

TRUSTMARK SERVICES

ARBOCULTURAL METHOD STATEMENT

An Arbocultural Method Statement in accordance with British Standard
5837 : 2012, addressing the specific issues of tree retention in the
context of a proposed development Catsley Cottage, Kinlet, Bewdley
DY12 3AP:

AMS – March 2021

Catsley Cottage, Kinlet

From commencement of the above development, the following methodology shall be implemented in the manner and sequence described below, I have expanded on these points where necessary in the following text.

1. Pre-contract site meeting to disseminate information between all parties active on site
2. Pre-construction tree works, including access facilitation pruning and felling as identified.
3. Installation of all tree protection fences as per Appendix 3
4. Local authority informed and check requested.
5. Main construction phase including any ground works and installation of services as per approved plan
6. Completion and removal of construction equipment
7. Landscaping works outside protective fences using machinery where required
8. Approval to remove tree protection for final landscaping works.
9. Final landscaping works inside Root Protection Areas of trees to be carried out by hand

1. Pre-contract site meeting

To outline working methods in relation to trees prior to any construction activity on site, a site meeting of the following shall take place:

- (a) Client
- (b) Architect/Planning Consultant
- (c) Structural Engineer
- (d) Main Contractor
- (e) Arboriculturist
- (f) Site Agent

2. Arboricultural Works

1. All work will be carried out in accordance with BS 3998 Recommendations for Tree Work 2010 industry best practice and in line with any works already agreed with the Council. Schedule of works at Appendix 2 Table 2 to this report
2. The Tree Surgeon shall ideally be chosen from The Arboricultural Association's Approved Contractor list. Proof of experience and insurance provision will be required. All work shall be undertaken at the appropriate time and with the consent and approval of the Site Agent.
3. The statutory protection afforded by the Wildlife and Countryside Act and Countryside and Rights of Way will be adhered to. If further advice is required, particularly if bats are discovered during tree work, it will be obtained from Natural England or other competent persons and recommendations adhered to.

4. The stumps of any trees removed from within the Construction Exclusion Zone (CEZ) or the Root Protection Areas (RPA) of retained trees will be either; cut flush to ground level and left in situ or ground out using a stump grinder. They will not be winched out or excavated with a back hoe
5. All operations shall be carefully carried out to avoid damage to the trees being treated or neighbouring trees. No trees to be retained shall be used for anchorage or winching purposes.
6. As identified in the tree protection plan there should be no works required in a root protection Zone if any root networks are found in location to the construction "dig". however protection of trees may be needed with fencing to avoid accidental contact.

3. Main Construction Phase

1. Tree Protection Measures

3.1.1 No construction or groundworks shall be begun until the temporary protective fence has been erected to the satisfaction of the local planning authority. The fence shall be secure and able to withstand accidental contact with construction equipment. A suggested design for this is attached at Appendix 1. The fence will remain in situ until all construction works are finished on site. The purpose of this fence will be discussed within site induction courses so that all persons on site are aware of why it is important to retain its integrity during the construction phase.

1. There shall be no storage of construction materials, site parking, site accommodation or equipment in any area designated as a Root Protection Area (RPA)
2. No fires shall be lit within 15m of any tree
3. The Site Agent shall supervise deliveries by self-loading crane, with vehicles positioned in such a manner that retained trees and/or hedgerows are not at risk of damage.
4. Care shall be taken when planning site operations in proximity of retained trees to ensure that wide or tall loads, or plant with booms, jibs and counterweights, can operate without coming into contact with retained trees. Such contact can result in serious injury to them and might make their safe retention impossible.
5. Consequently, any transit or traverse of plant in proximity of trees shall be conducted under the supervision of a 'banksman', to ensure that adequate clearance from trees is at all times maintained. In some circumstances, it may be impossible to achieve this without pruning works known as 'access facilitation pruning'.
- 6.

2. Site storage, parking, welfare facilities etc.

- 2.1. The site will require provision for; site storage, contractor parking, welfare facilities, temporary services/ drainage, material drop off points etc.
- 2.2. None of the above provisions will be sited with the Root Protection Areas of retained trees without the input of the Project Arboriculturist and the consent of the Local Planning Authority.

