

RECP and TRM's

Channel Installation Guidelines

(Supplemental instructions to accompany ET Drawings Entitled RECP and TRM Channel Installation, Drawings 6, 6.1, 7, 8)

Step 1: Site Preparation

The first step in installation of RECPs in channels is site preparation. The site should be fine graded to a smooth profile and relatively free from all weeds, clods, stones, roots, sticks, rivulets, gullies, crusting and caking. Fill any voids and make sure the channel is compacted properly.

Step 2: Seeding

Seed the area to be vegetated. Select a seed mix for vegetation adapted to the local geographical area. The seeding types may vary based on the water conditions expected immediately after installation. The types of seeds planted above the anticipated water line may differ from the seed planted below the anticipated water line.

Step 3: RECP Deployment in the Channel Bottom (Reference Drawing 6 and 6.1)

The RECPs should be unrolled in the direction of water flow. First the RECP is deployed in the channel bottom. It is also necessary to prevent a seam from going down the center of the channel bottom or in areas of concentrated water flow.

When installing two RECPs side by side in a waterway the center of the RECP should be centered in the area of concentrated water flow. Install adjoining RECP's away from the center of the channel bottom. If the manufacturer recommends overlapping the RECP, the overlap will generally be two to four inches. Continue to install a common row of staples at two-foot minimums along the length of the offset center overlap.

Step 4: Anchor Trench and Secure Blankets

The RECP must be secured at the beginning of the channel. The anchoring method recommended in the Federal Highway Administration's proposed FP-03 Specifications is a six-inch x six-inch check slot is dug perpendicular to the direction of water flow across the entire width of the channel. The RECP is laid in the check slot with 30 inches of the RECP extending upstream of the check slot. Stake or staple the RECP in the check slot on 12-inch centers. Backfill the anchor trench and compact the soil. Place seed over the compacted soil if necessary. Cover the compacted soil with the remaining 12 inches of the terminal end of the RECP. Staple or stake terminal end down slope of the anchor trench on 12-inch centers.

See Drawings 6, 6.1

Step 5: Deployment on Side Slopes

Continue to roll the RECP along the channel bottom and side slopes in the direction of the water flow. As the RECP is installed from the channel bottom up the slope a shingle type installation is recommended with the up-slope RECP overlapping the lower RECP approximately two inches to four inches Anchor the RECPs with a minimum staple pattern of one staple every 24 inches across the width and one staple every 36 inches down its length. If the RECP needs to be spliced, be sure the RECP is "shingled" with the up-stream RECP overlapping the down-stream RECP. There should be four inches of overlap in a splice. Use a staple check slot to secure the overlap. Anchor the RECP placed at the top of the channel slope in the same manner as described in the slope section.

See Drawing 8

Step 6: Terminal End

Secure the RECP at the terminal end of the channel with a check slot similar to the one made at the beginning of the channel.

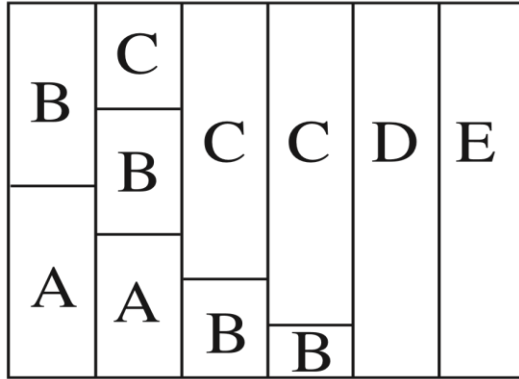


Supplemental Literature: See Channel Stapling Guidelines

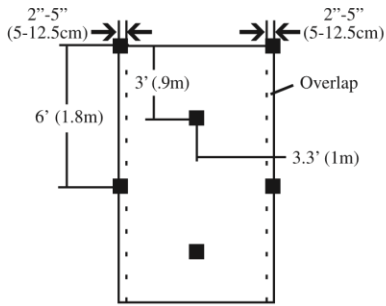
STAPLE PATTERN

1. The choice of staples depends on the compaction of the soil. In general the staples once applied should not easily come out by hand. The standard 6" (150mm) two sided staple is the norm but in sandier soils an 8"-10" (200mm-250mm) double sided may be required.
2. In extreme loose soil conditions a 18" (450mm) or longer pin with washers may be necessary to anchor the blanket.

