Coram Community Campus Arboricultural Method Statements
East Wing Landscaping

July 2018

Sylvan Resources Ltd. forestry and arboriculture

Dog Field House, Abcott, Clungunford, Craven Arms, Shropshire SY7 0PX
tel: 01588 660547 e-mail: jon@sylvanresources.co.uk

1.0 Introduction

1.1 On behalf of Mr. Matthew Barker of Gleeds, Mr. Raphael Skerratt, prepared arboricultural reports in support of a planning application to extend the East Wing of the existing building complex at Coram Community Campus, Brunswick Square, London WC1N 1AZ. From information in Mr Skerratt's earlier reports, I prepared a method statement which addressed the protection of trees during alterations to the East Wing. This method statement addresses tree protection during the landscaping of an area adjacent to the East Wing

1.2 This method statement sets out measures for the protection of trees - Trees 11,12, 022, 023, 024 and 025 - in relation to the proposed landscaping works. The locations of the trees are shown on the appended plans (Appendicies 1 and 2). Details of their size and species are provided in the appended excerpt from a full survey of the Coram Community Campus trees completed by Mr Skerratt in 2010**.**

1.3 The measures contained in these statements are based on the advice and guidance set out in *BS5837: 2012:* Trees in relation to design, demolition & construction – Recommendations.

1.4 This document should be read in conjunction with my earlier appended report (Appendix 3). Relevant guidance in this document also applies to the landscaping stage of the contract. Where guidance in this report conflicts with my earlier method statement the guidance in this document takes precedence.

1.2 Status

1.2.1 The method statements form part of the building contract. They are part of the contract specification and schedule of works.

1.2.2 A copy of the method statements must be available for inspection on site for the duration of construction works.

1.2.3 All persons working on site should be aware of the importance of avoiding damage to trees and should observe the necessary precautions. A guidance leaflet is included in Appendix 3. Copies of this leaflet may be made available to personnel working on the site.

1.3 Summary of landscaping works.

1.3.1 The appended plan (Appendix 1) shows the earlier predevelopment landscape. The plan shows the main access to the site from the street, a creative therapy garden and a soft play area enclosing Tree 24. The site is enclosed from the street by metal fencing which includes a bike rack.

1.3.2 Appendix 2 contains a plan showing the proposed landscape design. The relevant proposals comprise changes to the hard landscape including new paving to match existing paving in the Courtyard to the rear of the East Wing, and alterations to the boundary fencing and bike store.

2 Preparatory works prior to landscaping

2.1 Tree works

2.1.1 No preparatory tree works are required

2.1.2 **Protective measures: tree protection fencing**

2.1.3 Following completion of the alterations and extension to the East Wing the tree protection fencing shall either be removed or relocated. The appended tree protection plan SR1 indicates sites where the tree protection fencing shall be relocated to. At these new locations its purpose is to prevent access into neighbouring landscaped areas and Root Protection Areas (RPAs) of trees outside the area to be landscaped.

2.1.4 Unless otherwise specified, areas separated from the construction site by protective barriers are **Construction Exclusion Zones (CEZ).**

2.1.5 **CEZs** are total exclusion areas from which the following will be excluded:

- Animals
- Pedestrians
- Vehicles and construction equipment
- Materials and equipment storage
- Contamination from materials used outside the **CEZ** – (for example spillage of diesel or other toxic liquids)
- Surface water runoff from outside the **CEZ**

2.2 Inspection prior to start of works

2.2.1 Retained or relocated protective fencing and retained ground protection will be inspected prior to the start of works by the Arboricultural Consultant.

3.0 Works during construction

3.1 Summary

3.1.1 Most of the area referred to in this method statement is located within the Root Protection Area (RPA) of one or more of the retained trees (see the **Tree protection plan).**

3.1.2 Unless otherwise specified below, the working methods set out in this section apply to the complete site

3.2 Storage and use of materials

3.2.1 Phytotoxic materials will be stored at least 10m from the stem of any retained tree.

3.2.2 Phytotoxic liquids (diesel for example) will be stored in a double-bunded container to prevent damage from accidental spillage.

3.2.3 Inert materials must be stored on areas of existing hard surfacing or on a ground protection layer.

3.3 Lifting, excavating and handling equipment

3.3.1 Lifting, excavating and handling equipment must be of such a size and be in such a position that, when in use, no part extends into the crown of any retained tree. The crown limits of retained trees (in terms both of spread and height clearance) are specified in the Tree survey schedule in the appended report.

3.3.2 Within the RPA of any retained tree, the use of heavy lifting and handling equipment will be directed by a banksman.

3.4 Operations

<u>Removal of existing hard landscaping</u>

3.4.3 Existing hard landscaping or other hard surfaces shall be removed from affected RPAs by machines working off retained hard surfacing or ground protection. This work may be carried out using conventional excavation equipment with a ground bearing pressure not exceeding 0.3Kgf/cm^2.

3.4.4 Within the RPAs, the depth of excavation shall not exceed the depth of the hard surfacing plus its sub-base.

Installation of new hard landscaping

3.4.5 Within the RPAs the exposed ground shall be lightly decompacted by air spade or hand forking to a depth of 300mm. Any hollows in the ground shall be filled with topsoil or an inert granular no fines fill before covering

3.4.6 with an appropriate geotextile membrane. Above the membrane a layer of Cellweb ground protection shall be installed. Its specification shall be provided by its manufacturer, Geosynthetics.

