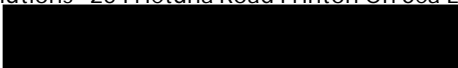




Appendix 1 Tree survey and explanatory notes



Tree Survey Schedule

Site: 524 St Johns Road
 Date of Survey: 31/08/2023
 Arboricultural Consultant/Surveyor: J Choat
 Weather: Cleary, dry, light wind

Tree ref	Species Common and Scientific	Height in m	Stem diameter in mm	Radial distance required for RPA	Branch spread				Height of crown clearance in m	Age class	Ground condition	Water demand	Observations	Preliminary management recommendations	Works urgency	Estimated remaining contribution in years	Category grading
					N	E	S	W									
T1	Oak Quercus robur	18	890	10.68	8	8	8	8	5	M	Bare soil	High	Good condition. Pruning wound at 2m, occluded well. Recent large branch tear wound at 4m.	None	0	30	A1
T2	Oak Quercus robur	12	300	3.6	8	8	8	8	5	M	Bare soil	High	Suppressed crown.	None	0	30	C1
T3	Oak Quercus robur	12	450	5.4	8	8	8	8	5	M	Bare soil	High	Lower stem buried in sand, unable to assess lower crown. Leaves and crown appeared full and healthy for time of year.	Remove sand from base.	0	30	B1
T4	Oak Quercus robur	18	720	8.64	8	8	8	8	5	M	Bare soil	High	Good condition. Damage to primary lateral at 4m.	None	0	30	A1
G1	Oak Quercus robur	17	600	7.2	6	6	6	6	5	M	Bare soil	High	Group of 9 trees all sharing crown. Assessed as a group. Recent concrete bases placed within PPA. Crown raised on all trees	None	0	30	A1/2
T5	Oak Quercus robur	18	500	6	8	8	8	8	5	M	Bare soil	High	3rd party, unable to assess..	None	0	30	A1
T6	Oak Quercus robur	17	610	7.32	8	8	8	8	5	M	Bare soil	High	Stem forks at 1m, rib formed at union. Wound on southern stem at 3m	None	0	30	A1
T7	Monterey Cypress Cupressus macrocarpa	18	500	6	3	3	3	3	4	M	Bare soil	Moderate	Fair condition. Suppressed crown. Leaning stem. Concrete pad within RPA.	None	0	20	C1
T8	Monterey Cypress Cupressus macrocarpa	5	600	7.2	3	3	3	3	4	M	Bare soil	Moderate	Topped at 2m, with 1 lateral remaining and extending to 5m.	Fell	3	10	C1
T9	Monterey Cypress Cupressus macrocarpa	18	700	8.4	3	3	3	3	4	M	Bare soil	Moderate	Significant wound on eastern aspect, remaining stems likely to fail.	Fell	3	5	C1
T10	Oak Quercus robur	15	380	4.56	4	4	4	4	2	EM	Bare soil	High	Good condition. Close proximity to existing dwelling.	None	0	20	B1

G2	Monterey Cypress Cupressus macrocarpa	15	450	5.4	3	3	3	3	2	M	Bare soil	Moderate	Multi stem. Rooted on boundary. Close planting centres for wide spreading tree.	Fell	0	15	C1
----	---	----	-----	-----	---	---	---	---	---	---	-----------	----------	---	------	---	----	----

Explanatory Notes

Referencing

Each tree is given a unique reference number and plotted on the attached plans for clear identity. Individual trees are referenced as T1, T2 etc., Groups G1, G2 etc. Hedgerows H1, H2 etc. and Woodlands W1, W2 etc.

Species

All species are recorded using common names. Identification is made using experience and knowledge.

Tree dimensions

Tree height is measured and recorded in meters and taken from the base of the stem to the tip of the crown. Height is estimated using experience and knowledge.

Diameter at Breast Height (DBH) is measured at approximately 1.5m from the ground up the stem and is measured and recorded in millimeters. DBH is measured accurately using a diameter tape.

Crown spread is measured in meters from the stem to the extent of the crown spread to each compass point (NESW). Crown spread is estimated using experience and knowledge.

Crown clearance is the height from ground level to the lowest branch and is measured in meters. Crown clearance is estimated using experience and knowledge.

Age class

Age class falls in to 4 categories:

Y	Young
EM	Early Mature
M	Mature
OM	Over Mature

Observations

The biological condition of the tree is assessed and noted. Notable defects are recorded; fruiting bodies, cankers, die back, exudates, etc. are recorded.

