5.0 Tree Survey Schedule

ARUN DISTRICT COUNCIL Y/78/20/RES

TREE SURVEY SCHEDULE

Key:

- **Ht** = Height estimated in metres.
- **Stem Diam** = Stem or trunk diameter, measured and calculated in accordance with Annex C and section 4.6 of BS5837:2012.
  - **oi** = Measurement taken over ivy, which is likely to produce an exaggerated figure.
- **Crown Spread =** Crown spread to the cardinal points in metres, measured by pacing.
- **1st significant branch ht' & direction** = First significant branch height in metres and direction of growth e.g. N = North.
- **Crown base ht'** = Minimum distance between surrounding ground level at the trunk base and the base of the main crown, estimated by eye in metres.
- **Life stage** is chosen from the four following categories;
  - Y = Young;
  - SM = Semi mature;
  - EM = Early mature;
  - M = Mature;
  - OM = Over Mature.
- **General observations** = Particularly of structural and/or physiological condition, significant features and defects, and the effect these may have on the health, stability and safe retention of the tree.
- **Preliminary management recommendations** = any significant works identified as necessary in the current context, and not taking into account any development of the site..
- **Rem' cont' =** an estimate, in years, of the remaining period over which the tree can be retained at an acceptable level of risk whilst still providing significant amenity benefits with no significant management intervention.
- **Reten' Cat'** = Desirability for retention category. Refers to BS5837:2012 which categorises trees on development sites into one of four categories – A, B, C or U, A being very good and U meaning that felling is appropriate regardless of any proposals. The suffix 1, 2 or 3 refers to a subcategory relating to tree, landscape or cultural/ecological values respectively.
- **AGL** = Above ground level
- **#** = Estimated dimension.
- **TYP** = Typical dimension where several are present.
- **n/a** = Not applicable.
- **n/k** = Not known.

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m)				1st sig' branch ht' (m)	Direc-tion of 1st sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
					N	E	S	W								
T1	Elm	8	180	1	2	2	2	2	1.3	SE	1.3	Y	• The tree was not plotted on the supplied topographical survey plan and its position was estimated by eye whilst on site. If the position of this tree becomes critical to any proposed development of the site, the position of this tree should be confirmed by a competent land surveyor and this report amended accordingly. • The tree was part of the roadside hedgerow. • However, it was considered likely that it would succumb to Dutch Elm Disease within the next 10-20 years at least, therefore the long term survival of this tree was not anticipated.	• No works currently identified. • RPA: radius = 2.2 metre; area = 15 square metres.	10-20	C1

ARUN DISTRICT COUNCIL Y/78/20/RES

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m) N	E	S	W	1st sig' branch ht' (m)	Direc-tion of 1st sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
G2	Hawthorn and Elm	8	320 max	1 typical	As per plan	As per plan	As per plan	As per plan	N/A	N/A	0	Y-SM	• The linear group comprised an overgrown section of hedge that had become dominated by two Elm trees. • However, it was considered likely that it would succumb to Dutch Elm Disease within the next 10-20 years at least, therefore the long term survival of this group was not anticipated.	• No works currently identified. • RPA per individual: radius = 3.8 metre; area = 46 square metres.	10-20	C1
G3	Elm	11 max	150 typical	1 typical	As per plan	As per plan	As per plan	As per plan	N/A	N/A	0	Y	• It was considered likely that the group would succumb to Dutch Elm Disease within the next 10-20 years at least, therefore the long term survival of this group was not anticipated.	• No works currently identified. • RPA per individual: radius = 1.8 metre; area = 10 square metres.	10-20	C1
T4	Holm Oak	10	450 + 380 = 589 mean	2	4	7	6	1	3.2	N	1.3	SM	• Extensive lower trunk decay was present making the long term and adequately safe retention of this tree unlikely.	• Monitor and assess condition at 18-monthly intervals, especially the extent of basal decay in the trunks. • RPA: radius = 7.1 metre; area = 157 square metres.	10-20	C1

ARUN DISTRICT COUNCIL Y/78/20/RES

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m) N	E	S	W	1st sig' branch ht' (m)	Direc-tion of 1st sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
T5	Poplar	24	1700 #	1	10	8	10	10 #	4	SE	4	M	• Access around the tree was impeded by dense vegetation, therefore some measurements and assessments used were estimates made from a distance. • The tree was heavily covered in Ivy, both live and dead, which greatly restricted the extent of visual survey possible, particularly of the trunk and the lower parts of the first order branches. • The crown had been heavily reduced in the past and had regrown strongly, although significant quantities of small diameter deadwood were now present in the outer crown. • On the north eastern side of the central stem at a height of approximately 7 metres above ground level was a large wound where a branch had broken out in the past. The wood exposed was bleached and seemed to be beginning to decay. • The tree was prominently visible from the public highway but given the age and the noted propensity of this species to branch breakage in maturity, the long term retention of this tree was not anticipated.	• Monitor and assess condition at 18 monthly intervals, taking care to assess the danger posed by this tree to the nearby road and approved residential development of the site. • RPA: radius = 15 metre; area = 707 square metres.	10-20	C1
T6	Holm Oak	11	370	1	5	5	2	5	0.2	NW	0.2	SM	• The tree has potential for future growth. • The tree was set back from the public highway within a surrounding group and was therefore of limited public visual amenity value. • However, its public visual amenity value may increase in the future as a result of its future growth and the inevitable demise of the surrounding Elm trees.	• No works currently identified. • RPA: radius = 4.4 metre; area = 62 square metres.	40+	B1

ARUN DISTRICT COUNCIL Y/7820/RES

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m) N	E	S	W	1st sig' branch ht' (m)	Direc-tion of 1st sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
G7	Leyland Cypress	18#	1000 #	1 typical	As per plan	As per plan	As per plan	As per plan	N/A	N/A	2	EM	• The group was offsite and inaccessible therefore all assessments and measurements used were estimates made from a distance. • The group comprised 2 individuals that had grown up to form a single, unified and mutually interdependent crown. • The group was large enough to be visible from the public highway but set far enough back to not be a prominent individual. • Therefore, the group was of limited public visual amenity value.	• No works currently identified. • RPA per individual: radius = 12.0 metre; area = 452 square metres.	20-40	B1
T8	Holly	8	100 typical	13#	4	4	4	4	0.1	N	0	EM	• The tree was multi stemmed from ground level and seemed centred on a dead and decayed central stem, suggesting that the original tree had long since died back and new growth had arisen from the base to form the existing tree. • The tree was set well back from the public highway and was therefore of limited public visual amenity value.	• No works currently identified. • RPA: radius = 4.3 metre; area = 59 square metres.	20-40	B1
T9	Holly	8	200#	1	4	5	4	2	3	N	0	EM	• Close access to the base of the tree was not possible due to dense surrounding undergrowth. Therefore, the trunk diameter was estimated by eye. • The upper crown was becoming sparse and was slightly deformed as a result of past storm damage and a thicket of Brambles was developing around the base. • This reduced vitality could be indicating the slow dieback of the main tree. However, some basal sucker stems were present and it seemed likely that these could ultimately regrow in the way that they have with tree no. T8.	• No works currently identified. • RPA: radius = 2.4 metre; area = 18 square metres.	10-20	C1

ARUN DISTRICT COUNCIL Y/78/20/RES

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m) N	E	S	W	1st sig' branch ht' (m)	Direc-tion of 1st sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
T10	Hawthorn	7	350#	1	5	5	5	5	1.1	N	0.5	M	• The tree was heavily covered with Ivy which restricted the extent of visual survey possible and access to the trunk base. • Therefore, some estimates used were estimates. • Extensive basal trunk decay was present, making the long term retention of the tree unlikely.	• Monitor and assess condition on an 18-monthly basis and assess the risk this tree poses to the nearby footpath. • RPA: radius = 4.2 metre; area = 55 square metres.	10-20	C1
T11	Common Oak	15	1000 #	1	7	11	12	10	3.5	S	1	EM	• Access to the trunk base was impeded by dense surrounding undergrowth, therefore, the trunk diameter has been estimated by eye. • The tree was heavily covered in Ivy which restricted the extent of visual survey possible. • The tree was a prominent boundary feature large enough to be seen from several public vantage points at distance from the site. • Therefore, the tree was considered to be of some public visual amenity value.	• No works currently identified. • RPA: radius = 12.0 metre; area = 452 square metres.	40+	B2
T12	Common Oak	10	700#	1	1	9	11	7	4	SE	2	EM	• See comments made for tree no. T13.	• See recommendations made for tree no. T13. • RPA: radius = 8.4 metre; area = 222 square metres.	20-40	B2

ARUN DISTRICT COUNCIL Y/78/20/RES

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m) N	E	S	W	1st sig' branch ht' (m)	Direc-tion of 1st sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
T13	Common Oak	12	850#	1	10	10	7	11	3	S	1.5	EM	• The tree formed a unified and mutually interdependent crown structure with that of the immediately adjacent tree no. T12 and they should therefore be regarded in visual terms as a single entity. • T12 was heavily asymmetric as a result of competition for light and space with T13. However, this is not an unusual situation for this species of tree. • Collectively, the two trees formed a prominent boundary feature large enough to be seen from several public vantage points at distance. • Therefore, they were of some public visual amenity value.	• No works currently identified. • RPA: radius = 10.0 metre; area = 327 square metres.	40+	B2
H14	Predominantly Elm and Hawthorn with some Bramble and Dogwood	12 max	180 max	1 typical	As per plan	As per plan	As per plan	As per plan	N/A	N/A	0	Y-EM	• The hedge was an overgrown feature becoming gappy at the bottom. • Individual Elm trees had grown into distinct small trees and were considered very likely to succumb to Dutch Elm Disease in the foreseeable future. • Some dead stems were present within the hedge and these were most likely Elm stems that had dies in the past. • The hedge divided a verdant division between the main site and the neighbouring field. • However, if it was to be maintained as a boundary feature, it would be necessary to re-lay this hedge.	• Consider laying the hedge in a traditional manner to form a dense boundary screen and manage thereafter as a hedgerow through regular clipping. • RPA per individual: radius = 2.2 metre; area = 15 square metres.	10-20	C1

ARUN DISTRICT COUNCIL Y/78/20/RES

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m) N	E	S	W	1st sig' branch ht' (m)	Direc-tion of 1st sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
T15	Common Oak	11	850 oi	1	10	8	5	10	4.5	E	5	EM	• The tree was large enough to be visible from several public vantage points at a distance. • Therefore, it was of some public visual amenity value. • Minor deadwood was present in the lower and inner crown as is commonly the case in this species. • The trunk was becoming covered in Ivy which was beginning to restrict the extent of visual survey possible.	• No works currently identified. • RPA: radius = 10.2 metre; area = 327 square metres.	40+	B2
T16	Ash	14	300# + 280# + 270# + 200# + 150# = 551 mean	5	9	8#	7	9	2	SW	1	EM	• The tree was multi stemmed from just above ground level, mostly likely as a result of past coppice or hedgerow management. • This multi stemmed structure had given rise to potentially weak basal forks. • Given the presence of these potentially weak basal forks and the fact that current Government guidance is that 75% of all native Ash trees in the UK will be dead as a result of Chalara Ash Dieback within the next 10 years, the long term retention of this tree is considered very unlikely.	• Monitor and assess condition on a 6-monthly basis. • Fell at the first signs of Chalara Ash Dieback. • RPA: radius = 6.6 metre; area = 137 square metres.	10-20	C1