3.4.7 The Cellweb grid shall be filled with an inert granular no fines fill before installation of the hard landscape. Paving units laid in the RPAs should have their joints left open to allow gas and water exchange between the soil and atmosphere.

Removal of existing fencing

3.4.8 Cutting off the existing fencing at a level below ground will minimise damage to nearby roots. Hand dig around fence posts to an appropriate depth below ground level and use hand tools to cut through posts. Any tree roots below 25mm diameter exposed by hand digging may be removed by making a single clean cut through them with a pair of secateurs. Roots larger than 25mm shall be wrapped in damp hessian and preserved. After removal of the fence remove the hessian and back fill the holes with topsoil or sharp sand.

3.4.9 Post holes for the new fence shall be hand dug with any exposed roots treated as per paragraph 3.4.8. When backfilling these holes ensure that any protected roots are wrapped in split plastic sleeves whose diameters are 20mm larger than the roots they enclose. If backfilling fence post sockets with concrete, insert a 25mm plywood barrier between the area to be filled and any roots present in the excavation. Backfill the area between the roots and the concrete with topsoil after the concrete has set. If tree roots prevent posts from being inserted into the ground back fill the excavation with topsoil and contact the supervising arboriculturalist for further advice. The arboriculturalist will consider how work might progress and agree a method of working with the local authority tree officer. This might entail removal of the root or relocation of the post. Do not proceed until approval to do so has been granted.

Removal of and relocation of the bike store.

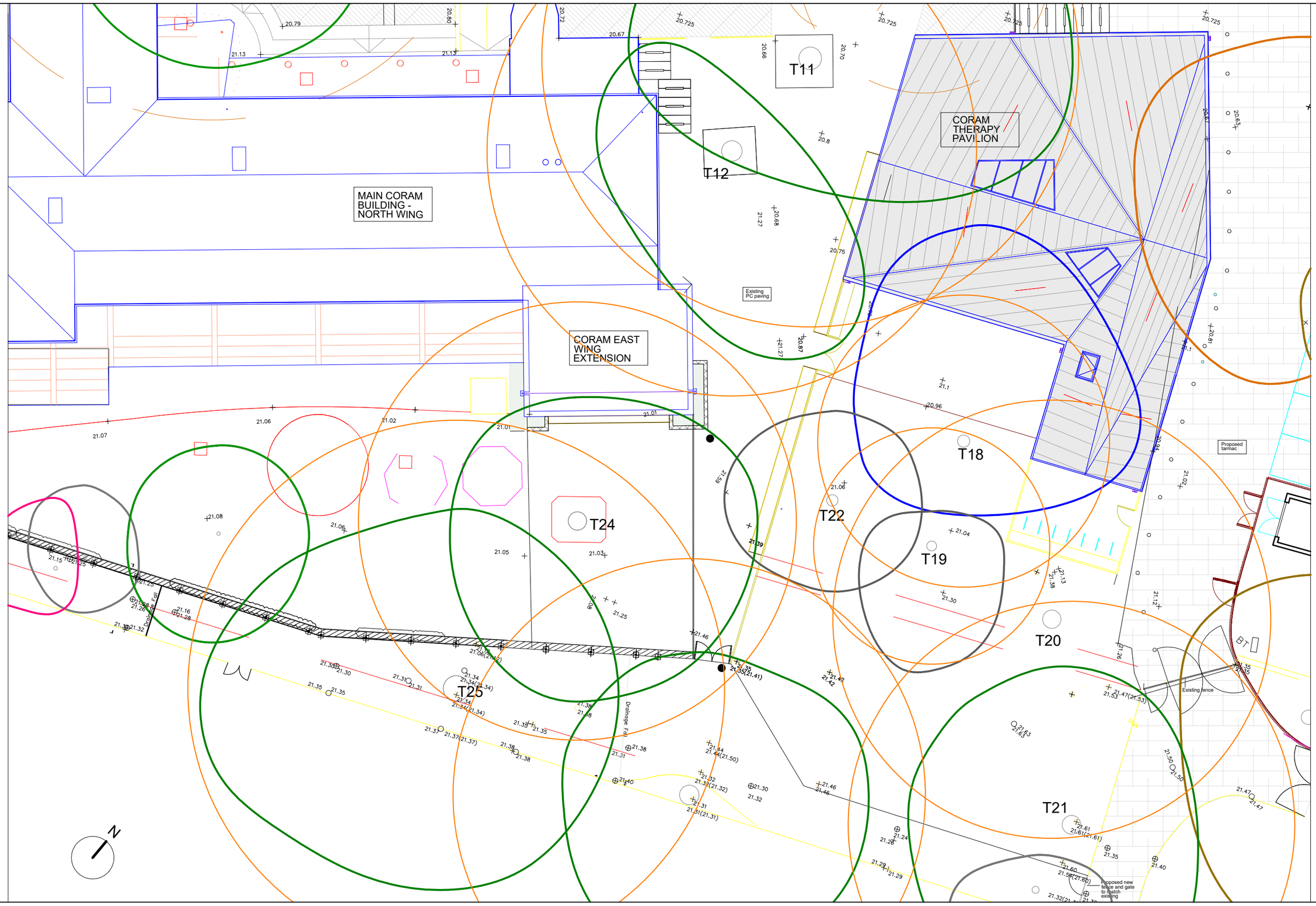
3.4.10 Follow the guidance in paragraphs 3.4.8 and 3.49.

