



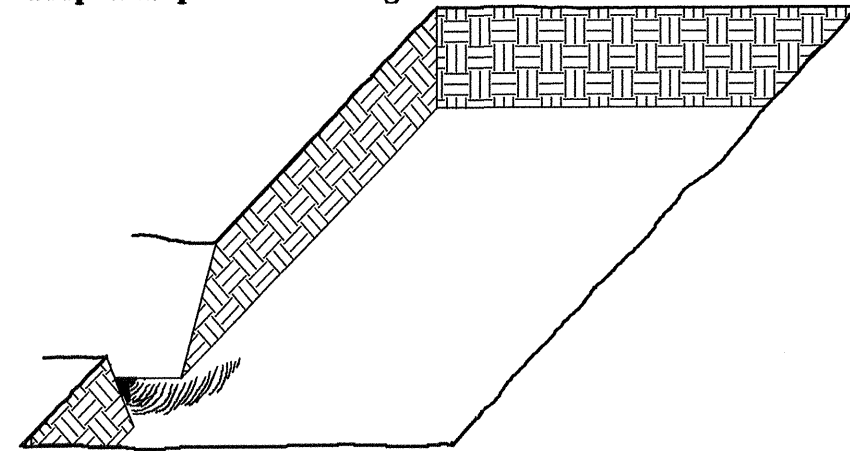
|                                  |                     |
|----------------------------------|---------------------|
| PROJECT REFERENCE NO.<br>R-2519A | SHEET NO.<br>RF-1   |
| R/W SHEET NO.                    |                     |
| ROADWAY DESIGN ENGINEER          | HYDRAULICS ENGINEER |

## PLANTING DETAILS

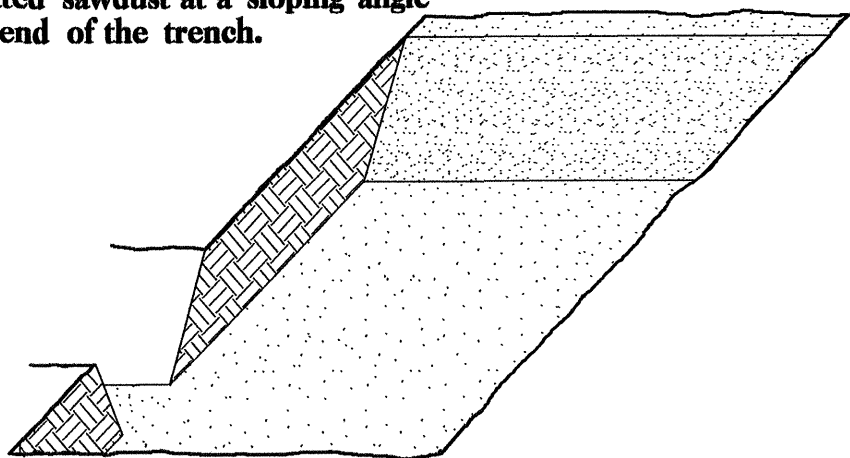
### SEEDLING / LINER BAREROOT PLANTING DETAIL

#### HEALING IN

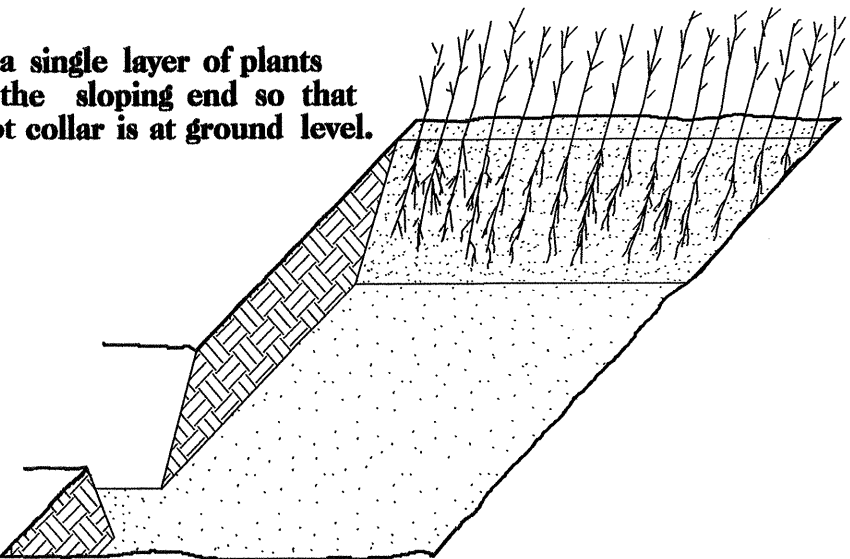
1. Locate a healing-in site in a shady, well protected area.
2. Excavate a flat bottom trench 300mm deep and provide drainage.



