Arboricultural Method Statement - Addendum

For consented development at

NW Bicester Eco Town (Phase 2)

Planning Consent Ref: 10/01780/HYBRID

Prepared by: Date:

Oisin Kelly, Arboricultural Consultant 24th March 2015

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1 INTRODUCTION

- 1.1 I am instructed by Hill Partnerships Ltd to prepare an addendum to the previously approved Arboricultural Method Statement of Hyder (Report No. 0516-UA001881-UE21R-05-ArbMS, dated 13 December 2012).
- 1.2 This addendum is limited to tree protection details in respect of Phase 2 only, and does not include infrastructure works, for instance within the river corridor or the primary school area.
- 1.3 A copy of my professional profile outlining my qualifications and experience is contained at Appendix 1.
- 1.4 I visited the site on 01/03/2016. Unless otherwise stated all observations were made from ground level and tree dimensions were measured.

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2 SURVEY FINDINGS

- 2.1 The survey on 01/03/2016 reviewed the tree data contained within the approved Arboricultural Method Statement of Hyder (Report No. 0516-UA001881-UE21R-05-ArbMS, dated 13 December 2012) ('the Hyder AMS'). Tree dimensions were checked and updated. Root Protection Areas were re-calculated based on revised dimensions. The location of existing Tree Protective Fencing was checked.
- 2.2 A revised schedule of trees within and adjacent the Phase 2 area is contained at Appendix 2. The schedule is updated to reflect the findings of the recent survey.
- 2.3 It is noted that with the specific exceptions noted below, all trees had been retained or removed in accordance with the Hyder AMS. The exceptions are:
 - Crack Willow T32 has been removed;
 - · Crack Willow T16 has been retained; and
 - Young broadleaf plantation G6 has been removed.
- 2.4 Crack Willow T16 was previously recommended for removal due to its condition. The reinspection of the tree revealed significant structural weaknesses rendering the tree at risk of imminent collapse. See Figures 1 and 2 below. It is recommended that T16 is removed.

Figure 1 – Crack Willow T16 is arrowed red and is adjacent Aspen T17



Figure 2 - Close up of stem of T16. The arrows indicate a large cavity partially hidden by ivy



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- 2.5 In respect of G6, the Hyder AMS states that G6 is to be removed (paragraph 3.1, page 4). However, in the Tree Data Schedule at Appendix 1 of the Hyder AMS, it states "No action required". G6 is also shown to be retained on the Tree Protection Plan (Sheet 1 of 2) at Appendix 2 of the Hyder AMS. Given that the proposed development footprint extended over the location of G6, it seems evident that removal of G6 was always necessary for the implementation of the planning consent and that the contrary indications within the Tree Data Schedule and Tree Protection Plan were erroneous.
- 2.6 In addition, a Crack Willow at the southern end of G2 has significant decay and dead wood. It is recommended the tree is pollarded at 3m see figures 3 and 4 below. Crack Willow T2 has recent failure of regrowth from old pollard points and should be re-pollarded see figure 5 below.

Figure 3 (below) – view of Willow at southern end of G2.

Figure 4 (right) – closer view of stem, area of exposed decayed wood indicated by arrows







Figure 5 (left) – shows Crack Willow T2 at southern end of G1. The tree has previsuly been pollarded and regwoth has recently failed.

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- 2.7 In respect of Tree Protection for Phase 2, all the trees to be retained can be adequately protected by means of Tree Protective Fencing enclosing their RPAs to form Construction Exclusion Zones. There is no need for any ground protection or additional measures.
- 2.8 The Tree Protective Fencing is partially in place. Certain sections need realignment to fully encompass the RPAs of trees to be retained and additional fencing is required where not present. This is indicated on the Tree Protection Plan at Appendix 3.

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3 METHOD STATEMENTS

Tree Protective Fencing

- 3.1 Tree Protective Fencing shall be installed in accordance with the layout shown on the Tree Protection Plan at Appendix 3.
- 3.2 Tree Protective Fencing should 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 should be maintained to ensure that it remains rigid and complete. Extracts from BS5837:2012 for suitable tree protective fencing is included at Appendix 4. Notices stating "Tree Protection Area No Access" should be affixed to the fencing. A Suitable notice is included at Appendix 4.

