



Tree Protection Scheme

in relation to approved change of site use from residential (C3)
to a cookery school with associated accommodation (C2),
including an extension to the existing detached garage building at



**Thorneyholme Hall, Dunsop Bridge,
Lancashire, BB7 3BB**

Prepared by:

Bowland 
Tree Consultancy Ltd

September 2020

**TREE PROTECTION SCHEME
THORNEYHOLME HALL, DUNSOP BRIDGE**

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Contact Details

Bowland Tree Consultancy Ltd
Unit 2
First Floor
11 Cannon Street
Preston
Lancashire
PR1 3NR

T: 01772 437150
E: info@bowlandtreeconsultancy.co.uk

**TREE PROTECTION SCHEME
THORNEYHOLME HALL, DUNSOP BRIDGE**

Control sheet

Project No.: BTC2068

Site: Thorneyholme Hall, Dunsop Bridge, Lancashire, BB7 3BB

Agent for Client: PWA Planning

Council: Ribble Valley Borough Council

Survey Date: 3 November 2016

Surveyed by: Joseph Lambert BSc(Hons) FdSc MArborA

Prepared by: Joseph Lambert BSc(Hons) FdSc MArborA

Checked by: Phill Harris MSc BSc(Hons) HND MArborA CEnv MICFor

Date of Issue: 8 September 2020

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DISCLAIMER

Survey Limitations: Unless otherwise stated all trees are surveyed from ground level using non-invasive techniques. The disclosure of hidden crown and stem defects, in particular where they may be above a reachable height or where trees are ivy clad or in areas of ground vegetation, cannot therefore be expected. All obvious defects, however, are reported. Detailed tree safety appraisals are only carried out under specific written instructions. Comments upon evident tree safety relate to the condition of said tree at the time of the survey only.

Unless otherwise stated all trees should be re-inspected annually in order to appraise their on-going mechanical integrity and physiological condition. It should, however, be recognised that tree condition is subject to change, for example due to the effects of disease, decay, high winds, development works, etc. Changes in land use or site conditions (e.g. development that increases access frequency) and the occurrence of severe weather incidents are also significant considerations with regards tree structural integrity and trees should therefore be re-assessed in the context of such changes and/or incidents and inspected at intervals relative to identified and varying site conditions and associated risks.

Where trees are located wholly or partially on neighbouring private third-party land then said land is not accessed and our inspection is therefore restricted to what can reasonably be seen from within the site. Stem diameters of trees located on such land are estimated. Any subsequent comments and judgments made in respect of such trees are based on these restrictions and are our preliminary opinion only. Recommendations for works to neighbouring third-party trees are only made where a potentially unacceptable risk to persons and/or property has been identified during our survey. Where significant structural defects of third-party trees are identified and associated management works are considered essential to negate any risk of harm and/or damage then we will first attempt to inform the site occupier of the issues and, if not possible, then inform the relevant Council. Where a more detailed assessment is considered necessary then appropriate recommendations are set out in the Tree Survey Schedule.

Where tree stem locations are not included on the plan(s) provided then they are plotted at the time of the survey using, where appropriate and/or practicable, a combination of measurement triangulation and GPS co-ordination. Where this is not possible then locations are estimated. Restrictions in these respects are detailed in the report.

The tree survey and any report information provided is intended as a guide to identify key tree related constraints to site development only. As such, the potential influence of trees upon existing or proposed buildings or other structures resulting from the effects of their roots abstracting water from shrinkable load-bearing soils is not considered herein. The tree survey information in its current form should not therefore be considered sufficient to determine appropriate foundation depths for new buildings. Accordingly, an updated survey, with reference to the current NHBC Standards Chapter 4.2 - Building Near Trees, must therefore be prepared for the specific purpose of informing suitable foundation depths subsequent to planning approval being granted. The advice of a structural engineer must also be sought with regard to appropriate foundation depths for new buildings.

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Statutory Tree Protection: It is the client's responsibility to check for the presence of any statutory tree protection measures, such as the site's location within a Conservation Area and/or the presence of any Tree Preservation Orders, directly with the applicable Council's planning department prior to scheduling or carrying out any tree works. In turn, it is also the client's responsibility to check for the need for a felling licence with the Forestry Commission prior to scheduling or carrying out any tree works. Bowland Tree Consultancy Ltd cannot be held responsible for any decisions made by the client to prune or remove trees where any such statutory protection exists.

TREE SURVEY SCHEDULE FOR ARBORICULTURAL IMPACT AND PROTECTION APPRAISAL	
Site:	Thorneyholme Hall, Dunsop Bridge, Lancashire, BB7 3BB
Agent for Client:	PWA Planning

Surveyor:	Jennie Keighley MSc MArborA
Survey Date:	3 November 2016
Job Ref:	BTC1208