3.5 Removal of protective fencing

3.5.1 The Arboricultural Consultant will authorise the removal of protective fencing after completion of all other works.

J C Terry
Sylvan Resources Ltd.
July 2019.

Appendix 1
Existing landscape and trees



Key

Existing Tree

001

Category A - Green
Category B - Blue
Category C - Grey
Category U - Red

Trees are coloured on plan to correspond to the Retention Categories specified in: *BS5837: 2012 Trees in relation to design, demolition and construction - Recommendations*

Root Protection Area (RPA)
as defined in BS5837:2012.
Trees in relation to design, demolition and construction - Recommendations

Project:
Corum Community Campus: Arboricultural Method Statement

Drawing Title:
Tree Survey: Existing Landscaping

Drawing: SR1_Existing Landscape
Scale: 1:200 @ A3
Date: 25.07.2019

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Appendix 2
Proposed landscape and trees

MAIN CORAM BUILDING - NORTH WING

CORAM EAST WING EXTENSION

CORAM THERAPY PAVILION

Uplighter to tree base

Existing PC paving

Planter detail to match front of QEII centre

Cobbles to match front of QEII centre

Paving to match courtyard

Reclaimed black railing fence

External Power Source

Existing Kiosk

Existing Bicycle storage area

Proposed tarmac

Existing fence

Proposed new fence and gate to match existing

T11 T12 T18 T19 T20 T21 T22 T23 T24 T25

Key

Existing Tree

001

Category A - Green
Category B - Blue
Category C - Grey
Category U - Red

Trees are coloured on plan to correspond to the Retention Categories specified in: *BS5837: 2012 Trees in relation to design, demolition and construction - Recommendations*

Root Protection Area (RPA)
as defined in BS5837:2012, *Trees in relation to design, demolition and construction - Recommendations*

Construction Exclusion Zone / Protective Fencing

Project:
Corum Community Campus: Aboricultural Method Statement

Drawing Title:
Tree Survey: Proposed Landscaping

Drawing: SR2 Proposed landscape

Scale: 1:200 @ A3

Date: 25.07.2019

Sylvan Resources

Appendix 3
Method statement for east Wing Extension and findings of Skerratt survey

Corum Community Campus
Arboricultural Method Statements

June 2018

Sylvan Resources Ltd. forestry and arboriculture

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e-mail: jon@sylvanresources.co.uk

1.0 Introduction

1.1 Background

1.1.1 On behalf of Mr. Matthew Barker of Gleeds, Mr. Raphael Skerratt, prepared arboricultural reports in support of a planning application to extend the East Wing of the existing building complex at Coram Community Campus, Brunswick Square, London WC1N 1AZ. These method statements are informed and supported by Mr Skerratt's earlier reports which should be read in conjunction with them.

1.1.2 These method statements set out measures for the protection of 5 trees - Trees 012, 022, 023, 024 and 025 - in relation to the proposed construction of an extension.

1.1.3 The locations of the trees are shown on the appended **Tree protection plan**. Details of their size and species are set out in tabular form in the appended excerpt from a full survey of the Coram Community Campus tree resource, carried out in 2010**.**

1.1.4 The measures contained in these statements are based on the advice and guidance set out in *BS5837: 2012: Trees in relation to design, demolition & construction – Recommendations.*

1.2 **Status**

1.2.1 These method statements form part of the building contract and its requirements are an integral part of the contract specification and schedule of works.

1.2.2 A copy of the method statements must be available for inspection on site for the duration of construction works.

1.2.3 All persons working on site should be aware of the importance of avoiding damage to trees and should observe the necessary precautions. A guidance leaflet is appended, copies of it may be made available to all personnel working on the site.

2 Preparatory works prior to construction

2.1 Tree works

2.1.1 No preparatory tree works are required

2.1.2 **Protective measures: tree protection fencing**

2.1.3 The extent and location of tree protection fencing is shown as a solid red line on the appended **Tree protection plan**. Fencing must be erected before any site works take place. It is particularly important that no demolition, soil stripping, breaking out of existing hard surfaces, re-grading or other excavation takes place before protective fencing has been erected.

2.1.4 Tree protection fencing will comply with the advice and guidance contained in *BS5837:2012 – Trees in relation to design, demolition and construction – Recommendations.*

2.1.5 The British Standard specifies 2000mm high panels with a galvanized tubular frame and welded mesh infill (eg Heras round or square top panels or equivalent), attached to a scaffold framework with braced uprights at no more than 3m intervals. Subject to the agreement of the local authority, these plywood panels are also fit-for-purpose if they are attached to uprights driven or dug into the ground at no more than 3m spacings and braced as specified in the British Standard. A 1:20 detail of the current British Standard specification for protective fencing is appended.

