

**NOTE: Refer to External Works Specification:
Soft Landscape (OTH-PLA-EE-ES-SPE-L-0003)
in conjunction with this drawing**

2. Arborvent Aeration
Ventilation and irrigation pipe, to be connected to 150 double inlet system with cast inlets fitted to RootSpace Airflow inlet RRARBV150A. 4no to each tree. Supplier: GreenBlue Urban. Installed to suppliers instructions, submit proposals.

4. RootDirector System
RootSpace, RootDirector, medium, modular root barrier system. RD1000-RS. Supplier: GreenBlue Urban. Installed to suppliers instructions, submit proposals.

6. Irrigation System
RootRain Hydrogrille with cast inlet RRHYDR1A to be integrated within tree grille. Supplier: GreenBlue Urban. Installed to suppliers instructions, submit proposals.

8. Stone layer for water distribution
150mm deep clean stone layer (no fines) to allow water distribution within the tree pit. To allow for incoming pipework from drainage channel. 1m of pipe to be perforated, to sit within/between root cells. Pipe to be wrapped in geotextile to prevent blocking of pipework.
8a. To include 2mm Arborflow Load Bearing Geonet to sit beneath ArborCell Unit. Supplier: GreenBlue Urban. Installed to suppliers instructions.

10. Soil Infill Layer
Soil backfill around rootball to surface of tree pit, above Stratcell modules. Topsoil to to BS3882:2015 and clause Q28 245A.

12. ReRoot 2000 Linear Root Barrier
Installed around the sides of the tree pit trench along any sides adjacent to underground utilities and drainage.
Supplier: GreenBlue Urban. Installed to suppliers instructions, submit proposals.

14. Sub-base
To be installed below RootSpace system to engineer's details / requirements.

15. Water Level Monitoring Pipe
Twin wall pipe for monitoring water levels in tree pit.
100mm dia., bottom 200mm to be perforated. To have
cast inlet cover to match aeration system (2).

16. Connection to Aco drainage channel
Refer to engineer's drawing
OTH-RAM-EE-XXDWG-C-1100 to 1102

17. Inground Lighting Element and Ducting
Lighting element (to be integrated within paving) to Arup specification. Duct for lighting supplies to be fed through StrataCell units as indicated.

18. Backfill to sides of tree pit
Backfill material, to civil engineer's specification.

19. Tree Guying System:
Arborguy strapped anchor system SASLCB c/w ground anchors. Supplier: GreenBlue Urban. Installed to suppliers instructions, submit proposals.

20. 100 diameter overflow pipe from tree pit
Refer to engineer's drawing
OTH-RAM-EE-XXDWG-C-1100 to 1102

21. 100 diameter overflow perforated pipe
in base of tree pit
Refer to engineer's drawing
OTH-RAM-EE-XXDWG-C-1100 to 1102

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1. Prior to tree planting a representative sample of the tree pits need to be excavated and completely filled with water. The percolation rates need to be recorded and adjustments made to the drainage detail as appropriate. It is **ESSENTIAL** that the Landscape Architects are consulted at this stage and approval given to proceed with planting.

2. Drawing to be read in conjunction with following NBS Specification Clauses:
Q28: Topsoiling,
Q30: Seeding and turfing,
Q31: External planting,
Q35: Landscape maintenance

3. At the commencement of each phase of works, all proposed tree pits within that phase should have a trial pit / slit trench (300mm wide) excavated to establish whether there are any service clashes and to allow trees to be relocated accordingly.

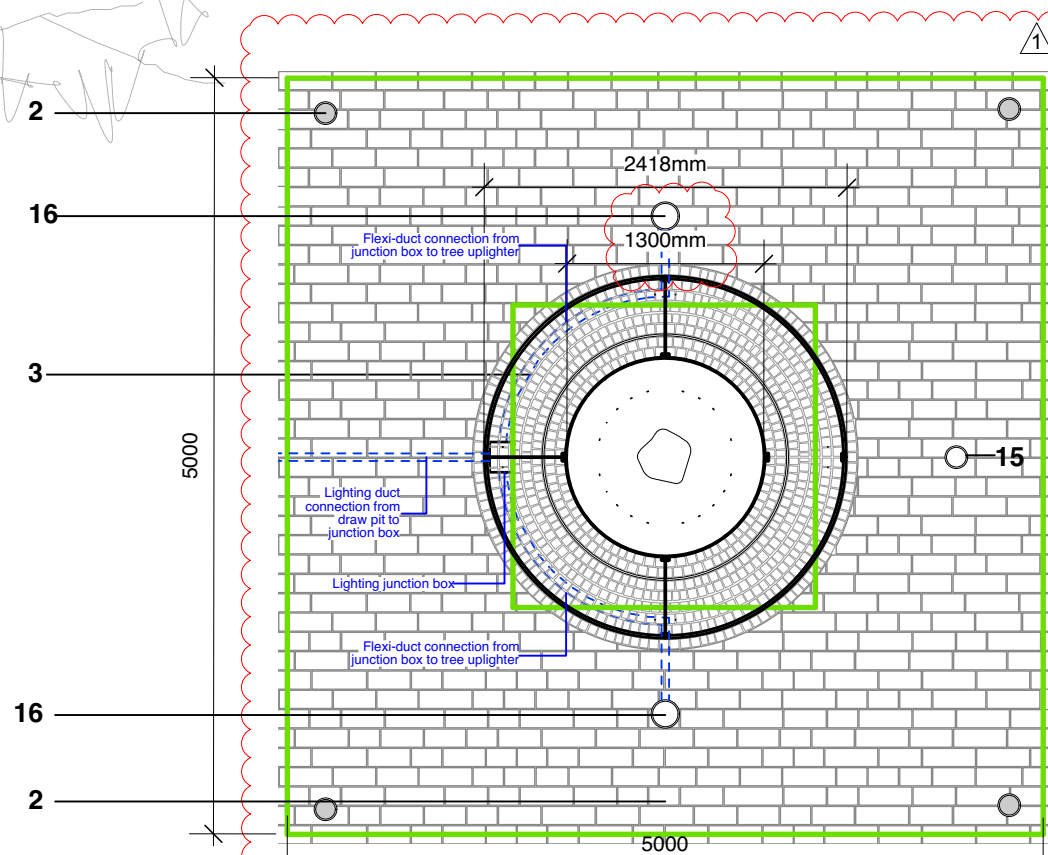
4. Landscape Architect to be invited to inspect works.
Allowance for integrated drainage connections as shown
on drainage engineer's (Ramboll) drawings.

