

NOTES

- This drawing has been prepared solely for the purpose of seeking planning approval. It should not be used for any other purpose.
- The original of this drawing was produced in colour - a monochrome copy should not be relied upon.
- Scale for planning purposes only.
- All dimensions to be checked on site.
- The copyright of this document resides with Keen Consultants unless assigned in writing by the company.
- Details shown on this drawing are devised with reference to BS5837:2012: Trees in relation to design, demolition and construction - Recommendations.
- Check if Tree Preservation Order or Conservation Area protection applies to trees before undertaking tree works.
- Topographical survey based on Prosopaplan Limited drawing number PP/4081/Gravesend/F1.
- Where trees were not identified on the topographical survey they have been plotted by eye.
- Proposed Site Layout (Ground Floor Plan) based on On Architecture Ltd project/drawing number LSE-2821-03-AC-0010 P4.

KEY

- Existing site features
- Proposed structures
- Trees retained (Green-coloured line indicates extent of canopy)
- Trees and hedge for removal (Red-coloured dash line indicates extent of canopy)
- 2.0m high barrier as detail in Figure 1
- Minimum extent of no-dig construction. Actual deployment may be greater. As detail in Figure 3

KEY TO TREE SCHEDULE

Column Heading	Explanation
Tree No.	Unique number corresponding with number on plan
Species	English names
Ht (m)	Height in metres
Branch Spread	Crown radius in metres to cardinal points of the compass
Stem Dia	All measurements conform to Annex C of BS 5837:2012
	Single stem - Stem diameter in centimetres measured at 1.5m above ground level.
	Multi-stemmed tree with 2 to 5 stems - Diameter of each stem
	Multi-stemmed tree with more than 5 stems - Average stem diameter and number of stems
Height of crown clearance	Height in metres between the ground and underside of canopy
Height of first major branch and direction of growth	Height from ground level to base of first major branch and the approximate direction of growth
Abbreviations as suffix to a dimension	Suffix 'e' denotes an estimated dimension Suffix 'av' denotes an average dimension
Age Class	Age Class definitions: Y = Young S = Semi-mature E = Early mature M = Mature O = Over mature
Category grading and Estimated remaining Contribution (yrs)	Summary of BS 5837: 2012 categorisation: 1. Trees unsuitable for retention: U = those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years 2. Trees to be considered for retention: A1, 2 or 3 = trees of high quality (substantial contribution >40 yrs) B1, 2 or 3 = trees of moderate quality (significant contribution >20 yrs) C1, 2 or 3 = trees of low quality but adequate, ie >10 yrs or young trees - until new planting can be established) Note: Useful estimated remaining contribution of the tree or tree group based on figures stated in BS5837:2012 Brief description including physiological and structural defects Works required to be undertaken to the trees to facilitate the construction of remediate a defect encountered during the survey
Tree Works	Radius of minimum root protection area in metres
Root Protection Radius	Radius of minimum root protection area in metres
Root Protection Area	Total area of minimum root protection area extrapolated from root protection radius

0 Preliminary issue 10.10.22

Rev Description Date

KEEN CONSULTANTS
Keen Consultants is a trading name of Keen (Europe) Limited. Registered No: 12641584
Registered office: 4 Sudley Road, Bognor Regis, West Sussex, PO21 1EU