2.1.6 *Unless otherwise specified*, areas separated from the construction site by protective barriers are **Construction Exclusion Zones (CEZ).**

2.1.7 **CEZs** are total exclusion areas. All of the following will be excluded:

- Animals
- Pedestrians
- Vehicles and construction equipment
- Materials and equipment storage
- Contamination from materials used outside the **CEZ** – (for example spillage of diesel or other toxic liquids)
- Surface water runoff from outside the **CEZ**

2.1.8 Clearly legible, weatherproof signs will be fixed to the perimeter fencing of the **CEZ** clearly setting out the access restrictions set out above. An example is appended**.**

2.2 Protective measures: ground protection

2.2.1 Ground protection layers will be installed in the areas indicated on the **Tree protection plan,** at the same time as the protective fencing (see **2.2** above) is erected. It is particularly important that no demolition, soil stripping, breaking out of existing hard surfaces, re-grading or other excavation takes place before ground protection layers have been installed

2.2.2 Existing hard surfacing is acceptable as a ground protection layer without reinforcement.

Ground protection for vehicular traffic

2.2.3 Where the ground protection layer will have to carry **vehicular traffic**, it will consist of Eve Trakpanel heavy duty interlocking aluminum temporary road sections (or equivalent) laid on an average 100mm deep layer of woodchip above a geo-textile membrane of appropriate strength (Terram T1000 or equivalent).

Ground protection for pedestrian traffic

2.2.4 For pedestrian traffic, the ground protection layer will consist of interlinked ground protection boards (12mm Portatrak or equivalent) laid on 100mm of woodchip above a geo-textile membrane of appropriate strength (Terram T1000 or equivalent).

2.2.5 Tracked or wheeled equipment used for installing ground protection layers will not exceed a ground bearing pressure of 0.3kgf/cm^2

2.2.6 Each successive section of ground protection will be laid by personnel and machinery working from the immediately preceding section or from existing hard surfacing.

2.3 Inspection prior to start of works

2.3.1 Protective fencing will be inspected prior to the start of works by the Arboricultural Consultant.

3.0 Works during construction

3.1 Summary

3.1.1 Most of the area referred to in this method statement is located within the Root Protection Area (RPA) of one or more of the retained trees specified in 1.1.1 above (see the **Tree protection plan).**

3.1.1 Unless otherwise specified below, the working methods set out in this section apply to the complete site

3.2 Storage and use of materials

3.2.1 Phytotoxic materials will be stored at least 10m from the stem of any retained tree.

3.2.2 Phytotoxic liquids (diesel for example) will be stored in a double-bunded container to prevent damage from accidental spillage.

3.2.3 Inert materials must be stored on areas of existing hard surfacing or on a ground protection layer.

3.3 Lifting, excavating and handling equipment

3.3.1 Lifting, excavating and handling equipment must be of such a size and be located in such a position that, when in use, no part extends into the crown of any retained tree. The crown limits of retained trees (in terms both of spread and height clearance) are specified in the appended **Tree survey schedule.**

3.3.2 Within the RPA of any retained tree, the use of heavy lifting and handling equipment will be directed by a banksman.

3.4 Operations

3.4.1 These method statements should be read in conjunction with the structural engineering specifications relevant to:

- Working areas
- Sleeving of piles to a depth of 3m
- Mini rig to be used for piling
- Piling mat not to exceed maximum excavation depth
- Pre-boring to confirm pile locations. Pile locations to be re-located if necessary to avoid excavation to remove obstacles within the working area.

3.4.2 Where there is a variance between the tree protection measures specified in the engineering specification and those set out in these method statements, the method statement requirements will take precedence.

Demolition

3.4.3 Demolition of existing buildings, by machine or hand must be away from the boundary fence of any CEZ into the footprint of the to-be-demolished building ('top down: pull back').

Excavation to reduced levels

3.4.4 Reduction in general levels will only take place within the working area as defined in the structural engineering specification. The working area is defined as the footprint of the building plus 500mm working room around its complete perimeter.

3.4.3 Excavation in areas of hard standing above a level of 20.340 may be carried out using conventional excavation equipment with a ground bearing pressure not exceeding 0.8kgf/cm^2.

3.4.4 In all other areas, equipment for excavation will not exceed a ground bearing pressure of 0.3kgf/cm^2. These areas shall be excavated to a depth of 600mm (level of 20.41).

3.4.5 Excavation in areas where hard standing is absent will be carried out under arboricultural supervision. The Arboricultural Consultant will be notified by email 48 hours in advance of the start of operations in these areas. The Arboricultural Consultant may require excavations to be undertaken by hand in some of these areas. If hand digging is necessary, it shall be restricted to the minimum required.

3.4.6 Reduction in levels below 20.340 will follow the procedure set out below.

1. Remove loose surface material by hand.

2. Break up the exposed ground surface to 100mm depth using hand tools or an equivalent non-destructive excavation method(an Air Spade for example: a hand operated pneumatic breaker may be used for loosening existing hard surfacing and associated sub-bases). Identify and retain bridging roots of 50mm diameter or greater; clear loosened material round each one by hand and wrap retained roots in damp hessian.

