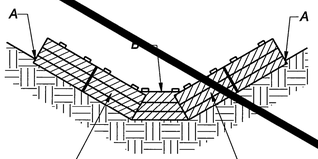
END POINTS "A" MUST BE HIGHER THAN FLOW LINE POINT "B"

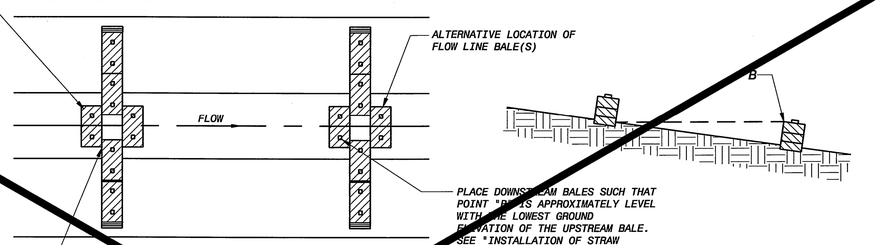


OVERLAP SIDE BALES ON FLOW LINE BALE(S) TO PREVENT GAPS

WIDE CHANNELS

ONE OR MORE BALES IN CHANNEL BED TIGHTLY ABUTTING EACH OTHER

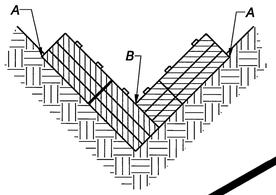
ALTERNATIVE LOCATION OF FLOW LINE BALE(S)



BALES MUST BE TIGHTLY ABUTTING WITH NO GAPS

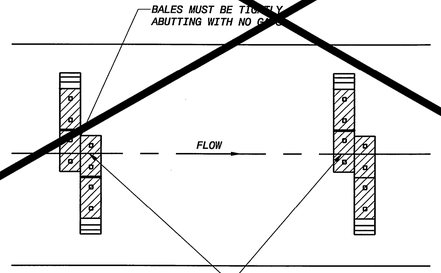
PLACE DOWNSTREAM BALES SUCH THAT POINT "B" IS APPROXIMATELY LEVEL WITH THE LOWEST GROUND ELEVATION OF THE UPSTREAM BALE. SEE *INSTALLATION OF STRAW BALES" AS PER CITY OF WICHITA STANDARD DETAILS.

END POINTS "A" MUST BE HIGHER THAN FLOW LINE POINT "B"

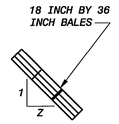


NARROW CHANNELS

BALES MUST BE TIGHTLY ABUTTING WITH NO GAPS



PLACE DOWNSTREAM BALES SUCH THAT POINT "B" IS APPROXIMATELY LEVEL WITH THE LOWEST GOUND ELEVATION OF THE UPSTREAM BALE



18 INCH BY 36 INCH BALES

VALUE OF Z	MINIMUM NUMBER OF BALES
1.0 OR <	1**
1.0 - 3.5	2**
3.5 - 5.0	3**
5.0 - 7.0	4**
7.0 OR >	NOT RECOMMENDED

** ASSUMES DEPTH OF WATER ABOVE POINT "B" WILL NOT EXCEED 6 INCHES

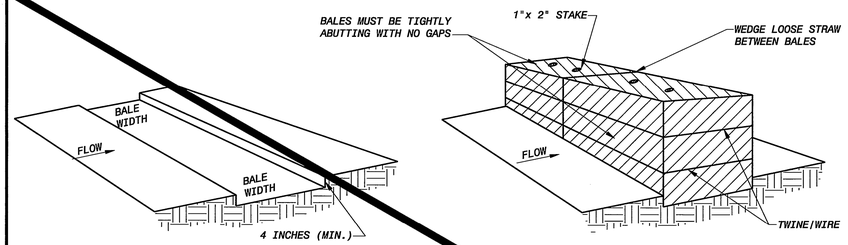
NOTES:
1. WHEN STRAW BALES ARE INSTALLED AT THE TOE OF A SLOPE TO TRAP SEDIMENT THEY SHOULD BE PLACE AWAY FROM THE TOE FOR INCREASED HOLDING CAPACITY.
2. WHEN SEDIMENT FILLS THE AREA BEHIND THE STRAW BALES TO 1/2 THE HEIGHT OF THE STRAW BALES, THE CONTRACTOR SHALL REMOVE THE SEDIMENT.