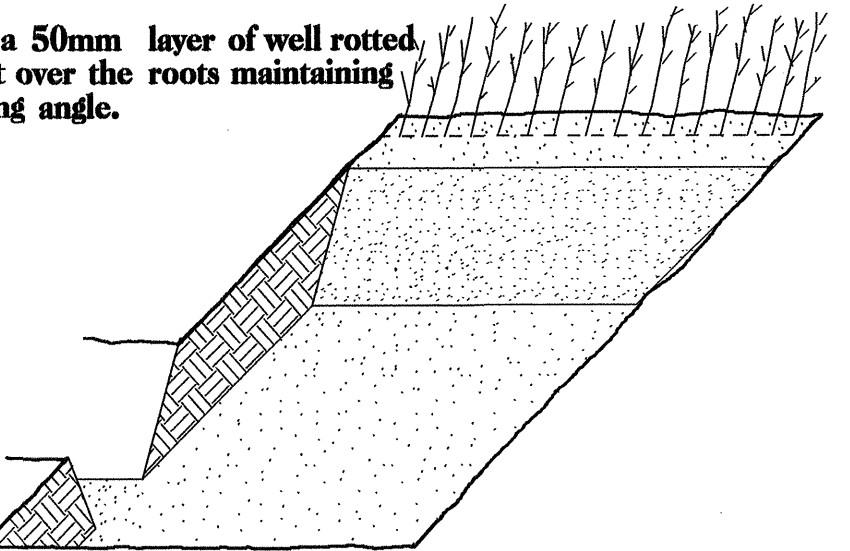
3. Backfill the trench with 50mm well rotted sawdust. Place a 50mm layer of well rotted sawdust at a sloping angle at one end of the trench.



4. Place a single layer of plants against the sloping end so that the root collar is at ground level.

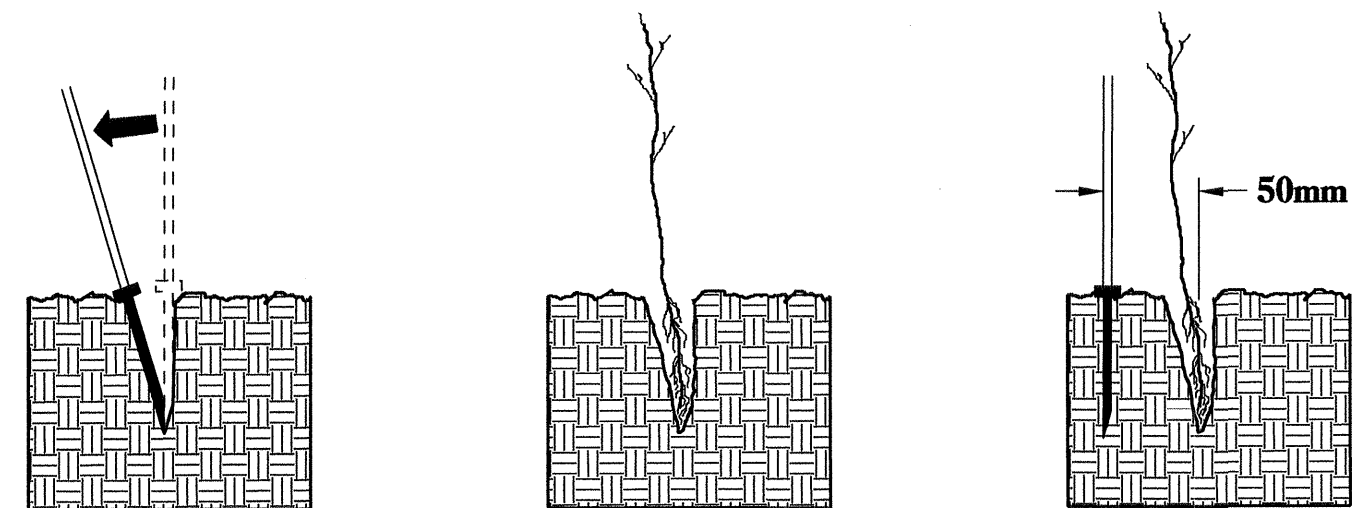


5. Place a 50mm layer of well rotted sawdust over the roots maintaining a sloping angle.

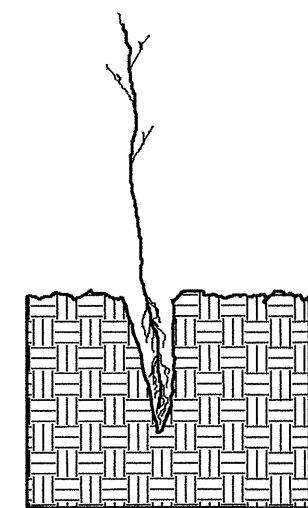


6. Repeat layers of plants and sawdust as necessary and water thoroughly.

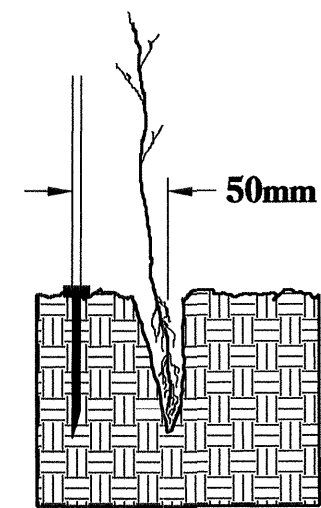
#### DIBBLE PLANTING METHOD USING THE KBC PLANTING BAR



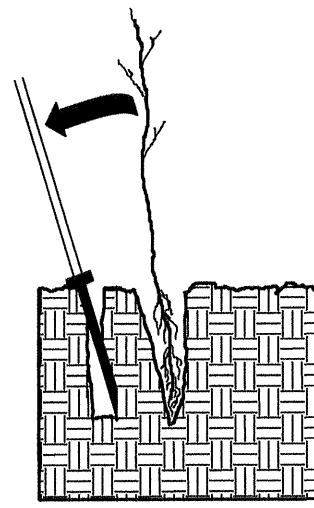
1. Insert planting bar as shown and pull handle toward planter.