ARUN DISTRICT COUNCIL Y/78/20/TRES

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m) N	E	S	W	1st sig' branch ht' (m)	Direc-tion of 1st sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
H17	Predominantly Elm and Hawthorn with some Bramble and Dogwood	12 max	180 max	1 typical	As per plan	As per plan	As per plan	As per plan	N/A	N/A	0	Y-EM	• The hedge was an overgrown feature becoming gappy at the bottom. • Individual Elm trees had grown into distinct small trees and were considered very likely to succumb to Dutch Elm Disease in the foreseeable future. • Some dead stems were present within the hedge and these were most likely Elm stems that had dies in the past. • The hedge divided a verdant division between the main site and the neighbouring field. • However, if it was to be maintained as a boundary feature, it would be necessary to re-lay this hedge.	• Consider laying the hedge in a traditional manner to form a dense boundary screen and manage thereafter as a hedgerow through regular clipping. • RPA per individual: radius = 2.2 metre; area = 15 square metres.	10-20	C1
G18	Field Maple	11 max	350 typical	1 typical	As per plan	As per plan	As per plan	As per plan	N/A	N/A	0.5	EM	• The group was not plotted on the supplied topographical survey plan and its position was estimated by eye whilst on site. If the position of this group becomes critical to any proposed development of the site, the position of this group should be confirmed by a competent land surveyor and this report amended accordingly. • The group comprised 4 individual trees that had grown up to form a single unified and mutually interdependent crown structure. • The group was large enough to be visible from several public vantage points at distance. • Therefore, the group had some public visual amenity value. • The group contributed to boundary screening between this site and the neighbouring field.	• No works currently identified. • RPA per individual: radius = 4.2 metre; area = 55 square metres.	20-40	B2

ARUN DISTRICT COUNCIL Y/78/20/RES

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m) N	E	S	W	1st sig' branch ht' (m)	Direc-tion of 1st sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
T19	Common Oak	12	790 oi	1	10	10	7	11	5	SW	1	EM	• The tree was large enough to be visible from several public vantage points at distance. • Therefore, the tree had some public visual amenity value. • The tree contributed to the boundary screening between this site and the neighbouring field. • The tree was heavily covered in Ivy which greatly restricted the extent of visual survey possible.	• Sever at ground level all Ivy stems growing up this tree and re-survey in 12 months time when the Ivy has died back. • RPA: radius = 9.5 metre; area = 282 square metres.	40+	B2
T20	Common Oak	10	400#	1	5	3	5	7	1.5	S	1.5	EM	• Close access to the trunk was impeded by a dense covering of Ivy and Honeysuckle, therefore, the trunk diameter had to be estimated by eye. • The tree was not large enough to be publicly prominent although it had some potential for future growth. • This future growth was likely to be impeded by the nearby, larger and overgrowing Common Oak, tree no. T19. • Therefore, this tree is unlikely to be publicly prominent, even in the future.	• Sever at ground level all Honeysuckle and Ivy stems growing up this tree and re-survey in 12 months time when the Honeysuckle and Ivy have died back. • RPA: radius = 4.8 metre; area = 72 square metres.	20-40	B1
G21	Elm	8 max	130 max	1 typical	As per plan	As per plan	As per plan	As per plan	N/A	N/A	0	Y	• It was considered likely that the group would succumb to Dutch Elm Disease within the next 10-20 years at least, therefore the long term survival of this group was not anticipated.	• No works currently identified. • RPA per individual: radius = 1.6 metre; area = 8 square metres.	10-20	C1
G22	Elm	10 max	280 max	1 typical	As per plan	As per plan	As per plan	As per plan	N/A	N/A	0	Y	• It was considered likely that the group would succumb to Dutch Elm Disease within the next 10-20 years at least, therefore the long term survival of this group was not anticipated.	• No works currently identified. • RPA per individual: radius = 3.4 metre; area = 36 square metres.	10-20	C1

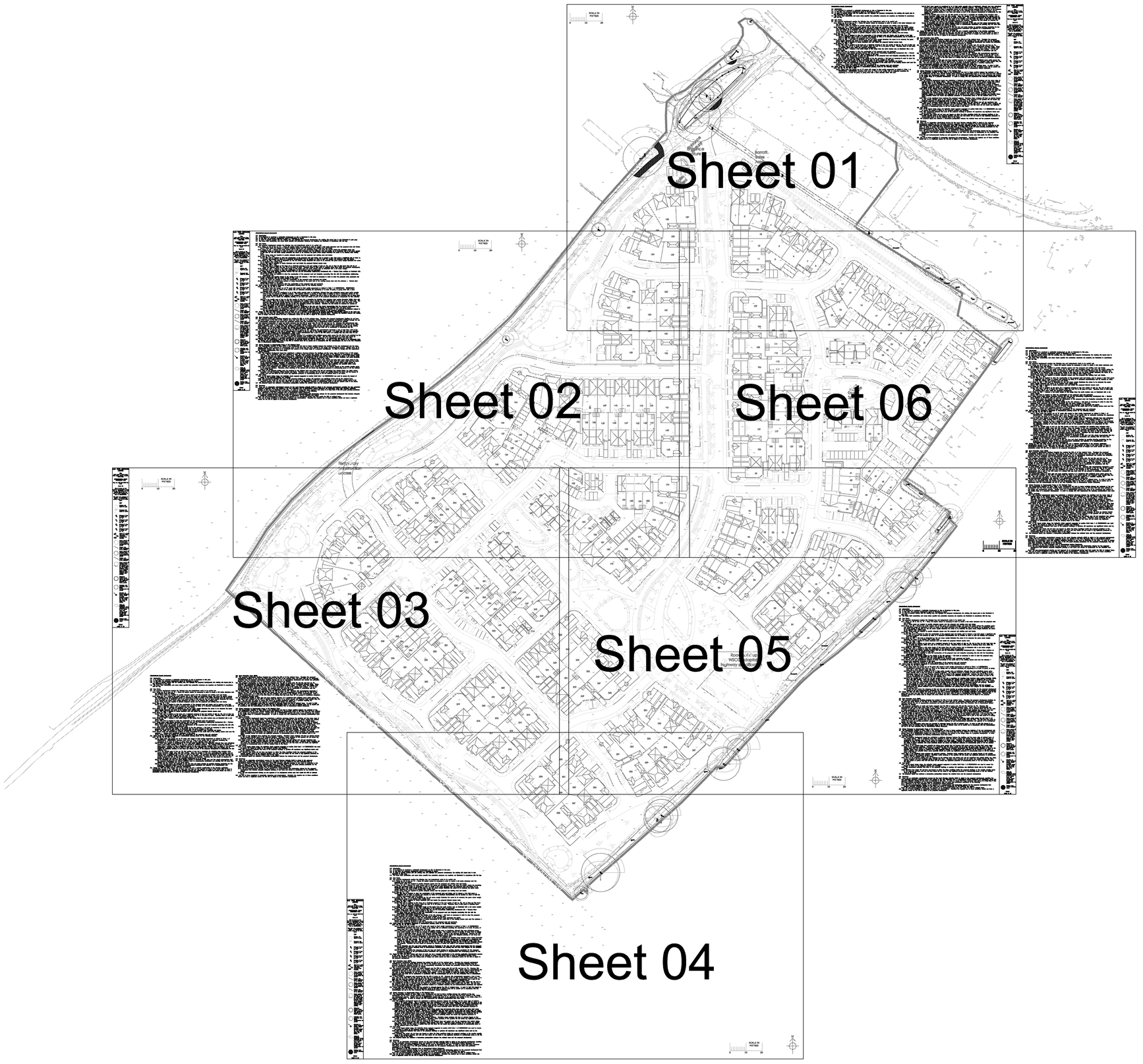
ARUN DISTRICT COUNCIL Y/78/20/TREES

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m) N	E	S	W	1st sig' branch ht' (m)	Direc-tion of 1st sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
G23	Hawthorn	6 max	200 max	Various	As per plan	As per plan	As per plan	As per plan	N/A	N/A	0	EM	• The group was an overgrown hedge becoming gappy at the bottom with Bramble, Ivy and Bay Laurel becoming established. • The group provided a degree of boundary screening between the site and the neighbouring residential property. • However, this value would diminish in the future as the hedge continues to become overgrown. • Judging by the position of the concrete fence posts, it would seem that this group is offsite.	• No works currently identified. • RPA per individual: radius = 2.4 metre; area = 18 square metres.	10-20	C1
G24	Hawthorn	5 max	300 max	Various	As per plan	As per plan	As per plan	As per plan	N/A	N/A	0	EM	• The group was not plotted on the supplied topographical survey plan and its position was estimated by eye whilst on site. If the position of this group becomes critical to any proposed development of the site, the position of this group should be confirmed by a competent land surveyor and this report amended accordingly. • The group was an overgrown fragment of an old hedge and may have been offsite.	• No works currently identified. • RPA per individual: radius = 3.6 metre; area = 41 square metres.	10-20	C1
G25	Holly and Hawthorn	6 max	300 max	Various	As per plan	As per plan	As per plan	As per plan	N/A	N/A	0	EM	• The group was not plotted on the supplied topographical survey plan and its position was estimated by eye whilst on site. If the position of this group becomes critical to any proposed development of the site, the position of this group should be confirmed by a competent land surveyor and this report amended accordingly. • The group was an overgrown fragment of an old hedge and may have been offsite.	• No works currently identified. • RPA per individual: radius = 3.6 metre; area = 41 square metres.	10-20	C1

ARUN DISTRICT COUNCIL Y/78/20/TREES

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m) N	E	S	W	1st sig' branch ht' (m)	Direc-tion of 1st sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
G26	Hawthorn	5 max	200 max	Various	As per plan	As per plan	As per plan	As per plan	N/A	N/A	0	EM	• The group was not plotted on the supplied topographical survey plan and its position was estimated by eye whilst on site. If the position of this group becomes critical to any proposed development of the site, the position of this group should be confirmed by a competent land surveyor and this report amended accordingly. • The group was an overgrown fragment of an old hedge and may have been offsite.	• No works currently identified. • RPA per individual: radius = 2.4 metre; area = 18 square metres.	10-20	C1
H27	Hawthorn	2.5 max	200 max	Various	As per plan	As per plan	As per plan	As per plan	N/A	N/A	0	EM	• The hedge had been regularly clipped to a square sided shape. • As a result, it was becoming increasingly gappy at the base. • The hedge provided a publicly visible verdant division between the site and the neighbouring recreation ground, therefore, it was of some public visual amenity value. • However, clipped hedges of this type are not a material constraint in the planning application determination process in the same way that trees are, but that does not mean that they are without significance. • If the hedge is to be maintained as an effective boundary screen, it should be re-laid and then managed thereafter as a hedge by regular clipping into an A-shaped profile.	• Consider laying the hedge in the traditional manner and maintaining as a hedge thereafter through regular clipping into an A-shaped profiled. • RPA per individual: radius = 2.4 metre; area = 18 square metres.	20-40	B1

6.0 Arboricultural Impact Assessment Plan


Sheet 01
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Sheet 04

SCALE IN METRES

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Arboricultural Impact Assessment

1.0 Introduction
1.1 It is proposed to construct a residential development on site as illustrated in this plan.
1.2 In this plan, the proposed development layout is illustrated in colour.
1.3 In order to provide context with the existing site, and highlight the proposed development, the existing site layout plan is also illustrated in pale grey.
1.4 The trees, their constraints, and areas where specific tree protection measures are required, are illustrated in accordance with the key.