STRAW BALE DITCH CHECK
NO SCALE

BALES MUST BE TIGHTLY ABUTTING WITH NO GAPS

1"x 2" STAKE

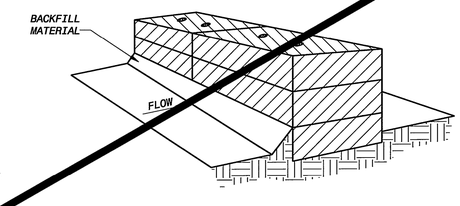
WEDGE LOOSE STRAW BETWEEN BALES



1. EXCAVATE THE TRENCH

2. PLACE AND STAKE STRAW BALES

BACKFILL MATERIAL



3. BACKFILL AND COMPACT EXCAVATED SOIL

STAKED AND ENTRENCHED 50 LB. (APPROXIMATE) STRAW BALE

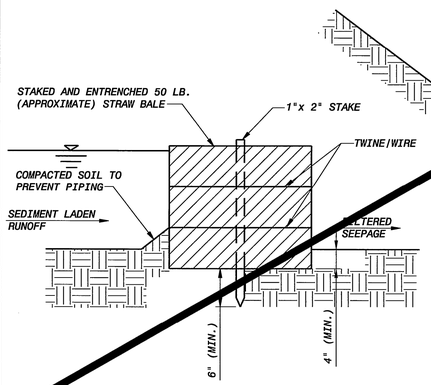
1"x 2" STAKE

TWINE/WIRE

COMPACTED SOIL TO PREVENT PIPING

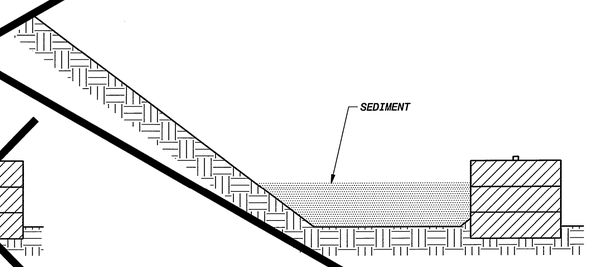
SEDIMENT LADEN RUNOFF

FILTERED SEEPAGE



CROSS SECTION OF A PROPERLY INSTALLED STRAW BALE

SEDIMENT



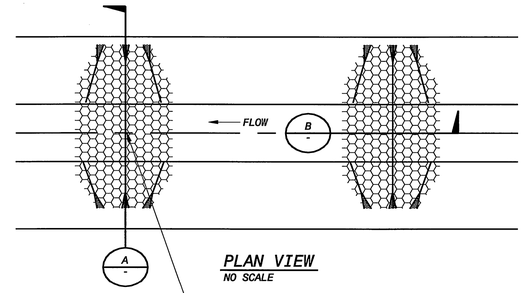
NOTES:

1. WHEN STRAW BALES ARE INSTALLED AT THE TOE OF A SLOPE TO TRAP SEDIMENT THEY SHOULD BE PLACE AWAY FROM THE TOE FOR INCREASED HOLDING CAPACITY.

2. WHEN SEDIMENT FILLS THE AREA BEHIND THE STRAW BALES TO 1/2 THE HEIGHT OF THE STRAW BALES, THE CONTRACTOR SHALL REMOVE THE SEDIMENT.

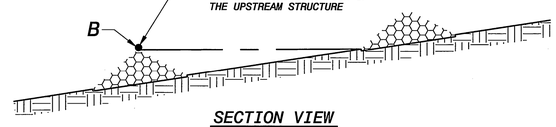
INSTALLATION OF STRAW BALES
NO SCALE

FD6000
DNR



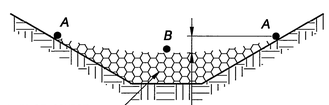
PLAN VIEW
NO SCALE

PLACE DOWNSTREAM STRUCTURE SUCH THAT POINT "B" IS APPROXIMATELY LEVEL WITH THE LOWEST GROUND ELEVATION OF THE UPSTREAM STRUCTURE



SECTION VIEW
NO SCALE

END POINTS "A" MUST BE HIGHER THAN FLOW LINE POINT "B"