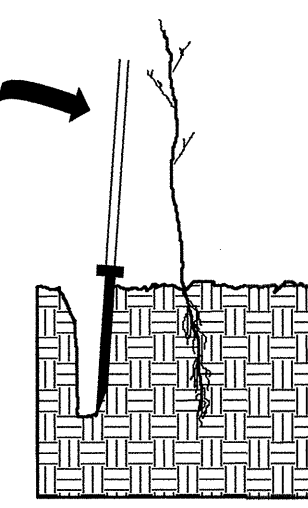
2. Remove planting bar and place seedling at correct depth.



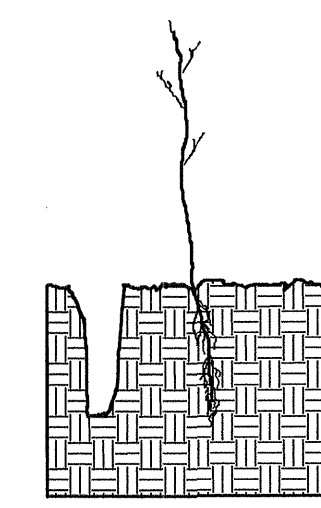
3. Insert planting bar 50mm toward planter from seedling.



4. Pull handle of bar toward planter, firming soil at bottom.



5. Push handle forward firming soil at top.



6. Leave compaction hole open. Water thoroughly.

#### PLANTING NOTES:

**PLANTING BAG**  
During planting, seedlings shall be kept in a moist canvas bag or similar container to prevent the root systems from drying.



**KBC PLANTING BAR**  
Planting bar shall have a blade with a triangular cross section, and shall be 300mm long, 100mm wide and 25mm thick at center.



**ROOT PRUNING**  
All seedlings shall be root pruned, if necessary, so that no roots extend more than 250mm below the root collar.

## REFORESTATION

- TREE REFORESTATION SHALL BE PLANTED 1.8m TO 3.0m ON CENTER, RANDOM SPACING, AVERAGING 2.4m ON CENTER, APPROXIMATELY 1680 PLANTS PER HECTARE.

#### REFORESTATION

MIXTURE, TYPE, SIZE, AND FURNISH SHALL CONFORM TO THE FOLLOWING:

|                             |              |                  |
|-----------------------------|--------------|------------------|
| 25% SALIX NIGRA             | BLACK WILLOW | 305mm - 457mm BR |
| 25% PLATANUS OCCIDENTALIS   | SYCAMORE     | 305mm - 457mm BR |
| 25% LIRIODENDRON TULIPIFERA | TULIP POPLAR | 305mm - 457mm BR |
| 25% JUGLANS NIGRA           | BLACK WALNUT | 305mm - 457mm BR |