2.0 Tree Works.
2.1 The proposed development requires the following tree and hedge/scrub works to be carried out.
2.1.1 Group no. G2 & tree no. T4 – Crown lift and/or reduce as necessary in order to create a 5.5 metre clearance over the proposed road and tracks.
2.1.1.1 These works are required to provide adequate access over the proposed and existing road and tracks.
2.1.2 Group no. G3 – Remove the south western end of this group and associated hedge, and crown lift and/or reduce the remaining group and associated hedge as necessary in order to create a 5.5 metre clearance over the proposed road and tracks, all as illustrated with a red crown margin in this plan i.e. the red crown margin illustrates the crown to be removed, the green crown margin illustrates the crown to be retained after cutting back.
2.1.2.1 These works are required to provide adequate access over the proposed and existing road and tracks.
2.1.3 Tree no. T5 – Fell.
2.1.3.1 This work is required to allow the construction of the proposed road and tracks, and to remove a tree that poses a significant risk of harm to persons and property by virtue of it structural characteristics and its location so close to both the existing and proposed road and tracks.
2.1.4 Group no. G21 – Cut back as illustrated i.e. the red crown margin illustrates the crown to be removed, the green crown margin illustrates the crown to be retained after cutting back.
2.1.4.1 This work is required to create clearance over and beside the proposed internal access road.
2.1.5 Group no. G22 – Fell.
2.1.5.1 This work is required as the trees are a dominant presence in the rear garden of plot no. 70, and as they are Elm trees they will die of Dutch Elm Disease within the next 10 to 20 years at least. Therefore there is little point in retaining these trees within the proposed development.
2.1.6 Hedge no. H27 – Remove a 5.5 metre length of this hedge from the north western end, as illustrated with a red crown margin.
2.1.6.1 This work is required to allow the construction of the proposed road and pavement.
2.1.7 Hedge along south eastern boundary between this site and the immediately neighbouring development site – Remove three sections as illustrated with red crown margins in this plan.
2.1.7.1 These works are required to allow the construction of the proposed road and footpaths connecting this site with the immediately neighbouring development site,.
2.1.8 Scrub growth and scrubby hedges in the vicinity of the site entrance – Cut back as necessary in order to clear the proposed road, pavement and tracks, as illustrated with red crown margins in this plan.
2.1.8.1 The works are required to allow the construction of the proposed road, pavement and tracks.
2.1.9 Several small and discontinuous sections of hedge immediately to the south east of the existing access road near the entrance – Remove (not specifically illustrated in this plan).
2.1.9.1 These works are required to allow the construction of the proposed road and pavement.
2.2 These works are considered acceptable in arboricultural planning terms for the following reasons.
2.2.1 G2, G3, T4, T5, G21 & G22.
2.2.1.1 These trees and groups are all 'C' grade with regard to their quality assessment as defined in Table 1 of BS5837:2012. BS5837:2012 describes such trees as "trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm".
2.2.1.2 Such trees cannot be considered to be of high public amenity value as individuals, although they may collectively accrue some public amenity value if they are present in sufficient numbers. The required removal or pruning of these trees is unlikely to form a substantive reason for the Local Planning Authority (LPA) to object to the proposed development. However, the LPA is likely to take note of the collective loss of tree trees and groups, and to require the mitigation planting of new trees and shrubs as part of the proposed development to compensate for this collective loss.
2.2.1.3 In the specific case of tree no. T5, this species of tree has a reputation for shedding large branches when mature (Lonsdale 1999), often with little warning. Given the location of this tree overhanging the existing road, it already poses a significant risk of harm to users of that road. The proposed development will greatly increase the vehicular and pedestrian traffic along the route of the existing road and under the crown of this tree, and this will greatly increase the risk of this tree damaging persons and property. Therefore the tree should be removed for reasons of health and safety if the proposed development is to go ahead.
2.2.1.4 An illustrative new tree and shrub planting scheme is illustrated in this plan and this clearly demonstrates that the proposed development has allowed sufficient room to accommodate substantive new planting that will more than mitigate for the identified tree and group losses.
2.2.1.5 The LPA can ensure the adequacy of this new tree and shrub planting by granting planning permission for the proposed development subject to the pre-commencement submission and approval of a comprehensive soft landscaping proposal for the proposed development.
2.4 Hedge no. H27 and other hedges and areas of scrub are not a material consideration in the planning application determination process in the same way as trees are, and they are not regarded as being of the same value of trees in arboricultural planning terms. Therefore the identified removal and cutting back of hedges and scrub should not form a substantive reason for the LPA to object to the proposed development.

3.0 Root Protection Areas (RPA).
3.1 The proposed development dwellings footprint has avoided the RPA of all the retained trees. Therefore the proposed development dwellings do not have any direct impact on the RPA of the retained trees, and these RPA can be adequately protected from the proposed development dwellings through the use of appropriately constructed and located tree protection barriers (see Tree Protection Plan & Arboricultural Method Statement for details).
3.2 The proposed construction of roads and tracks encroach over the RPA of group no's. G2 and G7, and tree no. T4. However, this encroachment only takes place where there is an existing tarmac road or compacted hardcore tracks. These areas of encroachment are illustrated in this plan as the hard surface retention areas. In these areas, the existing hard surface will be retained intact and the new road or track constructed on top of the existing hard surface. If it is not possible to retain the existing hard surfaces, the proposed road and track will be constructed in accordance with the methodologies set out in the Tree Protection Plan & Arboricultural Method Statement.
3.3 A small section of proposed road encroaches into the RPA of group no. G7. However, this encroachment represents a loss of less than 1.4% of the total RPA for this group, and the area of encroachment is located at the rear side of the existing access road. It is likely that this road has restricted root growth in the direction of the encroachment. Such a small encroachment into a part of the RPA where it is unlikely that any roots from G7 are present is considered acceptable in arboricultural planning terms.
3.4 No underground service or drain plan has been supplied, however, it is considered that sufficient space exists across the site that is not restricted by the RPA of retained trees for these to be routed around, and therefore avoid conflict with, the RPA. The LPA have the power to ensure this occurs by granting permission subject to a condition requiring the pre–commencement submission and approval of an underground service and drain plan.
3.5 Fences and soft landscaping works have the potential to adversely impact the RPA of retained trees. In order to limit this impact to an acceptable level, the fencing and soft landscaping works in the RPA of retained trees will be carried out in accordance with the methodologies set out in the Tree Protection Plan & Arboricultural Method Statement.

4.0 Future Pressures to Unreasonably Prune or Fell Retained Trees
4.1 The inappropriate retention of trees within a new development can lead to future conflicts between the residents of the new development and the trees, thereby creating future pressures to unreasonably prune or fell trees that had been retained in the design and development process. Section 5.3.4 d) of BS5837:2012 requires this issue to be considered and avoided at the design stage of a proposed development. In order to comply with this requirement the following considerations have been made.
4.2 Crown proximity.
4.2.1 The proposed development layout has maintained a minimum clearance between the dwellings and the crown edge of retained trees of 7.5 metres metres. This is considered more than sufficient to avoid the crowns coming into contact with the fabric of the dwellings or overswaying the dwellings, even when the trees are swaying in a storm event. Therefore, the proposed development has avoided placing dwellings so close to the existing crown spreads of retained trees that legitimate feelings of overbearance and dominance will be created in the minds of future residents, and crown proximity should not create any legitimate pressures to unreasonably prune or fell the retained trees in the future.
4.2.2 Some of the retained trees have potential for future crown growth that will increase their crown spread and bring their crown edges closer to the proposed dwellings. However, it is considered that this future growth will not bring any crown edge any closer than 7.5 metres away from the fabric of the proposed dwellings. Therefore, the proposed development has avoided placing dwellings so close to the potential future crown spreads of retained trees that legitimate feelings of overbearance and dominance will be created in the minds of future residents, and potential future crown proximity should not create any legitimate pressures to unreasonably prune or fell the retained trees in the future.
4.2.3 None of the significant trees overhang the proposed gardens, Therefore crown overhang will have no adverse impact on the useable amenity space in the proposed gardens. Therefore, crown overhang of the gardens will not create any legitimate pressures to unreasonably prune or fell the retained trees in the future.
4.2.4 None of the proposed parking bays are overhung by the retained trees and parked cars will not experience tree related debris, e.g. twigs, leaves, honeydew and bird droppings, falling directly onto them. Therefore crown overhang will not create any conflict between the trees and the owners of parked cars and this issue will not create any legitimate pressures to unreasonably prune or fell the retained trees in the future.
4.3 Tree shade.
4.3.1 At the layout design stage, the indicative shade segment suggested at section 5.2.2 Note 1 of BS5837:2012 was used to assess the impact of shade on the proposed gardens and dwellings.
4.3.2 This assessment indicated that none of the proposed dwellings or gardens will experience any significant shade cast by the retained trees.
4.3.3 Therefore tree shade will not have any impact on either the living conditions inside the proposed dwellings or the useable amenity space in the proposed gardens, and tree and tree shade will not result in any legitimate pressures to unreasonably prune or fell the retained trees in the future.
4.4 The proposed layout has achieved a harmonious juxtaposition between the retained trees and the proposed development.

5.0 Summary.
5.1 There are no substantive arboricultural reasons for the Local Planning Authority (LPA) to object to the proposed development, providing the tree protection measures suggested above and detailed in the Tree Protection Plan & Arboricultural Method Statement are undertaken, along with adequate mitigation planting of new trees as illustrated in this plan. In order to ensure that these measures take place, it is likely that, if the LPA grant planning permission for the proposed development, they will make that permission conditional of the following:
5.1.1 Adherence to the Tree Protection Plan & Arboricultural Method Statement.
5.1.2 The pre–commencement drawing up and approval of a comprehensive soft landscaping scheme for the proposed development that includes adequate mitigation planting of new trees and shrubs to compensate for the identified tree losses.
5.1.3 The pre–commencement drawing up and approval of an underground service plan that avoids the RPA of retained trees.
5.2 The use of these conditions is reasonable, necessary and commonplace. Therefore the required use of these conditions should not form a legitimate reason for the LPA to object to the proposed development.