4. Underground Services

1. Although every effort has been made to ensure the routing of services does not encroach into Root Protection Areas, if for whatever reason installation within Root Protection Areas is required the project Arboriculturist and local authority must be notified prior to any tree protection barrier removal and the following details adhered to.
2. Trenching for the installation of underground services severs any roots present and may change the local soil hydrology in a way that adversely affects the health of the trees. For this reason particular care will be taken in the routing and methods of installing underground services. Wherever possible, they will be kept together and arboriculturally sensitive methods of excavation used. At all times where services are to pass within the Root Protection Area, detailed plans showing the proposed routing will be drawn up in conjunction with an Arboriculturist. Such plans will also show the levels and access space needed for installing the services.
3. The preferable method for trenching within Root Protection Areas to avoid damage is via excavation using an 'air spade' or similar. This tool utilises compressed air to remove soil from around tree roots causing minimal damage. This approach will be utilised whenever possible.
4. Reference can be made to National Joint Utilities Group publication Volume 4 (NJUG Vol. 4) for guidance, but any approach must be approved by the Project Arboriculturist and brought to the attention of the Local Authority Tree Officer. Unless an emergency arises, there shall be no new excavation for the installation, renewal, or repair of underground services within any area designated as a Root Protection Area and Construction Exclusion Zone and enclosed by Temporary Protective Fencing (unless very low root volume is established beforehand).

5. Landscaping works inside Root Protection Areas

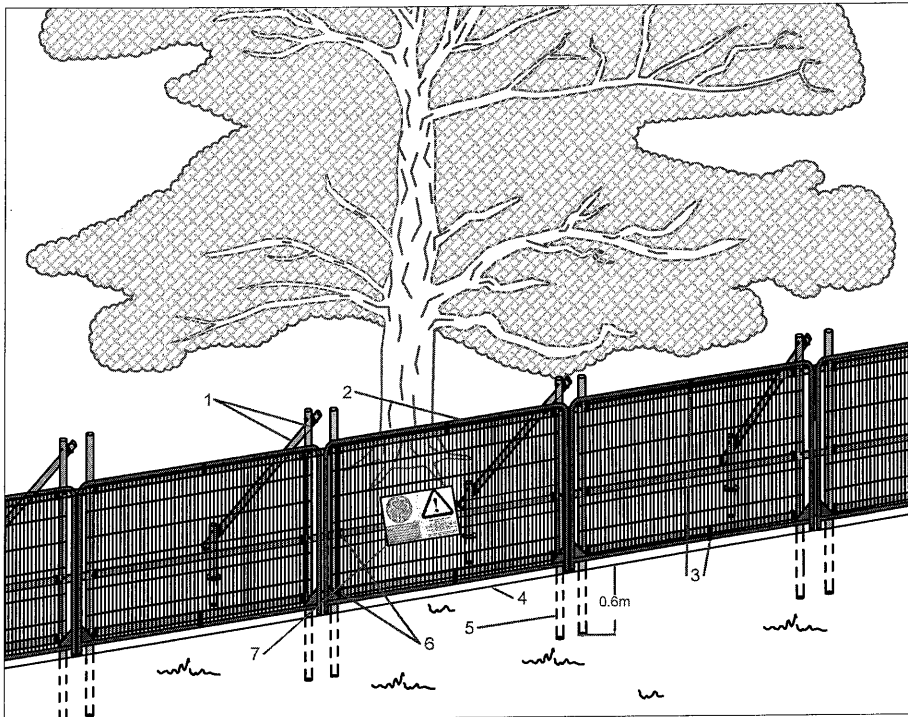
- 5.1 All landscaping work including levelling, cultivation and vegetation control shall be carried out by hand within the Root Protection Areas of the trees. No herbicides shall be used to control weed growth.
2. Cultivation depths shall be the minimum required to establish shrubs and trees to be planted inside the RPA's of the trees. No mechanical pit excavation shall be carried out.