The mechanics of the tree are assessed and noted. Notable defects are recorded; buckling, rib formation, stresses, bulges, soil cracks, large cavities or wounds, tight branch junctions, etc. are recorded.

Preliminary management recommendations

Tree management is recommended following the assessment of physiological and structural condition. Recommended works may include, no work required, crown reduction, crown lift, fell, crown thin, monitor etc.

Estimated remaining contribution in years

An estimate of remaining life expectancy recorded in years. Estimated remaining contribution is made using experience considering the structural and physiological condition of the tree, nuisance, previous management, etc.

Category grading and colour coding on plan

A (Green square) high quality and value

B (Blue square) moderate quality and value

C (Grey square) low quality and value

U (Red Square) those that cannot be retained as living trees

Sub categories

- 1 arboricultural values
- 2 landscape values
- 3 cultural values, including conservation

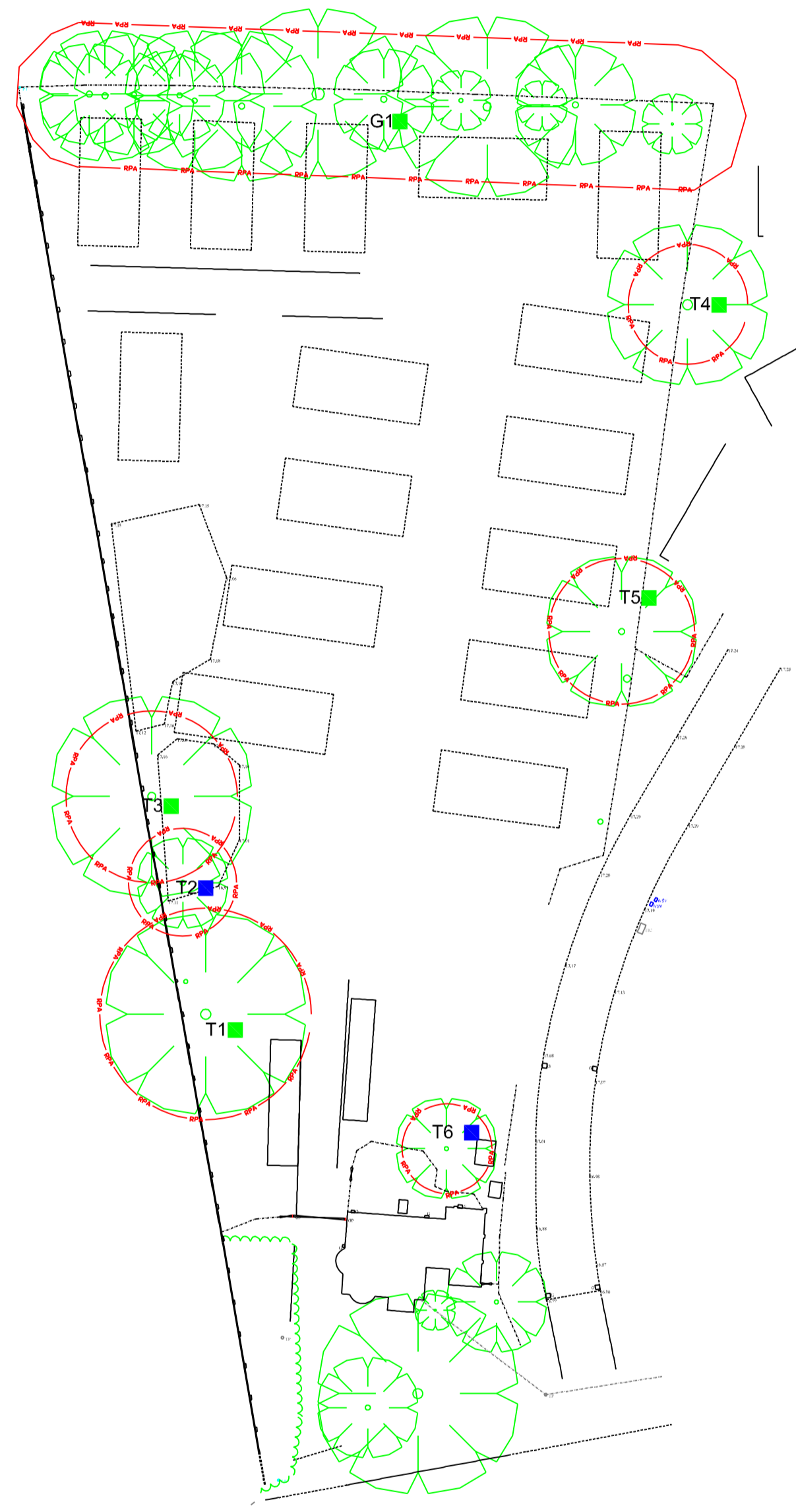
Works priority

- 1 Works required immediately to make the tree safe
- 2 Works required within 60 days
- 3 Works required as part of routine operations
- 0 no works required

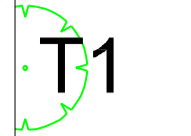
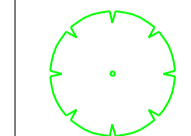
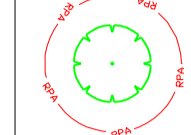
