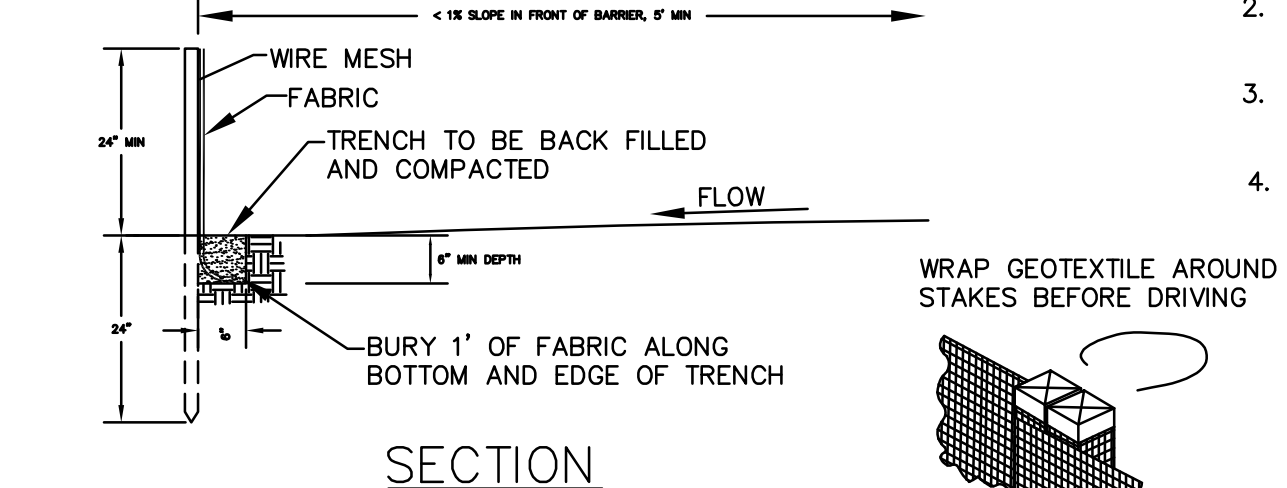
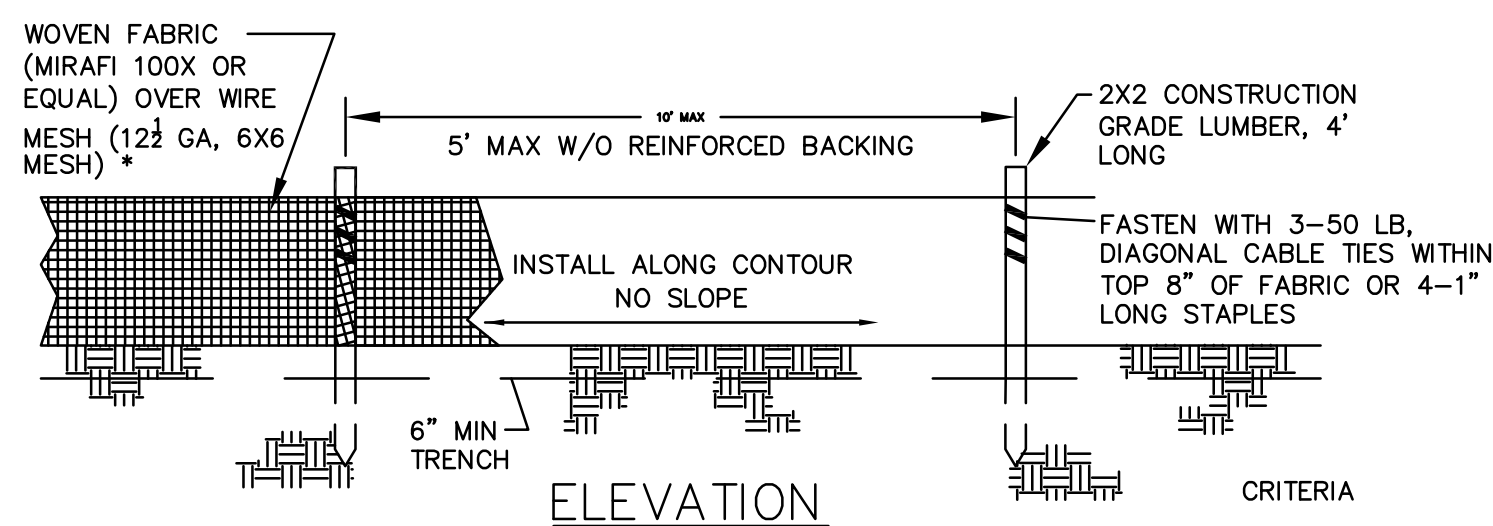