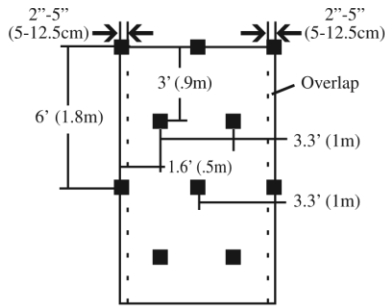
(91)	300
(84)	275
(76)	250
(69)	225
(61)	200
(53)	175
(46)	150
(38)	125
(30)	100
(23)	75
(15)	50
(8)	25
(m)	(Feet)



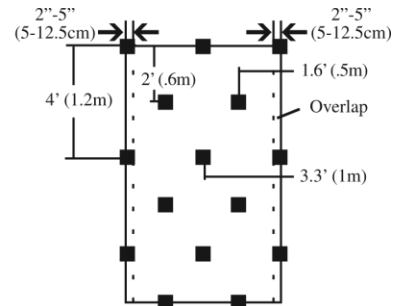
4:1 3:1 2:1 1:1 Low/Med Flow Channel And Shoreline High Flow Channel And Shoreline



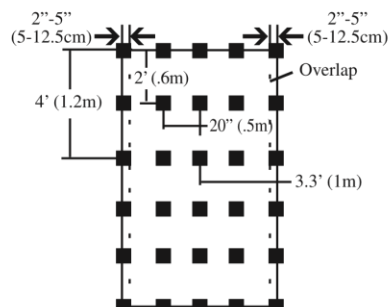
A
.7 staples per square yard
(.8 staples per square metre)



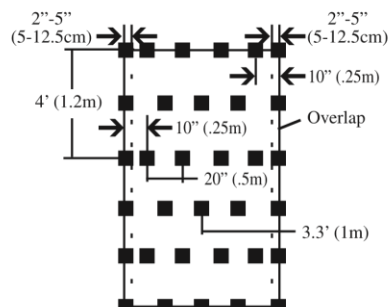
B
1.1 staples per square yard
(1.3 staples per square metre)



C
1.7 staples per square yard
(2 staples per square metre)