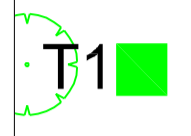
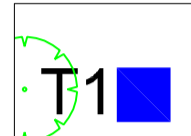
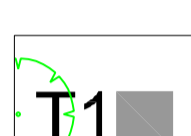
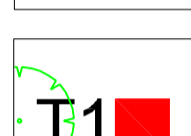


Appendix 2 Tree survey and constraints plan



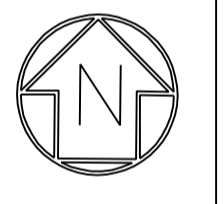


Legend:

- Tree reference 
- Tree and crown spread 
- Root protection area 
- BS 5837 Retention Category A 
- BS 5837 Retention Category B 
- BS 5837 Retention Category C 
- BS 5837 Retention Category U 

Notes:

This drawing was produced in colour; a monochrome copy should not be relied upon.



Project: 524 St Johns Road, Clacton On Sea

Drawing Title: Tree Survey and Constraints Plan

TPS
Arboricultural Consultancy

25 Frietuna Road
Frinton On Sea
Essex
CO130QP

Date: 2nd September 2023

Scale: 1:500 @ A1

Drawing Number: TPSQU0117 TSCP

Appendix 3 Barrier construction profile

Permission to reproduce extracts from BS 5837:2012 is granted by the British Standards Institution (BSI). No other use of this material is permitted. The complete British Standard can be purchased from the BSI online shop: <http://shop.bsigroup.com/en/ProductDetail/?pid=00000000030213642>

Diagram 1 Weldmesh panels with block supports pegged to brace light impact

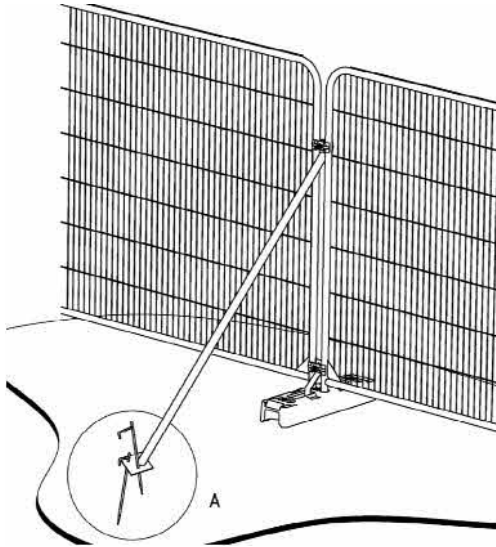


Diagram 2 Weldmesh panels with block supports and further block supports to brace intermediate impacts

