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Arboricultural Impact Assessment

For proposed development at:

Connell Coop College, 301 Alan Turing Way, Manchester M11 3BS

Date:
11th December 2020

Project Ref: 680

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1 INTRODUCTION

1.1 Instructions

- 1.1.1 Skilled Ecology is instructed to prepare an Arboricultural Impact Assessment to form part of a planning application for proposed development at Connell Coop College, 301 Alan Turing Way, Manchester M11 3BS.
- 1.1.2 Skilled Ecology has been provided with the following information in preparation of this report:
- Topographical survey of Terrascan (Drawing: 03661-001)
 - Proposed Block Plan of Darwin Group (Drawing: 180389-DGL-01-XX-DR-A-1160 P1)
 - Proposed Landscaping Plan of Darwin Group (Drawing: 180389-DGL-01-XX-DR-A-1400 P5)
- 1.1.3 This report was prepared by Mr Oisin Kelly, Arboricultural Consultant. Mr Kelly's professional profile outlining his qualifications and experience is contained at APPENDIX 1.

1.2 The Site & Proposal

- 1.2.1 The application site is situated within the grounds of Connell Coop College. The application seeks consent for a new school building providing 10 classrooms with stores and ancillary spaces, and landscaping.

1.3 The Tree Survey

- 1.1.1 The tree survey was carried out on 16th November 2020 by Alistair McLeod, Arboricultural Consultant. All observations were made from ground level. The survey was to assess trees in relation to proposed development and should not be relied upon as a tree safety survey.
- 1.3.1 Data from the survey is contained in the Tree Survey Schedule at APPENDIX 2. The Tree Survey Plan at APPENDIX 3 shows the location of the trees in relation to the existing site layout and their quality, as categorised for quality or value in accordance with "*Trees in relation to design, demolition and construction – Recommendations*" (BS:5837:2012). The categorisation is intended to assist in determining which trees should be removed or retained in the event of development. BS5837 is a standard reference document used by local planning authorities and the Planning Inspectorate when considering trees in the development context.
- 1.3.2 The quality/value categories are summarised as follows:
- Category U: trees not worthy of retention because of their condition
 - Category A: trees of high quality
 - Category B: trees of moderate quality
 - Category C: trees of low quality

1.3.3 The numbers of trees, groups and hedges surveyed by category are detailed in Table 1 below.

	Trees	Hedges
Category U	0	0
Category A	0	0
Category B	0	0
Category C	42	1
TOTALS	42	1

1.3.4 The trees are all young to semi-mature and mostly below 150mm stem diameter. In accordance with BS5837:2012, trees below 150mm stem diameter are rated as Category C. For the small number of trees with stems slightly larger than 150mm stem diameter, it would make no sense in this context to rate them higher than the other similarly sized (but slightly smaller) trees. As a result, all the trees on this site have been rated as Category C. This fairly reflects their size, maturity and ease of like-for-like replacement.

2 Impact Assessment

2.1 Drawings

2.1.1 The Tree Constraints Plan at APPENDIX 4 shows the trees in relation to the proposed site layout, along with the following information:

- Trees proposed for removal or retention
- Root Protection Areas (RPAs) - a layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority;
- Target notes in relation to the development proposals and arboricultural constraints.

2.2 Trees to be removed

2.2.1 The trees proposed to be removed are listed in the table below, by their quality / value category.

Category	Trees to be removed
U	n/a
A	n/a
B	n/a
C	English oaks T5, T23; wild cherries T6, T22, T31; Himalayan birches T11, T12, T13, T14, T15, T16, T17, T18, T19; Corsican pine T21, T27, T29; rowan T28; field maple T30; limes T32, T33, T34, T35, T36, T39, T42.

2.2.2 In addition to the above removals:

- sections of hedge H1 will be removed as required to match new access openings;
- apples T37, T38, T40 and T41 will be transplanted elsewhere on site. These trees were planted by students of the college, and subject to suitable methods and aftercare are of sufficiently small size to tolerate transplanting.

2.3 Protection of trees to be retained

2.3.1 The proposed new footpath adjacent the widened drive just extends into the Root Protection Area of lime T1. Only a small proportion of the RPA is affected. Given its species and early mature age class, it will likely tolerate root pruning at the edge of the path and adapt to its new environment. (See 3.4 below).

2.3.2 In other respects, the trees to be retained can be protected during construction by installation of suitable tree protective fencing. (See 3.2 below).