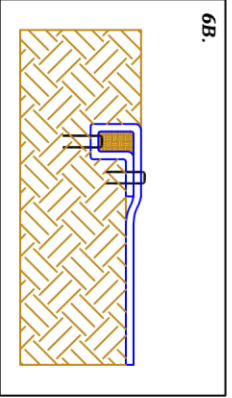
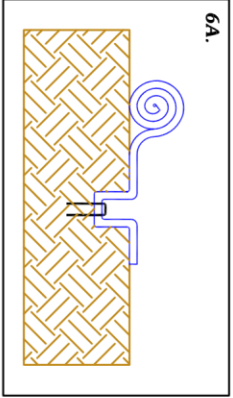
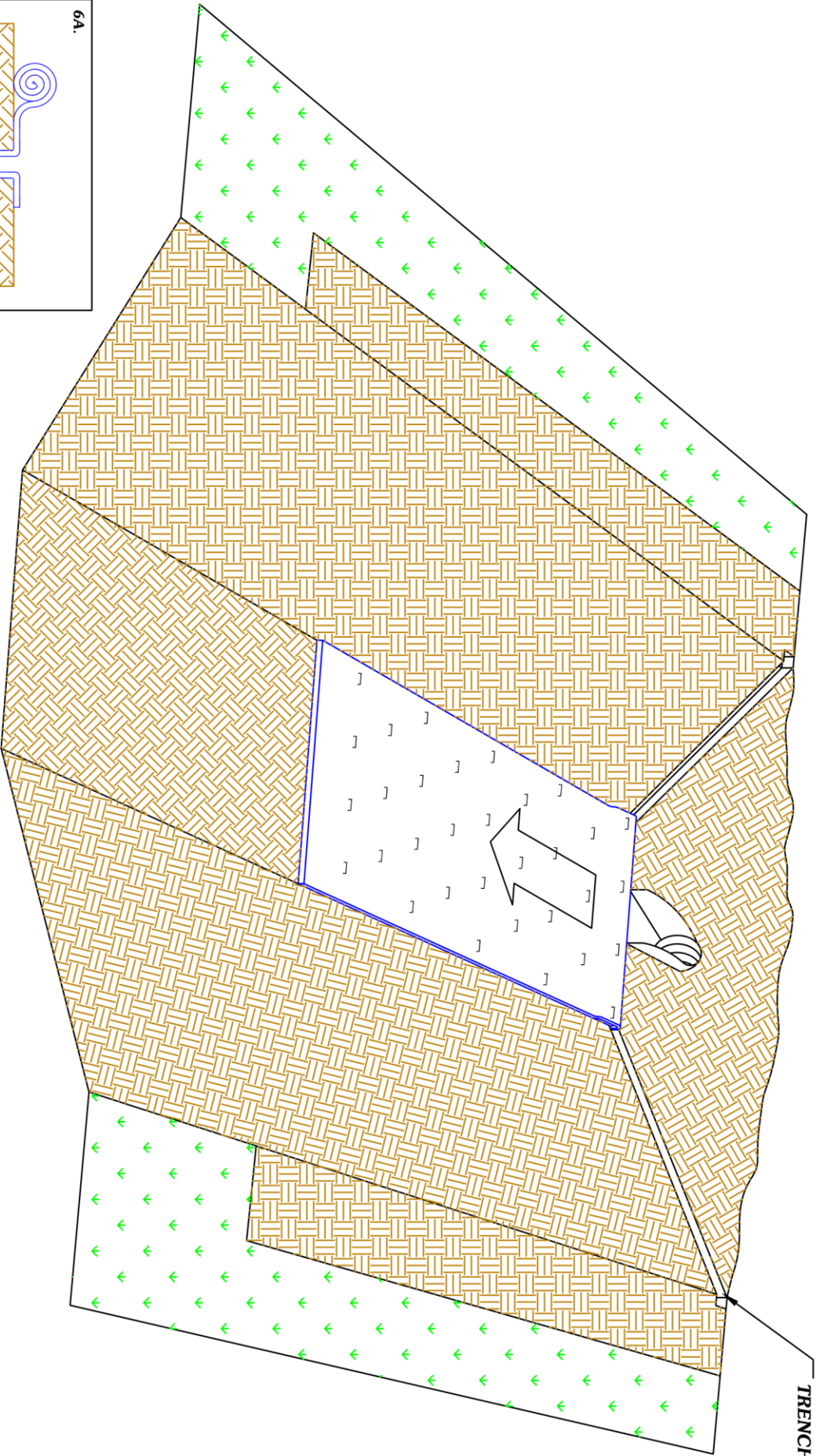


D
3.4 staples per square yard
(4.1 staples per square metre)

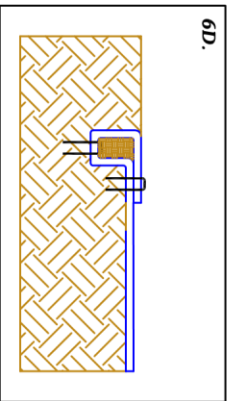
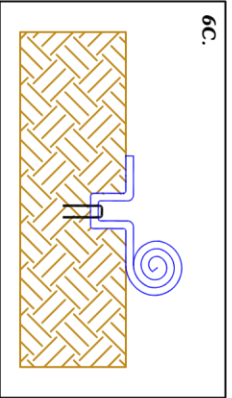


E
3.7 staples per square yard
(4.4 staples per square metre)

