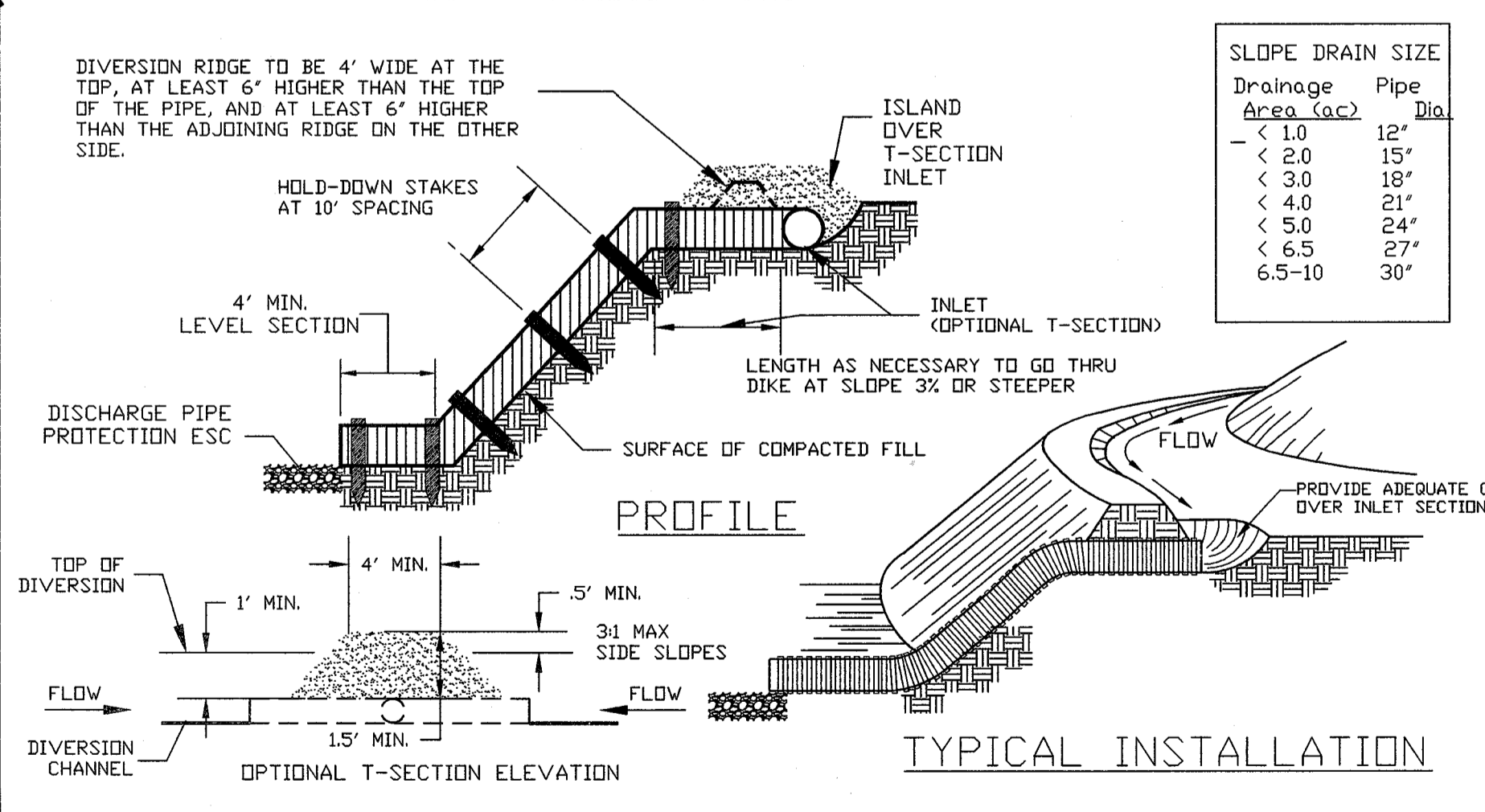
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STRAW BALE CHECK DAM