No.	Species	Height	Stem Diam.	Branch Spread	Branch & Canopy Clearances	Life Stage	PC	General Observations and Comments	Management Recommendations	ERC	Cat. Grade	RPA (m ²)	RPA Radius (m)
T1	Wellingtonia	30	1580	N 8 E 8 S 6 W 6	14-W 10	M	G	<ul style="list-style-type: none"> Bifurcates into two codominant leaders at a height of 4m. Crown slightly biased north and east. Strip of slight black bark staining with sappy exudate on western side from base to a height of 2.5m. 	<ul style="list-style-type: none"> Retain tree in context of approved development. Construct garage extension, where within Root Protection Area (RPA), using special pile and beam foundation to minimise tree root damage potential, in accordance with s7.5 of BS5837: 2012 – see AMS. Protect remainder of RPA throughout development using combination of Temporary Protective Fencing and Temporary Ground Protection (specification appended) to form a Construction Exclusion Zone (CEZ). 	10+	A1/3	707	15
T2	Holly	11	1x420 1x280 1x260 (ms)	N 5 E 5 S 3 W 3	1.5-S 2	PM	P	<ul style="list-style-type: none"> Multi-stemmed from base. Western leader dead. Two live leaders bifurcate at base with substantial bark inclusion. Light epicormic growth to lower stem and some branches. Partially occluded wound on northern side of central leader at a height of 2m with decaying wood visible beneath. Tree in a terminal state of decline. 	<ul style="list-style-type: none"> Remove tree due to short projected life expectancy. 	<10	U	146	6.81
T3	Wellingtonia	27	1090	N 4.5 E 4.5 S 5 W 4.5	12-NW 8	M	G	<ul style="list-style-type: none"> No visible defects. 	<ul style="list-style-type: none"> Retain tree in context of approved development. Protect RPA throughout development using Temporary Protective Fencing to form a CEZ. 	40+	A1	537	13.08
T4	Beech	18	680	N 12 E 9 S 7 W 10	3-W 3	M	G	<ul style="list-style-type: none"> Flared buttress root to west. Four primary leaders from a height of approximately 3m. Crown suppressed south due to presence of neighbouring tree. 	<ul style="list-style-type: none"> Retain tree in context of approved development. Protect RPA throughout development using Temporary Protective Fencing to form a CEZ. 	40+	A1/2	209	8.16

Headings and Abbreviations:

No. Allocated sequential reference number - Tree ('T'), Group ('G'), Woodland ('W') or Hedge ('H') reference number - refer to plan and to numbered tags where applicable

Species: Common name

Height: In metres, to nearest half metre – where possible approximately 80% are measured using an electronic clinometer and the remainder estimated against the measured trees. In the case of Groups and Woodlands the measurement listed is that of the highest tree

Stem Diam.: Stem diameter in millimetres, to nearest 10mm - measured and calculated as per Annex C of BS5837:2012. MS = multi-stemmed, TS = twin-stemmed

Branch Spread: Crown radius measured (or estimated where considered appropriate) from the four cardinal points (north, east, south and west) to give an accurate visual representation of the crown

Branch & Canopy Clearances: Existing height above ground level, in metres, of first significant branch and direction of growth (e.g. 2.5-N) and of canopy at lowest point – to inform on crown to height ratio, potential for shading, etc.

Life Stage: Estimated age class - Y = young, SM = semi-mature, EM = early-mature, M = mature, PM = post-mature

PC: Physiological Condition - a measure of the tree(s)' overall vitality, i.e. D = Dead, MD = Moribund, P = Poor, M = Moderate, G = Good

General Observations and Comments: Comments relating to the tree(s)' overall condition and any other pertinent factors including structural defects, current and potential direct structural damage, physiological decline, poor form, etc.

Management Recommendations: Either Preliminary or In Consideration of the Proposal - In the case of Arboricultural Constraints Surveys the recommended management works only take existing site and tree circumstances and conditions into account and not approved developments. Arboricultural Impact Assessment and Method Statement related Surveys take the approved development into consideration with recommendations made accordingly. More than one option may be given if considered appropriate

ERC: Estimated Remaining Contribution - in years as per BS5837:2012 (i.e. <10, 10+, 20+, 40+)

Cat. Grade: Category Grading - tree retention value listed as U, A, B or C - in accordance with BS5837:2012 Table 1

RPA m²: Root Protection Area in m² - calculated area around the tree that must be appropriately protected throughout the development process in order avoid root damage

RPA Radius (m): Root Protection Area Radius - in metres measured from the centre of the stem to the line of tree protection

(Estimated Dimensions): Where trees are located off-site, or are inaccessible for any other reason, and accurate measurements or other information cannot be taken then the information provided is estimated and is duly suffixed with a "#" symbol

TREE SURVEY SCHEDULE FOR ARBORICULTURAL IMPACT AND PROTECTION APPRAISAL	
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Agent for Client:	PWA Planning

Surveyor:	Jennie Keighley <small>MSc MArborA</small>
Survey Date:	3 November 2016
Job Ref:	BTC1208

No.	Species	Height	Stem Diam.	Branch Spread	Branch & Canopy Clearances	Life Stage	PC	General Observations and Comments	Management Recommendations	ERC	Cat. Grade	RPA (m ²)	RPA Radius (m)
T5	Sycamore	20	740	N E S W	7 3 3 7	4-SE 5	M M	<ul style="list-style-type: none"> ▪ 1.5m x 100mm x 300mm stem cavity from south-west stem base. ▪ Distometer reading indicates cavity extends at least 600mm further up stem. ▪ 300mm x 200mm partially occluded pruning wound with cavity to a depth of approximately 200mm at a height of 0.5m on north side of stem. ▪ Trifurcates at a height of 4m with tight forks. ▪ Primary branches within 0.5m of uninsulated electricity cables. ▪ Crown biased west due to past pruning away from electricity cables. ▪ Crown within striking distance of approximately 750 litre gas storage tank and outbuilding. 	<ul style="list-style-type: none"> ▪ Remove tree due to high risk of failure and subsequent unacceptable risk of damage to uninsulated electrical cables, gas storage tank, and outbuilding. 	<10	U	248	8.88
T6	Scots Pine	25	390	N E S W	3 4 1 2	19-N 19	M M	<ul style="list-style-type: none"> ▪ 3m x 300mm wound to south side of stem from base. ▪ Inward decay evident along length of wound. ▪ Crown within striking distance of uninsulated electricity cables, approximately 750 litre gas storage tank and outbuilding. 	<ul style="list-style-type: none"> ▪ Remove tree due to high risk of failure and subsequent unacceptable risk of damage to uninsulated electrical cables, gas storage tank, and outbuilding. 	<10	U	69	4.68
G1	2no. Weeping Ash	≤ 16	≤ 560	N E S W	≤ 4 ≤ 2.5 ≤ 5 ≤ 5	6-S ≥ 0	M P	<ul style="list-style-type: none"> ▪ Easternmost tree: <ul style="list-style-type: none"> ▪ 300mm diameter primary branch has failed in past, leaving 1m+ long tear out wound at a height of around 5m. ▪ Large swelling on east side of stem at a height of 3m around a fully occluded pruning wound. ▪ Sounding with a nylon hammer indicates some moderate decay within area of swelling. ▪ Light epicormic growth arising from swelling wound. ▪ Crown belongs to only one remaining primary branch. ▪ Westernmost tree: <ul style="list-style-type: none"> ▪ Larger primary branch lost at a height of 6m with a tear out wound. ▪ Smaller primary branch removed at a height of 4m. ▪ Remaining crown purely composed of epicormic growth emerging from wounds. 	<ul style="list-style-type: none"> ▪ Remove tree due to short projected life expectancy. 	<10	U	≤ 142	≤ 6.72