Client
McCARTHY STONE

Project
GRAVESEND RFC BOWLS CLUB, GRAVESEND

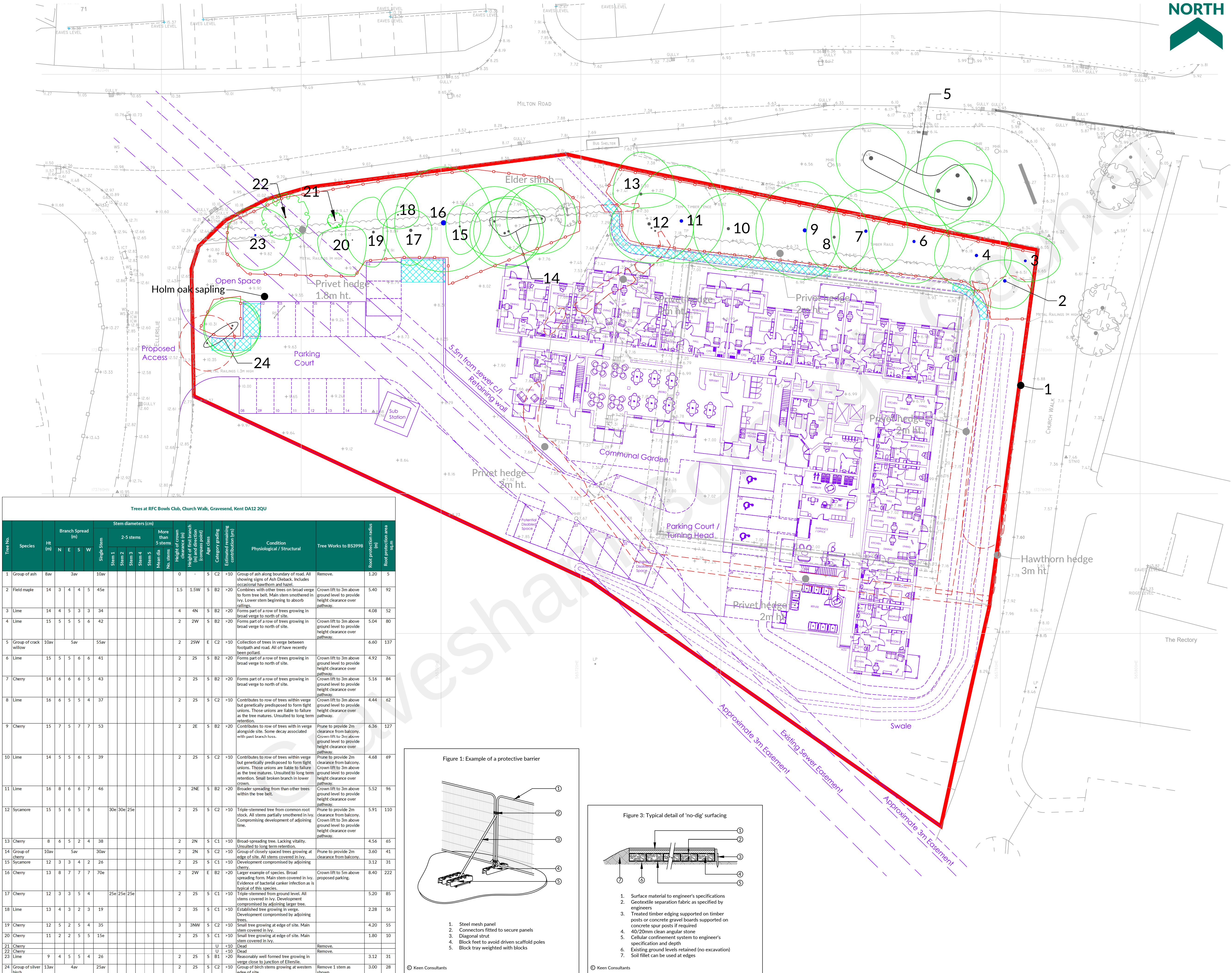
Title
TREE PROTECTION PLAN

Date Scale
OCT 2022 1:250@A1

Drawn by Checked by
ML JTK

Drawing Number

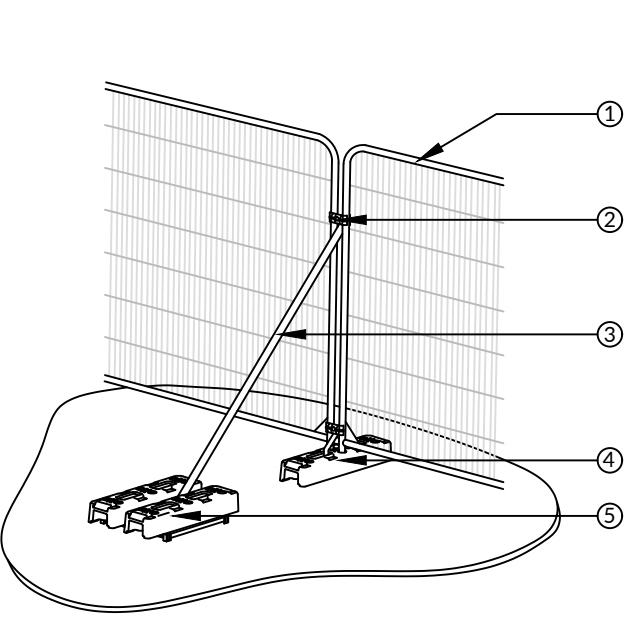
1856-KC-XX-YTREE-TPP01Rev0



Trees at RFC Bowls Club, Church Walk, Gravesend, Kent DA12 2QU

Tree No.	Species	Ht (m)	Branch Spread (m)	Stem diameters (cm)	Single Stem	2-5 stems	More than 5 stems	Height of crown clearance (m)	Height of first major branch (m) and direction (compass point)	Age class	Category grading	Estimated remaining contribution (yrs)	Condition Physiological / Structural	Tree Works to BS5398	Root protection radius (m)	Root protection area sq.m
1	Group of ash	8av	Sav	10av									Group of ash along boundary of road. All showing signs of Ash Dieback. Includes occasional hawthorn and hazel. Combines with other trees on broad verge to form tree belt. Main stem smothered in ivy. Lower stem beginning to absorb pollard.	Remove.	1.20	5
2	Field maple	14	3 4 4 5	45e						1.5	1.5W	S B2	>20	Crown lift to 3m above ground level to provide height clearance over pathway.	5.40	92
3	Lime	14	4 5 3 3	34						4	4N	S B2	>20	Forms part of a row of trees growing in broad verge to north of site.	4.08	52
4	Lime	15	5 5 5 6	42						2	2W	S B2	>20	Forms part of a row of trees growing in broad verge to north of site.	5.04	80
5	Group of crack willow	10av	Sav	55av						2	2SW	E C2	>10	Collection of trees in verge between footpath and road. All of have recently been pollard.	6.60	137
6	Lime	15	5 5 6 6	41						2	2S	S B2	>20	Forms part of a row of trees growing in broad verge to north of site.	4.92	76
7	Cherry	14	6 6 6 5	43						2	2S	S B2	>20	Forms part of a row of trees growing in broad verge to north of site.	5.16	84
8	Lime	16	6 5 5 4	37						2	2S	S C2	>10	Contributes to row of trees within verge but genetically predisposed to form light unions. Those unions are liable to failure as the tree matures. Unsuitable to long term retention.	4.44	62
9	Cherry	15	7 5 7 7	53						2	2E	S B2	>20	Contributes to row of trees with In verge alongside site. Some decay associated with past branch loss.	6.36	127
10	Lime	14	5 5 6 5	39						2	2S	S C2	>10	Contributes to row of trees within verge but genetically predisposed to form light unions. Those unions are liable to failure as the tree matures. Unsuitable to long term retention. Small broken branch in lower crown.	4.68	69
11	Lime	16	8 6 6 7	46						2	2NE	S B2	>20	Broader spreading from than other trees within the tree belt.	5.52	96