3. Within 300mm of any retained root remove remaining loosened subsoil by hand using hand operated tools only. Elsewhere, excavation equipment with a ground pressure not exceeding 0.3kgf/cm2 can be used.

4. Roots less than 50mm diameter will be cut cleanly flush with the appropriate surface of the excavation with a sharp saw or secateurs.

5. Repeat stages 2 to 4 above to the full depth of the excavation.

6. Protect all retained roots with damp hessian until service installation, foundation construction or backfilling takes place.

7. Immediately prior to backfilling remove the hessian protective layer and replace with clean sharp sand extending at least 75mm above the retained root upper surface and 75mm to either side.

Piling

3.4.7 Excavation for the piling mat must not extend below the maximum excavation depth. The maximum excavation depth is to a level of 20.34.

3.4.8 Piles will be constructed using a mini hydraulic drilling rig (Klemm 702-2 or equivalent) that complies with the height and ground bearing pressure constraints set out in 3.4.3 and 3.4.4 above.

3.4.9 Piles must be sleeved to a depth of 3m with steel or cardboard sleeves to prevent leachate from curing concrete escaping into the surrounding subsoil.

3.4.10 Where necessary, above ground, a containment system will be installed prior to the start of works to prevent phytotoxic materials (concrete slurry for example) flowing beyond the limits of the piling mat into unprotected subsoil.

Backfilling and consolidation

3.4.11 Within 300mm of any retained root in both the vertical and the horizontal axis, consolidation of backfill material will be by the use of hand operated equipment only.

3.4.11 Equipment used for excavation and backfilling will have a ground pressure not exceeding 0.3kgf/cm2.

Strip foundations

3.4.12 Strip foundations will be poured by hand within 500mm of any retained protected root. An aperture at least twice the diameter of the retained root in both the vertical and the horizontal axis will be constructed around each retained root and filled with clean sharp sand.

Installation of service pipes and cables

3.4.13 Pipes, manholes and inspection chambers for foul and surface water drainage will in some cases exceed the maximum excavation depth specified above.

3.4.14 Excavation for these structures is exempt from the general requirements specified above but must be undertaken either by hand or with the use of mechanical equipment with a ground bearing pressure not exceeding 0.3kgf/cm2.

3.5.15 Excavations for power and data cables must follow the procedures specified in 4.5.3 and 4.5.4 above and where roots over 50mm diameter are uncovered they must be retained and protected and the service re-positioned to allow this.

Floor slab

3.5.16 If soil conditions require leave a void below the floor slab. The slab may be constructed off ring beams supported by the piles or directly off the piles using the Abbey Pinford System or similar.

Fence posts and pad foundations for signs and other street furniture

3.5.17 Fence post holes will be excavated by hand or hand-held augur of the appropriate size.

3.5.16 Fence posts will be bedded in a dry concrete mix to minimise damage to surrounding roots from leachate contamination.

Preparation of planting areas

3.5.17 There will be no surface cultivation prior to planting in the RPAs. Any existing surface vegetation will be cleared by hand and plants will be planted into individual hand-dug pits of the appropriate size. Soil

improvers, weed suppressant membranes and mulch layers may be added to a maximum depth of 75mm above the existing ground surface.

3.6 Working within CEZs

3.6.1 Levels within the CEZs shall not be disturbed.

3.6.2 The Arboricultural Consultant will be notified in writing at least 48 hours before the start of approved works within any CEZ.

3.6.3 Within CEZs, all excavation of whatever depth will be carried out by hand or with powered equipment with a ground bearing pressure not exceeding 0.3kgf/cm^2 and within 500mm of the stem of any retained tree, all works will be carried out by hand, using hand operated tools only.

3.6.4 If heavy pedestrian access over a CEZ cannot eb avoided the ground shall be protected in accordance with 2.2.4 above.

3.7 Removal of protective fencing

3.7.1 The Arboricultural Consultant will authorise the removal of temporary protective fencing barriers around individual trees as works progress. See 5.10 below for procedures relating to the complete removal of protective fencing.

4.0 Conflicts and remedial actions

4.1 The main potential sources of damage to trees are listed in **Table 1** below together with the remedial measures that should be adopted to minimise or avoid damage.

Table 1: Summary of Potential Damage Sources and Remedial Measures

Damage	**Remedial actions**	**See**	**Trees at risk**
Damage to tree stems and foliage	Erect protective fencing; plan construction activities to avoid damage to overhead branches:	Section s: 2.1 **Tree protection plan**	All
Damage by surface compaction from site traffic/storage of materials	Observe restrictions applying to **CEZs**	Section: 2.2 **Tree protection plan**	All
Damage from spillage of toxic materials	No phytotoxic materials to be stored within 10m of any **CEZ**	Section: 3.2 **Tree protection plan**	All
Damage to tree roots	Observe restrictions applying to **CEZs;** follow sympathetic excavation	Sections: 2.2, 3.4 – 3.4.6 **Tree protection plan**	All

5.0 Supervision and completion

5.1 The Site Manger will be responsible for delivering induction training to all sub-contractors prior to their starting work on site. A guidance leaflet summarising the key points for sub-contractors is appended.

5.2 The Main Contractor's Site Manager will have overall responsibility for the protection of retained trees from the start of works through to completion. No powers will be delegated to others in relation to this responsibility.