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Surveyor:	Jennie Keighley <small>MSc MArborA</small>
Survey Date:	3 November 2016
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No.	Species	Height	Stem Diam.	Branch Spread	Branch & Canopy Clearances	Life Stage	PC	General Observations and Comments	Management Recommendations	ERC	Cat. Grade	RPA (m ²)	RPA Radius (m)
G2	7no. Yew, 2no. Holly	≤ 16	≤ 470	N ≤ 5 E ≤ 5 S ≤ 5 W ≤ 5	4-N ≥ 0	EM-M	M-G	<ul style="list-style-type: none"> Closely to widely spaced group. Most twin-stemmed from base. Several trees have had leaders and branches removed in the past. Largest Yew has slight stem lean west. 	<ul style="list-style-type: none"> Retain tree in context of approved development. Protect RPAs throughout development using Temporary Protective Fencing to form a CEZ. 	20+	B2	≤ 100	≤ 5.64
G3	approx. 15no. Western Red Cedar, Leyland Cypress, Yew, Ornamental Cypress, Holly	≤ 16	≤ 1x430 1x330 (ts)	N ≤ 4 E ≤ 4 S ≤ 5 W ≤ 4	1-S ≥ 1	EM	D-G	<ul style="list-style-type: none"> Closely to loosely spaced group. One Western Red Cedar has had a rope tied around its stem at a height of approximately 4m to 5m, which is now fully embedded within the stem, and the tree has died as a result. 	<ul style="list-style-type: none"> Retain tree in context of approved development. Protect RPAs throughout development using Temporary Protective Fencing to form a CEZ. 	20+	B2	≤ 133	≤ 6.5
G4	2no. Beech, 2no. Corsican Pine, 1no. Sycamore, 1no. Oak	≤ 27	≤ 800	N ≤ 7 E ≤ 7 S ≤ 9 W ≤ 11	5-E ≥ 3	M	M	<ul style="list-style-type: none"> Closely spaced group. Crowns suppressed east. 11kv uninsulated electrical cables pass within 2m of crown of Beech to south of group. 	<ul style="list-style-type: none"> Retain tree in context of approved development. Removal of existing hard surface within RPA to be limited to depth of existing wearing course and carried out in accordance with BS5837: 2012 - see AMS. Protect RPAs throughout development using Temporary Protective Fencing to form a CEZ. 	20+	B2	≤ 290	≤ 9.6
G5	6no. Apple	≤ 4	≤ 75	N ≤ 1 E ≤ 1 S ≤ 1 W ≤ 1	0.5-E ≥ 1	Y	M	<ul style="list-style-type: none"> Closely spaced group of planted as a double row. 	<ul style="list-style-type: none"> Retain tree in context of approved development. Protect RPAs throughout development using Temporary Protective Fencing to form a CEZ. 	10+	C2	≤ 3	≤ 0.9
G6	3no. Common Yew, 1no. Scots Pine	≤ 13	≤ 7x365 (ms)#	N ≤ 9 E ≤ 6 S ≤ 9 W ≤ 7	1-N ≥ 2	M	G	<ul style="list-style-type: none"> Closely spaced linear group. All have multiple primary leaders from a height of 1m to 2m. 	<ul style="list-style-type: none"> Retain tree in context of approved development. Protect RPAs throughout development using Temporary Protective Fencing to form a CEZ. 	40+	A2	≤ 422	≤ 11.59

BS5837:2012 Table 1 – Cascade Chart for Tree Quality Assessment

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
Trees unsuitable for retention (see Note)				
<p>Category U</p> <p>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</p>	<ul style="list-style-type: none"> ▪ Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) ▪ Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline ▪ Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality <p><i>Note: Category U trees can have existing or potential conservation value which it might be desirable to preserve; see BS5837:2012 paragraph 4.5.7.</i></p>			Red
1. Mainly arboricultural qualities		2. Mainly landscape qualities	3. Mainly cultural values, including conservation	
Trees to be considered for retention				
<p>Category A</p> <p>Trees of high quality with an estimated remaining life expectancy of at least 40 years</p>	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	Green
<p>Category B</p> <p>Those of moderate quality and value: those in such a condition as to make a significant contribution. A minimum of 20 years is suggested.</p>	Trees that might be included in the high category, but are downgraded because of impaired condition. Examples include the presence of remediable defects including unsympathetic past management and minor storm damage	Trees present in numbers, usually as groups or woodlands, so they form distinct landscape features which attract a higher collective rating than they might as individuals. But which are not, individually, essential components of formal or semi-formal arboricultural features. For example, trees of moderate quality within an avenue that includes better, A category specimens. Or trees which are internal to the site, therefore individually having little visual impact on the wider locality	Trees with clearly identifiable conservation or other cultural benefits	Blue
<p>Category C</p> <p>Those trees of low quality and value: currently in adequate condition to remain until new planting could be established - a minimum of 10 years is suggested - or young trees with a stem diameter below 150 mm</p>	Trees not qualifying in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater landscape value, and/or trees offering low or only temporary screening benefit	Trees with very limited conservation or other cultural benefits	Grey
	<p>Note – Whilst C category trees will usually not be retained where they would impose a significant constraint on development, young trees with a stem diameter of less than 150mm should be considered for relocation</p>			