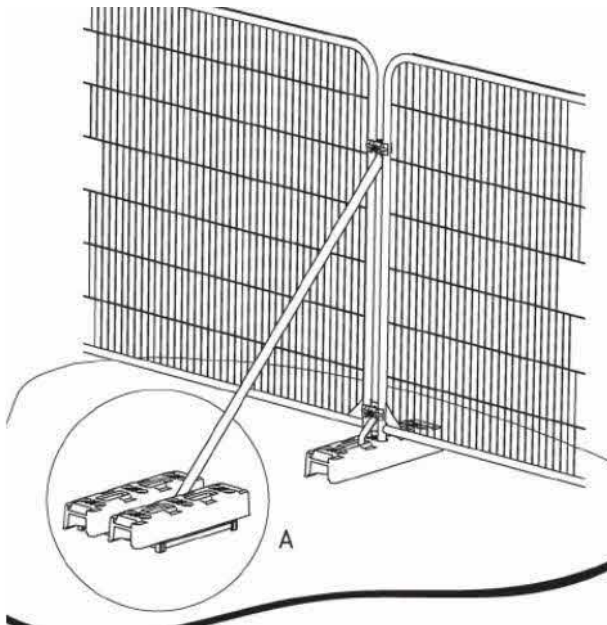
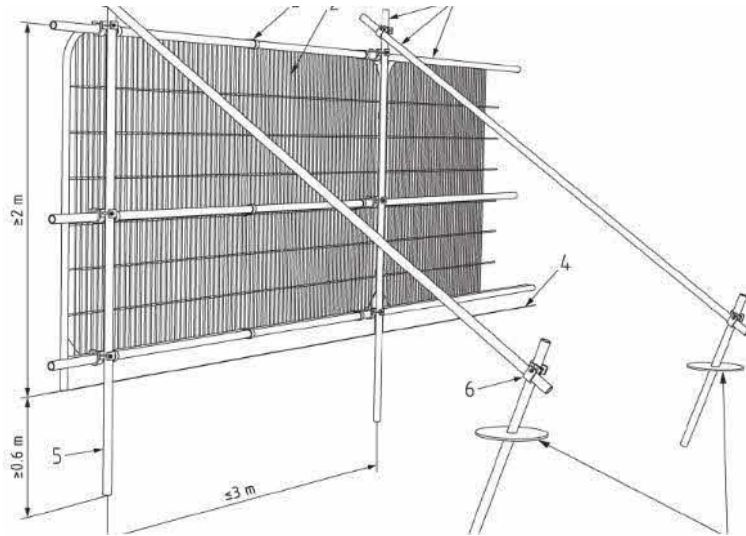


Diagram 3 Weldmesh panels with scaffold frame posts driven into the ground to brace heavy impacts



Construction Exclusion Zone

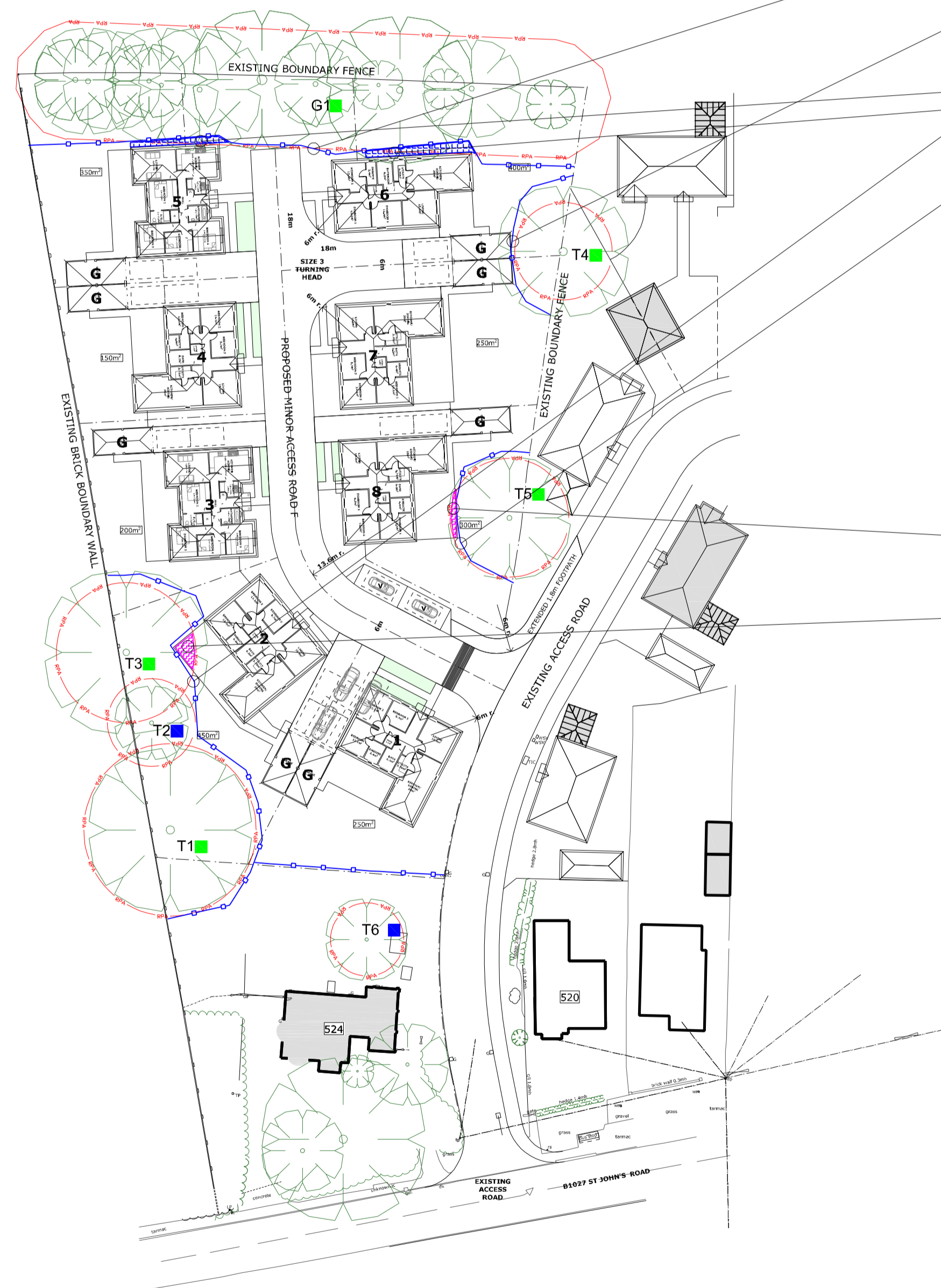
These trees have been retained and protected as part of the planning permission for this site.