**CHANNEL
STEP 1 OF 3**



OR

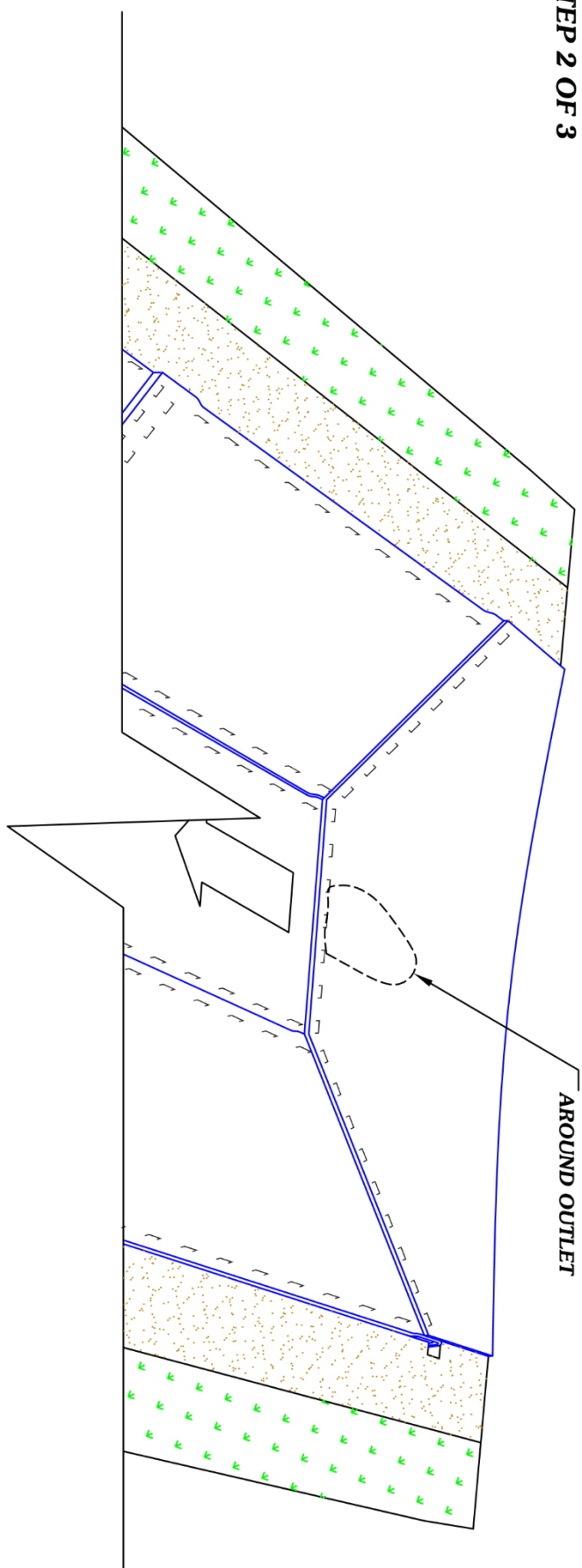


**ANCHOR
TRENCH**

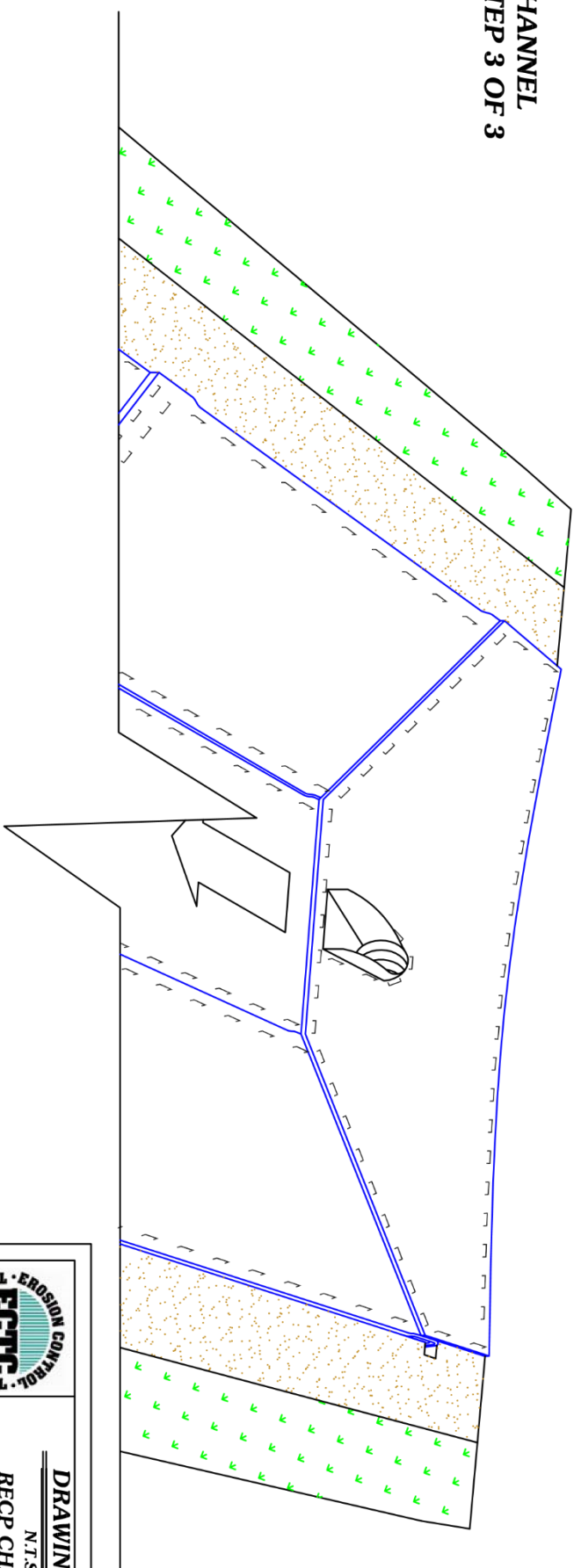