## REFORESTATION DETAIL SHEET

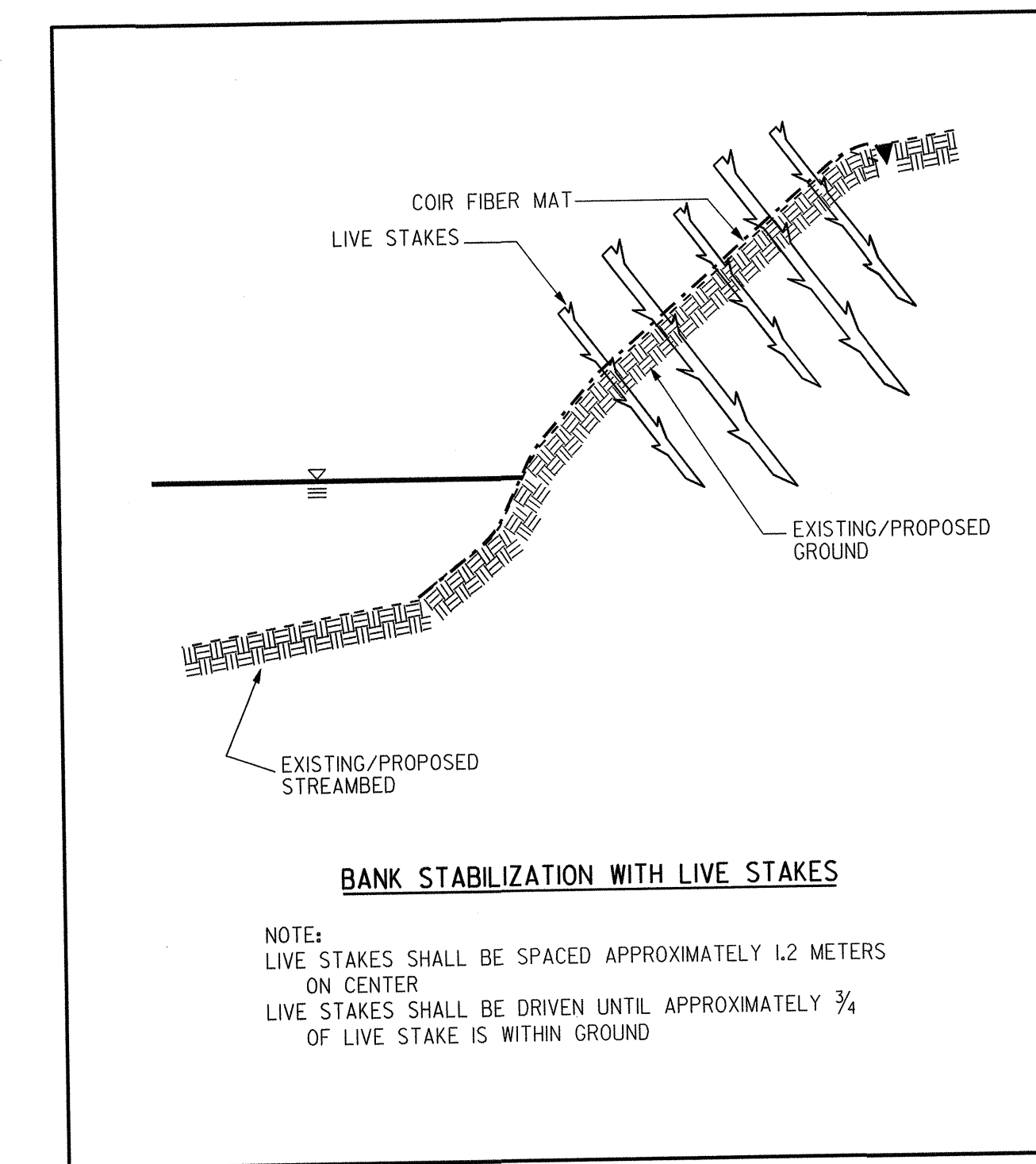
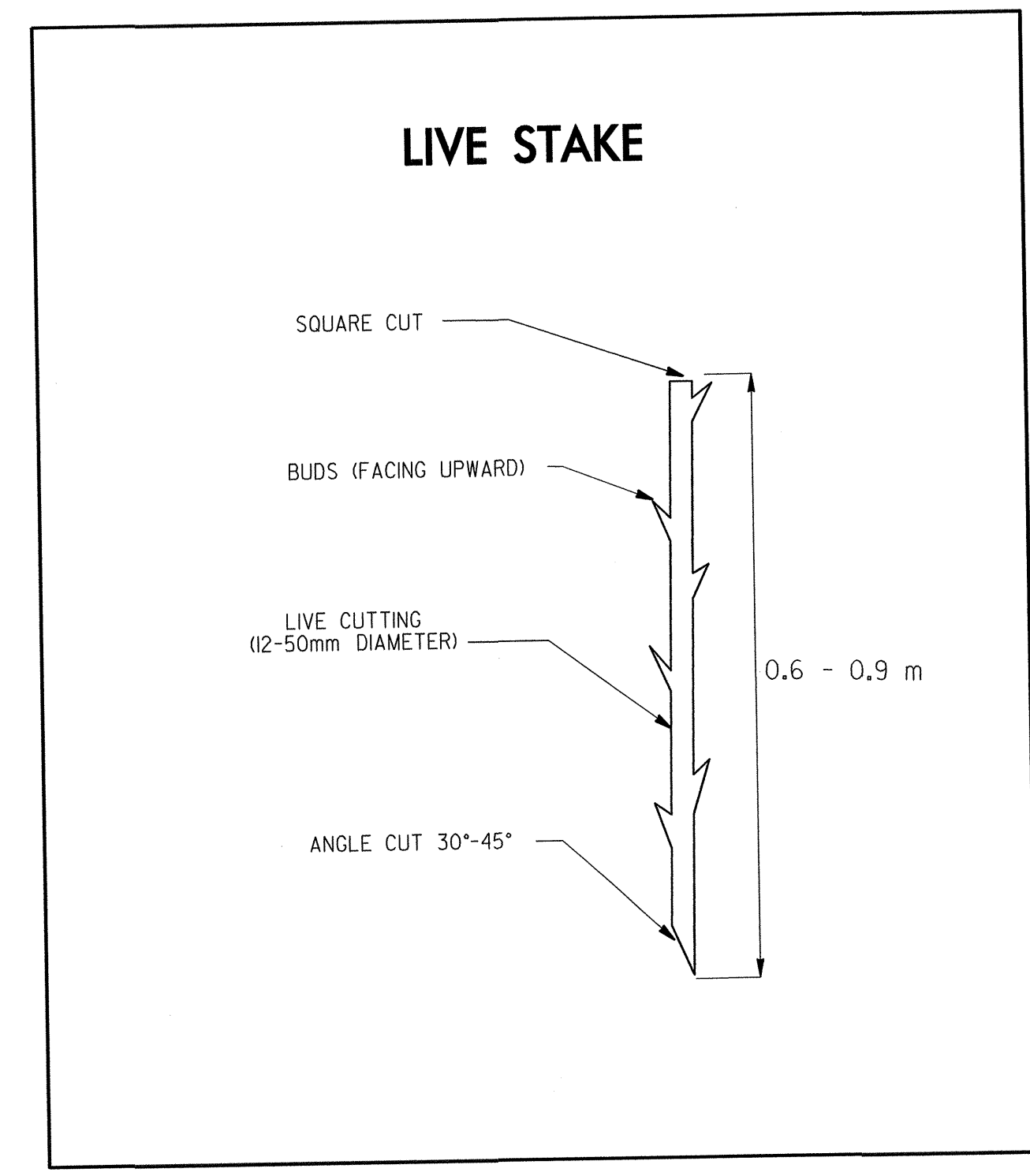
N.C.D.O.T. - ROADSIDE ENVIRONMENTAL UNIT