- DESIGN CRITERIA**
- SILT FENCE FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 - STRAW BALE BARRIERS FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 - REFER TO INDIVIDUAL ESC FIGURE FOR INSTALLATION.
 - TERRACING INCLUDES LOGS, WATILES & FILTER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

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ENGINEERING DEPARTMENT
O'FALLON, MISSOURI

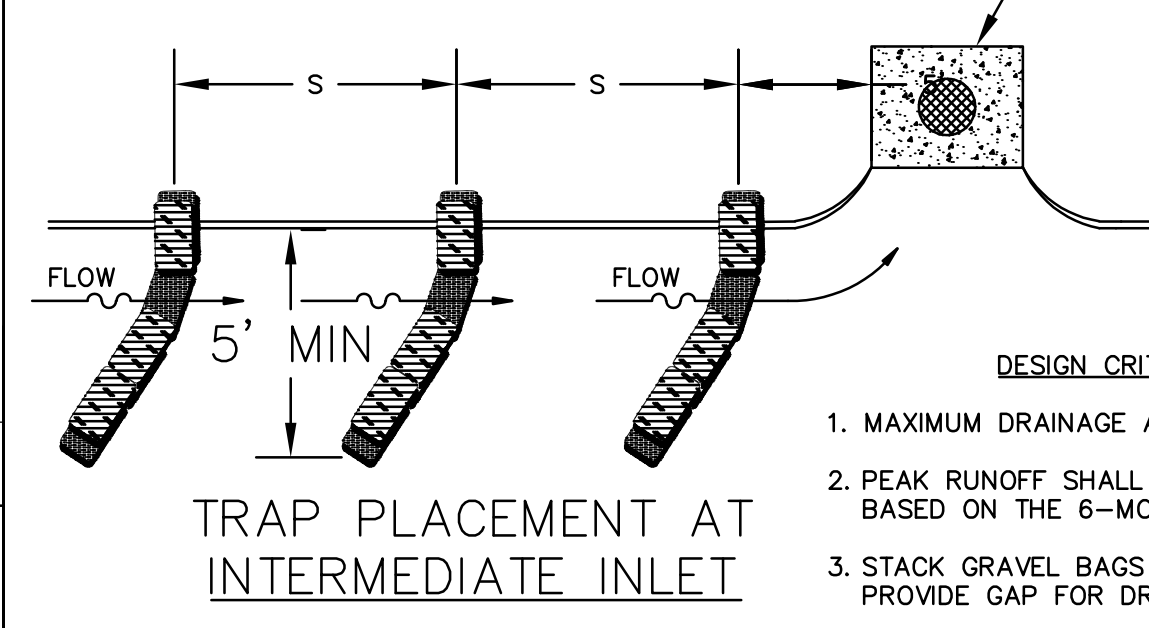
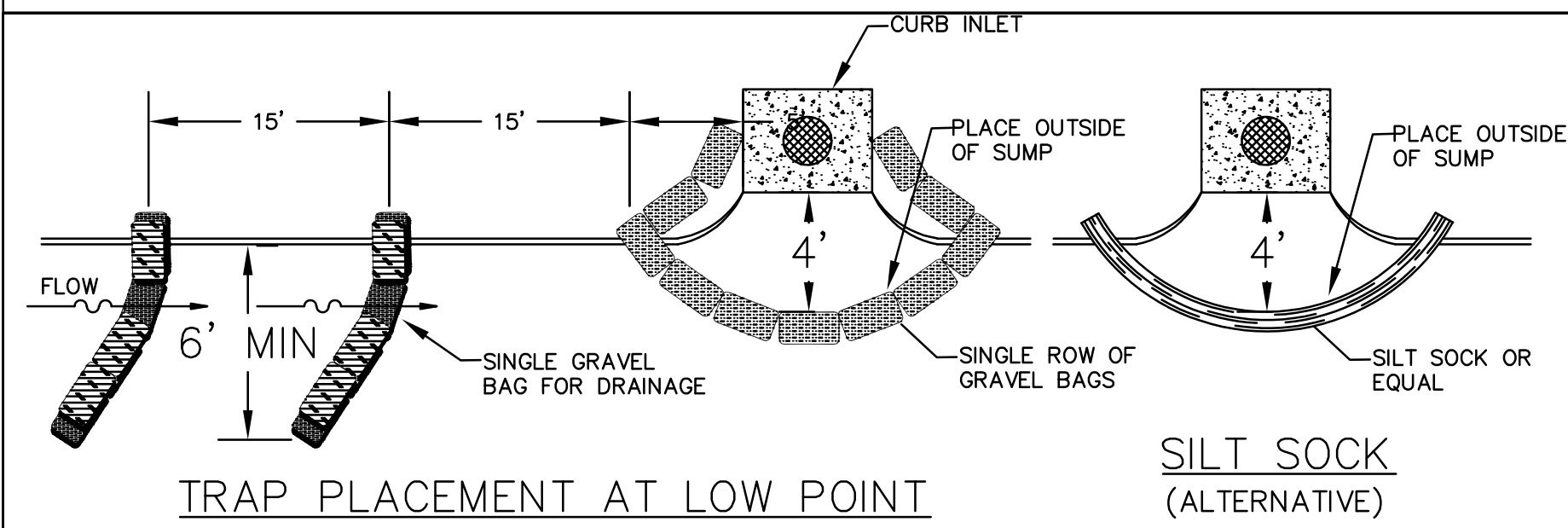
**SPACING CHART
FOR ESC DEVICES**