6. No Dig Drive Construction

1. Arboricultural supervision of the initial phase is essential in order that no tree roots are accidentally damaged by excavations. The arboricultural supervision shall commence when the area described as no dig commences and ends when a suitable hard surface is in situ.
2. The final design for the no dig hard surface should be engineer designed and of a porous nature to allow gaseous exchange and water flow both laterally and vertically. Cellular confinement systems are available that meet the requirements of such a no dig system. Manufacturer's guidance on these products is available and should be used
3. Existing hard surfaces within the Root Protection Area (RPA) should be left intact unless there is an overriding engineering reason for their removal. If this is the case then the hard surfaces should be removed by hand. The underlying foundation layer should be left intact to protect any roots near the surface. Temporary ground surface protection shall be used when machinery is required to work within a protected area for

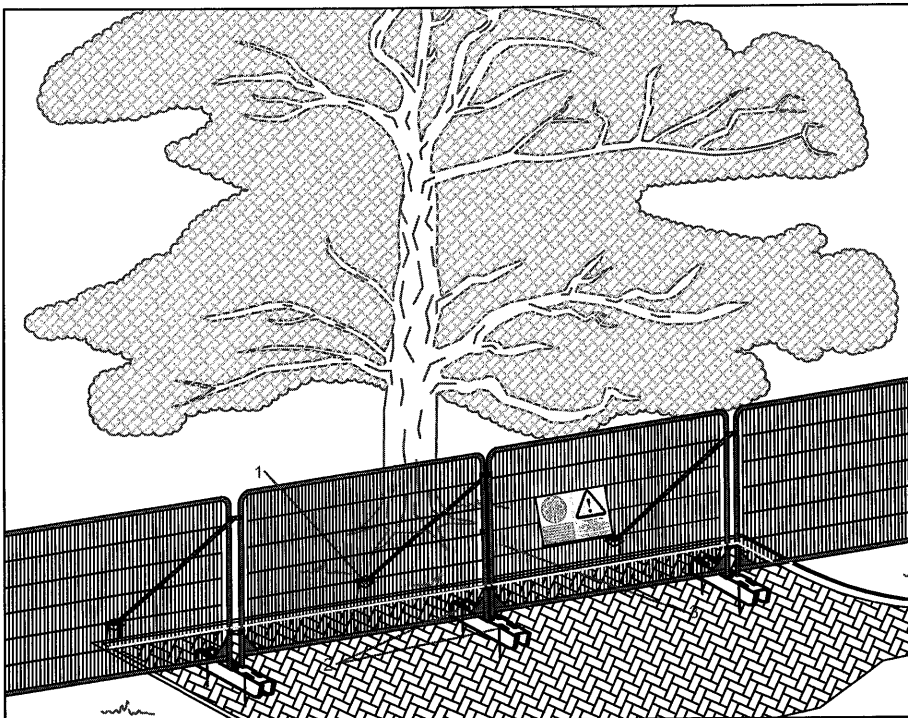
access purposes. This protection can be in the form of 8 x 4 boarding of a quality able to withstand the machinery that is to be used

4. In order for a no dig solution to be used for the creation of a hard surface within a Tree Protection Zone, it has to be constructed at a higher level than the existing surface
5. A protective fence shall be placed at the extremities of the no dig area prior to the start of the construction process. This fence shall be left in situ until the no dig hard surface is constructed to a condition whereby the fence can be moved back to the blue line as indicated on the Tree Protection Plan (TPP). The fence shall be constructed in such a way that removal or moving of the line is an onerous task and cannot be carried out casually. The final surface will be put in place once the project is nearing completion
6. The initial build surface of the soil should be cleared of vegetation and level. This should be carried out by hand. No machinery should be used within the designated RPA of the tree. No more than 20mm of top soil should be removed during this process. Any arising's to be wheel barrowed out of the RPA on boarded walkways
7. Any hollows to be filled with sharp sand barrowed in on running boards. It is important that at this stage no wheeled or tracked machinery is used to speed the task up. When the ground is level, a membrane should be laid over the soil so that the cellular infill does not migrate into the underlying soil
8. Support edges for the sides of the cellular system should be of a permeable nature to allow gaseous exchange to take place. The construction and laying of these supports shall be done by hand
9. The infill to the confinement system should be angular rather than rounded as this will help in binding the material together. The infill should be placed in the cells farthest away from the tree first and then worked inwards towards the tree stem. The filled cells may then be used as a platform at this point.
10. After filling the cellular system should be capped with a membrane and a porous final surface constructed. The final surface should be either of porous asphalt or unsealed block paviour construction. This list is not exhaustive and other final surfaces may be available.
11. The protective fence shall only be removed once the construction phase is complete.