2.4 Summary of Impact Assessment

2.4.1 The development will result in the removal of:

- Category U: 0 trees
- Category A: 0 trees
- Category B: 0 trees
- Category C: 26 trees, and sections of 1 hedge

2.4.2 In addition, 4 apples will be transplanted elsewhere on site.

3 SCHEME OF TREE PROTECTION

3.1 Enabling Tree Works

- 3.1.1 The tree works detailed in the Schedule at APPENDIX 2 shall be undertaken as part of the development.

3.2 Tree Protective Fencing

- 3.2.1 Prior to the commencement the development, Tree Protective Fencing shall be erected in accordance with the layout shown on the Tree Protection Plan at APPENDIX 5.
- 3.2.2 Tree Protective Fencing shall be fit for the purpose of excluding construction activity taking into account the type, intensity and proximity of work taking place around the retained trees. Fencing shall be maintained to ensure that it remains rigid and complete. Notices stating “Tree Protection Area – No Access” shall be affixed to the fencing. A suitable specification is shown at APPENDIX 6.

3.3 Site Facilities

- 3.3.1 All site huts, parking, delivery and storage areas, welfare facilities, cement/plaster mixing areas etc., should be sited outside of the RPAs of trees to be retained.
- 3.3.2 There is ample room on site for such site facilities outside of the RPAs of trees to be retained.

3.4 Root pruning along edge of footpath over RPA of lime T1

- 3.4.1 Within the RPA of T1, the edge of the proposed footpath closest to the tree stem shall be excavated manually, e.g. using a spade, mattock, digging bar etc. Any roots encountered shall be pruned back to the face of the excavation, using clean, sharp, pruning tools.

3.5 Services

- 3.5.1 Any underground utility services such as mains water, power, telecoms, surface and foul drainage etc., shall be located outside of the RPAs of trees to be retained.

4 CONCLUSIONS

4.1.1 The application site is situated within the grounds of Connell Coop College. The application seeks consent for a new school building providing 10 classrooms with stores and ancillary spaces, and landscaping.

4.1.2 A survey was carried out of the trees potentially affected by the development. The trees were categorised for their quality / value in accordance with “Trees in relation to design, demolition and construction – Recommendations” BS5837:2012, as summarised in the table below:

	Trees	Hedges
Category U	0	0
Category A	0	0
Category B	0	0
Category C	42	1
TOTALS	42	1

4.1.3 The development will result in the removal of:

- Category U: 0 trees
- Category A: 0 trees
- Category B: 0 trees
- Category C: 26 trees, and sections of 1 hedge

4.1.4 In addition, 4 apples will be transplanted elsewhere on site.

4.1.5 A scheme of protection for the trees to be retained is provided.

APPENDIX 1

Professional Profile for Oisín Kelly

Qualifications and Experience of Oisín Kelly

Oisín is an Arboricultural Consultant with 25 years' experience in across the planning, insurance, risk management, aviation, and utility sectors. Oisín is an experienced Expert Witness in the Civil Courts, the Criminal Courts and Planning Appeals (written representations, Hearings, and Inquiries).

ACADEMIC QUALIFICATIONS

BSc Forestry (hons)

Diploma in Management Studies

MEMBERSHIPS

Member of the Academy of Experts

Associate Member of the Institute of Chartered Foresters

Technician Member of the Arboricultural Association

CAREER HISTORY

Skilled Ecology February 2015 – present

Self-employed Arboricultural Consultant

Landscape Planning Group Limited 1997 – February 2015

Principal Consultant: 2013 – 2015

To line manage and lead the Planning Team of Arboriculturists, Ecologists and Landscape Architects to meet sales and revenue targets. To manage projects within agreed deadlines, making maximum use of potential revenue opportunities, whilst maintaining client satisfaction.

Principal Consultant: 2008 – 2013

As above for delivery of Tree Risk Management services.

Regional Manager: 2006 – 2008

Regional Manager of Colchester Officer providing Arboriculture, Ecology and Landscape Services across planning, local government, and risk management sectors.

Director of Technical Services: 2004 – 2006

To provide a focus for commercial innovation in technical skills, system evolution, equipment, software, hardware, and R&D.

Head of Insurance of Services: 2002 – 2004

Main client contact and technical authority for provision of tree-related subsidence services to loss adjusters, engineers, and insurers across the UK. Line Management of Arboricultural Consulting Staff and administrative support.

Consulting Arboriculturalist: 1997 - 2002

Fee earner specialising in tree-related subsidence.