5.3 The Arboricultural Consultant will make site visits as necessary and in particular at the start of the following stages:

- After installation of ground protection and the CEZ boundary fence.
- Before excavation work begins.
- Hard and soft works within Construction Exclusion Zones (CEZs)

5.4 The Arboricultural Consultant will circulate notes of his inspections by email, directly to the Local Authority and to the Project Team

5.5 The Arboricultural Consultant will notify the Local Authority immediately by email of any contract variations that may affect retained trees.

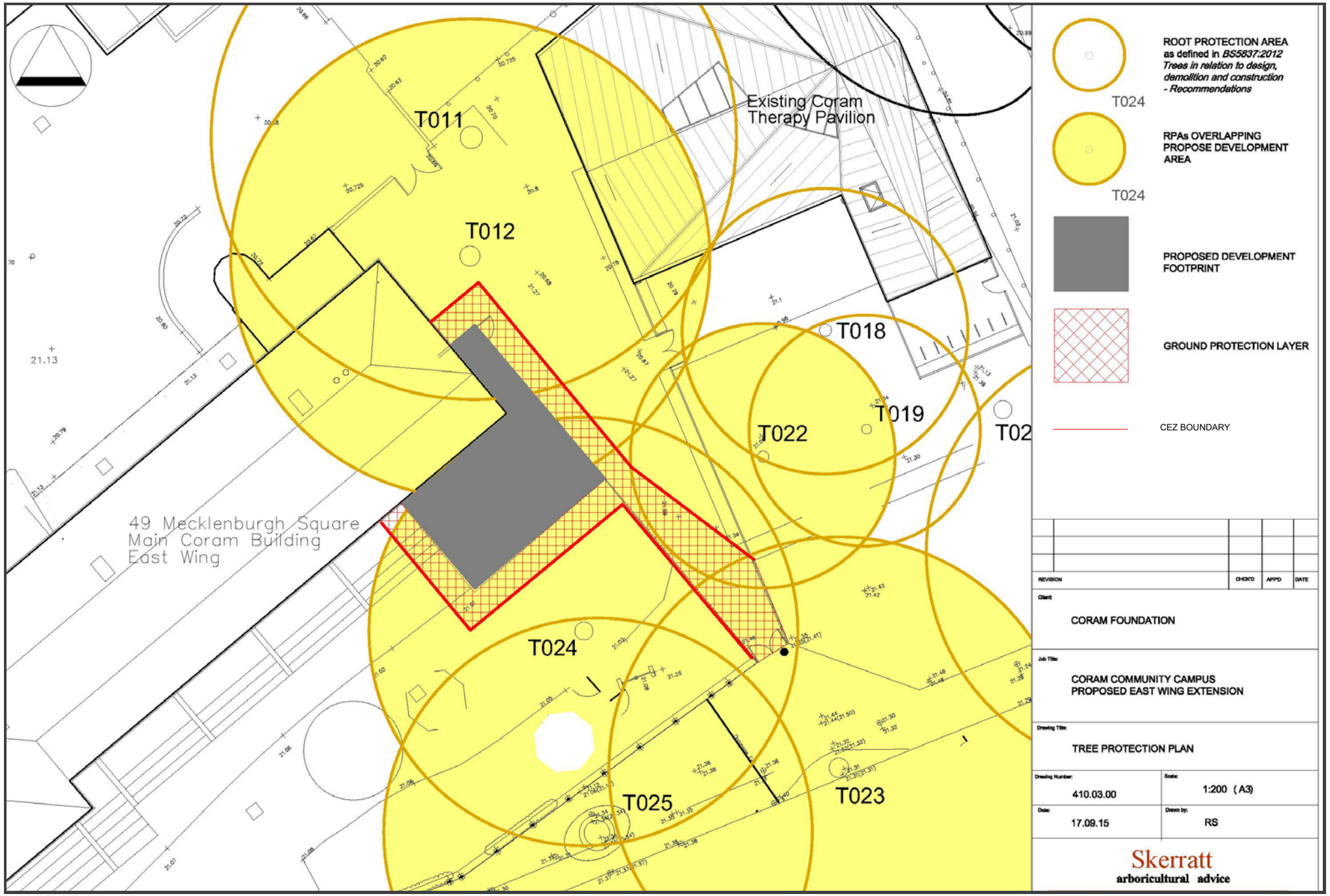
5.6 Unscheduled incidents affecting retained trees will be reported immediately, verbally and in writing, to the Arboricultural Consultant by the Site Manager. The Arboricultural Consultant will immediately forward the information to the Local Authority and the Project Manager, verbally and in writing

5.7 After notifying the relevant persons the Arboricultural Consultant will visit the site and report in writing on his findings and recommendations for remedial action to the Local Authority and the Project Manager

5.8 On completion, the Local Authority will meet on site with the Arboricultural Consultant, the Project Manager and the Main Contractor's Site Manager to sign-off tree protection measures.

5.9 If post-contract remedial works are required, they will be specified at the completion meeting and confirmed in writing.