DRAWING #6
N.T.S.
**RECP CHANNEL
INSTALLATION**

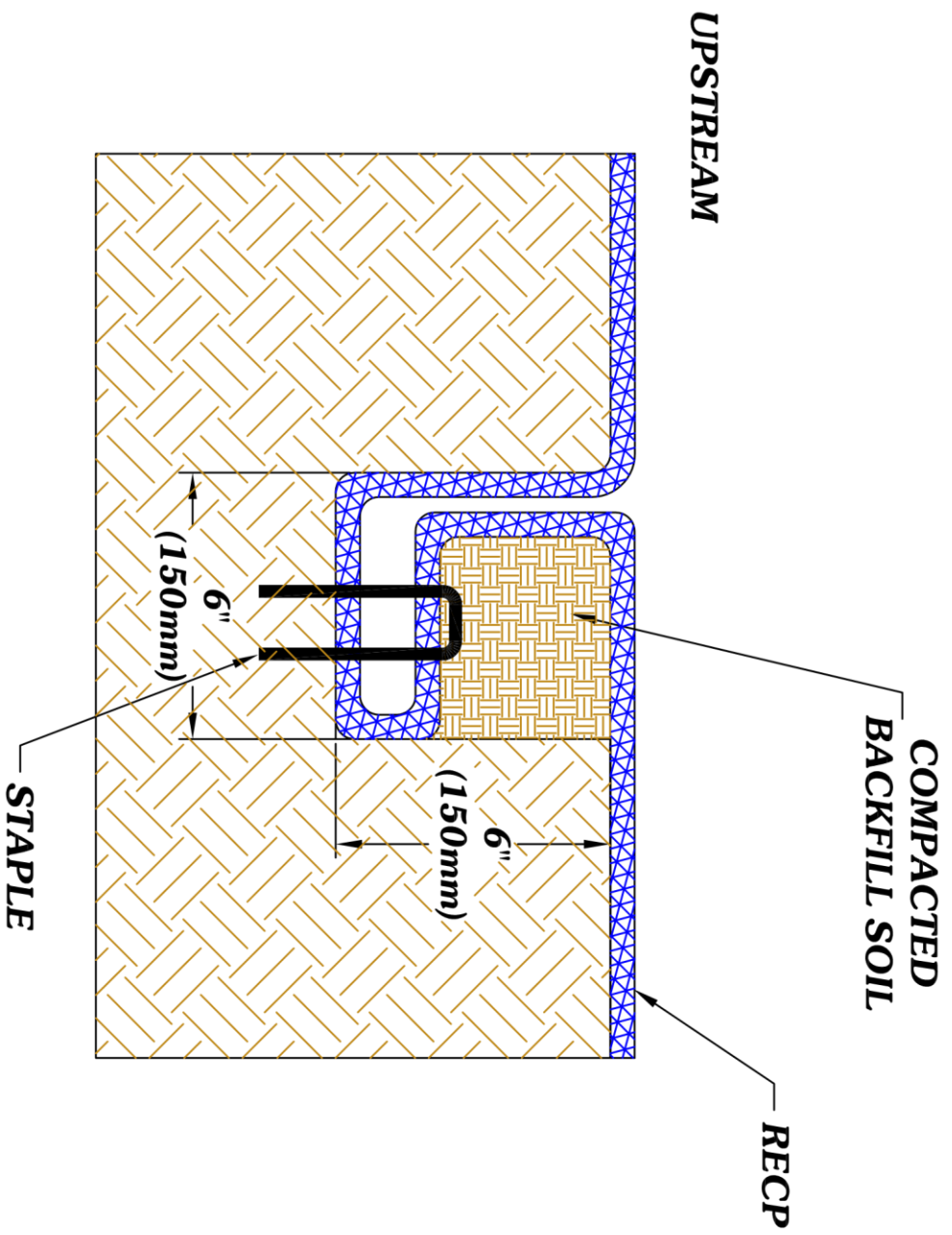
**CHANNEL
STEP 2 OF 3**