London Borough of Hounslow 1994-1997

Senior Arboricultural Officer

London Borough of Redbridge 1991 - 1994

Assistant Arboricultural Officer

APPENDIX 2

Tree Survey Schedule

Tree Survey at Connell Co-op College, 301 Alan Turing Way, Manchester M11 3BS

Tree No.	Species	Stem Diam @ 1.5m (mm)	Height (m)	Crown Spread				Age Range	Physiological Condition	First main branch	Crown Clearance	Comments	Recommendations	Remaining contribution (Yrs)	Amenity	RPA Radius	RPA Area
				N	S	E	W										
T1	Lime	130 x1	5	2	2	2	2	SM	SM	1.9	1.2	Good form		40+	C2	1.6	7.6
T2	Lime	160 x1	5.2	1.5	1.5	2	1.5	SM	SM	1.5	1.8	Good form		40+	C2	1.9	11.6
T3	Lime	170 x1	5.3	2	1.5	2	1.5	SM	SM	1.5	1.7	Good form		40+	C2	2	13.1
T4	Lime	100 x1	3.8	1	1	1	1	SM	SM	1.4	1.5	Good form		40+	C2	1.2	4.5
T5	English Oak	110 x1	6.5	2	2	1.7	1.5	SM	G	2.2	1.9	Good form	Fell for development	40+	C2	1.3	5.5
T6	Wild Cherry	140 x1	6	2	1.5	1.7	2	SM	G	1.6	1.5	Sunken lesion at 2.2m on main stem	Fell for development	40+	C2	1.7	8.9
T7	London Plane	100 x1	6.5	2	1.7	1.7	1.5	SM	G	1.7	2	Stem damage from redundant stake		40+	C2	1.2	4.5
T8	London Plane	140 x1	7	2.5	2.5	2.5	2	SM	G	1.4	1.9	Stem damage from redundant stake		40+	C2	1.7	8.9
T9	London Plane	110 x1	7.5	.7	1.5	1.8	1.5	SM	G	2	2	Stem damage from redundant stake		40+	C2	1.3	5.5
T10	London Plane	110 x1	6.5	1.5	1.5	1.7	1.3	SM	G	1.7	2.2	Stem damage from redundant stake		40+	C2	1.3	5.5
T11	Himalayan Birch	70 x2	7	1.9	1.8	1.9	1.8	SM	G	0.1	0.3	Multi stem. Stake still attached	Fell for development	40+	C2	1.2	4.4
T12	Himalayan Birch	75 x2	7	1.9	2	2.1	1.9	SM	G	0.1	0.2	Multi stem. Stake still attached	Fell for development	40+	C2	1.3	5.1
T13	Himalayan Birch	50 x4	6	2.3	2.2	2	1.8	SM	G	0.1	0.5	Multi stem. Stake still attached	Fell for development	40+	C2	1.2	4.5
T14	Himalayan Birch	40 x4	6.5	2.4	2	1.9	1.8	SM	G	0.1	0.75	Multi stem. Stake still attached	Fell for development	40+	C2	1	2.9
T15	Himalayan Birch	50 x2	6.5	1.7	2.3	1.8	1.8	SM	G	0.1	0.5	Multi stem. Stake still attached	Fell for development	40+	C2	0.8	2.3
T16	Himalayan Birch	60 x2	6.5	1.9	1.8	2	1.8	SM	G	0.1	0.4	Multi stem. Stake still attached	Fell for development	40+	C2	1	3.3
T17	Himalayan Birch	60 x2	6.5	1.9	2.5	2.3	2.2	SM	G	0.1	0.5	Multi stem. Stake still attached	Fell for development	40+	C2	1	3.3