MJC TREE SERVICES LIMITED

Site:
Land east of Drove Lane, Main Road, Yapton, Arundel, BN18 0EB.

ARBORICULTURAL IMPACT ASSESSMENT PLAN

Plan no. MJC–19–0213–02 rev2

Sheet 01

This is based on the Cadmap topographical survey plan no. CM/19796 and the Cartier layout plan no. PLN–1–1101, amended by MJC on 08/07/2020.

This plan was produced in colour. A monochrome version must not be relied upon.

KEY

- Existing site layout in grey
- Proposed site layout in colour
- Category U tree or group and ref' no'
- Category A tree or group and ref' no'
- Category B tree or group and ref' no'
- Category C tree or group and ref' no'
- Trees in a group that have been collectively surveyed and recoded.
- Crown spread of surveyed trees to be retained, amalgamated for groups
- Hedges and scrub vegetation to be retained
- Crown spread of surveyed trees to be removed, amalgamated for groups
- Hedges and scrub vegetation to be removed
- Crown spread of surveyed trees and groups to be pruned back i.e. red margin indicates crown to be removed, green margin indicates crown retained after pruning
- Estimated mature crown spread for trees with significant potential for future growth
- Indicative root protection area (RPA), amalgamated for groups
- Direction of lowest significant branch, length of arrow indicates height i.e. the longer the arrow the higher the branch
- Areas of potentially significant shade constraint for A, B & C grade trees and groups, based on surveyed heights and amalgamated for groups
- Existing hard surface retention areas

SCALE 1:250 @ A0

Entrance feature

Barratt Sales Area

Scrub growth

MJC TREE SERVICES LIMITED

Site:
Land east of Drove Lane, Main Road, Yapton, Arundel, BN18 0EB.

ARBORICULTURAL IMPACT ASSESSMENT PLAN

Plan no. MJC-19-0213-02 rev2

Sheet 02

This is based on the Cadmap topographical survey plan no. CM/19798 and the Carlton layout plan no. PLN-1-1101, amended by MJC on 08/07/2020.

This plan was produced in colour. A monochrome version must not be relied upon.

KEY

- Existing site layout in grey
- Proposed site layout in colour
- Category U tree or group and ref' no'
- Category A tree or group and ref' no'
- Category B tree or group and ref' no'
- Category C tree or group and ref' no'
- Trees in a group that have been collectively surveyed and recoded.
- Crown spread of surveyed trees to be retained, amalgamated for groups
- Hedges and scrub vegetation to be retained
- Crown spread of surveyed trees to be removed, amalgamated for groups
- Hedges and scrub vegetation to be removed
- Crown spread of surveyed trees and groups to be pruned back i.e. red margin indicates crown to be removed, green margin indicates crown retained after pruning
- Estimated mature crown spread for trees with significant potential for future growth
- Indicative root protection area (RPA), amalgamated for groups
- Direction of lowest significant branch, length of arrow indicates height i.e. the longer the arrow the higher the branch
- Areas of potentially significant shade constraint for A, B & C grade trees and groups, based on surveyed heights and amalgamated for groups
- Existing hard surface retention areas

SCALE
1:250 @ A0

Arboricultural Impact Assessment

1.0 Introduction
1.1 It is proposed to construct a residential development on site as illustrated in this plan.
1.2 In this plan, the proposed development layout is illustrated in colour.
1.3 In order to provide context with the existing site, and highlight the proposed development, the existing site layout plan is also illustrated in pale grey.
1.4 The trees, their constraints, and areas where specific tree protection measures are required, are illustrated in accordance with the key.

2.0 Tree Works.
2.1 The proposed development requires the following tree and hedge/scrub works to be carried out.
2.1.1 Group no. G2 & tree no. T4 – Crown lift and/or reduce as necessary in order to create a 5.5 metre clearance over the proposed road and tracks.
2.1.1.1 These works are required to provide adequate access over the proposed and existing road and tracks.
2.1.2 Group no. G3 – Remove the south western end of this group and associated hedge, and crown lift and/or reduce the remaining group and associated hedge as necessary in order to create a 5.5 metre clearance over the proposed road and tracks, all as illustrated with a red crown margin in this plan i.e. the red crown margin illustrates the crown to be removed, the green crown margin illustrates the crown to be retained after cutting back.
2.1.2.1 These works are required to provide adequate access over the proposed and existing road and tracks.
2.1.3 Tree no. T5 – Fell.
2.1.3.1 This work is required to allow the construction of the proposed road and tracks, and to remove a tree that poses a significant risk of harm to persons and property by virtue of it structural characteristics and its location so close to both the existing and proposed road and tracks.
2.1.4 Group no. G21 – Cut back as illustrated i.e. the red crown margin illustrates the crown to be removed, the green crown margin illustrates the crown to be retained after cutting back.
2.1.4.1 This work is required to create clearance over and beside the proposed internal access road.
2.1.5 Group no. G22 – Fell.
2.1.5.1 This work is required as the trees are a dominant presence in the rear garden of plot no. 70, and as they are Elm trees they will die of Dutch Elm Disease within the next 10 to 20 years at least. Therefore there is little point in retaining these trees within the proposed development.
2.1.6 Hedge no. H27 – Remove a 5.5 metre length of this hedge from the north western end, as illustrated with a red crown margin.
2.1.6.1 This work is required to allow the construction of the proposed road and pavement.
2.1.7 Hedge along south eastern boundary between this site and the immediately neighbouring development site – Remove three sections as illustrated with red crown margins in this plan.
2.1.7.1 These works are required to allow the construction of the proposed road and footpaths connecting this site with the immediately neighbouring development site.
2.1.8 Scrub growth and scrubby hedges in the vicinity of the site entrance – Cut back as necessary in order to clear the proposed road, pavement and tracks, as illustrated with red crown margins in this plan.
2.1.8.1 The works are required to allow the construction of the proposed road, pavement and tracks.
2.1.9 Several small and discontinuous sections of hedge immediately to the south east of the existing access road near the entrance – Remove (not specifically illustrated in this plan).
2.1.9.1 These works are required to allow the construction of the proposed road and pavement.
2.2 These works are considered acceptable in arboricultural planning terms for the following reasons.
2.2.1 G2, G3, T4, T5, G21 & G22.
2.2.1.1 These trees and groups are all 'C' grade with regard to their quality assessment as defined in Table 1 of BS5837:2012. BS5837:2012 describes such trees as 'Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm'.
2.2.1.2 Such trees cannot be considered to be of high public amenity value as individuals, although they may collectively accrue some public amenity value if they are present in sufficient numbers. The required removal or pruning of these trees is unlikely to form a substantive reason for the Local Planning Authority (LPA) to object to the proposed development. However, the LPA is likely to take note of the collective loss of these trees and groups, and to require the mitigation planting of new trees and shrubs as part of the proposed development to compensate for this collective loss.
2.2.1.3 In the specific case of tree no. T5, this species of tree has a reputation for shedding large branches when mature (Lonsdale 1999), often with little warning. Given the location of this tree overhanging the existing road, it already poses a significant risk of harm to users of that road. The proposed development will greatly increase the vehicular and pedestrian traffic along the route of the existing road and under the crown of this tree, and this will greatly increase the risk of this tree damaging persons and property. Therefore the tree should be removed for reasons of health and safety if the proposed development is to go ahead.
2.2.1.4 An illustrative new tree and shrub planting scheme is illustrated in this plan and this clearly demonstrates that the proposed development has allowed sufficient room to accommodate substantive new planting that will more than mitigate for the identified tree and group losses.
2.2.1.5 The LPA can ensure the adequacy of this new tree and shrub planting by granting planning permission for the proposed development subject to the pre-commencement submission and approval of a comprehensive soft landscaping proposal for the proposed development.
2.4 Hedge no. H27 and other hedges and areas of scrub are not a material consideration in the planning application determination process in the same way as trees are, and they are not regarded as being of the same value of trees in arboricultural planning terms. Therefore the identified removal and cutting back of hedges and scrub should not form a substantive reason for the LPA to object to the proposed development.

3.0 Root Protection Areas (RPA).
3.1 The proposed development dwellings footprint has avoided the RPA of all the retained trees. Therefore the proposed development dwellings do not have any direct impact on the RPA of the retained trees, and these RPA can be adequately protected from the proposed development dwellings through the use of appropriately constructed and located tree protection barriers (see Tree Protection Plan & Arboricultural Method Statement for details).
3.2 The proposed construction of roads and tracks encroach over the RPA of group no's. G2 and G7, and tree no. T4. However, this encroachment only takes place where there is an existing tarmac road or compacted hardcore track. These areas of encroachment are illustrated in this plan as the hard surface retention areas. In these areas, the existing hard surface will be retained intact and the new road or track constructed on top of the existing hard surface. If it is not possible to retain the existing hard surfaces, the proposed road and track will be constructed in accordance with the methodologies set out in the Tree Protection Plan & Arboricultural Method Statement.
3.3 A small section of proposed road encroaches into the RPA of group no. G7. However, this encroachment represents a loss of less than 1.4% of the total RPA for this group, and the area of encroachment is located at the far side of the existing access road. It is likely that this road has restricted root growth in the direction of the encroachment. Such a small encroachment into a part of the RPA where it is unlikely that any roots from G7 are present is considered acceptable in arboricultural planning terms.
3.4 No underground service or drain plan has been supplied, however, it is considered that sufficient space exists across the site that is not restricted by the RPA of retained trees for these to be routed around, and therefore avoid conflict with, the RPA. The LPA have the power to ensure this occurs by granting permission subject to a condition requiring the pre-commencement submission and approval of an underground service and drain plan.
3.5 Fences and soft landscaping works have the potential to adversely impact the RPA of retained trees. In order to limit this impact to an acceptable level, the fencing and soft landscaping works in the RPA of retained trees will be carried out in accordance with the methodologies set out in the Tree Protection Plan & Arboricultural Method Statement.