ARBORICULTURAL METHOD STATEMENT

Approved Development:	Change of use of site from residential use (C3) to a cookery school with associated accommodation (C2)
Site:	Thorneyholme Hall, Dunsop Bridge, Lancashire, BB7 3BB
Planning App. No.:	3/2017/0408
Pertinent Condition No.:	4

Prepared by:	Joseph Lambert <small>BSc(Hons) FdSc MArborA</small>
Report Date:	7 September 2020
Job Ref:	BTC2068
Agent:	PWA Planning

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Scope of Arboricultural Method Statement

- This Arboricultural Method Statement (AMS) relates specifically to the approved construction works at the above existing site, as detailed on the Tree Protection Plan (TPP) reference BTC2068 - TTP.
- The AMS and TPP should be read in conjunction with the appended Temporary Protective Fencing Specification.
- The purpose of the AMS is to consider the potential effects of the development work operations on the retained trees, and sets out how any identified adverse impacts are, as far as is practicable, to be avoided.
- From commencement of the development, and throughout the site works until completion, the methodology shall be implemented in the sequence and manner detailed in the Sequence of Works.
- As part of the tendering process, the client/client's agent shall provide the building contractor(s) with the AMS, the TPP, and the Temporary Protective Fencing Specification.
- In turn, the appointed building contractor shall be required to review the documents in detail and shall take the requirements of the AMS into consideration when pricing for the works.
- It shall be the contractor's responsibility to ensure that the works are carried out in strict accordance with the obligations and responsibilities of the AMS and, in turn, they will be accountable for any breaches of the obligations and responsibilities.
- Directly following the appointment of a building contractor, the specifics of the AMS and TPP shall be reviewed by the contractor and the Project Arboriculturist. In turn, the AMS and TPP shall be updated, by the Arboriculturist, in accordance with any changes in the development design that may have occurred subsequent to this AMS and TPP being issued, or any issues that may have arisen as a result of the review.
- As soon as is practicable the amended documents shall then be issued to the LPA for review – NB: it shall be the client's/client's agent's responsibility to arrange this review with the Project Arboriculturist immediately following the granting of planning permission.

Site Inspections & Reporting by Project Arboriculturist

- Prior to the commencement of the development, all personnel who might be charged with overseeing development related works shall be provided with the contact details of the Project Arboriculturist.
- In turn, it is the responsibility of the site manager to report any tree related issues, including deviations from the AMS, directly to the Project Arboriculturist, who will then visit the site and make recommendations to the site manager on how best to rectify the situation.
- The Project Arboriculturist shall be engaged to carry out site inspections for the duration of the works, at intervals agreed with the Local Planning Authority (LPA) (NB: no more than 31 days shall elapse between site inspections), in order to ensure compliance with the AMS and any planning conditions pertaining to tree issues.
- Subsequent to each site inspection the Project Arboriculturist shall complete a monitoring report detailing any problems encountered and breaches of the agreed working methods or tree related planning conditions, and any measures required to rectify such problems or breaches.
- The report shall be forwarded to the LPA's Tree Officer, the site manager, and the client or client's agent, by email. In the event of the client terminating the contract with the Project Arboriculturist, the Project Arboriculturist shall notify the LPA before the end of the next working day following termination.
- The Project Arboriculturist shall report any tree related issues and/or breaches of the AMS that they consider to be significant in relation to retained tree health and/or structural stability directly to the Tree Officer.
- In the event that the Project Arboriculturist's site monitoring contract is terminated, then the client/client's representative shall issue a written notice to all relevant parties to this effect, inclusive of the LPA Tree Officer.

LPA Tree Officer

- The LPA's Tree Officer shall have free access to the site (subject to prior arrangement with site manager for site access), and, should they visit the site and note any tree related issues, they will then report any problems directly to the site manager and, in turn, the Project Arboriculturist, who will then visit the site and make recommendations to the site manager on how best to rectify the situation.

Site Personnel

- All personnel engaged in the execution of the development works shall be provided with a copy of the AMS and the TPP.
- In turn, all such personnel shall be instructed in the protection of trees, as set out in this AMS.

Sequence of Works & Revisions

- The development works shall be carried out in strict accordance with the 'Sequence of Works' detailed in the table overleaf.
- Any proposed deviations from the 'Sequence of Works' shall be reported to the Project Arboriculturist, who will then review and comment on the modifications accordingly.
- Where the amendments are considered acceptable in relation to retained trees, then the Project Arboriculturist shall prepare and issue a revised version of the AMS to the LPA Tree Officer for comment.
- Should the Tree Officer consider the revised AMS to be acceptable, then the Project Arboriculturist shall issue the report to all pertinent persons, inclusive of the site manager, the client/client's agent, and the project engineer.

Acknowledgment of Obligations and Responsibilities of Arboricultural Method Statement

- The site manager shall provide a written acknowledgement, to the client/client's agent, the Project Arboriculturist, and the Tree Officer, that they shall abide by the obligations and responsibilities of the AMS, and that they will be accountable for any breaches of the obligations and responsibilities.