12	Sycamore	15	5 6 5 6	30e 30e 25e						2	2S	S C2	>10	Triple-stemmed tree from common root stock. All stems partially smothered in ivy. Compromising development of adjoining time.	5.91	110
13	Cherry	8	6 5 2 4	38						2	2N	S C1	>10	Broad-spreading tree. Lacking vitality. Unsuitable to long term retention.	4.56	65
14	Group of cherry	10av	Sav	30av						2	2N	S C2	>10	Group of closely spaced trees growing at edge of site. All stems covered in ivy. Development compromised by adjoining cherry.	3.60	41
15	Sycamore	12	3 3 4 2	26						2	2S	S C1	>10	Development compromised by adjoining cherry.	3.12	31
16	Cherry	13	8 7 7 7	70e						2	2W	E B2	>20	Larger example of species. Broad spreading form. Main stem covered in ivy. Evidence of bacterial canker infection as is typical of this species.	8.40	222
17	Cherry	12	3 3 5 4	25e 25e 25e						2	2S	S C1	>10	Triple-stemmed from ground level. All stems covered in ivy. Development compromised by adjoining trees.	5.20	85
18	Lime	13	4 3 2 3	19						2	3S	S C1	>10	Established tree growing in verge. Development compromised by adjoining trees.	2.28	16
19	Cherry	12	5 2 5 4	35						3	3NW	S C2	>10	Small tree growing at edge of site. Main stem covered in ivy.	4.20	55
20	Cherry	11	2 2 5 5	15e						2	2S	S C1	>10	Small tree growing at edge of site. Main stem covered in ivy.	1.80	10
21	Cherry	9	4 5 5 4	26						2	2S	S B1	>10	Reasonably well formed tree growing in verge close to junction of Ellenlie.	3.12	31
22	Cherry	9	4 5 5 4	26						2	2S	S C2	>10	Group of birch stems growing at western edge of site.	3.00	28
23	Lime	13av	4av	25av						2	2S	S C2	>10	Remove 1 stem as shown.		
24	Group of silver birch	13av	4av	25av						2	2S	S C2	>10	Remove 1 stem as shown.		

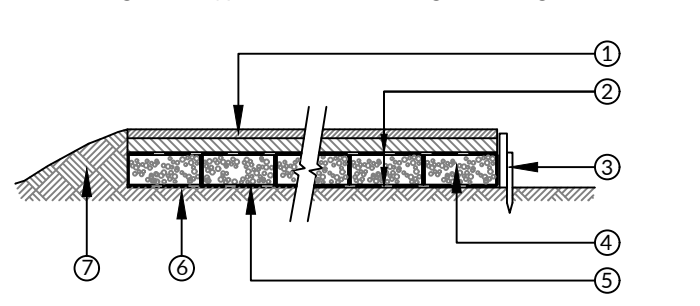
Figure 1: Example of a protective barrier



- Steel mesh panel
- Connectors fitted to secure panels
- Diagonal strut
- Block feet to avoid driven scaffold poles
- Block tray weighted with blocks

© Keen Consultants

Figure 3: Typical detail of 'no-dig' surfacing



- Surface material to engineer's specifications
- Geotextile separation fabric as specified by engineers
- Treated timber edging supported on timber posts or concrete gravel boards supported on concrete spur posts if required
- 40/20mm clean angular stone
- Cellular confinement system to engineer's specification and depth
- Existing ground levels retained (no excavation)
- Soil fill can be used at edges

© Keen Consultants