Site Facilities

3.3 All site huts, parking, delivery and storage areas, welfare facilities, cement/plaster mixing areas etc., shall be sited outside of the RPAs of trees to be retained.

Services

3.4 Within Phase 2, all underground utility services are located outside of the RPAs of trees to be retained.

Monitoring of Tree Protection

3.5 Hill Partnerships Ltd will monitor Tree Protective Fencing and tree protection more generally and shall provide Inspection Certificates to the local planning authority on a monthly basis, demonstrating that Tree Protective Fencing remains in place by means of a photographic record.

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4 CONCLUSIONS

- 4.1 A re-survey of trees within or adjacent NW Bicester Eco Town (Phase 2) was undertaken.
- 4.2 A revised schedule of trees within and adjacent the Phase 2 is contained at Appendix 2.
- 4.3 The following amendments to the information previously contained within the Hyder AMS are noted:
 - Crack Willow T32 has been removed;
 - Crack Willow T16 has been retained, but requires removal;
 - Young broadleaf plantation G6 has been removed;
 - A Crack Willow at the southern end of G2 requires pruning to make it safe;
 - Crack Willow T2 at the southern end of G1 requires pruning to make it safe;
- 4.4 In respect of Tree Protection for Phase 2, all the trees to be retained can be adequately protected by means of Tree Protective Fencing enclosing their RPAs to form Construction Exclusion Zones. There is no need for any ground protection or additional measures.
- 4.5 The Tree Protective Fencing is partially in place. Certain sections need realignment to fully encompass the RPAs of trees to be retained and additional fencing is required where not present. This is indicated on the Tree Protection Plan at Appendix 3.
- 4.6 Monitoring of Tree Protective Fencing can be undertaken by Hill Partnerships, with a photographic record issued to the local planning authority on a monthly basis.

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APPENDIX 1

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Mr Oisin Kelly, Arboricultural Consultant (Freelance)

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Web: http://uk.linkedin.com/in/oisinjkelly

PROFILE

I am an Arboricultural Consultant with 25 years' experience across planning, subsidence, tree-risk management, aviation and utility sectors. I act as an Expert Witness in relation to tree-related subsidence, tree-related property damage and personal injury, and alleged contraventions of tree preservation orders and felling licenses. I have appeared in Magistrates Court, County Court and High Court (including the Technology and Construction Court). I have provided written representations on planning appeals and have appeared at Hearings and Public Inquiries.

I provide arboricultural services to solicitors, planners, developers, local authorities, architects and their agents including

- Expert Witness in Arboriculture
- Tree Surveys (BS5837, hazard, subsidence)
- Arboricultural Impact Assessments
- Arboricultural Method Statements
- Arboricultural Clerk of Works
- Public Consultation
- Local Authority Consultation

EXAMPLE PROJECTS

Notable Court Cases:

Loftus-Brigham v Ealing LBC [2003] EWCA Civ 1490, Eiles v Southwark LBC [2006] EWHC 1411 (TCC)

Berent v Family Mosaic Housing [2011] EWHC 1353 (TCC)

Lovett, Newman and Barton v Epping Forest District Council in Harlow Magistrates Court

Planning & Development Cases

Bolingbroke Park is the former Middlesex University Cat Hill Campus site that is to be redeveloped for 231 residential units. I supported the Arboricultural elements of this sensitive project through planning consultation and during its construction (ongoing) by the production of Arboricultural Impact Assessments, Arboricultural Method Statements, Veteran Tree Management Plans and as an Arboricultural Clerk of Works.

Bell School Development Site is a residential development of 270 dwellings, comprising houses and apartments, including affordable housing and 100-bed student living accommodation for the Bell Language School. The site is in the Southern Fringe Growth Area of Cambridge. I supported the scheme from design through to planning consent, including consultation meetings with the local planning authority.