Standard specification for protective barrier

1. Standard scaffold poles
2. Heavy gauge 2m tall galvanized tube and welded mesh infill panels
3. Panels secured to scaffold frame with wire ties
4. Ground level
5. Uprights driven into the ground until secure (min depth of 0.6m)
6. Standard scaffold clamps
7. Construction Exclusion Zone signs



Above ground stabilising systems

1. Stabiliser strut with base plate secured with ground pins
2. Feet blocks secured with ground pins
3. Construction Exclusion Zone signs

Protective Fencing to be positioned to the specified dimensions in accordance with Figure 3 Tree Retention Plan

NOTES

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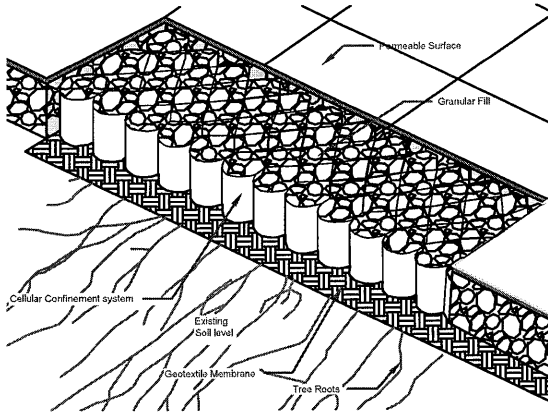
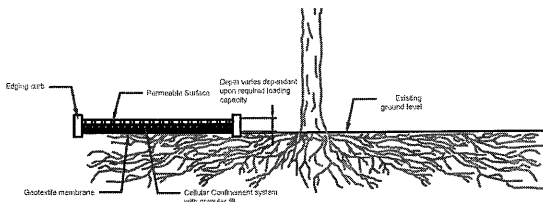
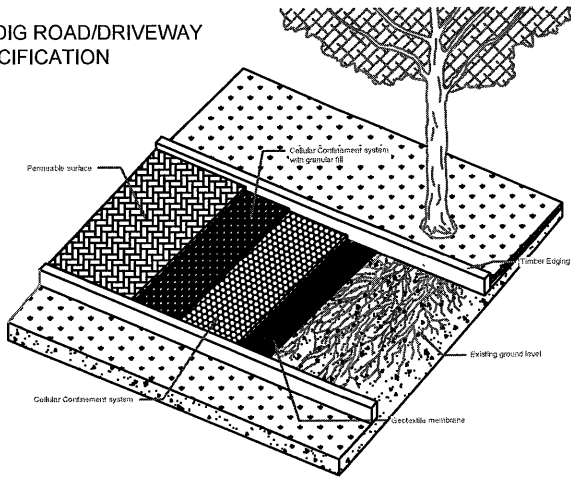
t: 01509 672772
 f: 01509 674565
 e: msil@fpcr.co.uk
 w: www.fpcr.co.uk