4.0 Future Pressures to Unreasonably Prune or Fell Retained Trees
4.1 The inappropriate retention of trees within a new development can lead to future conflicts between the residents of the new development and the trees, thereby creating future pressures to unreasonably prune or fell trees that had been retained in the design and development process. Section 5.3.4 d) of BS5837:2012 requires this issue to be considered and avoided at the design stage of a proposed development. In order to comply with this requirement the following considerations have been made.
4.2 Crown proximity.
4.2.1 The proposed development layout has maintained a minimum clearance between the dwellings and the crown edge of retained trees of 7.5 metres metres. This is considered more than sufficient to avoid the crowns coming into contact with the fabric of the dwellings or overswaying the dwellings, even when the trees are swaying in a storm event. Therefore, the proposed development has avoided placing dwellings so close to the existing crown spreads of retained trees that legitimate feelings of overbearance and dominance will be created in the minds of future residents, and crown proximity should not create any legitimate pressures to unreasonably prune or fell the retained trees in the future.
4.2.2 Some of the retained trees have potential for future crown growth that will increase their crown spread and bring their crown edges closer to the proposed dwellings. However, it is considered that this future growth will not bring any crown edge any closer than 7.5 metres away from the fabric of the proposed dwellings. Therefore, the proposed development has avoided placing dwellings so close to the potential future crown spreads of retained trees that legitimate feelings of overbearance and dominance will be created in the minds of future residents, and potential future crown proximity should not create any legitimate pressures to unreasonably prune or fell the retained trees in the future.
4.2.3 None of the significant trees overhang the proposed gardens, Therefore crown overhang will have no adverse impact on the useable amenity space in the proposed gardens. Therefore, crown overhang of the gardens will not create any legitimate pressures to unreasonably prune or fell the retained trees in the future.
4.2.4 None of the proposed parking bays are overhung by the retained trees and parked cars will not experience tree related debris, e.g. twigs, leaves, honeydew and bird droppings, falling directly onto them. Therefore crown overhang will not create any conflict between the trees and the owners of parked cars and this issue will not create any legitimate pressures to unreasonably prune or fell the retained trees in the future.
4.3 Tree shade.
4.3.1 At the layout design stage, the indicative shade segment suggested at section 5.2.2 Note 1 of BS5837:2012 was used to assess the impact of shade on the proposed gardens and dwellings.
4.3.2 This assessment indicated that none of the proposed dwellings or gardens will experience any significant shade cast by the retained trees.
4.3.5 Therefore tree shade will not have any impact on either the living conditions inside the proposed dwellings or the useable amenity space in the proposed gardens, and tree and tree shade will not result in any legitimate pressures to unreasonably prune or fell the retained trees in the future.
4.4 The proposed layout has achieved a harmonious juxtaposition between the retained trees and the proposed development.

5.0 Summary
5.1 There are no substantive arboricultural reasons for the Local Planning Authority (LPA) to object to the proposed development, providing the tree protection measures suggested above and detailed in the Tree Protection Plan & Arboricultural Method Statement are undertaken, along with adequate mitigation planting of new trees as illustrated in this plan. In order to ensure that these measures take place, it is likely that, if the LPA grant planning permission for the proposed development, they will make that permission conditional of the following:
5.1.1 Adherence to the Tree Protection Plan & Arboricultural Method Statement.
5.1.2 The pre-commencement drawing up and approval of a comprehensive soft landscaping scheme for the proposed development that includes adequate mitigation planting of new trees and shrubs to compensate for the identified tree losses:
5.1.3 The pre-commencement drawing up and approval of an underground service plan that avoids the RPA of retained trees.
5.2 The use of these conditions is reasonable, necessary and commonplace. Therefore the required use of these conditions should not form a legitimate reason for the LPA to object to the proposed development.

N

SCALE IN METRES
0 10 20

Temporary construction access

Arboricultural Impact Assessment

1.0 Introduction

1.1 It is proposed to construct a residential development on site as illustrated in this plan.

1.2 In order to provide context with the existing site, the following plan has been produced.

1.3 The trees, their constraints, and areas where specific tree protection measures are required, are illustrated in accordance with the key.

2.0 Tree Works

2.1 The proposed development requires the following tree works to be carried out.

2.1.1 Group no. G2 & Tree no. T4 – Crown lift and/or reduce as necessary in order to create a 5.5 metre clearance over the proposed road and footway.

2.1.11 Hedge work are required to provide adequate access over the proposed and existing road and footway.

2.1.12 Group no. G2 – Remove sections of overgrown hedge, as necessary in order to create adequate visibility splays and to be retained at a maximum height of 1 metre.

2.1.13 Hedge work are required to provide adequate access over the proposed and existing road and footway. to be removed. The green cross marked illustrates the crown to be retained after cutting back.

2.1.14 Group no. T15 – Fell.

2.1.15 Remove and fell existing access over the proposed and existing road and footway.

2.1.16 Group no. G21 – Cut back as illustrated i.e. the red crown margin illustrates the crown to be removed, to provide adequate clearance over the proposed road and footway.

2.1.17 Remove and fell outbuildings and all associated trees in the area illustrated in green to facilitate the proposed development.

2.1.18 Remove all existing and proposed road and footway.

2.1.19 Trees and hedgerows to be retained are to be protected with Heras fencing as illustrated on the tree protection plan.

2.1.20 Fences and soft landscaping works have not been detailed at this stage. In order to limit the impact on the trees and hedgerows, it is considered that sufficient space exists across the RPA. The LPA may be aware of the potential for fences to encroach into the RPA of trees to ensure this occurs by giving permission subject to a condition requiring the details of the fencing to be submitted to the LPA for approval. Such a condition is considered reasonable and necessary.

2.1.21 Remove and fell hedgerow to facilitate the proposed development.

2.2 Trees which are considered unsuitable for retention in accordance with the following reasons.

2.2.1.1 These trees are groups are of 'C' grade with reasonable amenity value but highly unsuitable for development. However, the LPA is likely to take note of the detailed tree and groups, and to assume some public amenity value if they are present in sufficient numbers. The required removal of unsuitable trees is unlikely to form a substantial reason for the Local Planning Authority (LPA) to object to the proposed development. However, the LPA is likely to take note of the detailed tree and groups, and to require the replacement and shrubs as part of the proposed development to compensate for this loss.

2.2.1.2 Trees which are considered to be of high public amenity value although they may collectively occupy a number of trees, of poor quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm.

BS5837:2012. BS5837:2012 describes such trees as 'trees of low quality with an estimated remaining life by the normal trees.

2.2.1.3 Such trees cannot be considered to be of high public amenity value although they may collectively occupy some public amenity value if they are present in sufficient numbers. The required removal of these trees is unlikely to form a substantial reason for the Local Planning Authority (LPA) to object to the proposed development. However, the LPA is likely to take note of the detailed tree and groups, and to require the replacement and shrubs as part of the proposed development to compensate for this loss.

2.2.1.4 Substitute new tree and shrub planting scheme is illustrated in this plan and this clearly demonstrates that adequate provision is made for sufficient room to accommodate substitute new planting that is more than adequate for the identified tree and group losses.

2.2.1.5 The LPA can ensure the adequacy of this new tree and shrub planting permission for the proposed development subject to the pre-commencement submission for the LPA's written approval of a comprehensive soil investigation report and subsequent implementation of the approved scheme.

2.4 Hedge no. H27 and other hedges and areas of scrub are not a material consideration in the planning application determination process in the same way as trees are, they are not regarded as being of the same value or there is substantive reason for the LPA to object to the proposed development.

3.0 Root Protection Area (RPA)

3.1 The proposed development dwellings footprint has avoided the RPA of all the retained trees. Therefore the proposed dwellings can be constructed without the need for any special construction methods.

3.2 In order to provide adequate protection to the retained trees, the Root Protection Area (RPA) can be adequately protected from the proposed development dwellings through the use of appropriately constructed and located protection barriers (see Tree Protection Plan) & Arboricultural Method Statement for details).

3.3 A small section of proposed road encroaches into the RPA of group no. G7. However, this encroachment represents a negligible area of the RPA and is considered to be acceptable. Such encroachment is to be constructed in accordance with the Arboricultural Method Statement.

3.4 No underground service to the new dwellings have been supplied, however, it is considered sufficient space exists across the RPA to enable the service to be installed. Such a encroachment is to be constructed in accordance with the Arboricultural Method Statement.

3.5 Fences and soft landscaping works have not been detailed at this stage. In order to limit the impact on the trees and hedgerows, it is considered that sufficient space exists across the RPA. The LPA may be aware of the potential for fences to encroach into the RPA of retained trees

Arboricultural Impact Assessment

1.0 Introduction
1.1 It is proposed to construct a residential development on site as illustrated in this plan.
1.2 In this plan, the proposed development layout is illustrated in colour.
1.3 In order to provide context with the existing site, and highlight the proposed development, the existing site layout plan is also illustrated in pale grey.
1.4 The trees, their constraints, and areas where specific tree protection measures are required, are illustrated in accordance with the key.

2.0 Tree Works.
2.1 The proposed development requires the following tree and hedge/scrub works to be carried out.
2.1.1 Group no. G2 & tree no. T4 – Crown lift and/or reduce as necessary in order to create a 5.5 metre clearance over the proposed road and tracks.
2.1.1.1 These works are required to provide adequate access over the proposed and existing road and tracks.
2.1.2 Group no. G3 – Remove the south western end of this group and associated hedge, and crown lift and/or reduce the remaining group and associated hedge as necessary in order to create a 5.5 metre clearance over the proposed road and tracks, all as illustrated with a red crown margin in this plan i.e. the red crown margin illustrates the crown to be removed, the green crown margin illustrates the crown to be retained after cutting back.
2.1.2.1 These works are required to provide adequate access over the proposed and existing road and tracks.
2.1.3 Tree no. T5 – Fell.
2.1.3.1 This work is required to allow the construction of the proposed road and tracks, and to remove a tree that poses a significant risk of harm to persons and property by virtue of it structural characteristics and its location so close to both the existing and proposed road and tracks.
2.1.4 Group no. G21 – Cut back as illustrated i.e. the red crown margin illustrates the crown to be removed, the green crown margin illustrates the crown to be retained after cutting back.
2.1.4.1 This work is required to create clearance over and beside the proposed internal access road.
2.1.5 Group no. G22 – Fell.
2.1.5.1 This work is required as the trees are a dominant presence in the rear garden of plot no. 70, and as they are Elm trees they will die of Dutch Elm Disease within the next 10 to 20 years at least. Therefore there is little point in retaining these trees within the proposed development.
2.1.6 Hedge no. H27 – Remove a 5.5 metre length of this hedge from the north western end, as illustrated with a red crown margin.
2.1.6.1 This work is required to allow the construction of the proposed road and pavement.
2.1.7 Hedge along south eastern boundary between this site and the immediately neighbouring development site – Remove three sections as illustrated with red crown margins in this plan.
2.1.7.1 These works are required to allow the construction of the proposed road and footpaths connecting this site with the immediately neighbouring development site.
2.1.8 Scrub growth and scrubby hedges in the vicinity of the site entrance – Cut back as necessary in order to clear the proposed road, pavement and tracks, as illustrated with red crown margins in this plan.
2.1.8.1 The works are required to allow the construction of the proposed road, pavement and tracks.
2.1.9 Several small and discontinuous sections of hedge immediately to the south east of the existing access road near the entrance – Remove (not specifically illustrated in this plan).
2.1.9.1 These works are required to allow the construction of the proposed road and pavement.
2.2 These works are considered acceptable in arboricultural planning terms for the following reasons.
2.2.1 G2, G3, T4, T5, G21 & G22.
2.2.1.1 These trees and groups are all 'C' grade with regard to their quality assessment as defined in Table 1 of BS5837:2012. BS5837:2012 describes such trees as "Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm'.
2.2.1.2 Such trees cannot be considered to be of high public amenity value as individuals, although they may collectively accrue some public amenity value if they are present in sufficient numbers. The required removal or pruning of these trees is unlikely to form a substantive reason for the Local Planning Authority (LPA) to object to the proposed development. However, the LPA is likely to take note of the collective loss of these trees and groups, and to require the mitigation planting of new trees and shrubs as part of the proposed development to compensate for this collective loss.
2.2.1.3 In the specific case of tree no. T5, this species of tree has a reputation for shedding large branches when mature (Lonsdale 1999), often with little warning. Given the location of this tree overhanging the existing road, it already poses a significant risk of harm to users of that road. The proposed development will greatly increase the vehicular and pedestrian traffic along the route of the existing road and under the crown of this tree, and this will greatly increase the risk of this tree damaging persons and property. Therefore the tree should be removed for reasons of health and safety if the proposed development is to go ahead.
2.2.1.4 An illustrative new tree and shrub planting scheme is illustrated in this plan and this clearly demonstrates that the proposed development has allowed sufficient room to accommodate substantive new planting that will more than mitigate for the identified tree and group losses.
2.2.1.5 The LPA can ensure the adequacy of this new tree and shrub planting by granting planning permission for the proposed development subject to the pre-commencement submission and approval of a comprehensive soft landscaping proposal for the proposed development.
2.4 Hedge no. H27 and other hedges and areas of scrub are not a material consideration in the planning application determination process in the same way as trees are, and they are not regarded as being of the same value of trees in arboricultural planning terms. Therefore the identified removal and cutting back of hedges and scrub should not form a substantive reason for the LPA to object to the proposed development.