West Park and St Ebbas are ex-NHS Hospital Sites in Epsom that that were redeveloped in phases for residential housing of several hundred units. I supported the project through planning to construction.

I have supported various Councils in the redevelopment and infill development of sites on the Housing Revenue Account for affordable housing. I have provided support on these sensitive projects by provision of preliminary advice to inform feasibility and design, public consultation and consultation with the local planning authority.

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ACADEMIC QUALIFICATIONS

BSc Forestry (hons)

Diploma in Management Studies

ACCREDITATIONS

Utility Arboriculture UA1, UA2.1, UA5.1, UA5.2 - expired 18/02/2014

BESC PERSON Lines - expires 15/09/2015

CSCS Construction Site Operative – expires April 2019

Street Works - Signing, Lighting and Guarding - expires 06/06/2016

QTRA Trained - License expired

MEMBERSHIPS

Member of the Academy of Experts
Associate Member of the Institute of Chartered Foresters

CAREER HISTORY

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

REFERENCES - Available on request.

APPENDIX 2

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Trees at NW Bicester Eco Town - Phase 2

Tree No.	Tree No.		Height (m)	Cr	own	Spre	ad	Age Range Physiological Condition Structural Condition		Crown Clearance	Comments	Recommendations	Remaining contribution (Yrs)	Amenity	RPA Radius	
		Stem Diam @ (mm)		N	S	E	W	,	Ы		Cro			COU		Œ
T1	Common Ash*	700 x1	20	4	4	4	5	MA	Р	Р	3	In fenced-off area. No access for survey. Twin-stemmed at 2m, with a sparse, crown. Large fungal brackets (Innonotus hispidus) at 1.5m and 3m (x2). Extensive dead wood on N side of crown.		<10	C2	8.4
T2	Crack Willow*	800 x1	10	3	3	3	3	ОМ	F	Р	1.5	In fenced-off area. No access for survey. Multiple stems from 3m, collapsing and splitting apart the main stem, which is decayed.	Pollard at 3m.	10+	C2	9.6
Т3	Crack Willow*	200 x1	11	2	2	2	2	SM	F	F	1.5	In fenced-off area. No access for survey. Single-stemmed and slightly leaning, with a sparse, slightly unbalanced crown. No access to survey. In fenced off area.		40+	B2	2.4
T4	Aspen*	600 x1	21	6	6	9	6	EM	G	G	3	Single-stemmed and slightly leaning. No In fenced-off area. No access for survey. access to survey. In fenced off area.		40+	B2	7.2
T5	Crack Willow	400	4	2	0	0	6	EM				Felled prior to survey				
Т6	Common Ash*	250 x1	10	2	4	2	4	SM	G	G		In fenced-off area. No access for survey. Single-stemmed. No access to survey. In fenced off area.		40+	B2	3
T7	Crack Willow	400	14	4	4	3	4	EM				Felled prior to survey				
T8	Crack Willow	500	15	4	4	4	4	EM				Felled prior to survey				
T9	Aspen	650	20	5	5	5	5	EM				Felled prior to survey				
T10	Common or Black Elder	190	4	3	2	0	3	MA				Felled prior to survey				

