

APPENDIX D TREE PROTECTION PLAN

Arboricultural Method Statement

(to be read in conjunction with details contained in main report 551842jr15MarFV01_AIA_AMS)

ACoW- A suitably qualified arboriculturist will be appointed to act as an Arboricultural Clerk of Works (ACoW). The ACoW will be engaged to monitor and oversee the implementation of the works required in the method statement.

Tree Fencing- The tree protection fencing will comprise 1.8m Heras fencing around retained trees. Once erected, this will not be moved or relocated without approval from the project ACoW or the council tree officer. The tree protection area behind the Heras fencing (the Construction Exclusion Zone) will be sacrosanct throughout development and no access will be allowed to this area including (for example) the storage of or moving of materials or machinery. The Heras fencing will be secured using footings to prevent movement of the protective fencing and ensure its rigid installation (shown below). For the purpose if this TPP, tree protection fencing has been shown around the full RPA extents. Reductions in this to allow for construction access, will be considered at the pre commencement Site meeting. With any such changes then requiring the installation of suitable ground protection over the then exposed RPA sections. An update to the TPP will then be submitted to the developer and construction manager.

Tree Fencing Signage- Clear and visible signage (as shown below) will be attached to the protective fencing. This area will be checked prior to the commencement of work by the ACoW and throughout the course of development.

RPA Ground Protection

No dig ground protection in the form of a 3D cellular layer with geo-textile membrane underlay, to be constructed within any RPA's of retained tree where new hardstanding is to be in introduced. To be designed by the project engineer and arboriculturalist to accommodate the likely loading (example of proposed ground protection is shown at Appendix 4.0 and referred to on this plan).

Any such specification and installation are required to ensure that RPA's remain both porous (to air and water) and non-compacting.

Facilitation Pruning

A number of retained trees will require moderate and significant crown pruning to ensure sufficient building and construction space clearance. As indicated on this plan, this will include T22, T33, T34, T35, T36, T37, T38, T41, T42 and T76. Pruning of the southern crown sections along with sympathetic full crown reductions (as required) are proposed. This then considered to be a visible option that allows for these trees to be retained. In line with the details within the main AMS report, the precise extent of pruning will be considered at the pre commencement site meeting with the ACoW, Site manager and Council Tree Officer.

Specialist Foundation Design

The proposed building footprint area to the north of the site fronting Woodville Road is shown to overlap with the calculated RPA of T35 by approximately 15%. Depending on the existing ground conditions and anticipated root spread for T35, an air spade root investigation within the RPA should be undertaken along the proposed new building foundation line. This soft dig method then avoiding root damage that could otherwise be caused by conventional digging. All roots that cannot be pruned back in line with the best practice methodology as set out in BS5837, can then be identified, retained and protected within mitigated foundation design, if suited to the proposed building structural requirements. Any such design would then need to consider the specific locations/size of piles and pile caps, as well as the need or otherwise for ground beams and/or foundation rafts; the depth of which then being largely dictated by the need to retain tree roots.



<hr/>						
	Geoweb Depth	Weight	Application			
ý	GW20V3 75mm Geoweb	1t Gross Weight	Ideal for pedestrian foot traffic and cycle paths.			
	GW20V4 100mm Geoweb	6t Gross Weight	For light vehicle traffic applications, such as cars and transit vans.			
11/	GW20V6 150mm Geoweb	30t Gross Weight	For increased vehicle weight applications, such as public carparks, refuse collection vehicles and emergency access routes.			
	GW20V8 200mm Geoweb	60t Gross Weight	For requirement of high level weight distribution, such as H.G.V and construction traffic			
	GW40V12 300mm Geoweb	-	A control measure to increase ground levels within tree rooting areas, whilst maintaining existing soil bulk densities for tree root health. For information on how Geoweb distributes the weight of its own porous infill, and for site specific recommendations, please contact Greenfix.			





Tree Protection Plan showing proposed layout against BS5837:2012 Tree Categories & Root **Protection Areas**

Category A (Retained)



Trees of high quality with an estimated remaining life expectancy of at least 40

Category B (Retained)



Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.

Category C (Retained)



Frees of low quality with an estimated remaining life expectancy of at least 10 years, or a stem diameter below 150mm.

Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10

Trees shown as removed



Trees BS5837 Tree Protection Fencing



Specification details as shown on this plan and within the Arboricultural Method Statement.

Site redline boundary



Final Tree Protection Detail

Subject to the final discussions with, the design and construction teams, locations of the following will be specified for all retained trees, as required. (not currently shown on this plan).

- RPA ground protection.
- Specialist foundation construction and groundworks within RPA's.
- Tree protection fencing locations.
- Extent of any facilitation pruning.

All methodologies then as detailed on this plan and within the AMS for the masterplan.

1	551842jrMar22_TPP_FV	10/03/22							
No.	Revision/Is	Date							
	o Greengage 9 Holyrood Street								
	SE1 2EL Tel: 0203 544 4000								
R	lam Close, lichmond								
Pr	oject	Sheet							
H	am Close	West							
Do 10	nte 0/02/2022								
Sc	ale								
1	to 500 at A1								

Arboricultural Method Statement

(to be read in conjunction with details contained in main report 551842jr15MarFV01_AIA_AMS)

ACoW- A suitably qualified arboriculturist will be appointed to act as an Arboricultural Clerk of Works (ACoW). The ACoW will be engaged to monitor and oversee the implementation of the works required in the method statement.