**CHANNEL
STEP 3 OF 3**

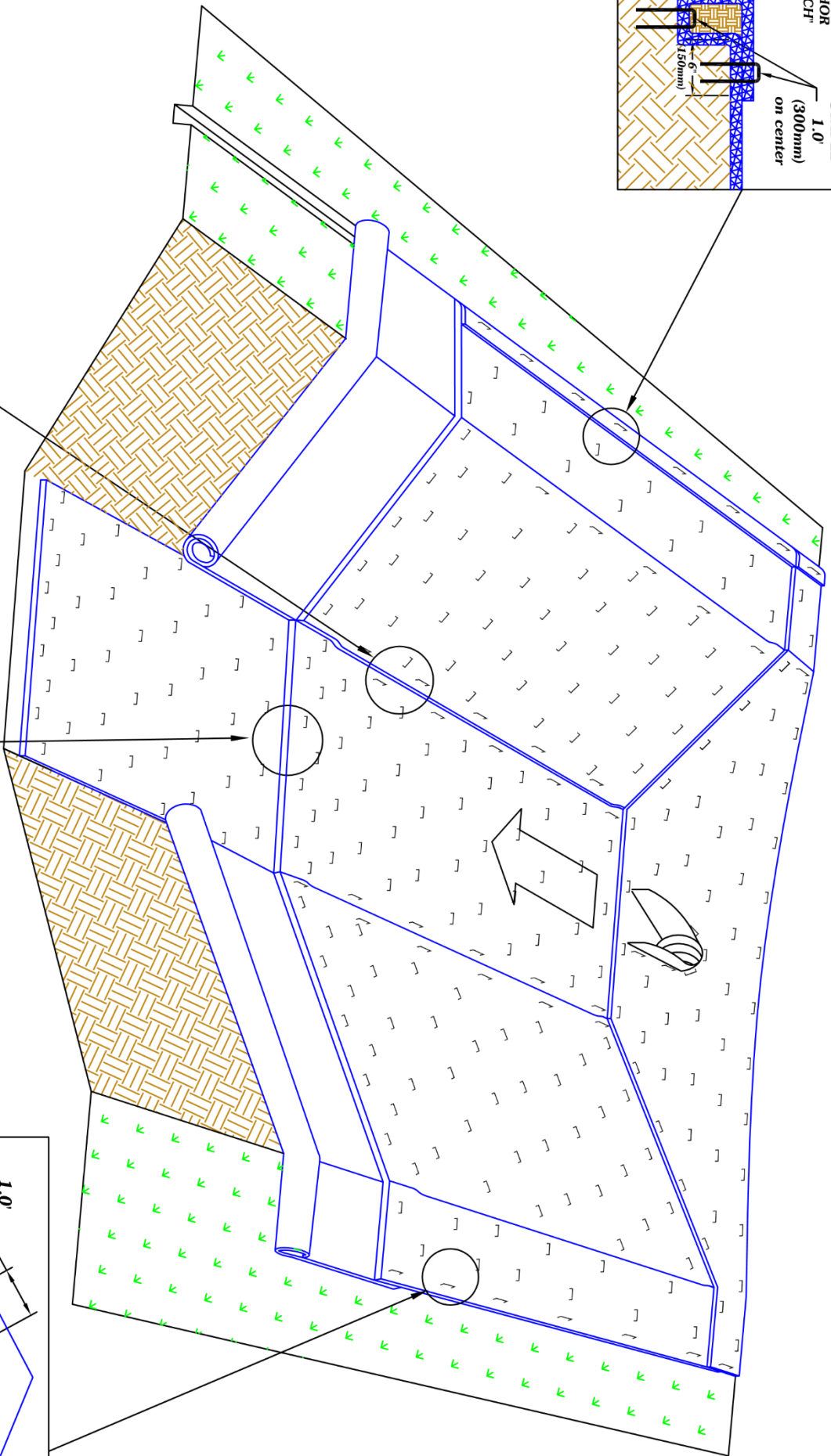
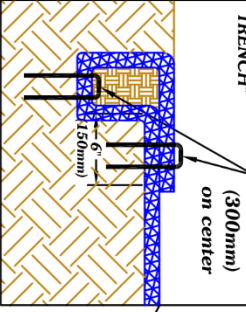