^{*} Denotes estimated dimension 'strikethrough' text indicates removed trees

Trees at NW Bicester Eco Town - Phase 2

Tree No.	Species Stem Diam @ 1.5m		(mm) Height (m) CLOADS				Age Range Physiological Condition Structural Condition		vn Clearance	Comments	Recommendations	Remaining contribution (Yrs)	Amenity	RPA Radius		
		Stem		N	s	E	w	⋖	Ph	0, 0	Crown			Cont		2
T11	Aspen	140	9	0	2	0	2	Y0				Felled prior to survey				
T12	Common Ash	410 x1	17.5	3	5	5	5	EM	G	G	2	Situated within G2. Twin-stemmed at 2m, forming included union with blunt-nosed rib.		40+	B2	4.9
T13	Crack Willow	360 x1	15	2	2	4	4	EM	F	Р	3.5	Situated within G2. Single-stemmed with a sparse crown. Decay from ground level to 3m. Fungal bracket (Dryad's Saddle) at 3m. Kink in stem due to partial failure at 1m. Scattered dead wood. Leans NE over stream.		10+	C2	4.3
T14	Crack Willow	540 x1	15	5	3	5	7	MA	F	Р	2	Situated within G2. Twin-stemmed at 2m, with large open cavity on E side. Scattered dead wood. Leans over stream.		10+	C2	6.5
T15	Crack Willow	250 x1 460 x1 410 x1	15	3	4	7	5	MA	F	Р	3	Situated within G2. Significant decay on inside faces of all stems. Southerly stems kinks at 2.5m, with significant decay. Scattered dead wood.		10+	C2	8
T16	Crack Willow	390 x1	15	4	0	2	3	EM	F	Р	4	extensive decay. At risk of imminent collapse.	Fell to ground level. (As recommended in Hyder AMS)	<10	U	4.7
T17	Aspen	500 x1	18	6	5	6	6	MA	G	G	3	Situated within G2. Single-stemmed. Ivy prevented detailed inspection.	Remove ivy and resurvey	40+	B2	6

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Trees at NW Bicester Eco Town - Phase 2

Tree No.	Species	Stem Diam @ 1.5m (mm)	Height (m)	Cr	own	Spre	ad	Age Range	Physiological Condition	Structural Condition	wn Clearance	Comments	Recommendations	Remaining contribution (Yrs)	Amenity	RPA Radius
		Stem	•	N	s	E	W	1	P.		Crown			cont		2
T27	Goat Willow	150 x1 120 x1	7	3.5	3.5	3.5	3.5	EM	G	F	1.5	Situated west of G1. Decay at base.		10+	C1	2.3
T28	Crack Willow	350 x1	9	4.5	4.5	4.5	4.5	MA	F	G		Situated west of G1. Low growth rate. Scattered dead wood.		10+	C2	4.2
T29	Crack Willow	170	4	4	0	1	4	EM				Felled prior to survey				
T30	Goat Willow	240 x1	7	3	2	2.5	2.5	EM	F	G		Situated west of G1. Single-stemmed. Minor cavity/decay on main stem.		20+	C1	2.9
T31	Crack Willow	190	6	3	2	2	3	EM				Felled prior to survey				
T32	Crack Willow	150	3	4	4	3	1	SM				Felled prior to survey				
T33	Crack Willow	220	8	4	2	4	2	EM				Felled prior to survey				
T34	Unknown	190	6	2	2	2	2	###				Felled prior to survey				
T35	Crack Willow	170	5	1	4	1	1	EM				Felled prior to survey				
T36	Grey Poplar*	530 x1	17.5	9	9	9	9	EM	G	G	4	Situated north of G8. In fenced-off area. No access for survey.		40+	B1	6.4
T37	Crack Willow*	150 x1	7	3	1	1	1	SM	Р	Р		Situated north of G8. Sparse crown. In fenced-off area. No access for survey.		<10	U	1.8
T38	Field Maple*	600 x1	8.2	5	5	5	5	MA	G	G	1.5	Situated north of G8. In fenced-off area. No access for survey.		40+	B1	7.2
T44	Horse Chestnut*	1150 x1	20	10	10	10	10	ОМ	Р	G		Off-site. No access for survey. Data from survey of Hyder Consulting.		40+	A1	14