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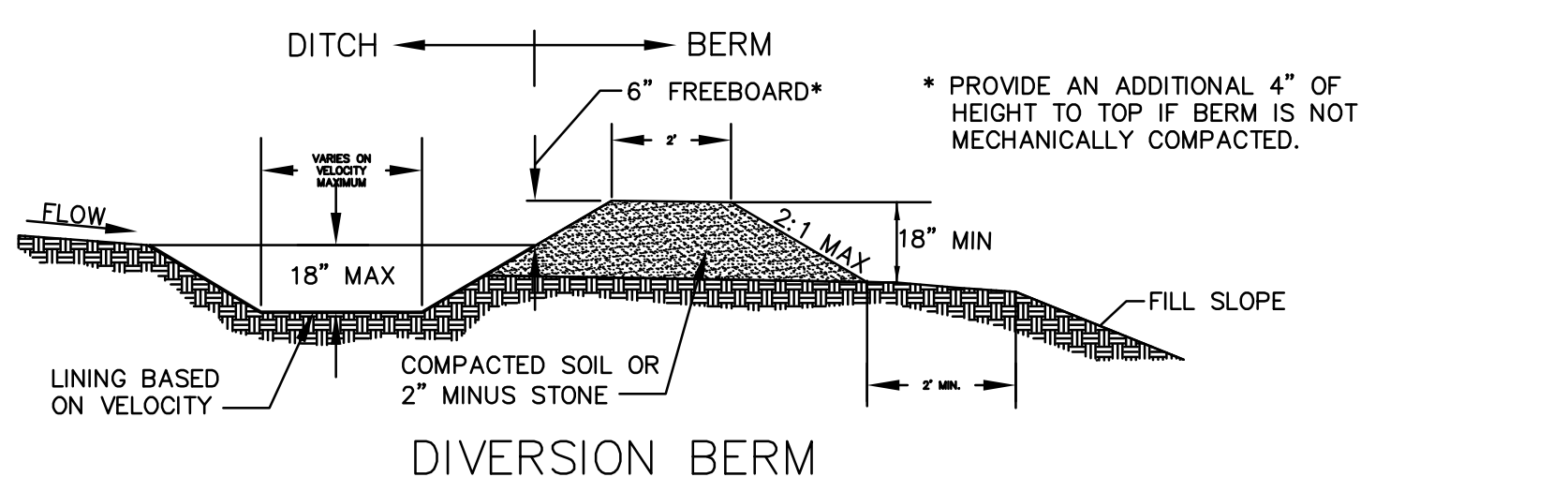
**SILT FENCE INSTALLATION
SHEET FLOW (ONLY)**



