

Drainage Strategy: Outfall to Whittle Brook

Two drainage connections to Whittle Brook from attenuation features associated with Unit 1 (TJM Unit) are required during the construction of Unit 1. There is concern that they do not unnecessarily cause damage to the neighbouring Booths Wood Local Wildlife Site (LWS) which is also covered by a Tree Preservation Order [TPO] (ref TPO 5/2 – W8).

Connection 1: Westernmost

The westernmost connection is sufficiently positioned to the west of Booths Wood that it will have no effect on any trees including those that are part of the LWS/TPO.

Connection 2: Easternmost

This connection will have to route through the wood's northern edge to reach the northern bank of Whittle Brook. The concern is that it may therefore affect the Root Protection Areas (RPAs) of trees associated with Booths Wood.

The trees that lay along the northern edge of Booths Wood between the wood and Whittle Brook have therefore been accurately positioned and tagged for identification. Their RPAs have then been identified by the project Arborist.

Trenching Route and Headwall Position

The route that will be adopted by all drainage trenching operations, required to form an outfall to Whittle Brook, has been identified as shown in Figure 1 below.

It has been agreed with the Tree & Woodland Officer for St Helens that 3 trees identified as 'unsuitable for retention' on arboriculture grounds will be removed to facilitate a direct route to the brook from the development thus avoiding the RPAs of all healthy trees. These are Tree Tag Nos. 1012, 1013 & 1014.

Work Supervision

All drainage works at this locale to be supervised by the Resident Arborist Clerk of Works (ACW) and agreed with the resident Ecological Clerk of Works (ECW) prior to their commencement. The Tree & Woodland Officer (TWO) may regularly visit the works to provide additional advice.

General Tree Fence Protection

The main Tree Protection fence between the proposed footpath and the wood will temporarily be removed to facilitate the installation of this connection, as shown in Figure 1.

Working Easement

A working easement has been identified as shown on Figure 1. All works will be restricted to this easement. The easement to be delineated by Heras Fence. Signing on the fence will be provided to alert the contractor's workforce to the nature of protection of the surrounding woodland. The easement to be considered a Biodiversity Protection Zone 2 in accordance with the Construction Environment Management Plan (Biodiversity) and the surrounding

woodland outside the easement remains a BPZ 1. A toolbox talk is to be given by the ACW/ECW to the work force prior to these works commencing.

Outfall Requirement

Access to the Outfall will require above-ground services such as stairs. While some surface positioning digging may be required during the installation process this will be kept to a minimum and only take place under the supervision of the project Arborist.

The precise type and thus extent of the headwall structure to be provided for installation into the northern bank of the Whittle Brook will be subject to agreement with the Environment Agency.

General Advice

Tree Preservation Order

The trees surrounding the easement are subject to TPO ref 5/2 W8, and therefore the following is prohibited:

- cutting down
- topping
- lopping
- uprooting
- wilful damage
- wilful destruction

Reference should be made to all restrictions listed in <https://www.gov.uk/guidance/tree-preservation-orders-and-trees-in-conservation-areas>

Therefore, no interference with any trees, nor Tree Surgery allowed. Should interference with any tree become unavoidable all works within this easement must stop and permission to be sought from the local authority in accordance with the above advice.

Tree Root Protection

Any roots uncovered, especially those measuring ≥ 25 mm in diameter, should be wrapped/covered to prevent them from desiccation and rapid temperature changes (any wrapping should be removed prior to backfilling). These works are only to be undertaken by the project Arborist.

Access Restrictions

No machine or vehicular access is permitted within an RPA, access is to be pedestrian only. All access to be restricted to the easement.