3.0 Root Protection Areas (RPA).
3.1 The proposed development dwellings footprint has avoided the RPA of all the retained trees. Therefore the proposed development dwellings do not have any direct impact on the RPA of the retained trees, and these RPA can be adequately protected from the proposed development dwellings through the use of appropriately constructed and located tree protection barriers (see Tree Protection Plan & Arboricultural Method Statement for details).
3.2 The proposed construction of roads and tracks encroach over the RPA of group no's. G2 and G7, and tree no. T4. However, this encroachment only takes place where there is an existing tarmac road or compacted hardcore track. These areas of encroachment are illustrated in this plan as the hard surface retention areas. In these areas, the existing hard surface will be retained intact and the new road or track constructed on top of the existing hard surface. If it is not possible to retain the existing hard surfaces, the proposed road and track will be constructed in accordance with the methodologies set out in the Tree Protection Plan & Arboricultural Method Statement.
3.3 A small section of proposed road encroaches into the RPA of group no. G7. However, this encroachment represents a loss of less than 1.4% of the total RPA for this group, and the area of encroachment is located at the far side of the existing access road. It is likely that this road has restricted root growth in the direction of the encroachment. Such a small encroachment into a part of the RPA where it is unlikely that any roots from G7 are present is considered acceptable in arboricultural planning terms.
3.4 No underground service or drain plan has been supplied, however, it is considered that sufficient space exists across the site that is not restricted by the RPA of retained trees for these to be routed around, and therefore avoid conflict with, the RPA. The LPA have the power to ensure this occurs by granting permission subject to a condition requiring the pre-commencement submission and approval of an underground service and drain plan.
3.5 Fences and soft landscaping works have the potential to adversely impact the RPA of retained trees. In order to limit this impact to an acceptable level, the fencing and soft landscaping works in the RPA of retained trees will be carried out in accordance with the methodologies set out in the Tree Protection Plan & Arboricultural Method Statement.

4.0 Future Pressures to Unreasonably Prune or Fell Retained Trees
4.1 The inappropriate retention of trees within a new development can lead to future conflicts between the residents of the new development and the trees, thereby creating future pressures to unreasonably prune or fell trees that had been retained in the design and development process. Section 5.3.4 d) of BS5837:2012 requires this issue to be considered and avoided at the design stage of a proposed development. In order to comply with this requirement the following considerations have been made.
4.2 Crown proximity.
4.2.1 The proposed development layout has maintained a minimum clearance between the dwellings and the crown edge of retained trees of 7.5 metres metres. This is considered more than sufficient to avoid the crowns coming into contact with the fabric of the dwellings or overswaying the dwellings, even when the trees are swaying in a storm event. Therefore, the proposed development has avoided placing dwellings so close to the existing crown spreads of retained trees that legitimate feelings of overbearance and dominance will be created in the minds of future residents, and crown proximity should not create any legitimate pressures to unreasonably prune or fell the retained trees in the future.
4.2.2 Some of the retained trees have potential for future crown growth that will increase their crown spread and bring their crown edges closer to the proposed dwellings. However, it is considered that this future growth will not bring any crown edge any closer than 7.5 metres away from the fabric of the proposed dwellings. Therefore, the proposed development has avoided placing dwellings so close to the potential future crown spreads of retained trees that legitimate feelings of overbearance and dominance will be created in the minds of future residents, and potential future crown proximity should not create any legitimate pressures to unreasonably prune or fell the retained trees in the future.
4.2.3 None of the significant trees overhang the proposed gardens, Therefore crown overhang will have no adverse impact on the useable amenity space in the proposed gardens. Therefore, crown overhang of the gardens will not create any legitimate pressures to unreasonably prune or fell the retained trees in the future.
4.2.4 None of the proposed parking bays are overhung by the retained trees and parked cars will not experience tree related debris, e.g. twigs, leaves, honeydew and bird droppings, falling directly onto them. Therefore crown overhang will not create any conflict between the trees and the owners of parked cars and this issue will not create any legitimate pressures to unreasonably prune or fell the retained trees in the future.
4.3 Tree shade.
4.3.1 At the layout design stage, the indicative shade segment suggested at section 5.2.2 Note 1 of BS5837:2012 was used to assess the impact of shade on the proposed gardens and dwellings.
4.3.2 This assessment indicated that none of the proposed dwellings or gardens will experience any significant shade cast by the retained trees.
4.3.3 Therefore tree shade will not have any impact on either the living conditions inside the proposed dwellings or the useable amenity space in the proposed gardens, and tree and tree shade will not result in any legitimate pressures to unreasonably prune or fell the retained trees in the future.
4.4 The proposed layout has achieved a harmonious juxtaposition between the retained trees and the proposed development.

5.0 Summary.
5.1 There are no substantive arboricultural reasons for the Local Planning Authority (LPA) to object to the proposed development, providing the tree protection measures suggested above and detailed in the Tree Protection Plan & Arboricultural Method Statement are undertaken, along with adequate mitigation planting of new trees as illustrated in this plan. In order to ensure that these measures take place, it is likely that, if the LPA grant planning permission for the proposed development, they will make that permission conditional of the following.
5.1.1 Adherence to the Tree Protection Plan & Arboricultural Method Statement;
5.1.2 The pre-commencement drawing up and approval of a comprehensive soft landscaping scheme for the proposed development that includes adequate mitigation planting of new trees and shrubs to compensate for the identified tree losses;
5.1.3 The pre-commencement drawing up and approval of an underground service plan that avoids the RPA of retained trees.
5.2 The use of these conditions is reasonable, necessary and commonplace. Therefore the required use of these conditions should not form a legitimate reason for the LPA to object to the proposed development.

MJC TREE SERVICES LIMITED

Site:
Land east of Drove Lane, Main Road, Yapton, Arundel, BN18 0EB.

ARBORICULTURAL IMPACT ASSESSMENT PLAN

Plan no. MJC-19-0213-02 rev:2

Sheet 04

This is based on the Cadmap Topographic survey plan no. CM/19/07 and the Contour layout plan no. PLN-1-1101, amended by MJC on 08/07/2020.

This plan was produced in colour. A monochrome version must not be relied upon.

KEY

- Existing site layout in grey
- Proposed site layout in colour
- T1 — Category U tree or group and ref' no'
- T1 — Category A tree or group and ref' no'
- T1 — Category B tree or group and ref' no'
- T1 — Category C tree or group and ref' no'
- G1 — Trees in a group that have been collectively surveyed and recoded.
- Crown spread of surveyed trees to be retained, amalgamated for groups
- Hedges and scrub vegetation to be retained
- Crown spread of surveyed trees to be removed, amalgamated for groups
- Hedges and scrub vegetation to be removed
- Crown spread of surveyed trees and groups to be pruned back i.e. red margin indicates crown to be removed, green margin indicates crown retained after pruning
- Estimated mature crown spread for trees with significant potential for future growth
- Indicative root protection area (RPA), amalgamated for groups
- Direction of lowest significant branch, length of arrow indicates height above ground, the longer the arrow the higher the branch
- Areas of potentially significant shade constraint for A, B & C grade trees and groups, based on surveyed heights and amalgamated for groups
- Existing hard surface retention areas

SCALE
1:250 @ A0

SCALE IN METRES
0 10 20

N

Road build up to WSCC adoptable highway specification

Scrub growth

Scrub growth

N

SCALE IN METRES

0 10 20

N

SCALE IN METRES

0 10 20

Arboricultural Impact Assessment

1.0 Introduction
1.1 It is proposed to construct a residential development on site as illustrated in this plan.
1.2 In this plan, the proposed development layout is illustrated in colour.
1.3 In order to provide contrast with the existing site, and highlight the proposed development, the existing site layout plan is also illustrated in pale grey.
1.4 The trees, their constraints, and areas where specific tree protection measures are required, are illustrated in accordance with the key.