- 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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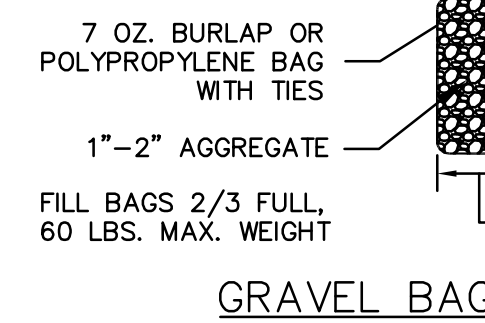
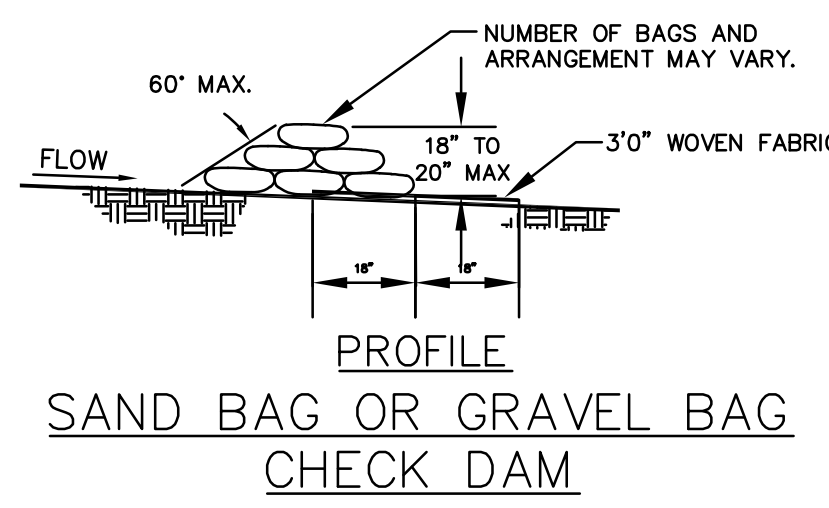
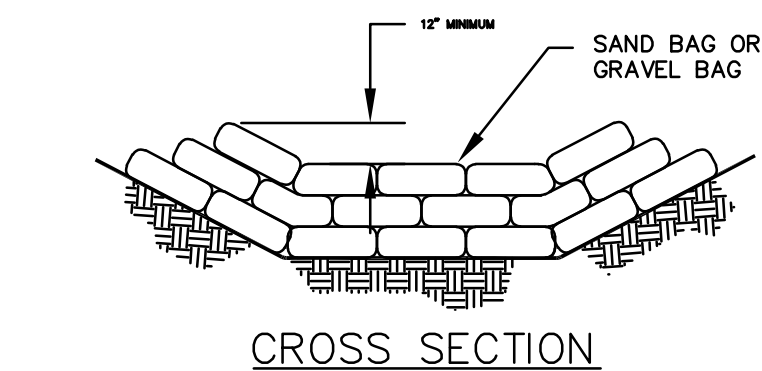
**CURB INLET
PROTECTION**



- 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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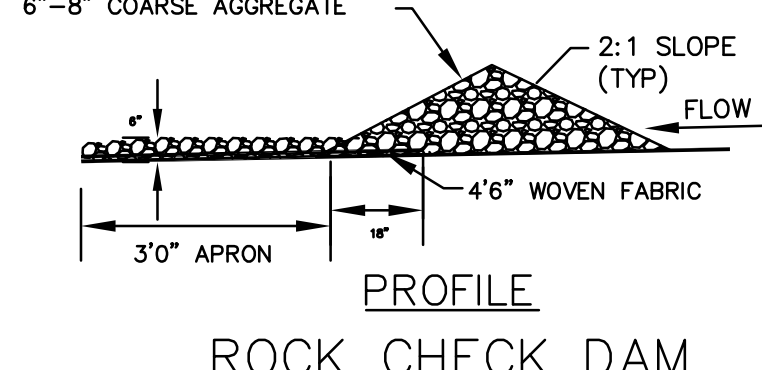
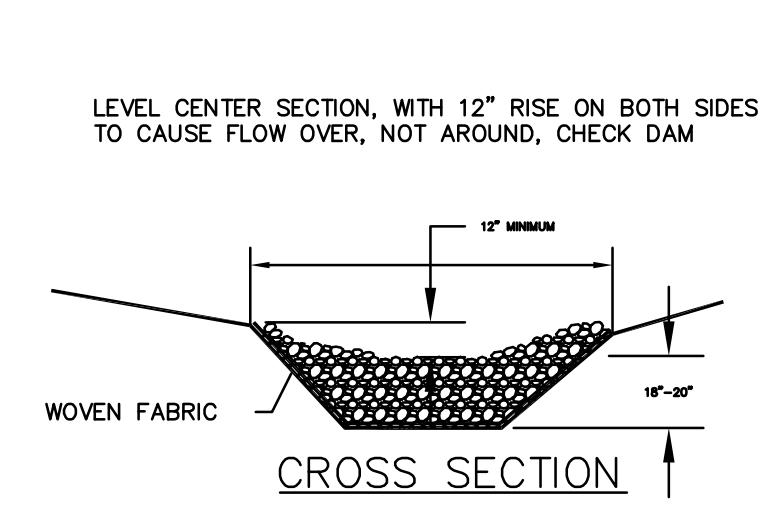
**DIVERSION BERMS
+ DIKES**