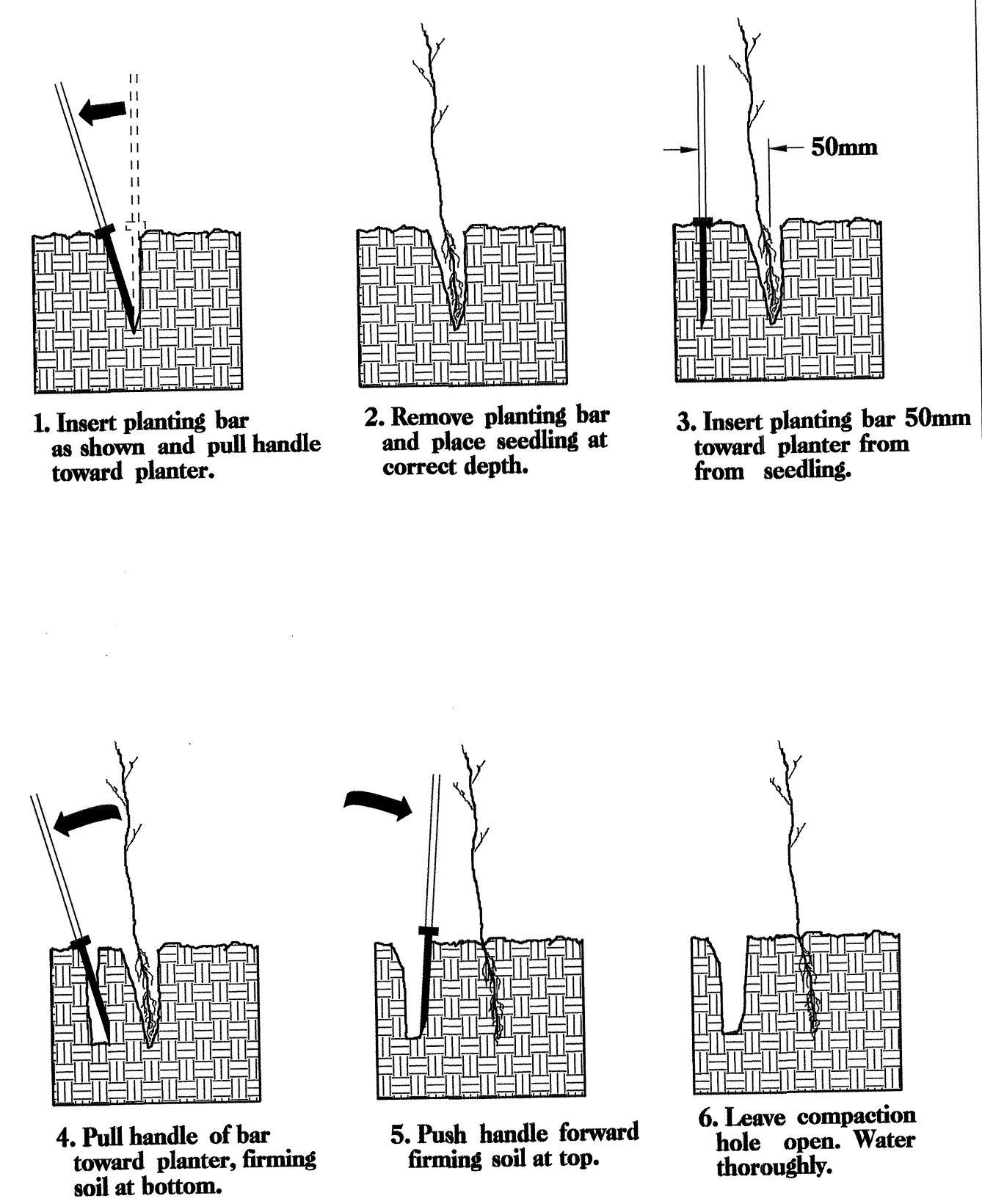
|                                  |                     |
|----------------------------------|---------------------|
| PROJECT REFERENCE NO.<br>R-2519A | SHEET NO.<br>RF-2   |
| R/W SHEET NO.                    |                     |
| ROADWAY DESIGN ENGINEER          | HYDRAULICS ENGINEER |

# PLANTING DETAILS

## LIVE STAKES PLANTING DETAIL

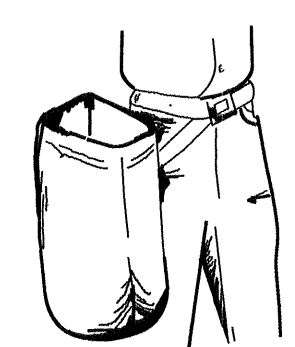


## BAREROOT PLANTING DETAIL DIBBLE PLANTING METHOD USING THE KBC PLANTING BAR

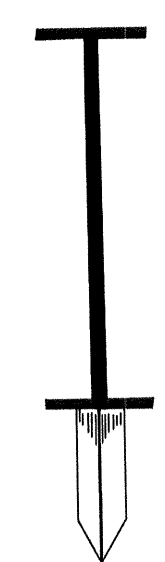


### PLANTING NOTES:

**PLANTING BAG**  
During planting, seedlings shall be kept in a moist canvas bag or similar container to prevent the root systems from drying.