2.0 Tree Works.
2.1 The proposed development requires the following tree and hedge/scrub works to be carried out.
2.1.1 Group no. G2 & tree no. T4 – Crown lift and/or reduce as necessary in order to create a 5.5 metre clearance over the proposed road and tracks.
2.1.1.1 These works are required to provide adequate access over the proposed and existing road and tracks.
2.1.2 Group no. G3 – Remove the south western end of this group and associated hedge, and crown lift and/or reduce the remaining group and associated hedge as necessary in order to create a 5.5 metre clearance over the proposed road and tracks, all as illustrated with a red crown margin in this plan i.e. the red crown margin illustrates the crown to be removed, the green crown margin illustrates the crown to be retained after cutting back.
2.1.2.1 These works are required to provide adequate access over the proposed and existing road and tracks.
2.1.3 Tree no. T5 – Fell.
2.1.3.1 This work is required to allow the construction of the proposed road and tracks, and to remove a tree that poses a significant risk of harm to persons and property by virtue of it structural characteristics and its location so close to both the existing and proposed road and tracks.
2.1.4 Group no. G21 – Cut back as illustrated i.e. the red crown margin illustrates the crown to be removed, the green crown margin illustrates the crown to be retained after cutting back.
2.1.4.1 This work is required to create clearance over and beside the proposed internal access road.
2.1.5 Group no. G22 – Fell.
2.1.5.1 This work is required as the trees are a dominant presence in the rear garden of plot no. 70, and as they are Elm trees they will die of Dutch Elm Disease within the next 10 to 20 years at least. Therefore there is little point in retaining these trees within the proposed development.
2.1.6 Hedge no. H27 – Remove a 5.5 metre length of this hedge from the north western end, as illustrated with a red crown margin.
2.1.6.1 This work is required to allow the construction of the proposed road and pavement.
2.1.7 Hedge along south eastern boundary between this site and the immediately neighbouring development site – Remove three sections as illustrated with red crown margins in this plan.
2.1.7.1 These works are required to allow the construction of the proposed road and footpaths connecting this site with the immediately neighbouring development site.
2.1.8 Scrub growth and scrubby hedges in the vicinity of the site entrance – Cut back as necessary in order to clear the proposed road, pavement and tracks, as illustrated with red crown margins in this plan.
2.1.8.1 The works are required to allow the construction of the proposed road, pavement and tracks.
2.1.9 Several small and discontinuous sections of hedge immediately to the south east of the existing access road near the entrance – Remove (not specifically illustrated in this plan).
2.1.9.1 These works are required to allow the construction of the proposed road and pavement.
2.2 These works are considered acceptable in arboricultural planning terms for the following reasons.
2.2.1 G2, G3, T4, T5, G21 & G22.
2.2.1.1 These trees and groups are all 'C' grade with regard to their quality assessment as defined in Table 1 of BS5837:2012. BS5837:2012 describes such trees as "Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm".
2.2.1.2 Such trees cannot be considered to be of high public amenity value as individuals, although they may collectively accrue some public amenity value if they are present in sufficient numbers. The required removal or pruning of these trees is unlikely to form a substantive reason for the Local Planning Authority (LPA) to object to the proposed development. However, the LPA is likely to take note of the collective loss of these trees and groups, and to require the mitigation planting of new trees and shrubs as part of the proposed development to compensate for this collective loss.
2.2.1.3 In the specific case of tree no. T5, this species of tree has a reputation for shedding large branches when mature (Lonsdale 1999), often with little warning. Given the location of this tree overhanging the existing road, it already poses a significant risk of harm to users of that road. The proposed development will greatly increase the vehicular and pedestrian traffic along the route of the existing road and under the crown of this tree, and this will greatly increase the risk of this tree damaging persons and property. Therefore the tree should be removed for reasons of health and safety if the proposed development is to go ahead.
2.2.1.4 An illustrative new tree and shrub planting scheme is illustrated in this plan and this clearly demonstrates that the proposed development has allowed sufficient room to accommodate substantive new planting that will more than mitigate for the identified tree and group losses.
2.2.1.5 The LPA can ensure the adequacy of this new tree and shrub planting by granting planning permission for the proposed development subject to the pre-commencement submission and approval of a comprehensive soft landscaping proposal for the proposed development.
2.4 Hedge no. H27 and other hedges and areas of scrub are not a material consideration in the planning application determination process in the same way as trees are, and they are not regarded as being of the same value of trees in arboricultural planning terms. Therefore the identified removal and cutting back of hedges and scrub should not form a substantive reason for the LPA to object to the proposed development.

3.0 Root Protection Areas (RPA).
3.1 The proposed development dwellings footprint has avoided the RPA of all the retained trees. Therefore the proposed development dwellings do not have any direct impact on the RPA of the retained trees, and these RPA can be adequately protected from the proposed development dwellings through the use of appropriately constructed and located tree protection barriers (see Tree Protection Plan & Arboricultural Method Statement for details).
3.2 The proposed construction of roads and tracks encroach over the RPA of group no's. G2 and G7, and tree no. T4. However, this encroachment only takes place where there is an existing tarmac road or compacted hardcore track. These areas of encroachment are illustrated in this plan as the hard surface retention areas. In these areas, the existing hard surface will be retained intact and the new road or track constructed on top of the existing hard surface. If it is not possible to retain the existing hard surfaces, the proposed road and track will be constructed in accordance with the methodologies set out in the Tree Protection Plan & Arboricultural Method Statement.
3.3 A small section of proposed road encroaches into the RPA of group no. G7. However, this encroachment represents a loss of less than 1.4% of the total RPA for this group, and the area of encroachment is located at the far side of the existing access road. It is likely that this road has restricted root growth in the direction of the encroachment. Such a small encroachment into a part of the RPA where it is unlikely that any roots from G7 are present is considered acceptable in arboricultural planning terms.
3.4 No underground service or drain plan has been supplied, however, it is considered that sufficient space exists across the site that is not restricted by the RPA of retained trees for these to be routed around, and therefore avoid conflict with, the RPA. The LPA have the power to ensure this occurs by granting permission subject to a condition requiring the pre-commencement submission and approval of an underground service and drain plan.
3.5 Fences and soft landscaping works have the potential to adversely impact the RPA of retained trees. In order to limit this impact to an acceptable level, the fencing and soft landscaping works in the RPA of retained trees will be carried out in accordance with the methodologies set out in the Tree Protection Plan & Arboricultural Method Statement.

4.0 Future Pressures to Unreasonably Prune or Fell Retained Trees
4.1 The inappropriate retention of trees within a new development can lead to future conflicts between the residents of the new development and the trees, thereby creating future pressures to unreasonably prune or fell trees that had been retained in the design and development process. Section 5.3.4 d) of BS5837:2012 requires this issue to be considered and avoided at the design stage of a proposed development. In order to comply with this requirement the following considerations have been made.
4.2 Crown proximity.
4.2.1 The proposed development layout has maintained a minimum clearance between the dwellings and the crown edge of retained trees of 7.5 metres metres. This is considered more than sufficient to avoid the crowns coming into contact with the fabric of the dwellings or oversawing the dwellings, even when the trees are swaying in a storm event. Therefore, the proposed development has avoided placing dwellings so close to the existing crown spreads of retained trees that legitimate feelings of overbearance and dominance will be created in the minds of future residents, and crown proximity should not create any legitimate pressures to unreasonably prune or fell the retained trees in the future.
4.2.2 Some of the retained trees have potential for future crown growth that will increase their crown spread and bring their crown edges closer to the proposed dwellings. However, it is considered that this future growth will not bring any crown edge any closer than 7.5 metres away from the fabric of the proposed dwellings. Therefore, the proposed development has avoided placing dwellings so close to the potential future crown spreads of retained trees that legitimate feelings of overbearance and dominance will be created in the minds of future residents, and potential future crown proximity should not create any legitimate pressures to unreasonably prune or fell the retained trees in the future.
4.2.3 None of the significant trees overhang the proposed gardens, Therefore crown overhang will have no adverse impact on the useable amenity space in the proposed gardens. Therefore, crown overhang of the gardens will not create any legitimate pressures to unreasonably prune or fell the retained trees in the future.
4.2.4 None of the proposed parking bays are overhung by the retained trees and parked cars will not experience tree related debris, e.g. twigs, leaves, honeydew and bird droppings, falling directly onto them. Therefore crown overhang will not create any conflict between the trees and the owners of parked cars and this issue will not create any legitimate pressures to unreasonably prune or fell the retained trees in the future.
4.3 Tree shade.
4.3.1 At the layout design stage, the indicative shade segment suggested at section 5.2.2 Note 1 of BS5837:2012 was used to assess the impact of shade on the proposed gardens and dwellings.
4.3.2 This assessment indicated that none of the proposed dwellings or gardens will experience any significant shade cast by the retained trees.
4.3.3 Therefore tree shade will not have any impact on either the living conditions inside the proposed dwellings or the useable amenity space in the proposed gardens, and tree and tree shade will not result in any legitimate pressures to unreasonably prune or fell the retained trees in the future.
4.4 The proposed layout has achieved a harmonious juxtaposition between the retained trees and the proposed development.

5.0 Summary.
5.1 There are no substantive arboricultural reasons for the Local Planning Authority (LPA) to object to the proposed development, providing the tree protection measures suggested above and detailed in the Tree Protection Plan & Arboricultural Method Statement are undertaken, along with adequate mitigation planting of new trees as illustrated in this plan. In order to ensure that these measures take place, it is likely that, if the LPA grant planning permission for the proposed development, they will make that permission conditional of the following:
5.1.1 Adherence to the Tree Protection Plan & Arboricultural Method Statement.
5.1.2 The pre-commencement drawing up and approval of a comprehensive soft landscaping scheme for the proposed development that includes adequate mitigation planting of new trees and shrubs to compensate for the identified tree losses.
5.1.3 The pre-commencement drawing up and approval of an underground service plan that avoids the RPA of retained trees.
5.2 The use of these conditions is reasonable, necessary and commonplace. Therefore the required use of these conditions should not form a legitimate reason for the LPA to object to the proposed development.

MJC TREE SERVICES LIMITED

Site:
Land east of Drove Lane, Main Road, Yapton, Arundel, BN18 0EB.

ARBORICULTURAL IMPACT ASSESSMENT PLAN

Plan no. MJC-19-0213-02 rev2

Sheet 05

This is based on the Cadmap topographical survey plan no. CM/19798 and the Carlton layout plan no. PLN-1-1101, amended by MJC on 08/07/2020.

This plan was produced in colour. A monochrome version must not be relied upon.

KEY

- Existing site layout in grey
- Proposed site layout in colour
- Category U tree or group and ref' no'
- Category A tree or group and ref' no'
- Category B tree or group and ref' no'
- Category C tree or group and ref' no'
- Hedge. This is a group of trees have been collectively surveyed and recorded.
- Crown spread of surveyed trees to be retained, amalgamated for groups
- Hedges and scrub vegetation to be retained
- Crown spread of surveyed trees to be removed, amalgamated for groups
- Hedges and scrub vegetation to be removed
- Crown spread of surveyed trees and groups to be pruned hard i.e. red margin indicates crown to be removed, green margin indicates crown retained after pruning
- Estimated mature crown spread for trees with significant potential for future growth
- Indicative root protection area (RPA) amalgamated for groups
- Direction of lowest significant branch, length of arrow indicates height i.e. the longer the arrow the higher the branch
- Areas of potentially significant shade constraint for A, B & C grade trees and groups, based on surveyed heights and amalgamated for groups
- Existing hard surface retention areas

SCALE
1:250 @ A0

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Arboricultural Impact Assessment

1.0 Introduction
1.1 It is proposed to construct a residential development on site as illustrated in this plan.
1.2 In this plan, the proposed development layout is illustrated in colour.
1.3 In order to provide context with the existing site, and highlight the proposed development, the existing site layout plan is also illustrated in pale grey.
1.4 The trees, their constraints, and areas where specific tree protection measures are required, are illustrated in accordance with the key.