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

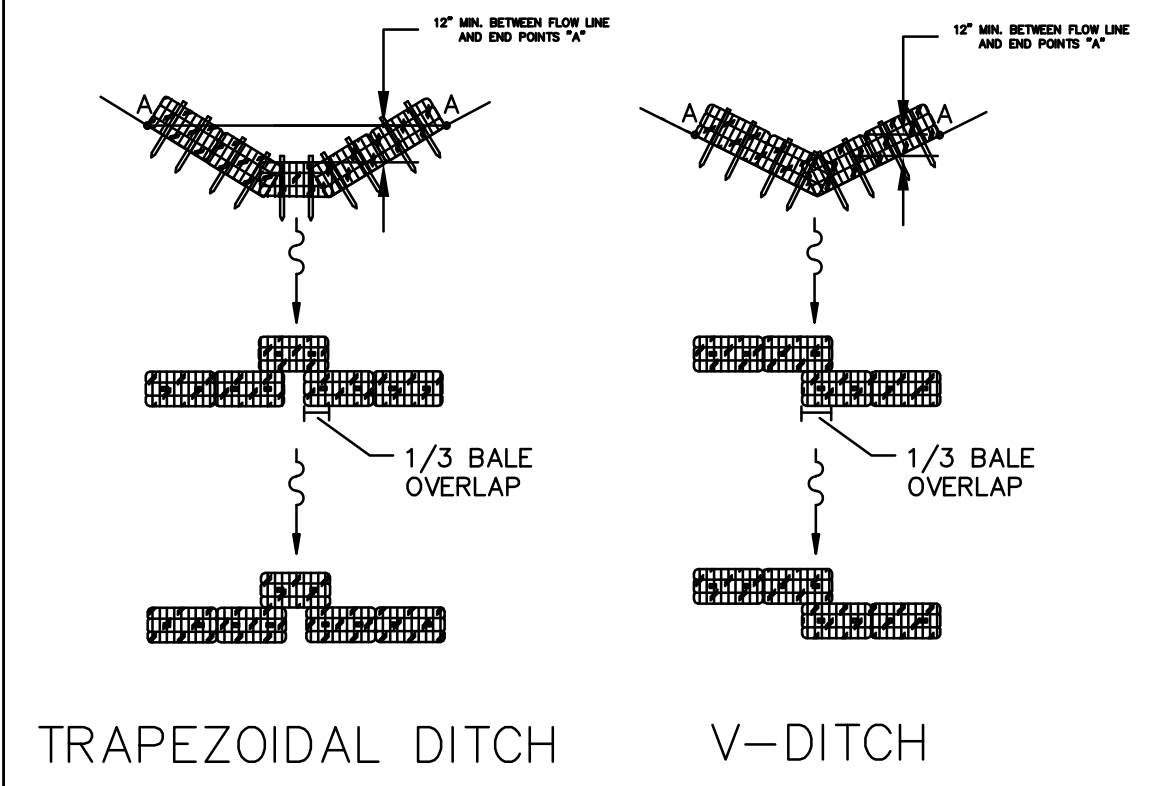
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CHECK DAMS