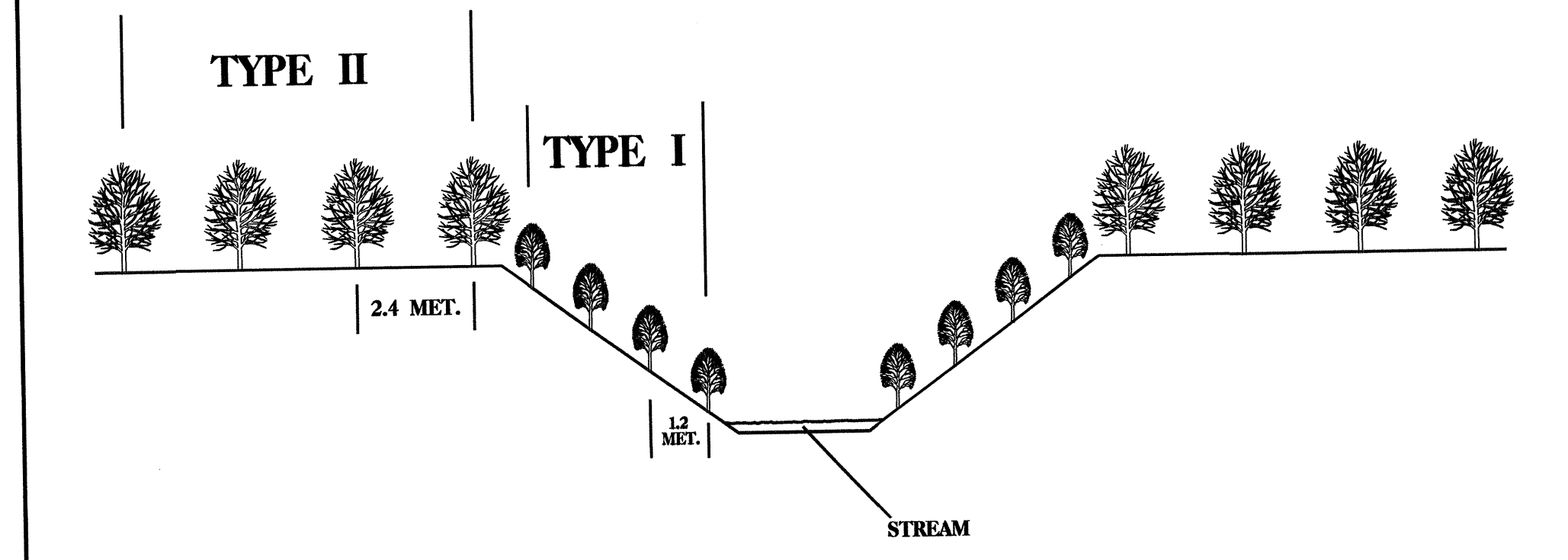
**KBC PLANTING BAR**  
Planting bar shall have a blade with a triangular cross section, and shall be 300mm long, 100mm wide and 25mm thick at center.



**ROOT PRUNING**  
All seedlings shall be root pruned, if necessary, so that no roots extend more than 250mm below the root collar.

- TYPE 1 STREAMBANK REFORESTATION SHALL BE PLANTED 0.9m TO 1.5m ON CENTER, RANDOM SPACING, AVERAGING 1.2m ON CENTER, APPROXIMATELY 6726 PLANTS PER HECTARE.
- TYPE 2 STREAMBANK REFORESTATION SHALL BE PLANTED 1.8m TO 3.0m ON CENTER, RANDOM SPACING, AVERAGING 2.4m ON CENTER, APPROXIMATELY 1680 PLANTS PER HECTARE.
- NOTE: TYPE 1 AND TYPE 2 STREAMBANK REFORESTATION SHALL BE PAID FOR AS "STREAMBANK REFORESTATION"

## STREAMBANK REFORESTATION TYPICAL



### STREAMBANK REFORESTATION

MIXTURE, TYPE, SIZE, AND FURNISH SHALL CONFORM TO THE FOLLOWING:

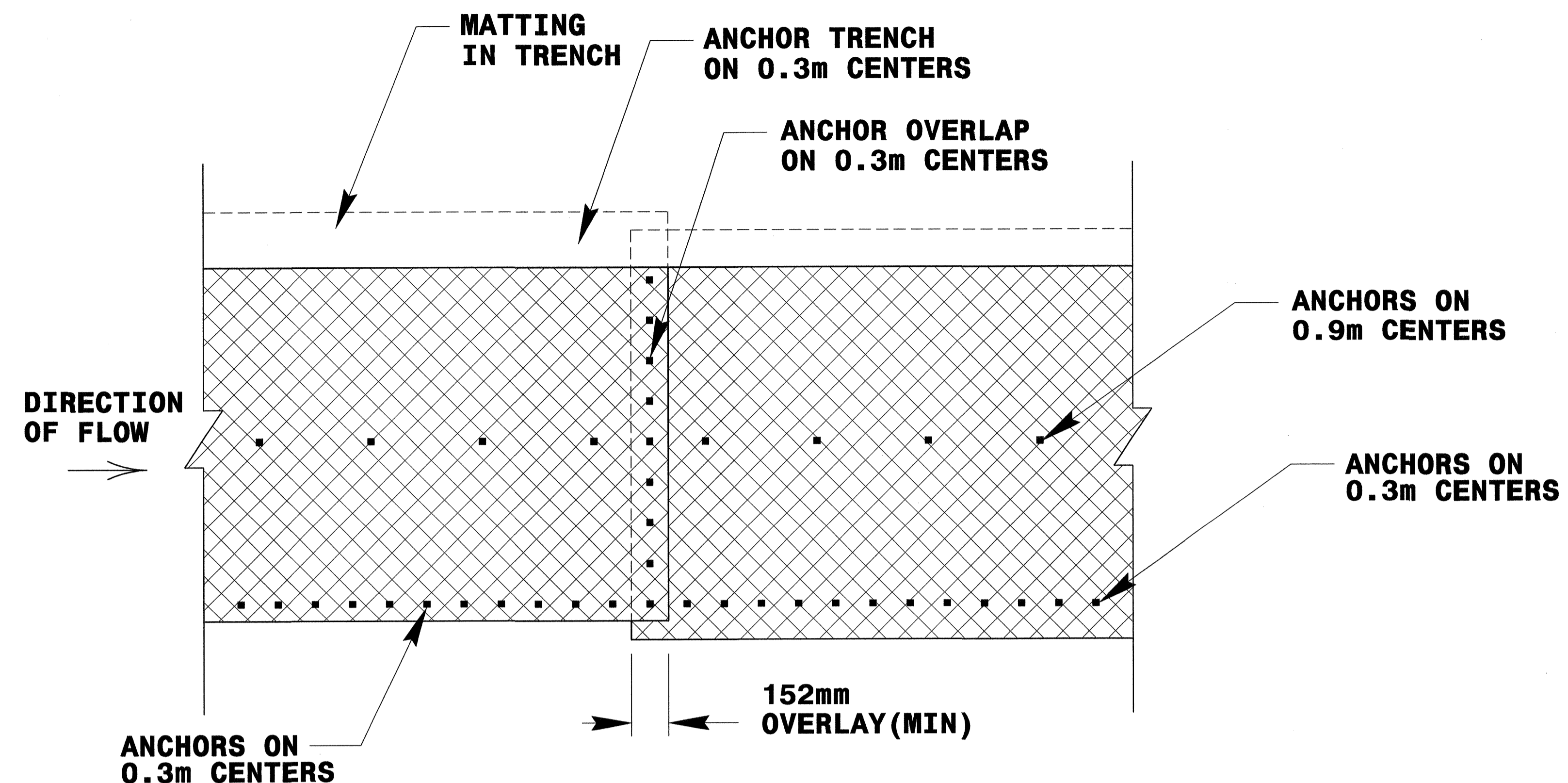
|                             |               |                          |
|-----------------------------|---------------|--------------------------|
| <b>TYPE 1</b>               |               |                          |
| 50% SALIX SERICEA           | SILKY WILLOW  | 0.6m to 0.9m LIVE STAKES |
| 50% CORNUS AMOMUM           | SILKY DOGWOOD | 0.6m to 0.9m LIVE STAKES |
| <b>TYPE 2</b>               |               |                          |
| 25% LIRIODENDRON TULIPIFERA | TULIP POPLAR  | 305mm - 457mm BR         |
| 25% PLATANUS OCCIDENTALIS   | SYCAMORE      | 305mm - 457mm BR         |
| 25% FRAXINUS PENNSYLVANICA  | GREEN ASH     | 305mm - 457mm BR         |
| 25% QUERCUS ALBA            | WHITE OAK     | 305mm - 457mm BR         |