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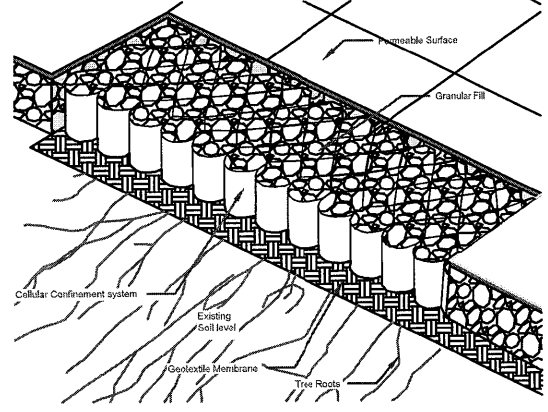
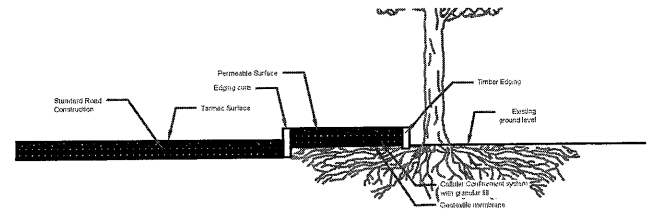
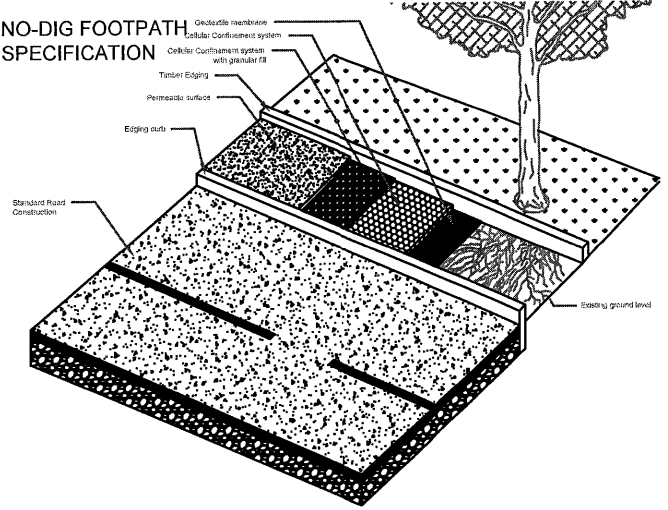
APPENDIX B PROTECTIVE FENCING SPECIFICATIONS

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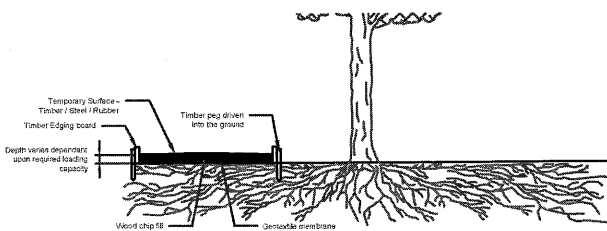
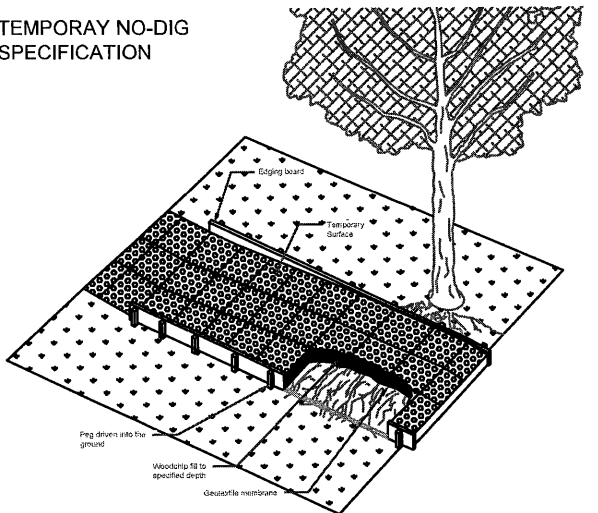
NO-DIG ROAD/DRIVEWAY SPECIFICATION



NO-DIG FOOTPATH SPECIFICATION



TEMPORARY NO-DIG SPECIFICATION



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t: 01509 672772
 f: 01509 674565
 e: mail@fpcr.co.uk
 w: www.fpcr.co.uk

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**APPENDIX D
 NO DIG TECHNIQUES**