Excavations

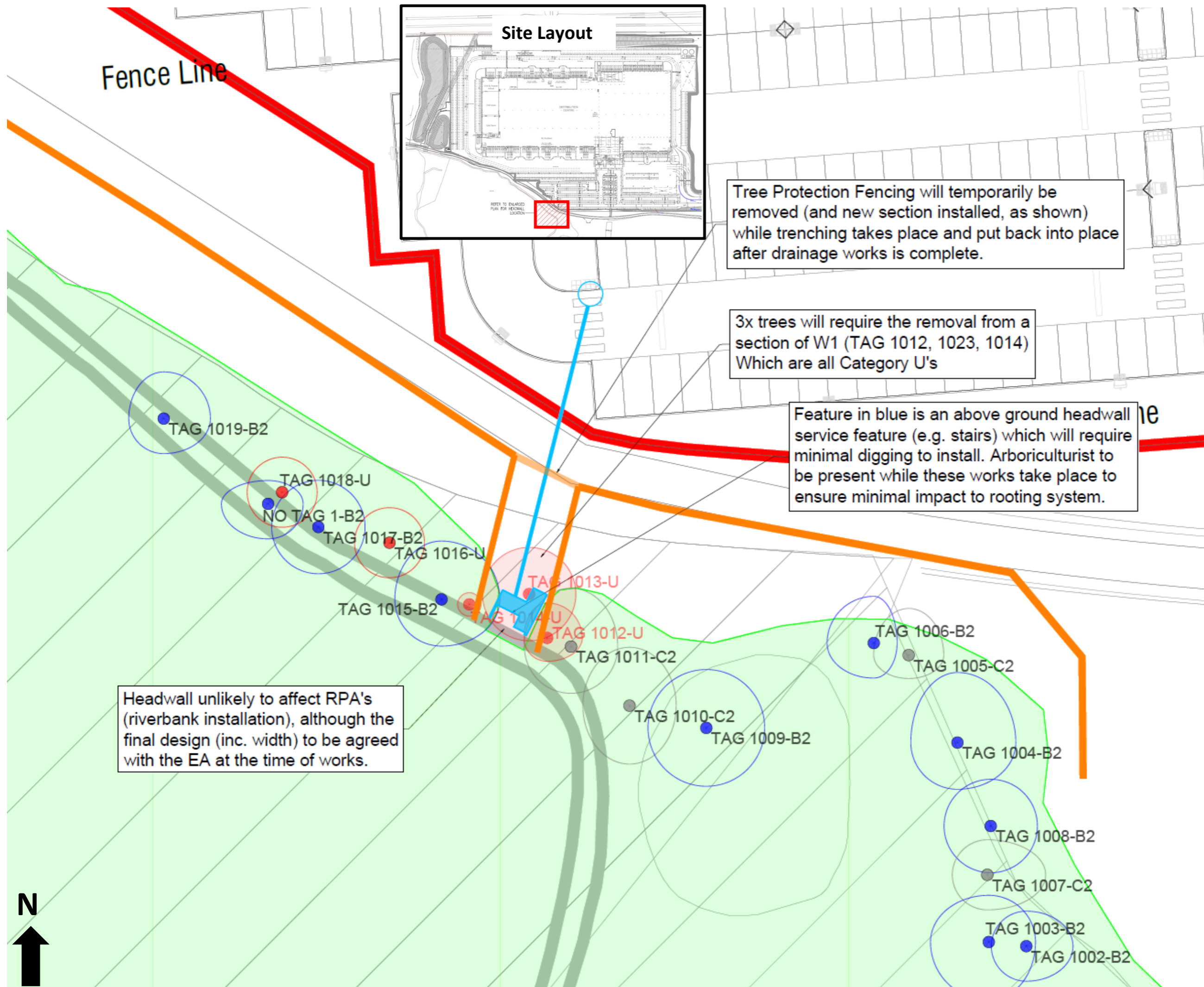
All digging works within an RPA are to be by hand.

All arisings from digging are to be kept within the easement.

Arisings to be replaced to re-create conditions as they were first found i.e. subsoil to be replaced first, with turf last.

Figure 1
Drainage Outfall

Omega Zone 8, St Helens



Legend

- Category A - Trees of High Quality
- Category B - Trees of Moderate Quality
- Category C - Trees of Low Quality
- Category U - Trees Unsuitable for Retention
- Trees proposed for removal
- Tree Trunk
Tree Canopy Spread
- Tree Protection Fencing

FAIRHURST



Drawing No.: 16903-01DMS_B

Revision Dates			
A	B	C	D
22/07/20	06/08/20		

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Drawings are diagrammatic and not to scale. Refer to architect drawings for exact measurements