Tree Survey at Connell Co-op College, 301 Alan Turing Way, Manchester M11 3BS

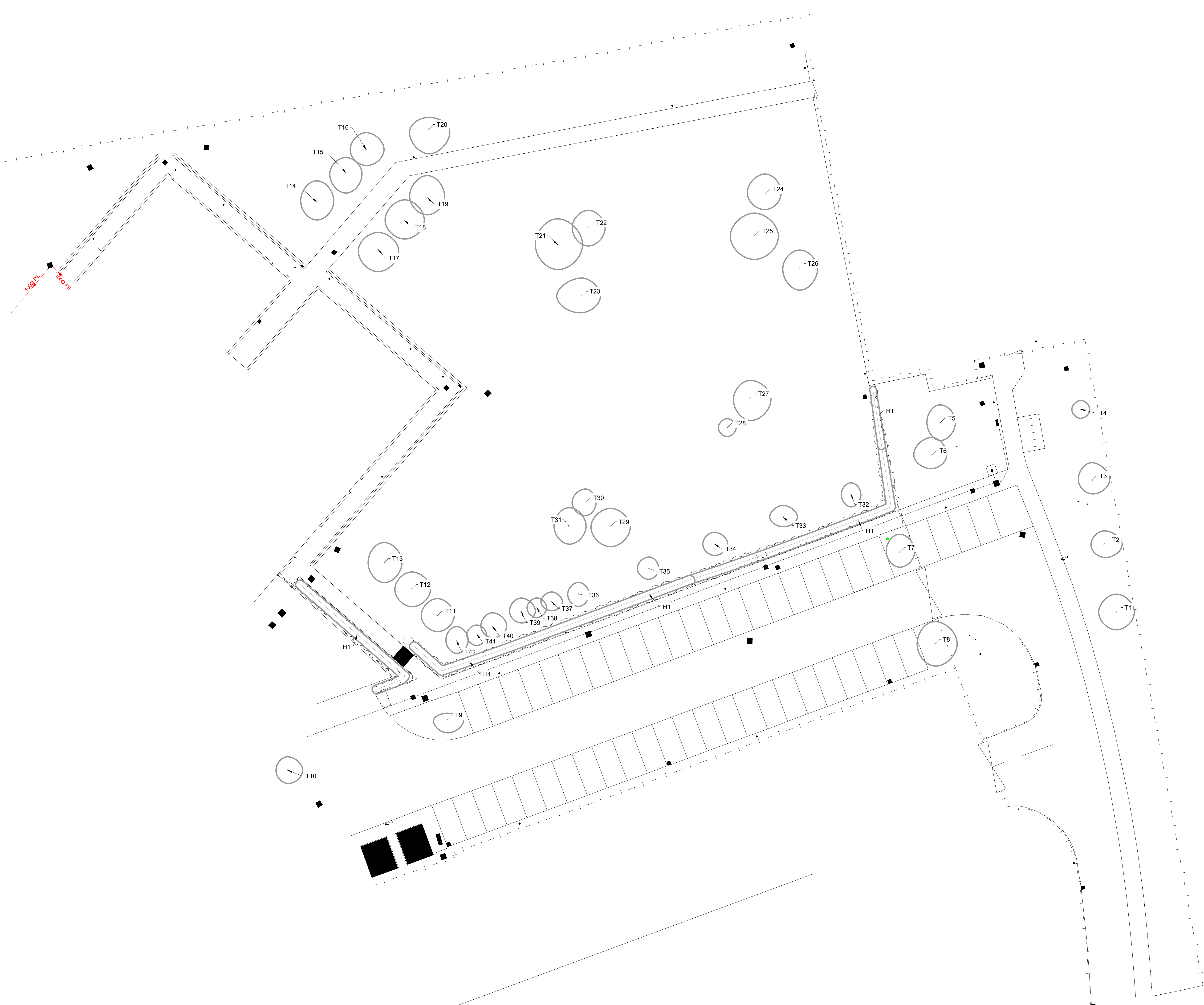
Tree No.	Species	Stem Diam @ 1.5m (mm)	Height (m)	Crown Spread				Age Range	Physiological Condition	First main branch	Crown Clearance	Comments	Recommendations	Remaining contribution (Yrs)	Amenity	RPA Radius	RPA Area
				N	S	E	W										
T18	Himalayan Birch	55 x4	6.5	2.3	2.1	2.2	2.2	SM	G	0.1	0.3	Multi stem. Stake still attached	Fell for development	40+	C2	1.3	5.5
T19	Himalayan Birch	55 x2	5	2.5	1.9	1.9	2	SM	G	0.1	0.1	Multi stem. Stake still attached	Fell for development	40+	C2	0.9	2.7
T20	Blue Atlantic Cedar	160 x1	5.5	1.3	2.8	2.3	2.1	SM	F	1.3	0.9	Guy wires digging into main stem		40+	C2	1.9	11.6
T21	Corsican Pine	160 x1	5	2.9	2.8	2.8	2.5	SM	F	0.3	0.1	Guy wires digging into main stem	Fell for development	40+	C2	1.9	11.6
T22	Wild Cherry	150 x1	7	1.9	2.1	1.9	1.8	SM	G	1.7	1.6	Stake still attached	Fell for development	40+	C2	1.8	10.2
T23	English Oak	110 x1	6	2	1.9	2.1	2.8	SM	G	2	1.6	Stake still attached	Fell for development	40+	C2	1.3	5.5
T24	Corsican Pine	120 x2	4.5	2.2	1.8	1.8	2	SM	F	0.3	0.1	Tight fork at 0.1m. Guy wires still attached		40+	C2	2	13
T25	Wild Cherry	140 x1	5.5	2.5	2.7	2.7	2.7	SM	G	1.7	1.6	Stake still attached		40+	C2	1.7	8.9
T26	Corsican Pine	160 x1	4.7	2	2.5	2	1.9	SM	G	0.2	0	Guy wires digging into main stem		40+	C2	1.9	11.6
T27	Corsican Pine	180 x1	5.5	2	2.5	2.3	1.9	SM	G	1	0.1	Guy wires digging into main stem	Fell for development	40+	C2	2.2	14.7
T28	Rowan	70 x1	5	1	1	1	1	Y	G	1.6	1.7	Minor mower damage at base	Fell for development	30	C2	0.8	2.2
T29	Corsican Pine	180 x1	5.5	2	2.3	2.2	2.2	SM	G	0.2	0	Guy wires digging into main stem	Fell for development	40+	C2	2.2	14.7
T30	Field Maple	110 x1	5	1.5	1.5	1.2	1.5	Y	G	1.7	1.7	Good form	Fell for development	40+	C2	1.3	5.5
T31	Wild Cherry	120 x1	5.5	2.1	2	1.9	1.7	SM	G	1.7	1.6	Good form	Fell for development	40+	C2	1.4	6.5
T32	Lime	130 x1	6	1.3	1.4	1.1	1.1	SM	G	1.4	1.2	Stake still attached	Fell for development	40+	C2	1.6	7.6
T33	Lime	120 x1	5.8	1.3	1.1	1.6	1.5	SM	G	1.6	1.5	Stake still attached	Fell for development	40+	C2	1.4	6.5
T34	Lime	120 x1	6	1.3	1.3	1.5	1.3	SM	G	1.6	1.6	Stake still attached	Fell for development	40+	C2	1.4	6.5
T35	Lime	130 x1	6	1.3	1.2	1.1	1.3	SM	G	11.3	1.2	Stake still attached. Fork with included union at 1.6m	Fell for development	40+	C2	1.6	7.6
T36	Lime	130 x1	5.8	1.3	1.4	1.2	1.2	SM	G	1.6	1.2	Stake still attached	Fell for development	40+	C2	1.6	7.6
T37	Apple	40 x1	2.5	1.1	1	1.2	1.2	Y	G	0.4	1.2	Minor mower damage at base	Transplant to suitable alternative location	40+	C2	0.5	0.7