^{*} Denotes estimated dimension 'strikethrough' text indicates removed trees

Trees at NW Bicester Eco Town - Phase 2

Tree No.	Species	Stem Diam @ 1.5m (mm)	Height (m)	Cr	own	Spre	ad	Age Range	Physiological Condition	hysiological Condition Structural Condition	Crown Clearance	Comments	Recommendations	Remaining contribution (Yrs)	Amenity	RPA Radius
		Sten		N	S	E	W	,	Δ.		Cro			con		
T45	Norway Maple*	220 x1	10	4	4	4	4	EM	G	G	2	Situated within G15. No access to measure stem diameter. Data from Hyder Consulting survey used.		40+	B2	2.6
T46	Norway Maple*	210 x1	8	4	4	4	4	EM	G	G	2.5	Situated within G15. No access to measure stem diameter. Data from Hyder Consulting survey used.		40+	В	2.5
T47	Norway Maple	200	11	Ф	Ф	4	4	SM				Felled prior to survey				
T48	Norway Maple	170	Ф	0	Ф	2	2	SM				Felled prior to survey				
T49	Common Hornbeam	140	5	2	2	4	2	SM				Felled prior to survey				
T50	Norway Maple	180	8	2	2	2	2	SM				Felled prior to survey				
T51	Common Beech	150	6	2	4	4	2	SM				Felled prior to survey				
T52	Field Maple	220	9	3	3	3	3	EM				Felled prior to survey				
T53	Norway Maple	260	9	2	3	2	3	SM				Felled prior to survey				
T54	Field Maple	210	9	3	ფ	3	3	EM				Felled prior to survey				
T55	Norway Maple	240 x1	9	3	3	3	3	SM	N	N	2	Situated within G15. No significant pruning		40+	B2	2.9
T56	Common Ash	160 x1	7	2	2	2	2	SM	N	N	2	Situated within G15. No significant pruning		40+	B2	1.9
T57	Common Hawthorn	300 x1	5	2	2	2	2	MA	N	N	0.5	Situated within G15. No significant pruning		40+	B2	3.6

^{*} Denotes estimated dimension 'strikethrough' text indicates removed trees

Trees at NW Bicester Eco Town - Phase 2

Tree No.	Species	Stem Diam @ 1.5m (mm)	Height (m)	Cr	own	Spre	ad	Age Range	Physiological Condition Structural Condition	Condition wn Clearance	Comments Recommendations	Recommendations	Remaining contribution (Yrs)	Amenity	RPA Radius	
		Sterr		N	s	E	w	_	Ы	ב	Crown			cont		œ
T58	Common Ash	190 x1	6	2	2	2	2	SM	N	N	3	Situated within G15. No significant pruning	No action required	40+	B2	2.3
T90	Crack Willow	700	10	0	Ф	Ф	3	ОМ				Felled prior to survey				
G1	English Elm, Hazel, Common Ash, Elder, Aspen, Common Horse Chestnut, Crack Willow, Field Maple, Dogwood	ı	15	1	1	1	-	EM - OM	G'P	G P	ı	Mixed group adjacent to existing stream containing trees of varied species, age, size and condition. Valuable habitat, but risk of tree and branch failure poses a risk in areas open to public access.	As part of River Corridor works (not Phase 2): Walkover survey of areas to be open to public access to determine appropriate works to reduce risk of harm arising from tree failure.	20+	В3	-
G2	English Elm, Hazel, Common Ash, Elder, Aspen, Common Horse Chestnut, Crack Willow, Field Maple, Dogwood	-	13	-	-	-	-	EM ·	G P	G - P	-	containing trees of varied species, age, size and condition. Willow at south of goup is dying, with extensive dead wood and decay. At risk of collapse.	As part of River Corridor works (not Phase 2): Pollard Willow at south of group at 3m height. Walkover survey of areas to be open to public access to determine appropriate works to reduce risk of harm arising from tree failure.	20+	В3	-
G6	Hazel, Sessile Oak, Cherry		4									Felled prior to survey				