Table of Sequence of Works:

ARBORICULTURAL METHOD STATEMENT

Approved Development:	Change of use of site from residential use (C3) to a cookery school with associated accommodation (C2)
Site:	Thorneyholme Hall, Dunsop Bridge, Lancashire, BB7 3BB
Planning App. No.:	3/2017/0408
Pertinent Condition No.:	4

Prepared by:	Joseph Lambert <small>BSc(Hons) FdSc MArborA</small>
Report Date:	7 September 2020
Job Ref:	BTC2068
Agent:	PWA Planning

No.	Operation*	Timing	Responsible Professional	Arboricultural Supervision	Specific Tree Protection Measures During Operation#
i	Pre-contract site meeting between: <ul style="list-style-type: none"> Site Manager Council Tree Officer; and Project Arboriculturist 	To be completed prior to any other works, including deliveries of material, plant, etc.	Site Manager	N/A	None - however, specific methods of tree protection shall be discussed in detail, in particular the temporary protective fencing types and locations (see Operation iv), between the parties present and, if identified as necessary, a schedule of supplementary recommendations shall be agreed between the parties and subsequently prepared and distributed to said parties by the Site Manager
ii	Carry out approved tree works (i.e. pruning and removals) in accordance with written permission from Local Planning Office (LPA)	Only to commence on completion of Item i	Tree Contractor overseen by Site Manager	Project Arboriculturist to verbally advise Tree Contractor with regard to tree works where necessary	No vehicular or plant access within retained trees' RPAs under soft surfaces
iii	Mark up, on site, locations and extents of proposed Temporary Protective Fencing and Temporary Ground Protection measures	Only to commence on completion of Item ii	Site Manager	Project Arboriculturist to verbally advise Fencing Contractor with regard to siting and construction of fencing and ground protection	No vehicular or plant access within retained trees' RPAs under soft surfaces
iv	Erect Temporary Protective Fencing and install Temporary Ground Protection measures to protect RPAs of specific retained trees, in locations identified on the TPP°	To be erected and installed immediately on completion of Item iii	Fencing Contractor overseen by Site Manager on advice of Project Arboriculturist	Project Arboriculturist to visit site, appraise protection measures, and provide brief report to LPA Tree Officer following their erection and installation (NB: it shall be the Site Manager's responsibility to arrange the Project Arboriculturist site visit)	No vehicular or plant access within retained trees' RPAs under soft surfaces The temporary protective fencing shall be installed in strict accordance with the Temporary Protective Fencing Specification, with a combination of 'Type 1' 'Type 2' and 'Type 3' fencing (see Specification) to be utilised depending on the existing and retained surfaces in the specific areas under consideration (NB: any proposed deviations from the Specification should be discussed with the LPA Tree Officer at Operation i, and, where necessary, agreed in writing Temporary Ground Protection to be of suitable load bearing capacity for anticipated loading, on advice of product manufacturer, in order to prevent compaction to ground below

*Note 1: All operations to be subject to risk assessments and method statements to be provided by applicable contractor(s)

#Note 2: The General Recommendations in Respect of Works, detailed at page 4, shall also be adhered to by all site operatives during all work operations

°Note 3: Refer to appended Temporary Protective Fencing Specification

continued overleaf

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Pertinent Condition No.:	4

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Table of Sequence of Works (cont.):

No.	Operation*	Timing	Responsible Professional	Arboricultural Supervision	Specific Tree Protection Measures During Operation#
v	Commence construction of pile and beam foundations for garage extension where within RPA of tree T1 in accordance with Detail 1 on drawing no. 1178-WD04 (Appended)	Only to commence on completion of Item iv	Site manager and piling contractor on advice of specialist foundations engineer and project arboriculturist	Project Arboriculturist to verbally advise Piling Contractor with regard to works prior to commencement.	No vehicular or plant access within retained trees' RPAs under soft surfaces All works involving moving plant with booms etc. to be supervised by banksman where close to retained tree canopies Piling works to be carried out in accordance with method statement to be provided by piling contractor Foundations to be constructed in strict accordance with section 7.5 of BS5837:2012 and shall be constructed above existing ground levels on a pile and beam structure, with a ventilated air space between the existing soil surface and the structure's underside to allow retention of tree roots below
vi	Commence main construction phase including construction of extension and conversion of existing garage	Only to commence on completion of Item v	Site Manager	Project Arboriculturist to carry out monthly site visits and provide subsequent monitoring reports to LPA Tree Officer	All works involving moving plant with booms etc. to be supervised by banksman where close to retained tree canopies Existing paved surfacing around existing garage to be retained throughout conversion works in order to provide ground protection No vehicular or plant access within retained trees' RPAs under soft surfaces
vii	Carry out re-surfacing of parking area within RPA of group G4 and any necessary renewal of existing hard paving around garage	Only to commence on completion of Item vi	Groundworks Contractor overseen by Site Manager on advice of project arboriculturist	Project Arboriculturist to verbally advise site manager and groundworks contractor prior to commencement of surfacing works.	All works to be carried out in strict accordance with s7 of BS5837: 2012 including no significant level changes within RPAs with any removal of hard surfacing within RPA's restricted to depth of wearing course only Parking area not to exceed that of existing hard surfaced area where adjacent or within trees' RPAs All works involving moving plant with booms etc. to be supervised by banksman where close to retained tree canopies No vehicular or plant access within retained trees' RPAs under soft surfaces
viii	Remove Temporary Protective Fencing and Temporary Ground Protection	Only to commence on completion of Item vii	Fencing Contractor overseen by Site Manager	Project Arboriculturist to verbally brief Fencing Contractor prior to removal of Temporary Protective Fencing	No vehicular or plant access within retained tree's RPA under soft surfaces

*Note 1: All operations to be subject to risk assessments and method statements to be provided by applicable contractor(s)

#Note 2: The General Recommendations in Respect of Works, detailed at page 4, shall also be adhered to by all site operatives during all work operations

°Note 3: Refer to appended Temporary Protective Fencing Specification

continued overleaf

ARBORICULTURAL METHOD STATEMENT

Approved Development:	Change of use of site from residential use (C3) to a cookery school with associated accommodation (C2)
Site:	Thorneyholme Hall, Dunsop Bridge, Lancashire, BB7 3BB
Planning App. No.:	3/2017/0408
Pertinent Condition No.:	4

Prepared by:	Joseph Lambert <small>BSc(Hons) FdSc MArborA</small>
Report Date:	7 September 2020
Job Ref:	BTC2068
Agent:	PWA Planning

Page:	4 of 4
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Table of Sequence of Works (cont.):