Tree Survey at Connell Co-op College, 301 Alan Turing Way, Manchester M11 3BS

Tree No.	Species	Stem Diam @ 1.5m (mm)	Height (m)	Crown Spread				Age Range	Physiological Condition	First main branch	Crown Clearance	Comments	Recommendations	Remaining contribution (Yrs)	Amenity	RPA Radius	RPA Area
				N	S	E	W										
T38	Apple	40 x1	2.5	1.1	1.1	1.1	1.1	Y	G	1.1	1.2	Minor mower damage at base	Transplant to suitable alternative location	40+	C2	0.5	0.7
T39	Lime	130 x1	6	1.5	1.3	1.6	1.3	SM	G	1.6	1.2	Stake still attached. Some sucker growth from base	Fell for development	40+	C2	1.6	7.6
T40	Apple	50 x1	5	1.5	1.3	1.6	1.3	Y	G	1.2	1.2	Stake still attached. Some sucker growth from base	Transplant to suitable alternative location	40+	C2	0.6	1.1
T41	Apple	40 x1	4	1	1.3	1.1	1.1	Y	G	1.1	1.2	Stake still attached	Transplant to suitable alternative location	40+	C2	0.5	0.7
T42	Lime	120 x1	6	1.6	1.4	1.3	1.2	SM	G	1.5	1.2	Stake still attached	Fell for development	40+	C2	1.4	6.5
H1	Beech	30	2	0.5	0.5	0.5	0.5	SM	G	0.1	0	Good form, strong linear feature. Planted as double row 500mm apart	Remove sections as required for the development - see Tree Constraints Plan	40+	C2	0	0

APPENDIX 3

Tree Survey Plan (ref: 680-01)



Key

-  Tree / Group Category A
-  Tree / Group Category B
-  Tree / Group Category C
-  Tree / Group Category U

Tree Categories from BS5837:2012

REVISIONS

No	Description	By	Date	Chkd

PREPARED BY:



ISSUE:

For Planning

CLIENT:

Darwin Group

LOCATION:

Connell Coop College

DRAWING TITLE:

Tree Survey

SCALE: 1:200 @ A1

DATE:

November 2020

DRAWN BY:

OK

CHECKED BY:

OK

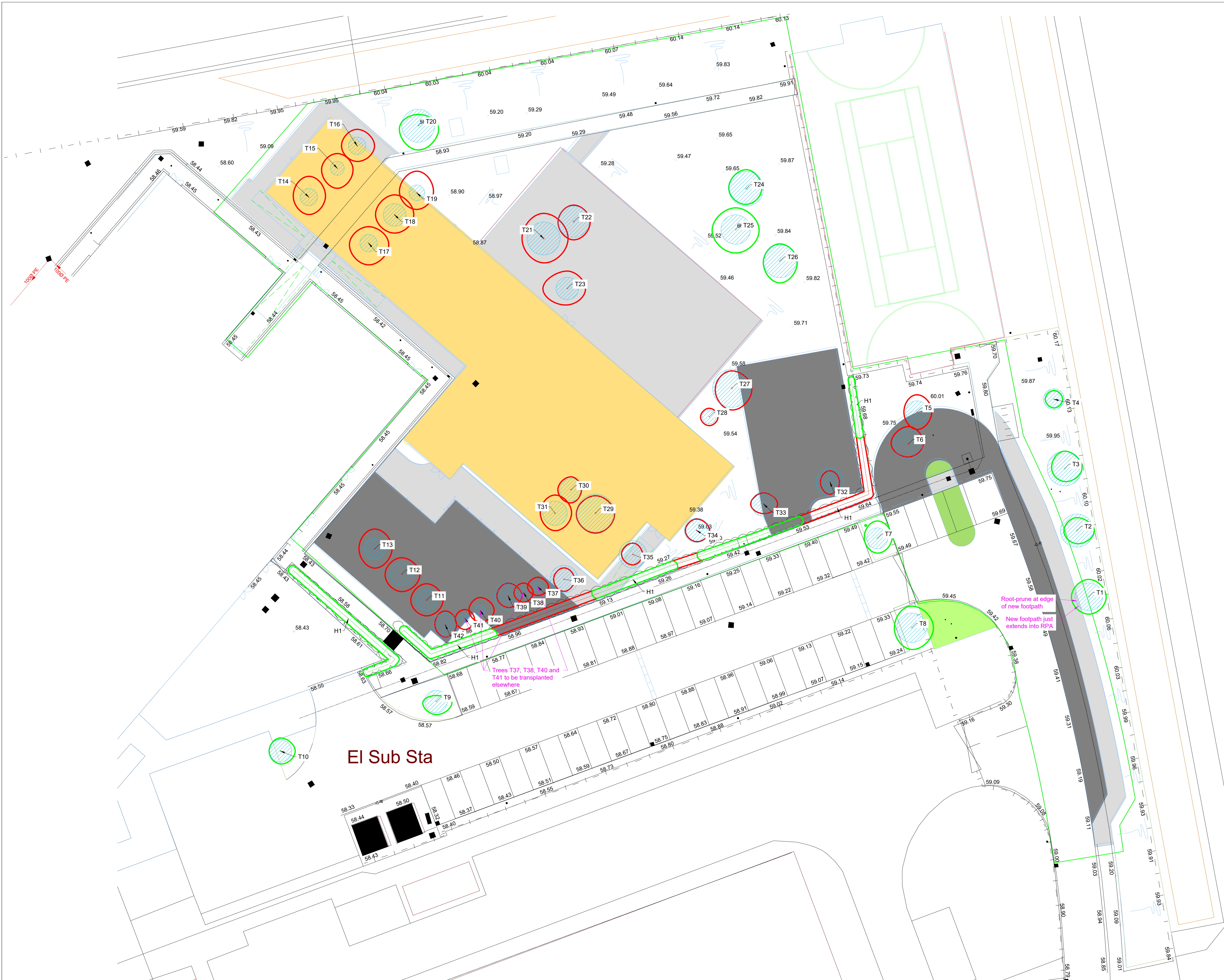
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680-01

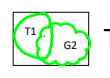
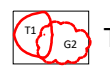
REV:

APPENDIX 4

Tree Constraints Plan (ref: 680-02A)



Key

-  Trees to be retained
-  Trees to be removed
-  Root Protection Areas
-  Target Notes

REVISIONS

No	Description	By	Date	Chkd
A	Proposed Block plan and Landscape Plan updated	ok	11/12/2020	ok

PREPARED BY:



ISSUE:

For Planning

CLIENT:

Darwin Group

LOCATION:

Connell Coop College

DRAWING TITLE:

Tree Constraints

SCALE: 1:200 @ A1

DATE: November 2020

DRAWN BY: OK

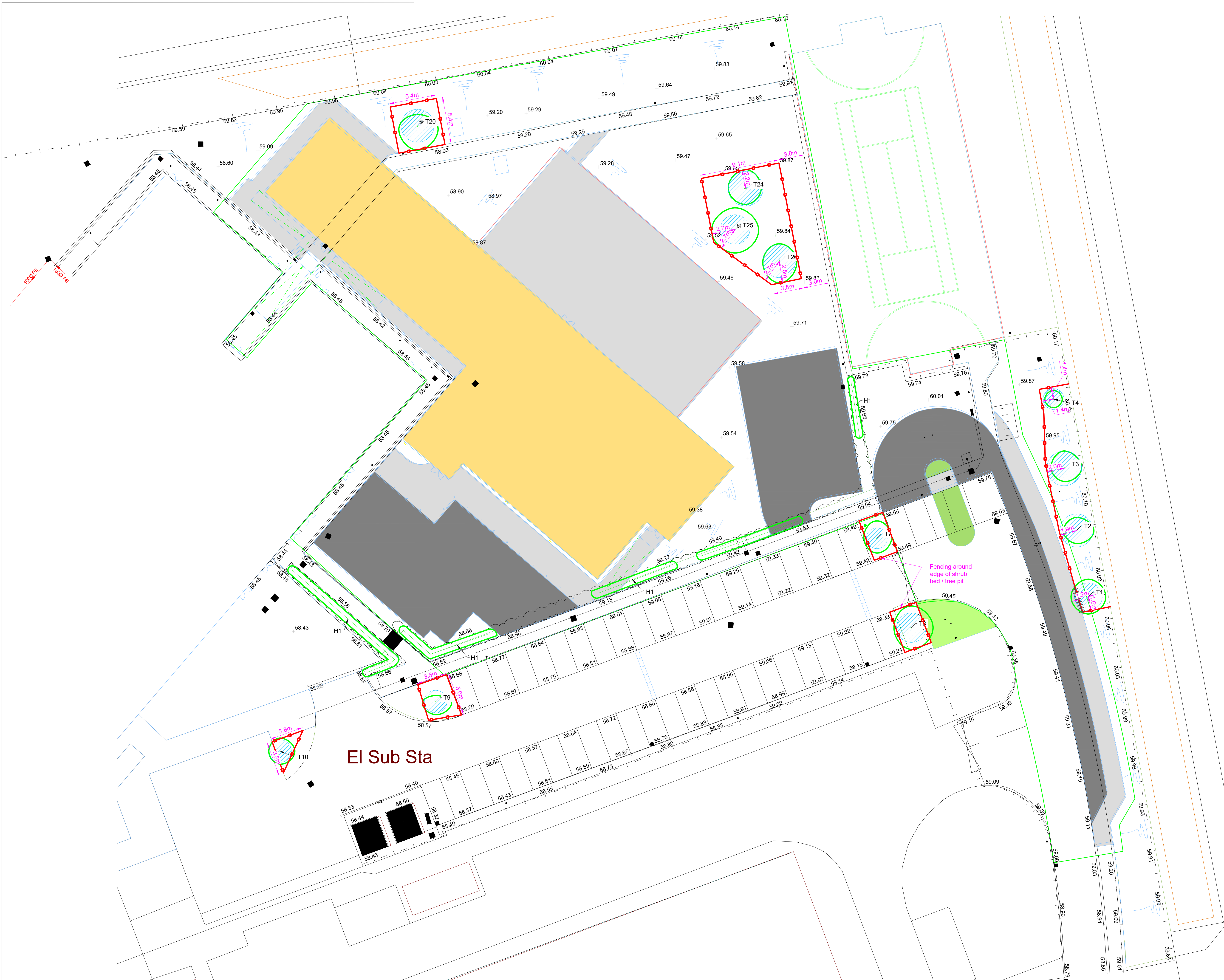
CHECKED BY: OK

DRAWING NO: 680-02

REV: A

APPENDIX 5

Tree Protection Plan (ref: 680-03A)



El Sub Sta

Key

- Trees to be retained
- Root Protection Areas
- Tree Protective Fencing
- Manual-dig & root-prune
- Dimensions for setting out Tree Protection