J C Terry MSC, MICFor, MRICS, CEnv
Sylvan Resources Ltd
26th June 2018


T011
T012
T018
T019
T022
T024
T025
T023
T02
Existing Coram
Therapy Pavilion
49 Mecklenburgh Square
Main Coram Building
East Wing
21.13
ROOT PROTECTION AREA
as defined in BS5837:2012
Trees in relation to design,
demolition and construction
- Recommendations
T024
RPAs OVERLAPPING
PROPOSE DEVELOPMENT
AREA
T024
PROPOSED DEVELOPMENT
FOOTPRINT
GROUND PROTECTION LAYER
CEZ BOUNDARY
REVISION
CHCKD
APP'D
DATE
Client:
CORAM FOUNDATION
Job Title:
CORAM COMMUNITY CAMPUS
PROPOSED EAST WING EXTENSION
Drawing Title:
TREE PROTECTION PLAN
Drawing Number:
410.03.00
Scale:
1:200 (A3)
Date:
17.09.15
Drawn by:
RS
Skerratt
arboricultural advice

Tree survey schedule

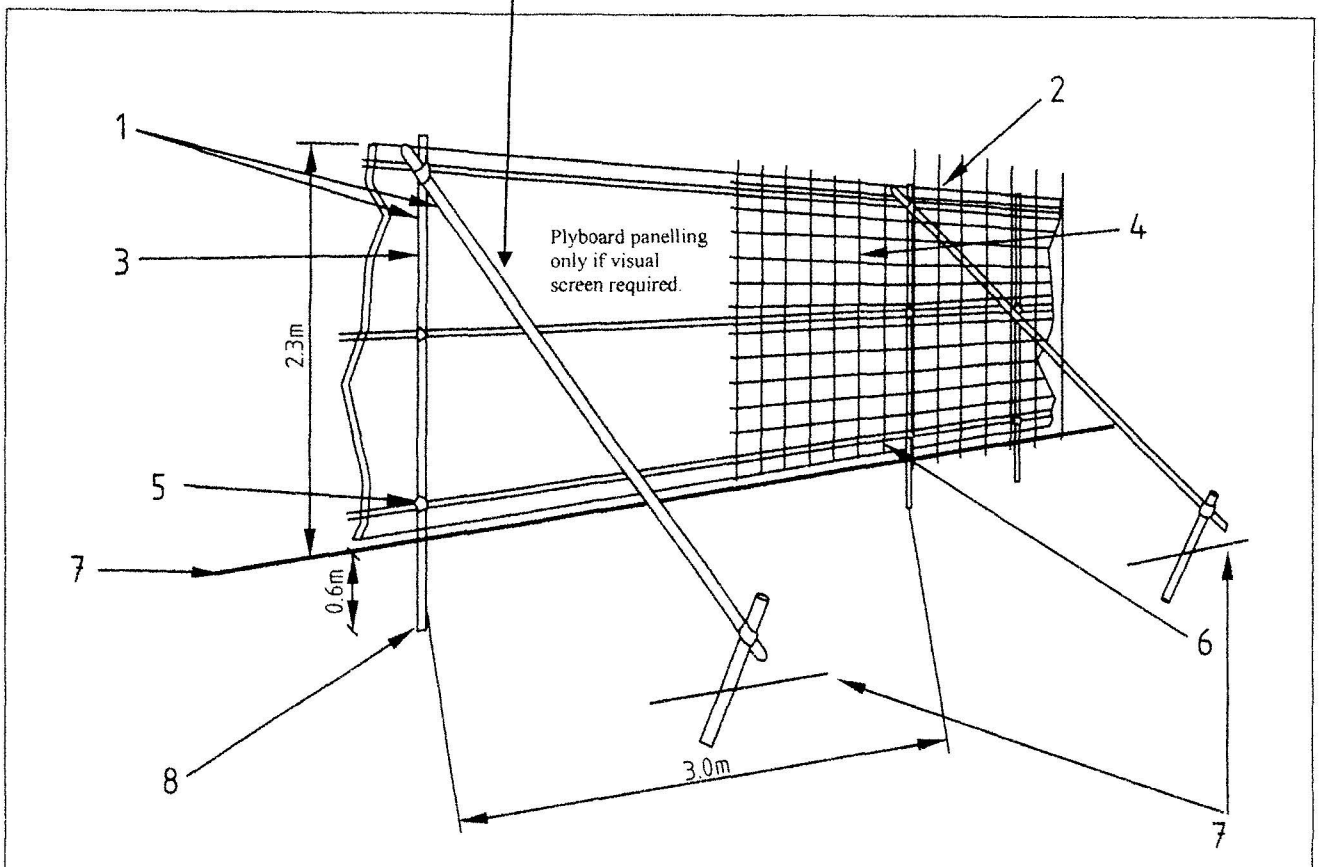
Skerratt

Tree No.	Species	Height (m)	Diam (mm)	Crown Spread (m)				Crown Height (m)	Age	Physiological Condition	Structural Condition	Comments	Recommendations	Priority	Life Expectancy	Retention Category	Retention Sub-category
				N	E	S	W										
Western boundary																	
011	London Plane (*Platanus x hispanica*)	33	126	14	15	7	10	5	M	G	G	011 and 012 make up an interdependent key group; 011 has a single stem and stands in a rectangular un-surfaced enclosure in an area of new paving (2015): crown density noted as normal in terms of leaf size, colour and distribution at last visual inspection (23.07.15)	No action required	20-40	A	1	
012	London Plane (*Platanus x hispanica*)	24	114	8	3	12	7	9	M	G	G	See 011: single slightly leaning stem with one sided crown contributing to the well balanced branch system of the group as a whole: stands in a rectangular un-surfaced enclosure in an area of new paving (2015): crown density noted as normal in terms of leaf size, colour and distribution at last visual inspection (23.07.15)	No action required	20-40	A	1	
018	London Plane (*Platanus x hispanica*)	20 est	68	12	10	4	6	8	M	G	G	Trees 018, 019, 020 and 022 make up a distinct group encircled by key trees T021, 023, 024 and 025. Timber edgings and hard surfacing around their bases has been removed and replaced with a layer of shredded bark (2015): T018, 019 and 020 were reduced n height and spread (2015) following the completion of the Pears Pavilion (replacement for previous temporary offices): T018 has a single stem and is larger than average for group; forks at 3m into 3	No action required	20-40	B	1/2	
019	London Plane (*Platanus x hispanica*)	20 est	55	2	4	7	4	12	M	G	F	See 018: single leaning stem: crown height and spread reduced (2015)	No action required	20-40	C+	2	
020	London Plane (*Platanus x hispanica*)	20 est	102	10	6	10	3	12	M	G	F	See 018: single upright stem forks at 3m into 3: large branch stub from major limb breakage	Review (general condition)	10-20	C+	2	
021	London Plane (*Platanus x hispanica*)	29	104	9	7	10	9	6	M	G	G	Single stem: a key boundary tree: floodlight adjacent: public footpath and lighting columns below: small cavity at 6m (no signs of significant structural decay)	No action required	40+	A	1/2	
022	London Plane (*Platanus x hispanica*)	26	63	5	5	5	6	12	M	G	F	Single stem with slight lean: shredded bark surfacing at base (see 018): subsidiary stem originates at 3m	Review (general condition)	20-40	C+	1/2	