No.	Operation*	Timing	Responsible Professional	Arboricultural Supervision	Specific Tree Protection Measures During Operation#
ix	Commence landscaping works within and in close proximity to retained trees' RPAs	Only to commence on completion of Item viii	Landscaping Contractor overseen by Site Manager in consultation with Project Arboriculturist	LPA Tree Officer to visit site following completion of works (note: it shall be the Site Manager's responsibility to arrange Tree Officer's site visit/inspection)	All landscaping works to be undertaken in accordance with Section 7 BS5837:2012 including no significant level changes within RPA No vehicular or plant access within retained trees' RPAs under soft surfaces

*Note 1: All operations to be subject to risk assessments and method statements to be provided by applicable contractor(s)

#Note 2: The General Recommendations in Respect of Works, detailed at page 4, shall also be adhered to by all site operatives during all work operations

°Note 3: Refer to appended Temporary Protective Fencing Specification

General Recommendations in Respect of Works:

- All tree works should be implemented by suitably qualified and experienced arboricultural contractors in accordance with the tree works detailed in the Tree Survey Schedule prior to the erection of the Temporary Protective Fencing.
- All tree works should conform to British Standard BS3998:2010 Tree Work - Recommendations.
- Performance of all arboricultural operations and use of equipment should be in accordance with current directives of the Health and Safety Executive (HSE) and industry codes of practice.
- All operatives should be equipped with and use Personal Protective Equipment (PPE) in accordance with current directives of the HSE and industry codes of practice.
- All tree stumps scheduled for removal that are located within a distance of 6.0 metres of any retained tree should be removed by mechanical stump grinder and not by mechanical excavator.
- All possible efforts should be made by the tree contractor and any other site operatives to prevent damage to retained trees.
- There shall be no vehicular or plant (e.g. wood chipper) access within the RPAs of retained trees that are not under hard surfaced areas, as detailed on the TPP.
- All tree works arising should be removed from the site.
- No services are to be installed below ground level within RPAs.
- No construction related operations should occur within RPAs, unless specifically detailed in the Arboricultural Method Statement.
- No concrete should be mixed within RPAs.
- No excavation or any other operations should occur within the RPAs, other than as detailed in the Arboricultural Method Statement.
- All construction equipment and materials should be stored outside RPAs.
- No fires should be lit within 15.0m of any tree crown.
- Deliveries by crane should be supervised by the Site Manager, positioning the vehicle in such a manner that retained trees are not put at risk of damage.
- No substances with potential to contaminate the soil (e.g. chemicals, concrete washings, diesel, vehicle washings, etc.) should be discharged within 10.0 of any tree crown. This should take into consideration the topography of the site in order to avoid materials running towards trees.
- No notice boards, phone cables or services should be attached to any part of any tree.
- A log should be kept of any activity or incident with an impact or potential impact on protected trees and made available at all times for review by the Project Arboriculturist and the Tree Officer

- TEMPORARY PROTECTIVE FENCING SPECIFICATION -

Construction Exclusion Zones (CEZs), enclosed by **Temporary Protective Fencing**, as detailed below and to be agreed with the Local Planning Authority (LPA), shall:

1. be retained in place throughout the development process, as specified in the 'Temporary Protective Fencing Construction' section below and detailed in BS5837:2012 Figure 2 (overleaf);
 2. be sited in the area(s) defined by the Root Protection Areas or, if applicable, the Construction Exclusion Zones, as detailed on the associated Tree Plan;
 3. be erected prior to any construction, demolition or excavation works and remain in place for the duration of the project;
 4. preclude any delivery of site accommodation and/or materials and/or plant machinery;
 5. preclude all construction related activity, with the sole exception of specified arboricultural works and any other works to be carried out under supervision that have been agreed by all parties; and
 6. preclude the storage of all development related materials and substances including fuels, oils, additives, cement and/or any other deleterious substance.
- Any incursion into CEZs must be by prior arrangement, following consultation with the LPA.

Temporary Protective Fencing Construction

1. Temporary protective fencing panels shall be weldmesh "Heras" panels of at least 2.0 metres in height.
2. The panels shall butt together and be securely fixed to a scaffold framework, as per 3 to 5 below.
3. The scaffold framework shall comprise of upright poles of at least 3.0 metres in length driven no less than 0.6 metres into the ground at maximum 3.0 metre centres with horizontal and diagonal poles fixed to the uprights, as per 4 to 5 below.
4. The two horizontal rail poles shall be attached to the uprights at heights of 0.6 and 1.8 metres with 3 no. clamps to each joint.
5. The diagonal scaffold pole struts be clamped to the top rail of the scaffold framework at a 45° angle and extend back into the CEZ and clamped to a 0.7 metre length of scaffold tube that shall be driven no less than 0.5m into the ground.
6. No fixing shall be made to any tree and all possible precautions shall be taken to prevent damage to tree roots when locating posts.
7. A 600mm x 300mm warning sign reading "TREE PROTECTION AREA KEEP OUT" (see Figure 1, below) shall be fixed to every 10.0 metre length of protective fencing.
8. On completion and prior to any demolition or construction works, site preparation, excavation or delivery of plant and materials, the LPA shall inspect and approve the Temporary Protective Fencing.