5. Allowance for integrated lighting and connections as shown on lighting engineer's (Arup) drawings.

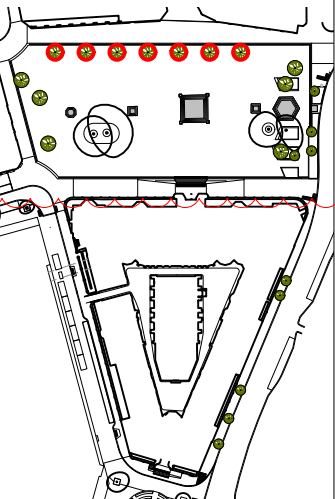
6. Greenleaf StrataCell system may be cut on site to match foundation or other elements, all cutting to manufacturer's specification.

7. Greenleaf StrataCell system may be omitted in singular elements to match foundation or other elements, in accordance with manufacturer's specification. Free space to be filled with concrete, to manufacturer's specification.

Extent of tree pit and root cell modules below ground (indicative). Final layout of pit subject to coordination with underground utilities. Refer to drawing OTH-PLA-EE-ES-DWG-L-1015 for tree pit locations.



NTS



NOTE: PERCOLATION TEST

To be performed on all tree pits and any planting areas where insufficient permeability might be an issue.

Instructions for performing the test:

1. With a spade or soil auger, dig a hole 45-60 cm deep at the bottom of the proposed tree pit. The hole diameter should be a maximum of 10 cm. The hole should be drilled straight down from top to bottom with the bottom being flat.
2. Fill the hole with water. The water level should be allowed to stand for at least an hour to pre-wet the soil.
3. Refill hole to within a 5 cm of the top. Don't overflow the hole, as this will cause the water to seep out of the hole.
4. Allow the water to drain for at least one hour. A longer period of time (2 to 3 hours) will give a more accurate reading of average percolation rate.
5. Determine the average drop in water level per hour and refer to the table below to interpret results:
 - If water level in hole drops:
 - Less than 1.25 cm per hour: Poorly drained and suited to wet-site species
 - 1.25 to 2.5 cm per hour: Moderately well drained and acceptable for many species including wet site species
 - More than 2.5 cm per hour: Well drained and suitable for all species including xerophilic species

The site manager of the main contractor/client must be informed of the results and must make the decision as to whether it is necessary to pre-undertake the tests. Please report the results to the landscape architect and the site manager prior to filling the tree

Revision Notes:

1. Key Plan & tree grille design updated			
C02	08/12/21	For Information	SR MS/KR
C01	01/04/21	Construction Issue	SR MS/KR
06	26/02/21	Stage 4 Issue (Re-Coordination)	SR MS/KR
07	25/11/20	For Information	SR MS/KR
06	10/01/20	Revised as clouded and notes above	SR MS/KR
05	06/09/19	Planning Issue	SR MS/KR
04	25/07/19	Stage 4 Issue	SAB MS/KR
03	05/07/19	Stage 4 Issue	SR MS/KR
02	29/05/19	Stage 3+ Issue	SR MS/KR
01	30/11/18	Stage 3 Issue	TF MS/KR

Revision	Date	Description	Drawn	Apprvd.
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Client Manchester City Council

Project Our Town Hall

Drg Title Softworks Detail
Tree Pit In Hard Landscape

Created on	Created by	Approved by
29-11-18	TF	MS

Scale	Size	Workstage
As Shown	A3	Stage 5

Drg No.	Suitability	Revision
OTH-PLA-EE-ES-DWG-L-6000	S4	C02