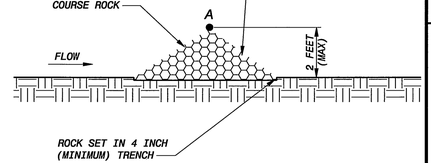


MINIMUM DEPTH OF COURSE ROCK PLACED IN CHANNEL FLOW LINE IS 0.5 FEET

0.5 TO 1.5 FEET DIFFERENCE

3 INCH (MINIMUM) COURSE ROCK

0.35 FT/FT OR FLATTER FLOW LINE SLOPE



ROCK SET IN 4 INCH (MINIMUM) TRENCH

SECTION A
NO SCALE

SECTION B
NO SCALE

D-50 OF ROCK (INCHES)	DOWNSTREAM FLOWLINE SLOPE OF STRUCTURES (FT/FT) 0.35	0.30	0.25	0.20	0.15	0.10 MAXIMUM WATER DEPTH OVER ROCK (INCHES)					
3	0.6	0.7	0.8	1.0	1.3	1.9					
6	1.2	1.4	1.6	2.0	2.6	3.9					

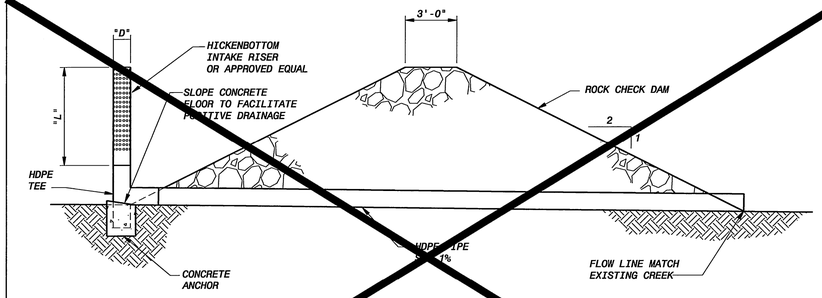
RECOMMENDED ROCK SIZE & FLOW DEPTHS

NOTES:
1. WHEN USED TO CONTROL SEDIMENT FROM STEEP SLOPES, FILTER FENCES SHOULD BE PLACED AWAY FROM THE TOE OF A SLOPE FOR INCREASED HOLDING CAPACITY.

2. WHEN SEDIMENT FILLS THE AREA BEHIND THE SILT FENCE TO 1/2 THE HEIGHT OF THE SILT FENCE, THE CONTRACTOR SHALL REMOVE THE SEDIMENT.

3. WHEN STRAW BALES ARE INSTALLED AT THE TOE OF A SLOPE TO TRAP SEDIMENT THEY SHOULD BE PLACE AWAY FROM THE TOE FOR INCREASED HOLDING CAPACITY.

SMALL ROCK DITCH CHECK
NO SCALE



PROJECT AREA	CHECK DAM ELEVT (ft)	HEIGHT OF RISER L(ft)	DIAMETER OF PIPE D(in)	STORAGE BEHIND DAM (acre ft)
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

NOTES:
1. FORM CONCRETE INVERT OF TEE TO FACILITATE PROPER DRAINAGE.

2. PERFORATED RISER SHALL BE AGRI-DRAIN OR APPROVED EQUAL.

TYPICAL ROCK CHECK DAM SECTIONS
NO SCALE

NO.	BY	CK	APP	DATE	REVISIONS AND RECORD OF ISSUE
4	DEC			03/13/09	FINAL - CONSTRUCTION SET
3	DEC			2/13/08	100% SUBMITTAL
2	DEC			11/21/07	90% SUBMITTAL - FOR REVIEW ONLY
1	DEC			8/31/07	70% SUBMITTAL - FOR REVIEW ONLY

CYBNET ID: 143234-320-MR-C-T0000N0H2 XREF1:Andrew Smith Seal Plan Sheet.dwg
WF: 006.dwg XREF2:
SAVED: C0037035, 3/3/2009 8:53:12 AM XREF3:
PLOTTED: C0037035, 3/16/2009 8:26:41 AM XREF4:
USER: C0037035 DWG VER:1.21 XREF5:

ANDREW K. SMITH 17970 REGISTERED PROFESSIONAL ENGINEER
03-13-09

BLACK & VEATCH
Building a world of difference
Black & Veatch Corporation
Kansas City, Missouri

DRY CREEK CHANNEL IMPROVEMENTS
WICHITA, KANSAS

LINCOLN TO ORME
EROSION CONTROL
EROSION & SEDIMENT CONTROL DETAILS

DESIGNED:
DETAILED: DEC
CHECKED: AKS
APPROVED:
DATE: 13 MAR 2009

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

PROJECT NO.
143234

006
SHEET
6 OF 42