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CHECK DAMS

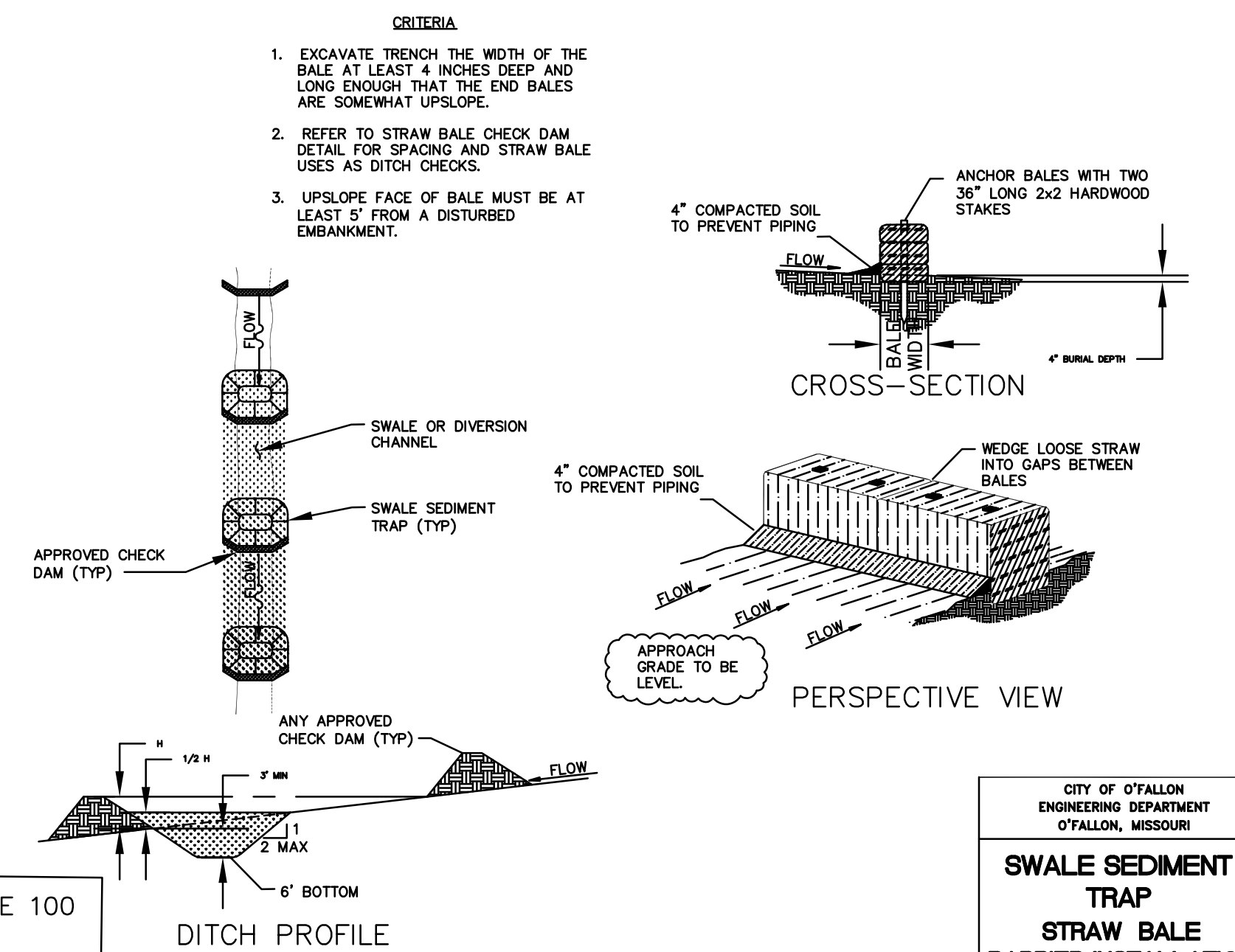


- CRITERIA FOR LOW CONCENTRATED FLOWS**
- DRAINAGE AREAS SHALL BE LESS THAN 1 ACRE.
 - INSTALL TWO STAKES PER BALE.
 - BALES WILL BE TRENCHED 4\"/>

CHECK DAM SPACING	
Ditch Slope	Maximum Spacing
3%	50'
2%	75'