2.0 Tree Works.
2.1 The proposed development requires the following tree and hedge/scrub works to be carried out.
2.1.1 Group no. G2 & tree no. T4 – Crown lift and/or reduce as necessary in order to create a 5.5 metre clearance over the proposed road and tracks.
2.1.1.1 These works are required to provide adequate access over the proposed and existing road and tracks.
2.1.2 Group no. G3 – Remove the south western end of this group and associated hedge, and crown lift and/or reduce the remaining group and associated hedge as necessary in order to create a 5.5 metre clearance over the proposed road and tracks, all as illustrated with a red crown margin in this plan i.e. the red crown margin illustrates the crown to be removed, the green crown margin illustrates the crown to be retained after cutting back.
2.1.2.1 These works are required to provide adequate access over the proposed and existing road and tracks.
2.1.3 Tree no. T5 – Fell.
2.1.3.1 This work is required to allow the construction of the proposed road and tracks, and to remove a tree that poses a significant risk of harm to persons and property by virtue of it structural characteristics and its location so close to both the existing and proposed road and tracks.
2.1.4 Group no. G21 – Cut back as illustrated i.e. the red crown margin illustrates the crown to be removed, the green crown margin illustrates the crown to be retained after cutting back.
2.1.4.1 This work is required to create clearance over and beside the proposed internal access road.
2.1.5 Group no. G22 – Fell.
2.1.5.1 This work is required as the trees are a dominant presence in the rear garden of plot no. 70, and as they are Elm trees they will die of Dutch Elm Disease within the next 10 to 20 years at least. Therefore there is little point in retaining these trees within the proposed development.
2.1.6 Hedge no. H27 – Remove a 5.5 metre length of this hedge from the north western end, as illustrated with a red crown margin.
2.1.6.1 This work is required to allow the construction of the proposed road and pavement.
2.1.7 Hedge along south eastern boundary between this site and the immediately neighbouring development site – Remove three sections as illustrated with red crown margins in this plan.
2.1.7.1 These works are required to allow the construction of the proposed road and footpaths connecting this site with the immediately neighbouring development site.
2.1.8 Scrub growth and scrubby hedges in the vicinity of the site entrance – Cut back as necessary in order to clear the proposed road, pavement and tracks, as illustrated with red crown margins in this plan.
2.1.8.1 The works are required to allow the construction of the proposed road, pavement and tracks.
2.1.9 Several small and discontinuous sections of hedge immediately to the south east of the existing access road near the entrance – Remove (not specifically illustrated in this plan).
2.1.9.1 These works are required to allow the construction of the proposed road and pavement.
2.2 These works are considered acceptable in arboricultural planning terms for the following reasons.
2.2.1 G2, G3, T4, T5, G21 & G22.
2.2.1.1 These trees and groups are all 'C' grade with regard to their quality assessment as defined in Table 1 of BS5837:2012. BS5837:2012 describes such trees as 'Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm'.
2.2.1.2 Such trees cannot be considered to be of high public amenity value as individuals, although they may collectively accrue some public amenity value if they are present in sufficient numbers. The required removal or pruning of these trees is unlikely to form a substantive reason for the Local Planning Authority (LPA) to object to the proposed development. However, the LPA is likely to take note of the collective loss of these trees and groups, and to require the mitigation planting of new trees and shrubs as part of the proposed development to compensate for this collective loss.
2.2.1.3 In the specific case of tree no. T5, this species of tree has a reputation for shedding large branches when mature (Lonsdale 1999), often with little warning. Given the location of this tree overhanging the existing road, it already poses a significant risk of harm to users of that road. The proposed development will greatly increase the vehicular and pedestrian traffic along the route of the existing road and under the crown of this tree, and this will greatly increase the risk of this tree damaging persons and property. Therefore the tree should be removed for reasons of health and safety if the proposed development is to go ahead.
2.2.1.4 An illustrative new tree and shrub planting scheme is illustrated in this plan and this clearly demonstrates that the proposed development has allowed sufficient room to accommodate substantive new planting that will more than mitigate for the identified tree and group losses.
2.2.1.5 The LPA can ensure the adequacy of this new tree and shrub planting by granting planning permission for the proposed development subject to the pre-commencement submission and approval of a comprehensive soft landscaping proposal for the proposed development.
2.4 Hedge no. H27 and other hedges and areas of scrub are not a material consideration in the planning application determination process in the same way as trees are, and they are not regarded as being of the same value of trees in arboricultural planning terms. Therefore the identified removal and cutting back of hedges and scrub should not form a substantive reason for the LPA to object to the proposed development.

3.0 Root Protection Areas (RPA).
3.1 The proposed development dwellings footprint has avoided the RPA of all the retained trees. Therefore the proposed development dwellings do not have any direct impact on the RPA of the retained trees, and these RPA can be adequately protected from the proposed development dwellings through the use of appropriately constructed and located tree protection barriers (see Tree Protection Plan & Arboricultural Method Statement for details).
3.2 The proposed construction of roads and tracks encroach over the RPA of group no's. G2 and G7, and tree no. T4. However, this encroachment only takes place where there is an existing tarmac road or compacted hardcore track. These areas of encroachment are illustrated in this plan as the hard surface retention areas. In these areas, the existing hard surface will be retained and the new road or track constructed on top of the existing hard surface. If it is not possible to retain the existing hard surfaces, the proposed road and track will be constructed in accordance with the methodologies set out in the Tree Protection Plan & Arboricultural Method Statement.
3.3 A small section of proposed road encroaches into the RPA of group no. G7. However, this encroachment represents a loss of less than 1.4% of the total RPA for this group, and the area of encroachment is located at the far side of the existing access road. It is likely that this road has restricted root growth in the direction of the encroachment. Such a small encroachment into a part of the RPA where it is unlikely that any roots from G7 are present is considered acceptable in arboricultural planning terms.
3.4 No underground service or drain plan has been supplied, however, it is considered that sufficient space exists across the site that is not restricted by the RPA of retained trees for these to be routed around, and therefore avoid conflict with, the RPA. The LPA have the power to ensure this occurs by granting permission subject to a condition requiring the pre-commencement submission and approval of an underground service and drain plan.
3.5 Fences and soft landscaping works have the potential to adversely impact the RPA of retained trees. In order to limit this impact to an acceptable level, the fencing and soft landscaping works in the RPA of retained trees will be carried out in accordance with the methodologies set out in the Tree Protection Plan & Arboricultural Method Statement.

4.0 Future Pressures to Unreasonably Prune or Fell Retained Trees
4.1 The inappropriate retention of trees within a new development can lead to future conflicts between the residents of the new development and the trees, thereby creating future pressures to unreasonably prune or fell trees that had been retained in the design and development process. Section 5.3.4 d) of BS5837:2012 requires this issue to be considered and avoided at the design stage of a proposed development. In order to comply with this requirement the following considerations have been made.
4.2 Crown proximity.
4.2.1 The proposed development layout has maintained a minimum clearance between the dwellings and the crown edge of retained trees of 7.5 metres. This is considered more than sufficient to avoid the crowns coming into contact with the fabric of the dwellings or overswaying the dwellings, even when the trees are swaying in a storm event. Therefore, the proposed development has avoided placing dwellings so close to the existing crown spreads of retained trees that legitimate feelings of overbearance and dominance will be created in the minds of future residents, and crown proximity should not create any legitimate pressures to unreasonably prune or fell the retained trees in the future.
4.2.2 Some of the retained trees have potential for future crown growth that will increase their crown spread and bring their crown edges closer to the proposed dwellings. However, it is considered that this future growth will not bring any crown edge any closer than 7.5 metres away from the fabric of the proposed dwellings. Therefore, the proposed development has avoided placing dwellings so close to the potential future crown spreads of retained trees that legitimate feelings of overbearance and dominance will be created in the minds of future residents, and potential future crown proximity should not create any legitimate pressures to unreasonably prune or fell the retained trees in the future.
4.2.3 None of the significant trees overhang the proposed gardens. Therefore crown overhang will have no adverse impact on the useable amenity space in the proposed gardens. Therefore, crown overhang of the gardens will not create any legitimate pressures to unreasonably prune or fell the retained trees in the future.
4.2.4 None of the proposed parking bays are overhung by the retained trees and parked cars will not experience tree related debris, e.g. twigs, leaves, honeydew and bird droppings, falling directly onto them. Therefore crown overhang will not create any conflict between the trees and the owners of parked cars and this issue will not create any legitimate pressures to unreasonably prune or fell the retained trees in the future.
4.3 Tree shade.
4.3.1 At the layout design stage, the indicative shade segment suggested at section 5.2.2 Note 1 of BS5837:2012 was used to assess the impact of shade on the proposed gardens and dwellings.
4.3.2 This assessment indicated that none of the proposed dwellings or gardens will experience any significant shade cast by the retained trees.
4.3.5 Therefore tree shade will not have any impact on either the living conditions inside the proposed dwellings or the useable amenity space in the proposed gardens, and tree and tree shade will not result in any legitimate pressures to unreasonably prune or fell the retained trees in the future.
4.4 The proposed layout has achieved a harmonious juxtaposition between the retained trees and the proposed development.

5.0 Summary.
5.1 There are no substantive arboricultural reasons for the Local Planning Authority (LPA) to object to the proposed development, providing the tree protection measures suggested above and detailed in the Tree Protection Plan & Arboricultural Method Statement are undertaken, along with adequate mitigation planting of new trees as illustrated in this plan. In order to ensure that these measures take place, it is likely that, if the LPA grant planning permission for the proposed development, they will make that permission conditional of the following:
5.1.1 Adherence to the Tree Protection Plan & Arboricultural Method Statement:
5.1.2 The pre-commencement drawing up and approval of a comprehensive soft landscaping scheme for the proposed development that includes adequate mitigation planting of new trees and shrubs to compensate for the identified tree losses:
5.1.3 The pre-commencement drawing up and approval of an underground service plan that avoids the RPA of retained trees.
5.2 The use of these conditions is reasonable, necessary and commonplace. Therefore the required use of these conditions should not form a legitimate reason for the LPA to object to the proposed development.

MJC TREE SERVICES LIMITED

Site:
Land east of Drove Lane, Main Road, Walton, Arundel, BN18 0DS.

ARBORICULTURAL IMPACT ASSESSMENT PLAN

Plan no. MJC-19-0213-02 rev:2

Sheet 06

This is based on the Cadmap topographical survey plan no. CM/19798 and the Carlton layout plan no. PLN-1-1101, amended by MJC on 08/07/2020.

This plan was produced in colour. A monochrome version must not be relied upon.

KEY

Existing site layout in grey

Proposed site layout in colour

Category U tree or group and ref' no'

Category A tree or group and ref' no'

Category B tree or group and ref' no'

Category C tree or group and ref' no'

Trees in a group that have been collectively surveyed and recoded.

Crown spread of surveyed trees to be retained, amalgamated for groups

Hedges and scrub vegetation to be retained

Crown spread of surveyed trees to be removed, amalgamated for groups

Hedges and scrub vegetation to be removed

Crown spread of surveyed trees and groups to be pruned back i.e. red margin indicates crown to be removed, green margin indicates crown retained after pruning

Estimated mature crown spread for trees with significant potential for future growth

Indicative root protection area (RPA), amalgamated for groups

Direction of lowest significant branch, length of arrow indicates height i.e. the longer the arrow the higher the branch

Areas of potentially significant shade constraint for A, B & C grade trees and groups, based on surveyed heights and amalgamated for groups

Existing hard surface retention areas

SCALE
1:250 @ A0