
Knowlmere Estate (Access to Crag Wood) – Protection & Infrastructure (FY2) Track Construction Specification**1. Track use**

Harvester, forwarder, pedestrian, 4x4, tractor & trailer for general environmental/ woodland management access and timber extraction, approx. 550m of track overall.

2. Track preparation

Limited track preparation is required. Cutting of new stone track with appropriate water management and stacking/turning area to facilitate timber extraction from Crag Wood

3. Specification of new track

- a. The ground profile will be preserved wherever possible.
- b. Stone tracks will be constructed to a finished width of 3.5 or 4.0m as outlined. Tracks will be widened out on bends and junctions to 4m with a minimum radius of 6m (where boundaries allow).
- c. A crossfall of circa 5% will be achieved to drain water off the tracks. Where stone is required, this will be achieved by constructing the track 50mm higher on one side of the track to the other.
- d. Trackside drainage ditches might be required sometimes in order to carry away runoff produced by the crossfall of the track and aid land drainage. Drainage ditches should be created/maintained using a “V” ditching bucket where possible. Attention should be given to creating a ditch with sufficient side slope, bottom width and the gradient should be $>2\%$ to ensure water flows but $\leq 6\%$ to prevent erosion.
- e. Any culverts installed will be 450mm in width as required and twin-walled. Exposed pipe ends to be walled to tidy appearance. Specific culvert locations will be agreed with the Contract Manager or Forest Manager.
- f. A tracked excavator will cut, profile and lay the track. A 6 - 10 tonne wheeled dumper will transport stone where required. A double drum-vibrating roller will be used for rolling operations.
- g. Appropriate signage and hazard tape should be used to inform the operations and restrict access where necessary. There is no public right of way through the proposed work area.

4. Job Specification

Job No.	Job Description	Price (£)	Tons of stone supplied	Number of culverts
1	Widen access from road to create bellmouth for lorries turning in and out of track. Widen 125m of existing track from road to first field gate (green line on map) Cut 425m of new track for access to allow harvester and forwarder access to Crag Wood (orange line on map). Address drainage issues (use of back ditch and track camber outlined in spec) by installing qty 5 450mm culverts (to remove water off track) Supply necessary 100mm and 75mm to dust crusher run for new or existing track			
	Contingency - construct 2 extra 450mm culverts if required		-	
2	Cut hardstanding for timber stacking area with lorry turnaround. Turnaround to be approx 26m in overall length (i.e. from far edge of road to end of 'T'), 4m wide with 11m radii (as per FC spec)			
3	Supply and install 2 x 3.7m wooden gate at field boundary (gate 2) and woodland entrance (gate 3). Repair fence either side of gate 2 after installation			

Refer to following pages for detailed maps below; any clarifications should be made through contacting the Contract Manager or Forest Manager

5. Site photos

Fig 1 Second gateway



Fig 2 Track from first gateway



Fig 3 Concrete culvert to replace



Fig 4 Drain/stream alongside track after culvert



Fig 5 Drain converges with track



Fig 6 Flooded third gateway area (culvert reqd)