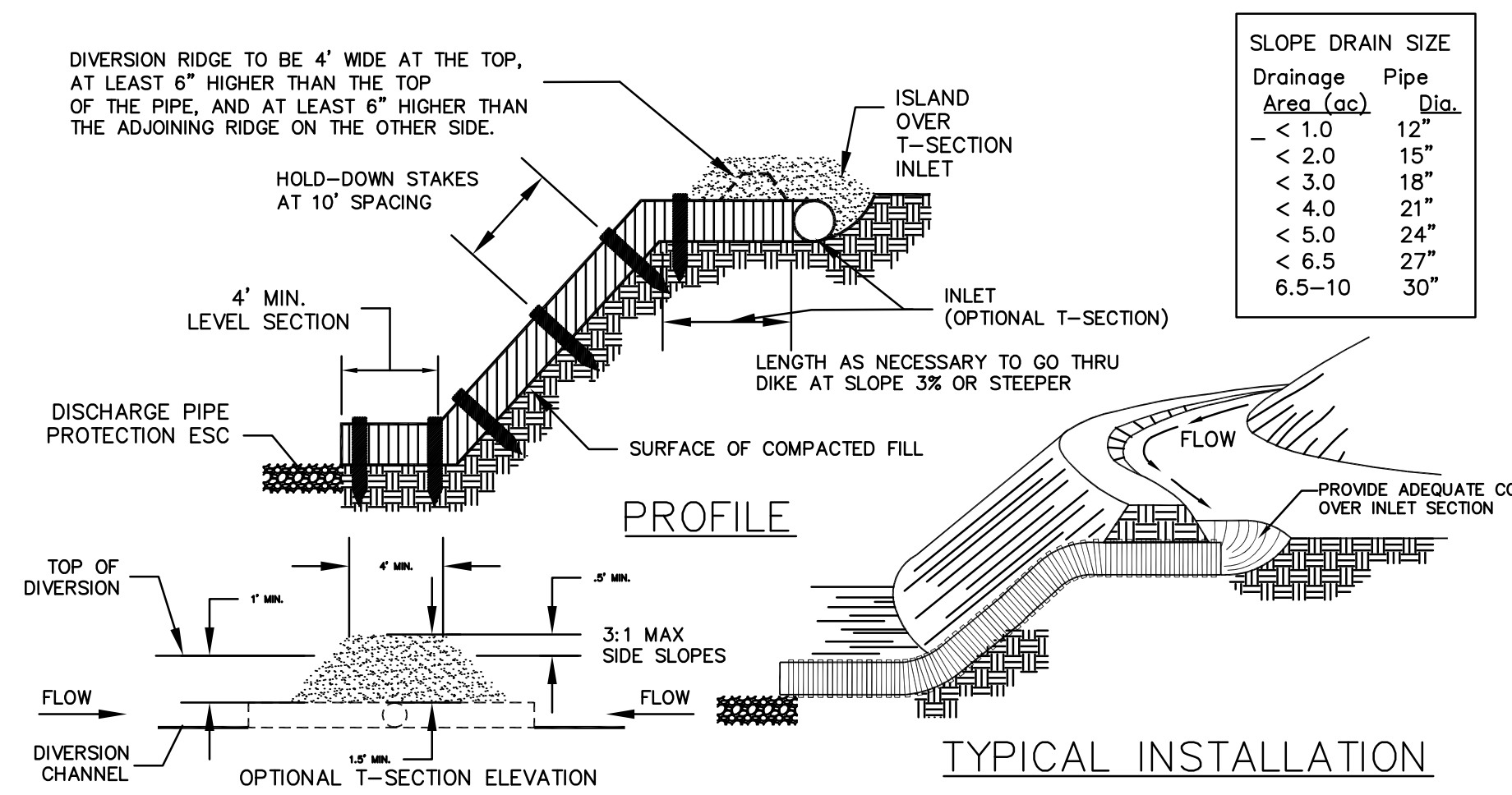
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ENGINEERING DEPARTMENT
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**STRAW BALE
CHECK DAM**



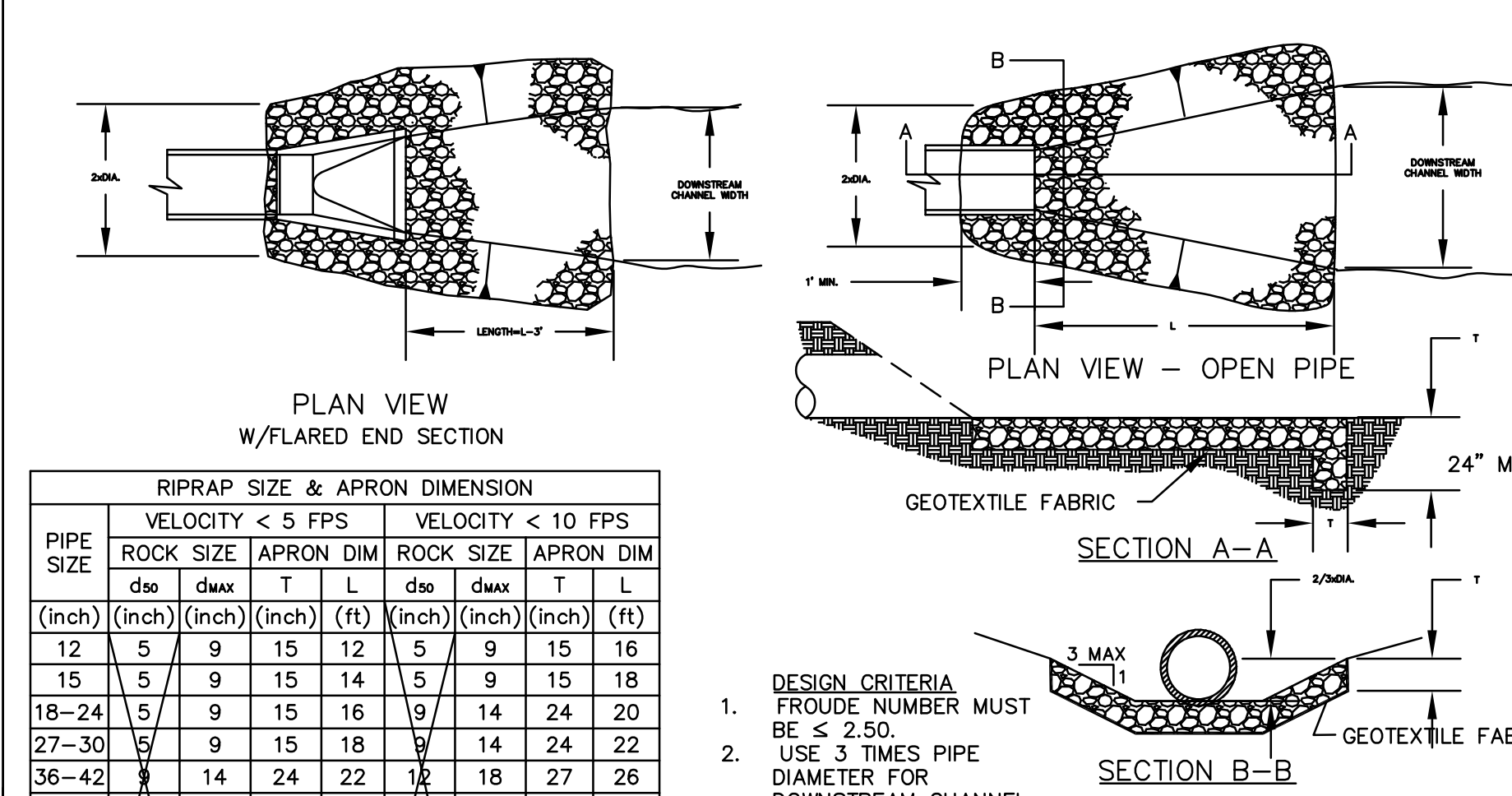
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**SWALE SEDIMENT
TRAP
STRAW BALE
BARRIER INSTALLATION**