Figure 1: CEZ Warning Sign

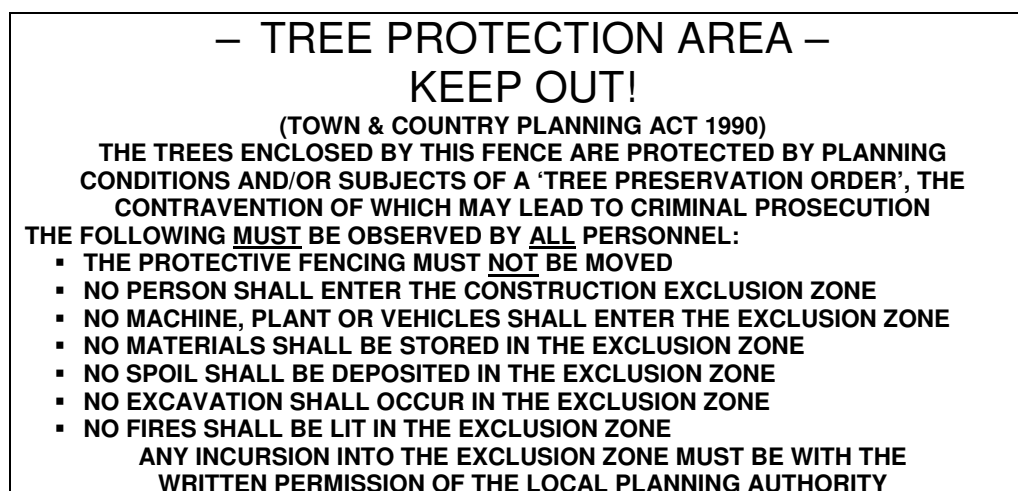
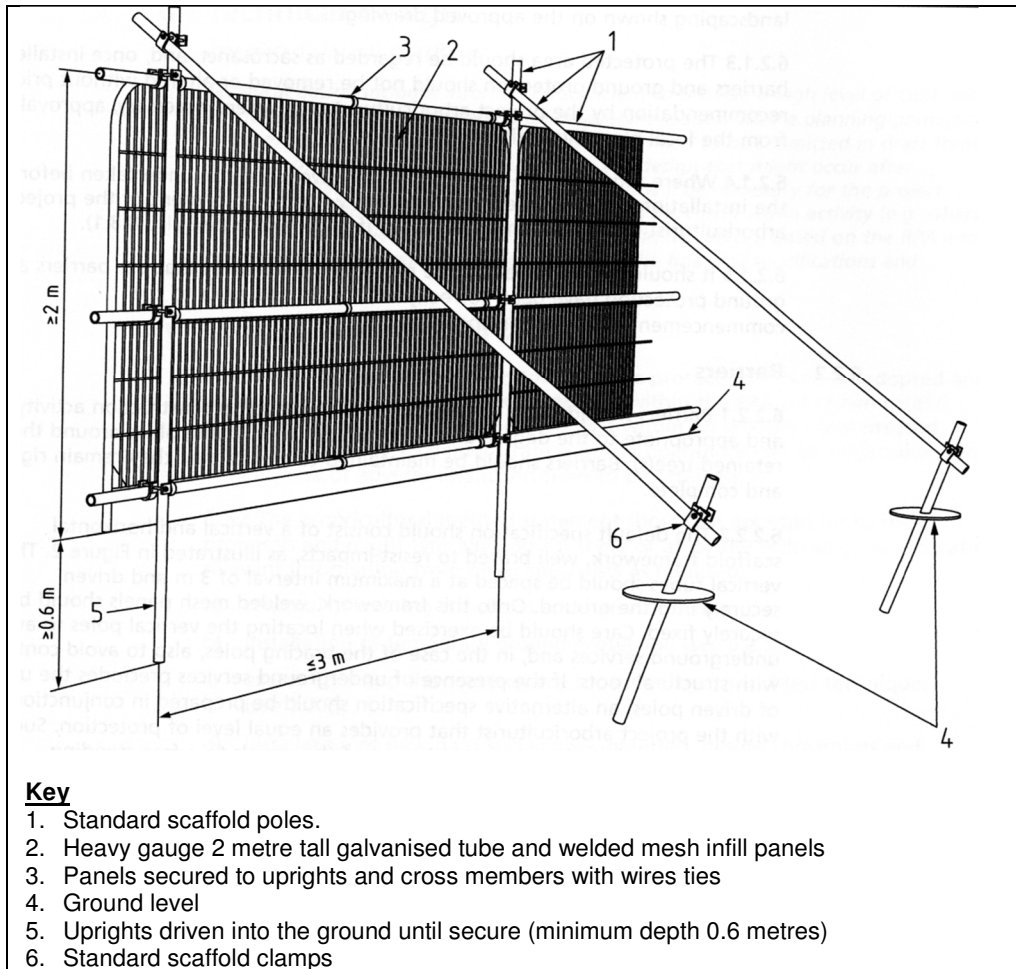


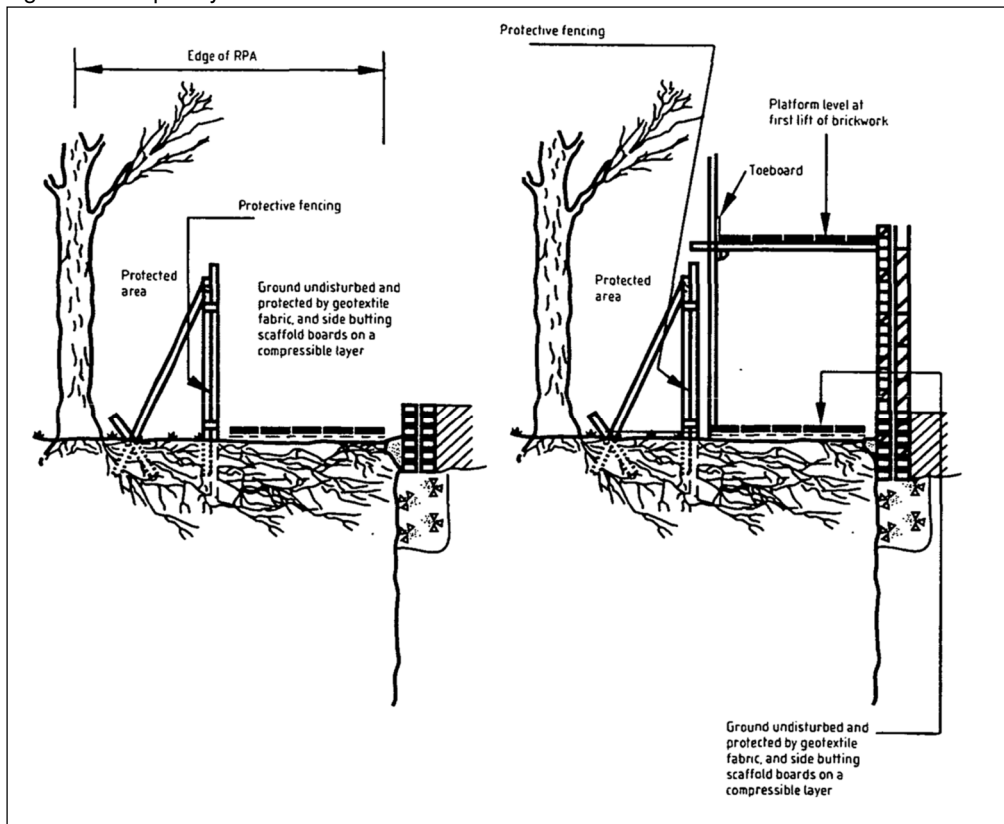
Figure 2: BS5837:2012 Default specification for protective barrier