SEE PLAN SHEETS FOR AREAS TO BE PLANTED

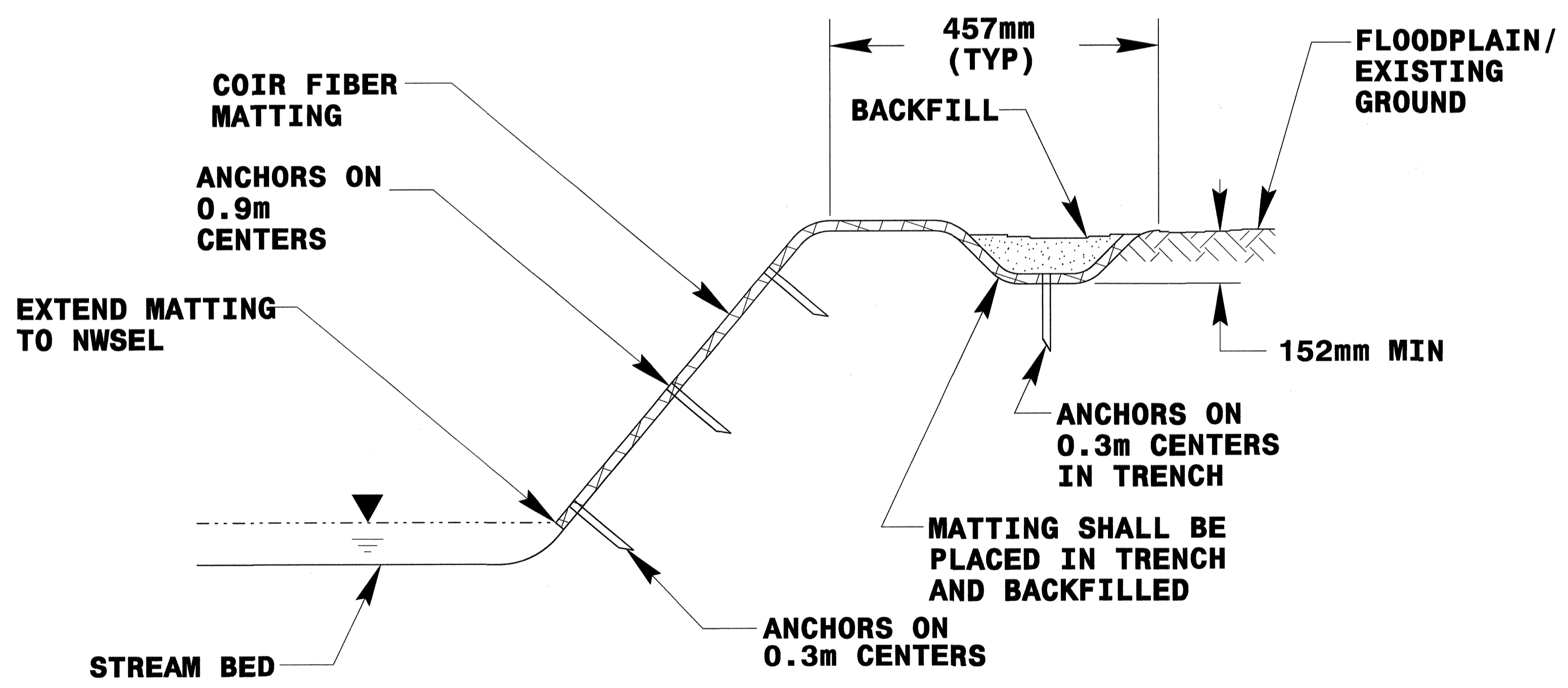
**STREAMBANK REFORESTATION  
DETAIL SHEET 1 OF 2**  
N.C.D.O.T. - ROADSIDE ENVIRONMENTAL UNIT



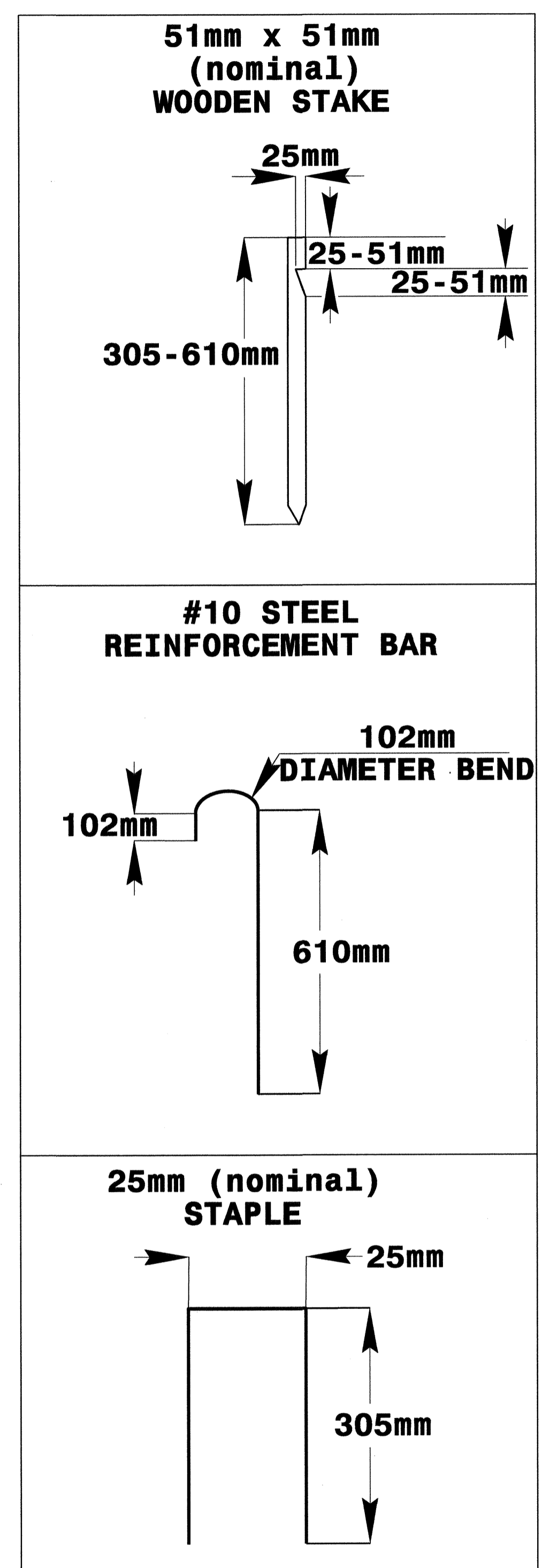
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|----------------------------------|---------------------|
| PROJECT REFERENCE NO.<br>R-2519A | SHEET NO.<br>RF-3   |
| R/W SHEET NO.                    |                     |
| ROADWAY DESIGN ENGINEER          | HYDRAULICS ENGINEER |



**PLAN VIEW**



**TYPICAL CROSS SECTION**



**ANCHOR OPTIONS**

**COIR FIBER MATTING DETAIL**

NOT TO SCALE