THIS FIGURE IS ONLY MEANT TO DEFINE THE MINIMUM INFORMATION REQUIRED BY THE CITY OF CHARLOTTE TO BE INCLUDED IN A DETAIL FOR THIS TYPE OF TECHNIQUE. THIS FIGURE IS NOT MEANT TO REPRESENT A STANDARD DESIGN METHOD FOR THIS TYPE OF TECHNIQUE AND SHALL NOT BE USED AS SUCH.
1. BRANCHPACKING is typically used to repair stream bank scour areas. It may be used as a stand-alone technique and integrated into existing vegetation. It may also be used in conjunction with other plantings and/or stream bank stabilization techniques. If other stream bank stabilization is used it shall be added to this detail or detailed separately and referenced herein.

2. BRANCHPACKING shall use dormant live cuttings of woody, native plant species which can take root from the cutting. The species from which the cuttings shall be taken, and the size (length and diameter) of the cutting to be used, shall be specified by the designer and shown in a table in this detail or elsewhere in the plans (e.g. – a planting plan) and referenced herein.

3. Detailed handling, preparation, and installation guidelines for live cuttings shall be specified by the designer, including:
   A. Live cuttings shall be cut and installed on the same day unless otherwise provided for in the specifications.
   B. Split or otherwise damaged live cuttings shall not be used.
   C. The soil should be moist or moistened to ensure that live cuttings do not dry out.

4. The proposed slope of the finished stream bank after branchpacking is installed shall match the surrounding stream bank slope.

5. The work shall progress as follows:
   A. The scoured stream bank area shall be prepared by slightly grading the floor of the scour area back into the stream bank to allow the first layer of live cuttings to be placed perpendicular to the proposed slope of the stream bank.
   B. Wooden stakes of a size specified by the designer shall be driven vertically into the ground to a specified depth and spacing to form a grid, with the top of the stake at the elevation of the proposed stream bank slope.
   C. The first layer of live cuttings is pressed, between the vertical wooden stakes, and perpendicular to the proposed stream bank slope. Live cuttings shall be placed to a specified thickness, in a crisscross configuration, with the growing tips generally oriented toward the proposed stream bank slope. Some of the basal ends of the live cuttings should touch the back of the scoured area. Note that subsequent layers of live cuttings are installed with the basal ends lower than the growing tips so the live cuttings are perpendicular to the proposed stream bank slope.
   D. Each layer of live cuttings shall be covered by a layer of soil of a specified thickness. Soil shall be hand tamped or lightly compacted as necessary to ensure soil contact with the live cuttings.

6. Live cuttings shall protrude only slightly from the repaired stream bank face. The basal ends of the cuttings shall be trimmed prior to placement in each layer to account for the changing depth of scour as each layer of cuttings and soil is added. The wooden vertical stakes shall not protrude from the filled stream bank face.

This figure is only meant to define the minimum information required by the City of Charlotte to be included in a detail for this type of technique. This figure is not meant to represent a standard design method for this type of technique and shall not be used as such.