CAD file: J:\7900\7989\ARB\Plans\Appendix D - No Dig Specification.dwg

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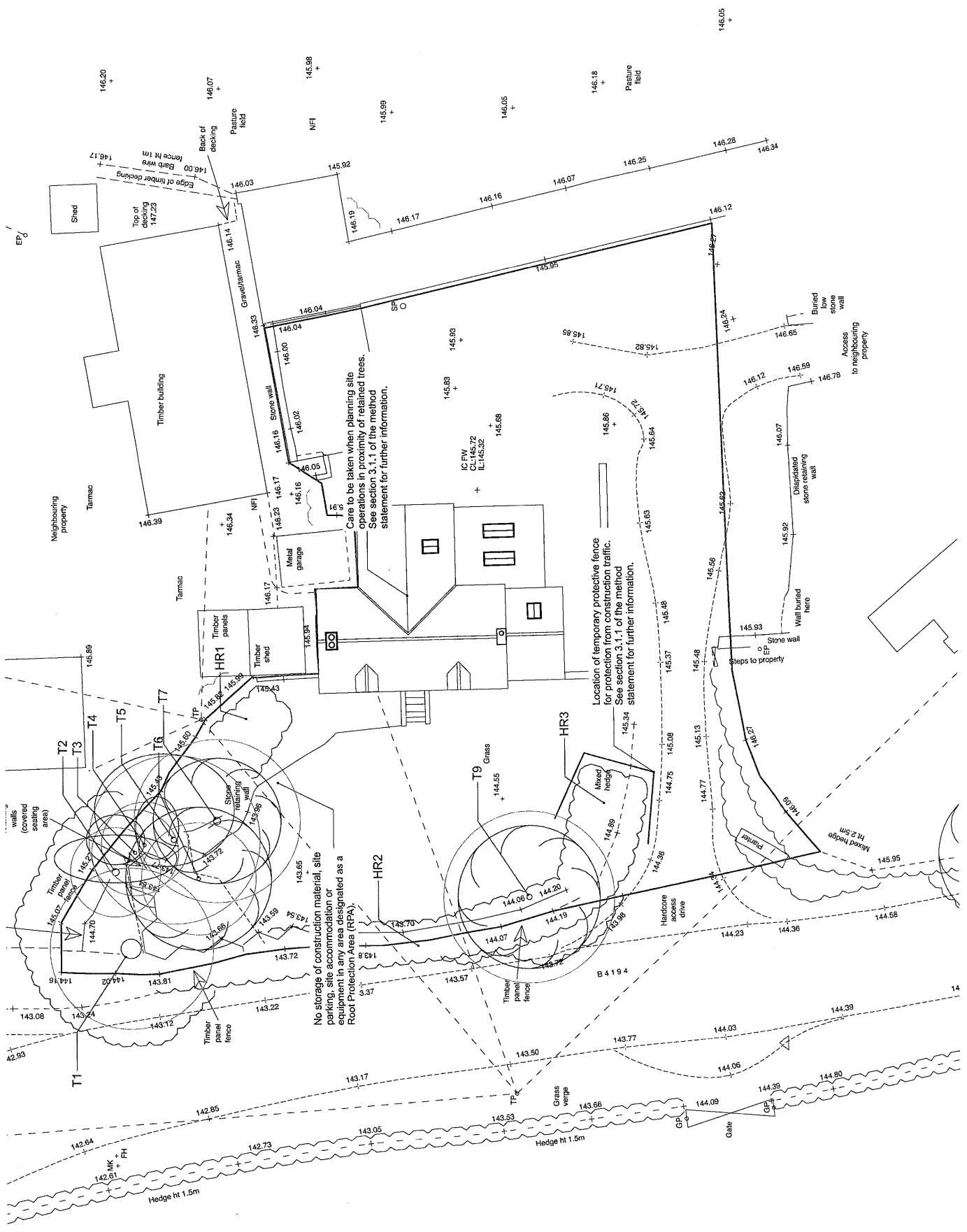
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NOTES

This drawing is submitted as the Architectural Record. The Client is to verify all dimensions and annotations and is responsible for any discrepancies. Annotations and dimensions are provided by BUNNEMAN SURVEYORS.

- Site boundary, Culinary College, NFI, Siteplan, 20/12/2017
- Please the outside extent of real protection area.
- Blue line indicates location of protective barrier fence.



Project	Cansley Cottage
Client	Planning
Date	14/08/2017
Scale	1:100
Sheet	1 of 1

CANSELY COTTAGE
KINH

Tree Protection Plan

Client: P1
Date: 14/08/2017
Scale: 1:100
Sheet: 1 of 1

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