^{*} Denotes estimated dimension 'strikethrough' text indicates removed trees

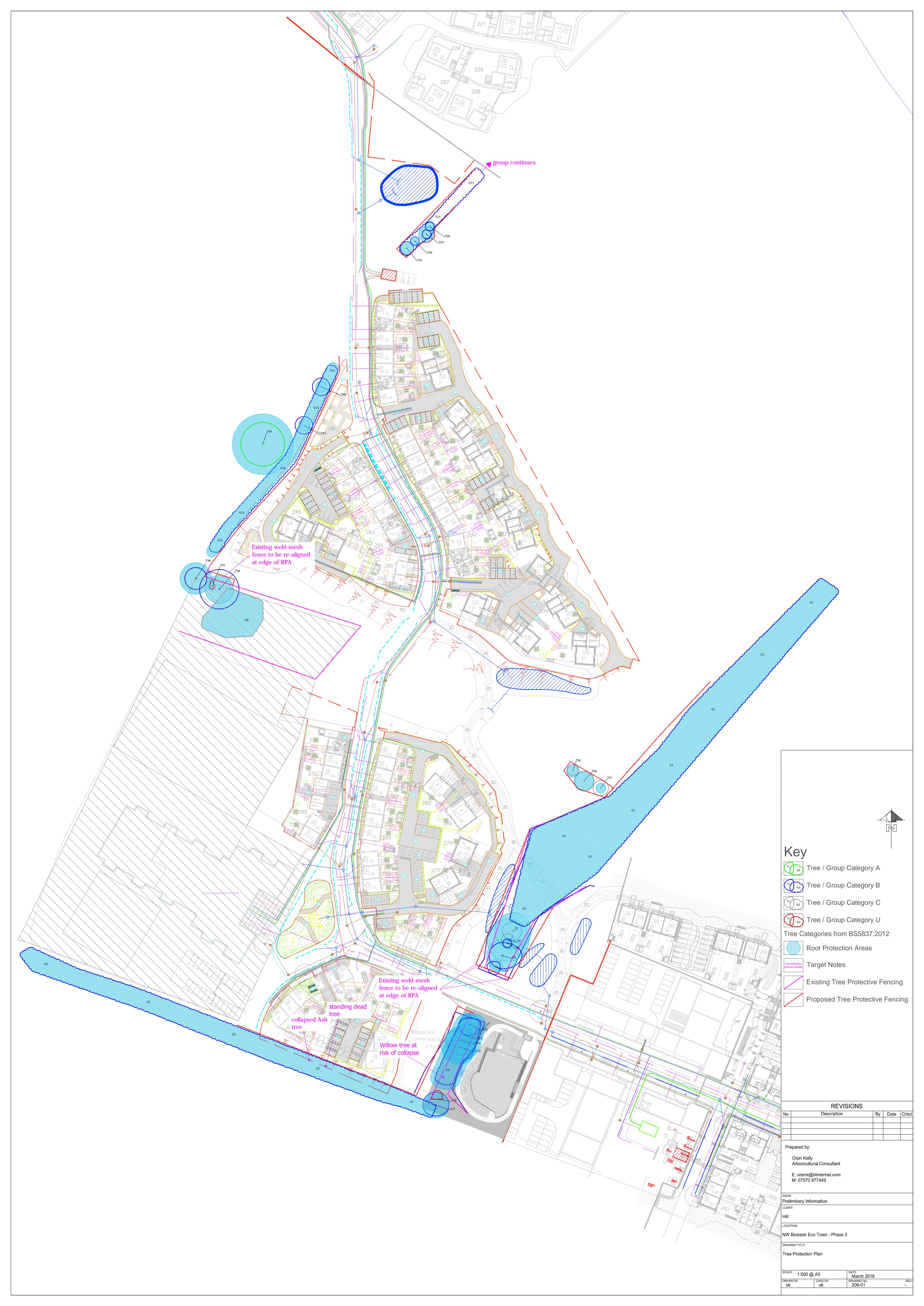
Trees at NW Bicester Eco Town - Phase 2

Tree No.	Species	Diam @ 1.5m (mm)	Height (m)	Cr	own	Spre	ad	Age Range	Physiological Condition		Structural Condition wn Clearance	Comments	Recommendations	Remaining contribution (Yrs)	Amenity	RPA Radius
		Stem		N	s	E	w	4	Ph Ph	0, 0	Cro			cont		~
G 7	Hawthorn Elm											Mixed species native hedgerow, with numerous gaps. Many trees in poor condition.				
G7	Hawthorn, Elm, Blackthorn, Elder, Ash	-	7	-	-	-	-	MA - OM		F - P		The location of a collapsed tree and a standing dead tree is indicated on Tree Protection Plan 206-01.		10+	В3	-
												Of ecological value as a wildlife corridor.				
G9	Common Ash, Hazel, Wayfaring-Tree	<150	6	-	ı	ı	-	SM	G	G	-	Established plantation. No access for survey.		40+	B3	1.8