023	London Plane (*Platanus x hispanica*)	33	110 est	8	10	9	7	8	M	G	G	A key single stem boundary tree: stands in a fenced enclosure on south edge of the footpath linking Mecklenburgh and Brunswick Squares: cable brace in crown: 4m high sports pitch fence adjacent (replaced 2013)	No action required	40+	A	1	
024	London Plane (*Platanus x hispanica*)	36	102	7	10	10	7	6	M	G	G	Single stem: stands in nursery outside space: rubberised surface and paving at base: well balanced crown	No action required	20-40	A	1	
025	London Plane (*Platanus x hispanica*)	31	145	10	9	11	14	6	M	G	G	A key single stem boundary tree: cable brace in crown: floodlight and 4m sports pitch fence below (replaced 2013): the footpath linking Mecklenburgh and Brunswick Squares runs below	No action required	40+	A	1	

Client: The Coram Foundation
Location: Coram Community Campus EC1N 1AZ
Date: 17.09.15
Job No.: 410

Appendix IV
BS5837 Tree Protection Fencing.

Apply signs:



1 Standard scaffold poles
2 Uprights to be driven into the ground
3 Panels secured to uprights with wire ties and where necessary standard scaffold clamps
4 Weldmesh wired to the uprights and horizontals
5 Standard clamps
6 Wire twisted and secured on inside face of fencing to avoid easy dismantling
7 Ground level
8 Approx. 0.6 m driven into the ground

Figure 2 — Protective barrier

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For item 4, weldmesh, substitute **Heras** mesh panel.

TREE PROTECTION ZONE
KEEP OUT

NO DIGGING OR TRENCHING

NO STORAGE OF PLANT AND MATERIALS

NO VEHICULAR ACCESS

NO FIRES TO BE LIT

NO CHEMICALS TO BE STORED OR HANDLED IN THE VICINITY OF THIS ZONE

AVOID PHYSICAL DAMAGE TO TREES

REPORT DAMAGE TO TREES OR FENCING IMMEDIATELY

TREE PROTECTION NOTES

Trees are thin skinned and easily damaged

Their roots spread widely and run close to the ground surface.

All of the following can cause serious damage:

- Heavy traffic over and the storage of heavy materials above tree roots
- Direct damage to stems and branches from badly handled construction equipment,
- Root damage caused by unnecessary excavation
- Leakage of toxic liquids and powders above roots and close to tree stems.

Please keep the trees on site safe by following these simple rules carefully and in full.

There is a protective fence round each retained tree. These fenced-off areas are CONSTRUCTION EXCLUSION ZONES (CEZ). Don't enter any CEZ unless authorised to do so

In Construction Exclusion Zones

- Don't store any materials
- Don't use heavy machinery
- Don't handle toxic materials
- Stick to the planned work programme. Don't undertake unscheduled variations
- Don't light fires
- Report any damage to protective fencing to the Site Manager

Work Planning

Plan your work so that construction machinery does not come into contact with and cause damage to branches and stems of retained trees.

Appoint someone to supervise movement of machinery and equipment close to CEZs

Tell the Site Manager if tree pruning is needed to get machinery in, out or around the site. Don't do it yourself