Fig 7 Approach across field



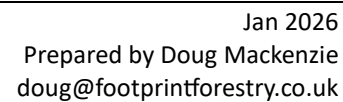
Fig 8 Approach across field



Fig 9 Approach across field



Fig 10 Woodland gateway



7. T shaped turnaround Specification

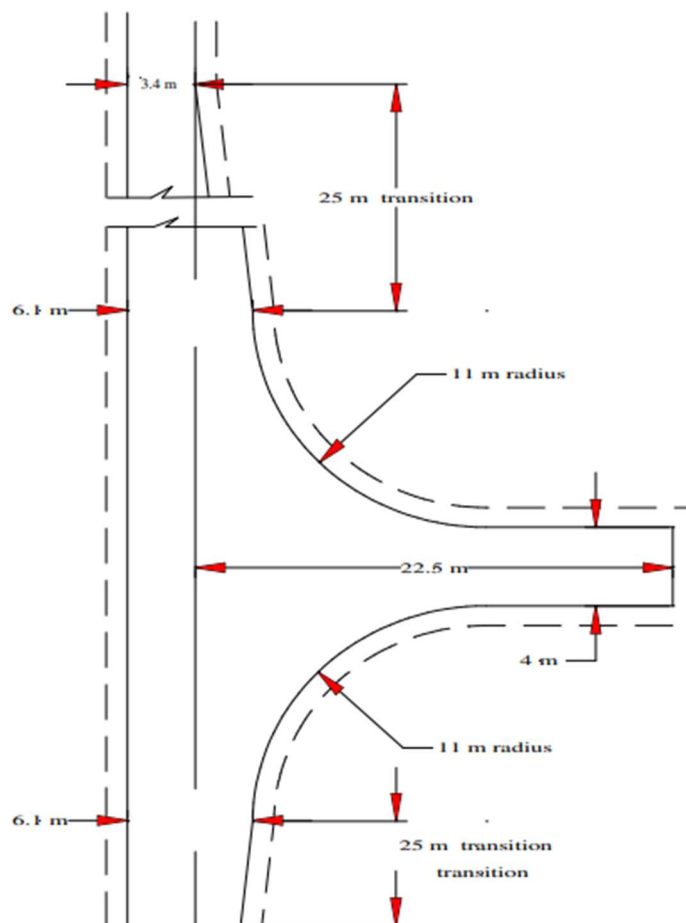
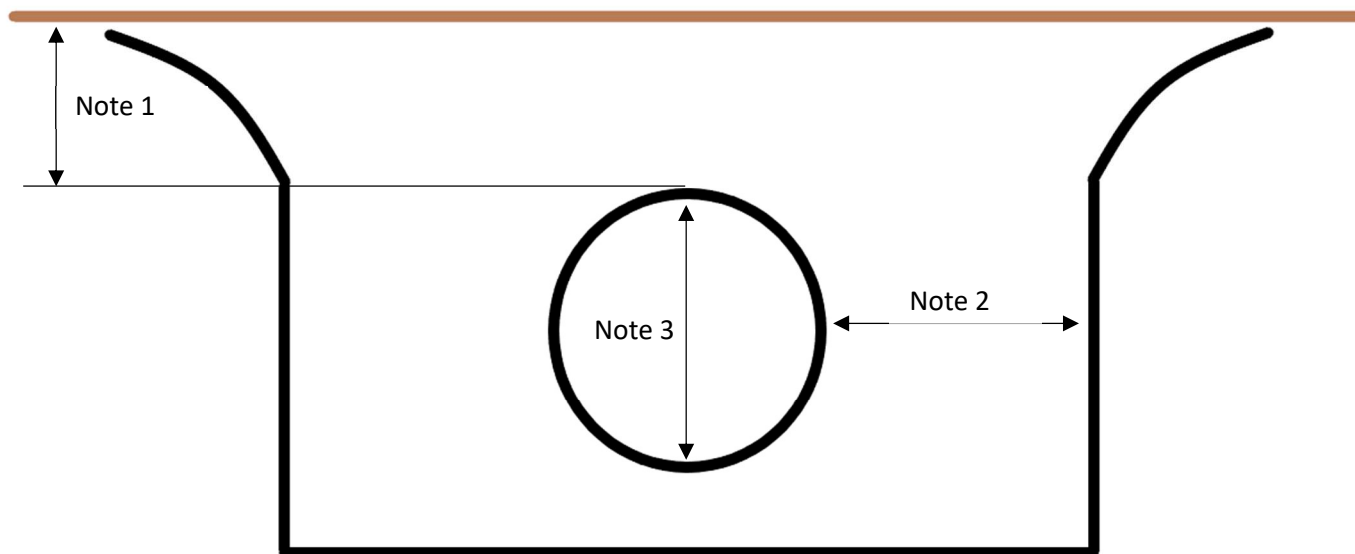


Figure 1

T - Shaped Turn Around

8. Culvert Specification

Note 1. – Minimum 45cm of 75mm Crusher Run stone between pipe top and ground level.

Note 2. – Minimum 30cm between pipe and side of trench to give enough space to compress stone.

Note 3. – Minimum 450mm twin walled plastic pipe. Exposed pipe ends to be walled to tidy appearance.