G15	Elm, Ash, Field Maple, Blackthorn, Hawthorn, Crab Apple, Norway Maple	<200	7									Mixed species native hedgerow. Some trees in poor condition. Of ecological value as a wildlife corridor.		40+	В3	2.4

^{*} Denotes estimated dimension 'strikethrough' text indicates removed trees

APPENDIX 3

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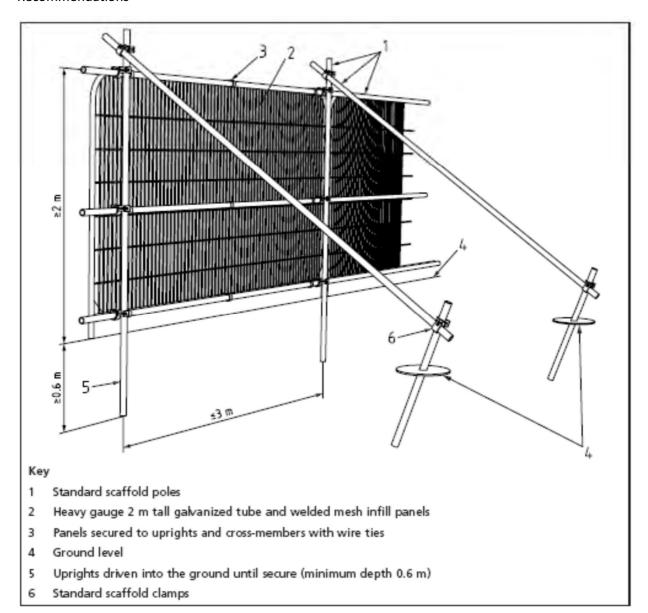
APPENDIX 4

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Tree Protective Fencing

Default Specification

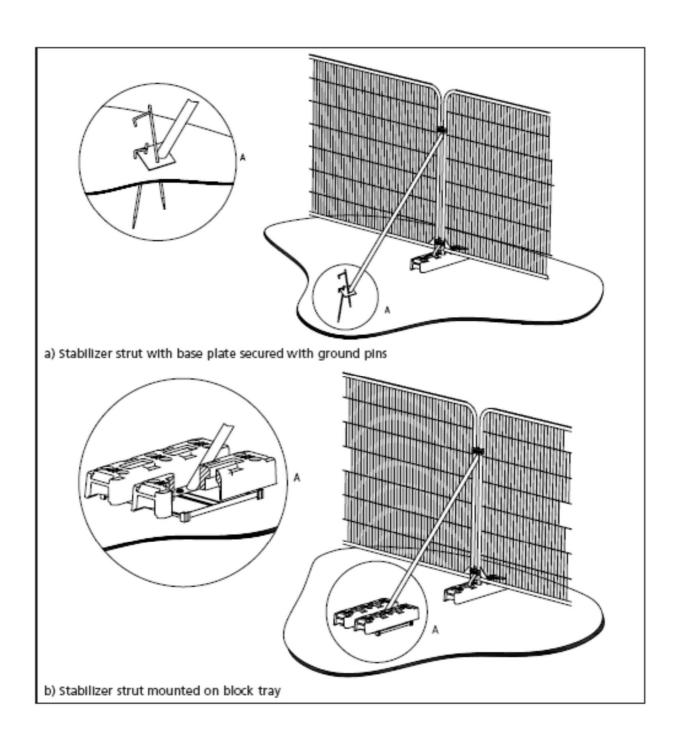
Taken from Figure 2 of BS5837:2012 "Trees in relation to design, demolition and construction – Recommendations"



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

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