Tree Fencing- The tree protection fencing will comprise 1.8m Heras fencing around retained trees. Once erected, this will not be moved or relocated without approval from the project ACoW or the council tree officer. The tree protection area behind the Heras fencing (the Construction Exclusion Zone) will be sacrosanct throughout development and no access will be allowed to this area including (for example) the storage of or moving of materials or machinery. The Heras fencing will be secured using footings to prevent movement of the protective fencing and ensure its rigid installation (shown below). For the purpose if this TPP, tree protection fencing has been shown around the full RPA extents. Reductions in this to allow for construction access, will be considered at the pre commencement Site meeting. With any such changes then requiring the installation of suitable ground protection over the then exposed RPA sections. An update to the TPP will then be submitted to the developer and construction manager.

Tree Fencing Signage- Clear and visible signage (as shown below) will be attached to the protective fencing. This area will be checked prior to the commencement of work by the ACoW and throughout the course of development.

RPA Ground Protection

No dig ground protection in the form of a 3D cellular layer with geo-textile membrane underlay, to be constructed within any RPA's of retained tree where new hardstanding is to be in introduced. To be designed by the project engineer and arboriculturalist to accommodate the likely loading (example of proposed ground protection is shown at Appendix 4.0 and referred to on this plan).

Any such specification and installation are required to ensure that RPA's remain both porous (to air and water) and non-compacting.

Facilitation Pruning

A number of retained trees will require moderate and significant crown pruning to ensure sufficient building and construction space clearance. As indicated on this plan, this will include T22, T33, T34, T35, T36, T37, T38, T41, T42 and T76. Pruning of the southern crown sections along with sympathetic full crown reductions (as required) are proposed. This then considered to be a visible option that allows for these trees to be retained. In line with the details within the main AMS report, the precise extent of pruning will be considered at the pre commencement site meeting with the ACoW, Site manager and Council Tree Officer.

Specialist Foundation Design

The proposed building footprint area to the north of the site fronting Woodville Road is shown to overlap with the calculated RPA of T35 by approximately 15%. Depending on the existing ground conditions and anticipated root spread for T35, an air spade root investigation within the RPA should be undertaken along the proposed new building foundation line. This soft dig method then avoiding root damage that could otherwise be caused by conventional digging. All roots that cannot be pruned back in line with the best practice methodology as set out in BS5837, can then be identified, retained and protected within mitigated foundation design, if suited to the proposed building structural requirements. Any such design would then need to consider the specific locations/size of piles and pile caps, as well as the need or otherwise for ground beams and/or foundation rafts; the depth of which then being largely dictated by the need to retain tree roots.



Ground Protection (indicative layout) NO-DIG TREE PROTECTION SYSTEM **Geoweb Size Specification** Geoweb Depth Weight 1t Gross GW20V3 75mm Geoweb Weight 6t Gross GW20V4 100mm Geoweb Weight 30t Gross GW20V6 150mm Geoweb Weight 60t Gross GW20V8 200mm Geoweb Weight GW40V12 300mm Geoweb \Diamond \Diamond 0/ **Tree Protection Fencing** a) Stabilizer strut with base plate secured with ground pins \bigcirc b) Stabilizer strut mounted on block tray Tree Protection Signage **TREE PROTECTION** TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDI CONTRAVENTION OF TREE PRESERVATION ORDERS MAY LEAD TO CR THE FOLLOWING MUST BE OBSERVED BY ALL THE PROTECTIVE FENCING MUST NOT BE REMOV • NO PERSON SHALL ENTER THE PROTECTED AREA • NO MACHINE OR PLANT SHALL ENTER THE PROTE • NO MATERIALS SHALL BE STORED IN THE PROTEC • NO SPOIL SHALL BE DEPOSITED IN THE PROTECT NO EXCAVATION SHALL OCCUR IN THE PROTECTED WITH THE WRITTEN PERMISSION OF THE LOCAL PLANNIN



Tree Protection Plan showing proposed layout against BS5837:2012 Tree Categories & Root **Protection Areas**

> Trees of high quality with an estimated remaining life expectancy of at least 40

Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.

Frees of low quality with an estimated remaining life expectancy of at least 10 years, or a stem diameter below 150mm.

Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10

Trees BS5837 Tree Protection Fencing

Specification details as shown on this plan and within the Arboricultural Method Statement

Final Tree Protection Detail

Subject to the final discussions with, the design and construction teams, locations of the following will be specified for all retained trees, as required. (not currently shown on

- Specialist foundation construction and
- Tree protection fencing locations.
- Extent of any facilitation pruning.

All methodologies then as detailed on this plan and within the AMS for the masterplan.

		1	551842jrMar22_TPP_FV	2.dwg	10/03/22
AREA		No.	Revision/Is	sue	Date
AND ARE SUBJECTS OF A					-
	Cy		$\rightarrow \circ$		
MINAL PROSECUTION		() Creengage			
ERSONS:-	X			0.0	5
D	5			9 Holyı	rood Street
		SE1 2EL Tel: 0203 544 4000			
TED AREA					
ED AREA		Pr	oject Name and Address		
DAREA		F	lam Close,		
AREA		Richmond			
ST BE					
IG AUTHORITY					
		Pr	oject	Sheet	
		Н	am Close	East	
		Dc 1(nte 0/02/2022		
		Sc	ale		
		1	to 500 at A1		
\sim	\sim				