Any breach of the protection will result in enforcement action from the Local Authority.



Appendix 5 Tree protection plan





Key Arboricultural Work Phasing

All methods statements below and annotations to the plan are to be read in conjunction with the arboricultural impact assessment RFP (TPS0117).

The methodology used to assess the tree preservation is based on the principles of the Arboricultural Act 1981 and the Arboricultural Best Practice Guidelines (ABPG) 2012. The methodology used to assess the tree preservation is based on the principles of the Arboricultural Act 1981 and the Arboricultural Best Practice Guidelines (ABPG) 2012. The methodology used to assess the tree preservation is based on the principles of the Arboricultural Act 1981 and the Arboricultural Best Practice Guidelines (ABPG) 2012.

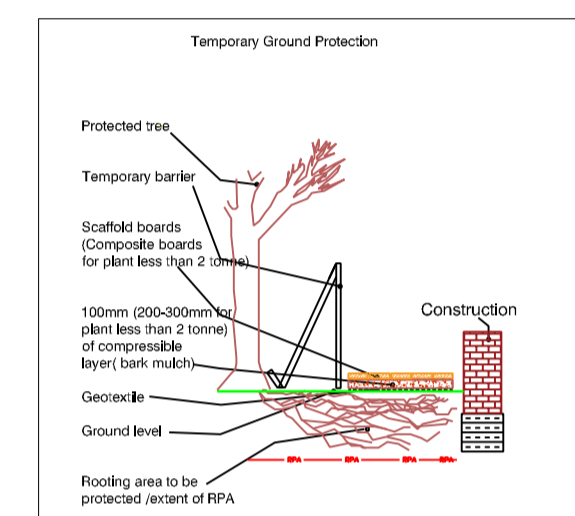
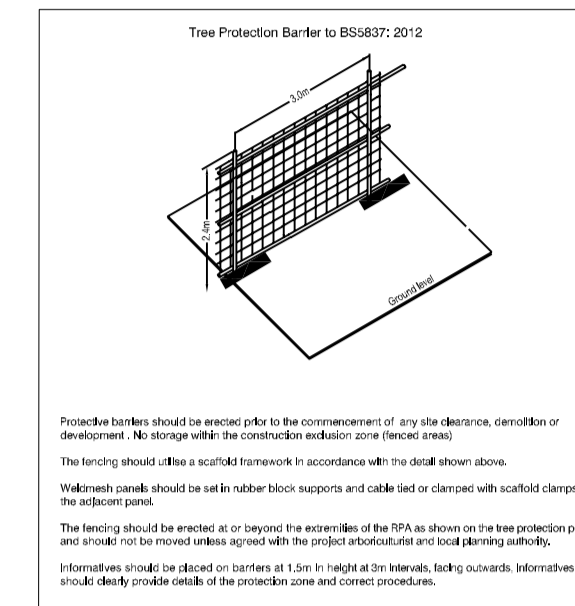
Phase 1 - Tree works: See section 7 of accompanying impact assessment, to include treatment within the RPA.