REVISIONS				
No	Description	By	Date	Chkd
A	Proposed Block plan and Landscape Plan updated	ok	11/12/2020	ok
PREPARED BY:				
Skilled Ecology Consultancy Ltd.				
ISSUE: For Planning				
CLIENT: Darwin Group				
LOCATION: Connell Coop College				
DRAWING TITLE: Tree Constraints				
SCALE: 1:200 @ A1		DATE: November 2020		
DRAWN BY: OK	CHKD BY: OK	DRAWING NO: 680-03	REV: A	

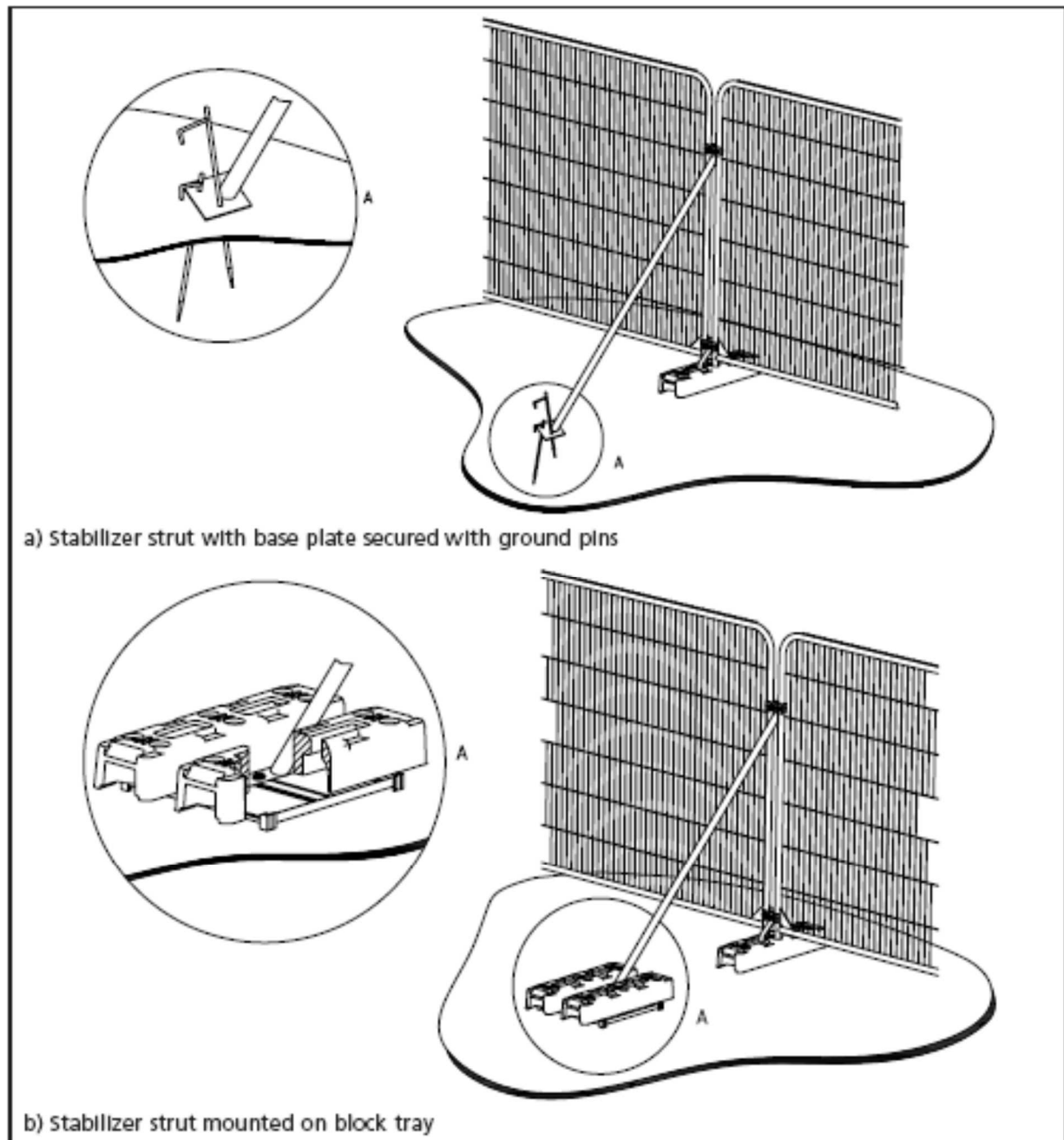
APPENDIX 6

Tree Protective Fencing

Tree Protective Fencing

Alternative Specification

Taken from Figure 3 of BS5837:2012 "Trees in relation to design, demolition and construction – Recommendations"





Tree Protection Area

No Access

Contact: Skilled Ecology

Tel: 07747 477 307

Email: roger@skilledecology.co.uk