DRAWING #6.1
N.T.S.
RECP CHANNEL
INSTALLATION

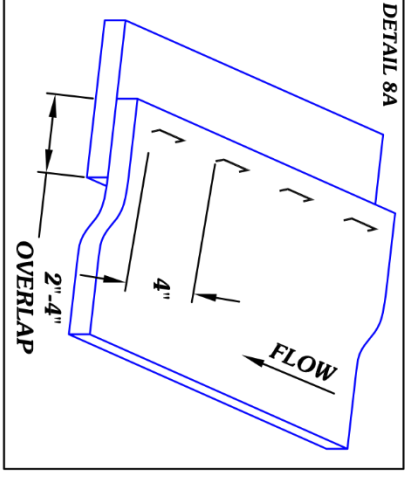


DRAWING #7
 N.T.S
 CHANNEL
 CHECK SLOT

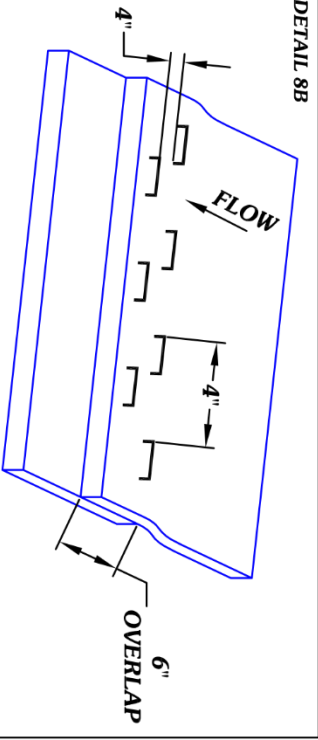
DETAIL 8E
"ANCHOR
TRENCH"
STAPLE
1.0'
(300mm)
on center



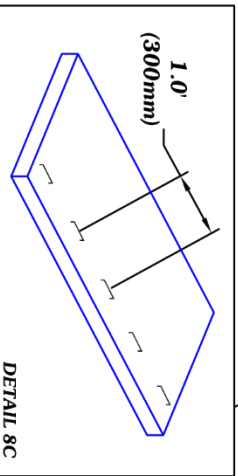
DETAIL 8A



DETAIL 8B



DETAIL 8C



DRAWING #8
N.T.S.
RECIP CHANNEL
INSTALLATION