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SWALE SEDIMENT TRAP STRAW BALE BARRIER INSTALLATION

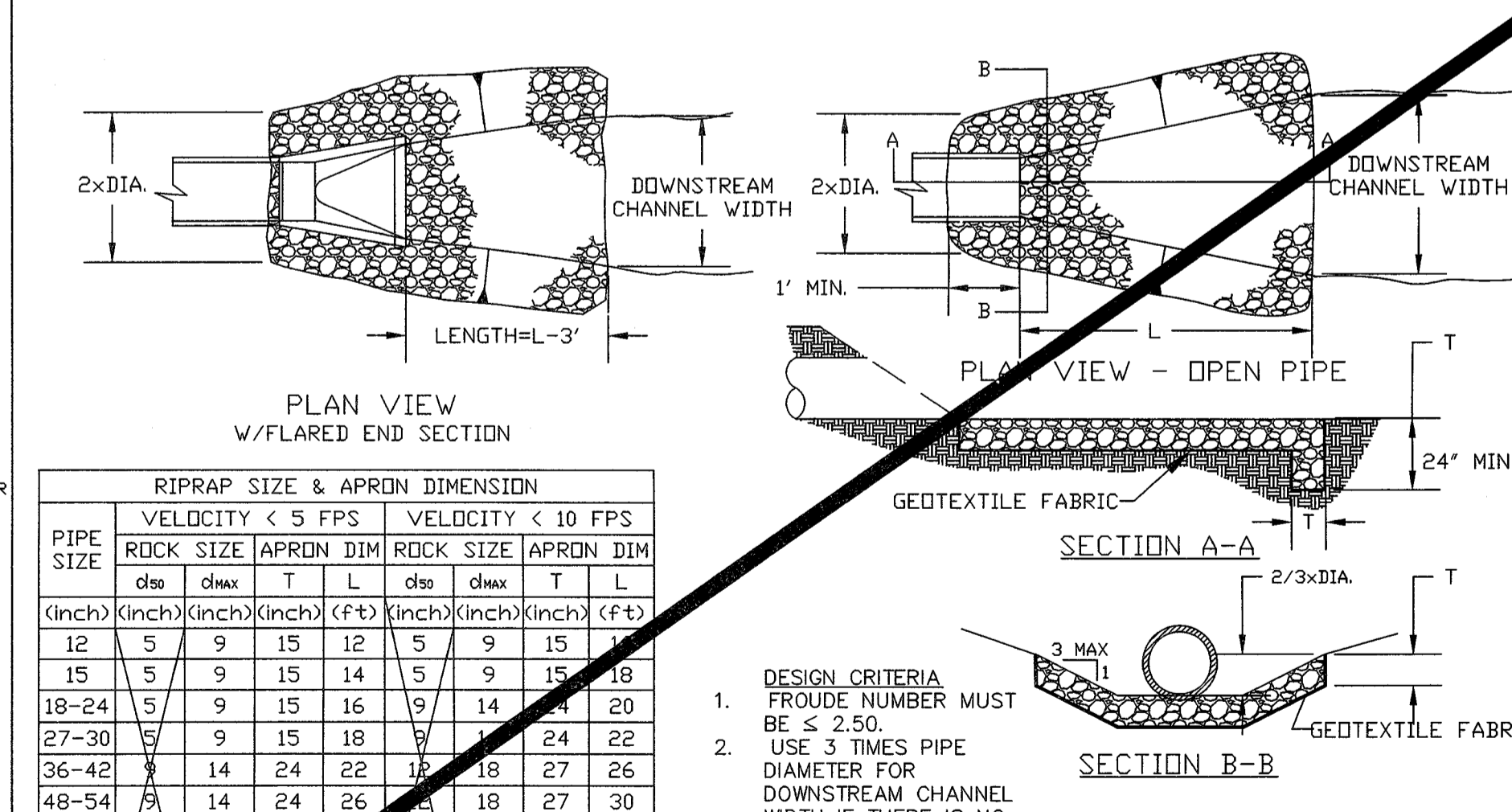


SLOPE DRAIN SIZE

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"

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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	12
15	5	9	15	14	5	9	15	18
18-24	5	9	15	16	9	14	21	20
27-30	5	9	15	18	9	14	24	22
36-42	5	9	15	22	14	24	27	26
48-54	5	9	15	24	26	18	27	30
60-66	12	18	27	24	15	24	30	38
72-84	15	24	30	42	15	24	30	46
96	18	27	30	50	18	27	30	54

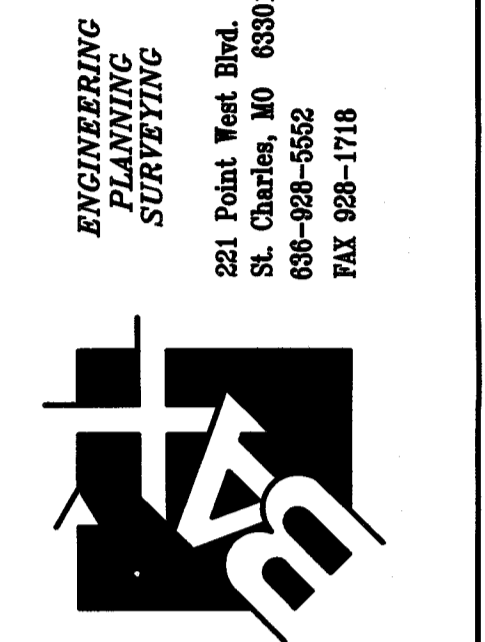
- DESIGN CRITERIA**
1. FROUDE NUMBER MUST BE ≤ 2.50 .
 2. USE 3 TIMES PIPE DIAMETER FOR DOWNSTREAM CHANNEL WIDTH IF THERE IS NO DEFINED CHANNEL.
 3. BANK PROTECTION HEIGHT TO BE 2/3 TIMES PIPE DIAMETER.
 4. ROCK SLOPES SHALL BE NO STEEPER THAN 3:1.

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O'FALLON, MISSOURI

TEMPORARY OUTLET PIPE DISCHARGE PROTECTION

PROJECT TITLE:
SCCAD BASE 18

Bax Project #95-7632G



ENGINEERING PLANNING SURVEYING

221 Point View Blvd
St. Charles, MO 63301
636-928-5662
FAX 928-1718

REVISIONS

NO.	DATE	REVISION
8-15-17		CITY COMMENTS

Developer / Owner:
ST. CHARLES COUNTY AMBULANCE DISTRICT
4169 OLD MILL PARKWAY
ST. PETERS, MISSOURI 63376

City No. #17-005139

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EROSION CONTROL DETAILS