Phase 2 - Root protection: Root protection shall be provided in accordance with the ABPG 2012. The methodology used to assess the tree preservation is based on the principles of the Arboricultural Act 1981 and the Arboricultural Best Practice Guidelines (ABPG) 2012.

Phase 3 - Intensive build phase:

Phase 4 - Soft and hard landscaping, then barrier protection:

Phase 5 - Removal of barrier protection.



Construction Exclusion Zone

No access is permitted

The trees beyond this protected zone are subject to planning conditions and statutory protection

Any breach of this zone will result in enforcement action by the Local Authority

- Sequential method statement for hand excavation and root pruning**
1. Root surfaces: Using a hand held excavator breaker and excavation from outside of the RPA, working inwards from the RPA. All work to be carried out within the RPA.
 2. Soft surfaces: Identifying soft soil or existing ground surface. Remove soft soil with a hand held excavator breaker and excavation from outside of the RPA. All work to be carried out within the RPA.
 3. Where access is possible and will not damage from movement, path to site of work.
 4. Any exposed roots shall immediately be wrapped or covered in using burlap to prevent desiccation and to protect from soil temperature change.
 5. If required, work shall be carried out in a controlled manner. A hand held excavator breaker shall be used to break up the soil in the area of the RPA.
 6. Hand excavation shall be carried out in a controlled manner. A hand held excavator breaker shall be used to break up the soil in the area of the RPA.
 7. After the excavation is complete, the area shall be protected from the protection covering and covered with a 100mm subsoil base (2 tonnes of compressible layers laid in situ) or other material as required. The barrier to be removed as soon as possible.
 8. Monitor tree health during and 2 growth seasons. Check leaf colour, soil levels and moisture growth.

Soft surfaces within RPA

No further excavation of these soft surfaces shall be carried out in the RPA. The methodology used to assess the tree preservation is based on the principles of the Arboricultural Act 1981 and the Arboricultural Best Practice Guidelines (ABPG) 2012.

- Cultivation is to be completed using manual hand tools only.
- Working soil to be used, where additional soil is required it should be transported from a well drained and suitable 7% moisture and structure for the site and planting 'existing proof' affords.
- Damage to roots is to be avoided; large structural roots may be seen at or near the surface and where they radiate from the stem of the tree from large buttresses. After around 4m solid evidence structural roots need to have a minimum 10cm diameter.
- Changes to ground levels are to be avoided; any lowering or raising of levels should be carried out using a suitable method statement that provides continuous soil conditions of gas exchange and water penetration.
- Working is to be done with care and to avoid covering tree roots; generally, piling should be completed outside the RPA.

Legend:

- Tree reference: T1
- Tree and crown spread: [Diagram]
- Root protection area: [Diagram]
- Temporary barrier protection: [Diagram]
- Hand excavation: [Diagram]
- Temporary ground protection: [Diagram]

Notes:

This drawing was produced in colour, a monochrome copy should not be relied upon.

Project: 524 St Johns Road, Clacton On Sea

Drawing Title: Tree Protection Plan

TPS
Arboricultural Consultancy

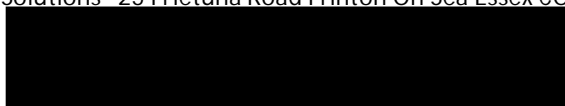
25 Frietuna Road
Frinton On Sea
Essex
CO130QP

Date:	12th March 2024	
Scale:	1:500 @ A1	
Drawing Number:	TPSQU0117 TPP	Rev B

TPS

Appendix 6

Example of arboricultural monitoring form



Tree Planning Solutions

Contract Monitoring Form

Details

Date	
Time	
Surveyor	
Client	
Site	
Ref	

Trees

Tree ref	Condition	Recommendations

Barrier

Tree ref	Barrier type	RPA radial distance as per planning permission	Actual barrier radial distance at site	Condition of barrier	Condition of signage	Comments

Tree Planning Solutions

Ground Protection

Tree ref	Type of ground protection installed	RPA distance as per planning permission	Actual distance of ground protection at site	Condition of ground protection	Comments

Additional Comments