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**TEMPORARY
SLOPE DRAIN**



PIPE SIZE	RIPRAP SIZE & APRON DIMENSION				VELOCITY < 5 FPS				VELOCITY < 10 FPS				
	ROCK SIZE	APRON DIM	ROCK SIZE	APRON DIM	ROCK SIZE	APRON DIM	ROCK SIZE	APRON DIM					
(inch)	d ₅₀	d _{max}	T	L	d ₅₀	d _{max}	T	L	d ₅₀	d _{max}	T	L	
12	5	9	15	12	5	9	15	16	15	9	15	18	
15	5	9	15	14	5	9	15	18	18	14	24	22	
18-24	5	9	15	16	9	14	24	20	27	30	18	24	
27-30	5	9	15	18	9	14	24	22	30	30	18	27	
36-42	8	14	24	22	12	18	27	26	48-54	14	24	26	12
48-54	8	14	24	26	12	18	27	30	60-66	12	18	27	34
60-66	12	18	27	34	15	24	30	38	72-84	15	24	30	42
72-84	15	24	30	42	15	24	30	46	96	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.

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**TEMPORARY OUTLET
PIPE DISCHARGE
PROTECTION**

NO.	DESCRIPTION	DATE
1	CITY COMMENTS	02-24-2022
2	CITY/UTIL COMMENTS	03-14-2022

PROJECT TITLE

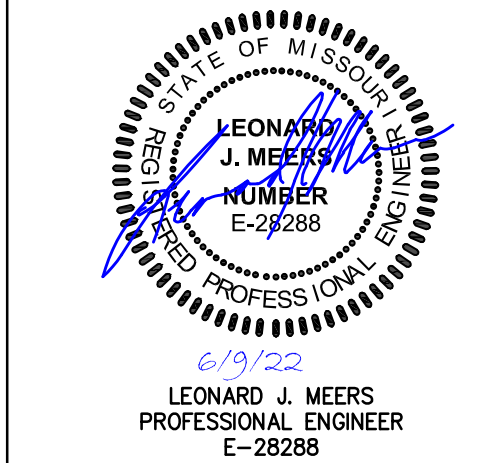
O'FALLON
U-HAUL

1200 S. OUTER ROAD
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Civil Engineering & Surveying Services

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www.grimesconsulting.com

PROFESSIONAL ENGINEER CORPORATION E-170-D
PROFESSIONAL LAND SURVEYING CORPORATION LS-543-D



LEONARD J. MEERS
PROFESSIONAL ENGINEER
E-28288

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314-952-6203
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P4-Z No.

Approval Date:

City No.

Page No.

C6.1

SWPPP DETAILS