Temporary Ground Protection

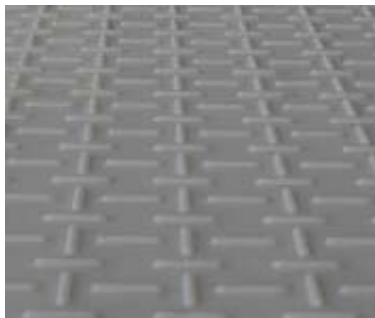
1. Any necessary Temporary Ground Protection areas shall conform to Figure 3, below, unless otherwise agreed with the LPA.
2. The Ground Protection Area shall be left undisturbed and covered by a semi-permeable geotextile membrane which shall, in turn, be covered by a compressible layer consisting of a material such as woodchip.
3. Side-butting scaffold boards shall then be fitted to cover the Ground Protection Area.
4. On completion of installation, and prior to any demolition or construction works, site preparation, excavation or delivery of plant and materials, the Consulting Arboriculturist or the LPA Tree Officer, as agreed, shall inspect the Temporary Ground Protection.
5. The Temporary Ground Protection shall remain in place until completion of the project and only removed following receipt of written permission from the LPA.

Figure 3: Temporary Ground Protection – Recommended Construction



Heavy Duty Temporary Access Mat

General Description



Key Information

- High pressure compression moulded in one piece
- Quality batch control / mat identification
- 23 x 1200 x 2410mm
- Weight: c. 37kg (manhandable)
- Materials: choice of (a) Mix of HD / LDPE regenerated (b) HD / LDPE virgin / natural or green / UV protection
- Two traction surfaces – vehicular and pedestrian
- Connection holes / cut out hand holds

Vehicular Traction Surface

- Rugged raised surface profile for excellent traction for light to heavy (80 tonnes) vehicles, plant and machinery
- Sand blasted finish for micro-traction
- Low trip hazard
- Chevron pattern for high visibility strips

Pedestrian/Tire Traction Surface

- Uniform raised surface profile pattern for pedestrian use
- Good traction for vehicular use
- Sand blasted finish for micro-traction
- Low trip hazard (hand cut outs blanked off on pedestrian surface)

Connection

- 2-way and 4-way bolt in connectors
- 'Quick fit' metal connectors for fast turnaround
- Flexible webbing / anchor plate connectors
- U-pins for stability on sideways ground
- High visibility colour options

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Heavy Duty Temporary Access Mat

Mechanical Testing of HD/LDPE Regenerated Material

Factor	Value
Tensile Strength (MPa)	23 - 26
Flexural Strength (MPa)	25 - 28
Flexular Modulus (MPa)	1936 – 1967
Charpy Notched Impact Strength (kJ/m ²)	5 - 6
Poisson's Ratio (theoretical)	0.35 – 0.38
Compression testing – maximum value reached before test terminated (tonnes)*	250

*Refers to the material strength on a firm substrate as tested by the National Physical Laboratory. The weight load distribution performance is subject to ground conditions. Lineman's Testing Laboratories, its agents or employees are not liable for any damage to existing ground or property through the use of this mat. The information provided is for guidance only. In all cases, qualified engineering / geotechnical advise should be sought regarding bearing capacity of the ground where the mat is to be used.

Generic Properties of HDPE and LDPE

Properties:		Resistance to Chemicals	
<ul style="list-style-type: none"> low density high toughness (LDPE provides flexibility) high elongation very good electrical and dielectric properties very low water absorption low steam permeability high chemical resistance good protection against stress cracking 		<ul style="list-style-type: none"> Dilute Acid **** Dilute Alkalis **** Oils and Greases ** variable Aliphatic Hydrocarbons * Aromatic Hydrocarbons * Halogenated Hydrocarbons * Alcohols **** 	
		Key: * poor ** moderate *** good **** very good	
Factor	HDPE Value	LDPE Value	Unit
Thermal expansion	110 - 130	150 - 200	e-6/K
Thermal conductivity	0.46 - 0.52	0.3 – 0.33	W/m.K
Specific heat	1800 - 2700	1800 - 3400	J/kg.K
Melting temperature	108 - 134	125 - 136	°C
Glass temperature	-110 - -110	-110 - -110	°C
Service temperature	-30 - 85	-30 - 70	°C
Density	940 - 965	910 - 928	kg/m ³
Resistivity	5e+17 - 1e+21	5e+17 – 1e+21	Ohm.mm ² /m
Breakdown potential	17.7 - 19.7	17.7 – 39.4	kV/mm
Dielectric loss factor	0.0005 - 0.0008	0.0002 – 0.001	
Friction coefficient	0.25 - 0.3	0.3 – 0.5	
Refraction index	1.52 - 1.53	1.51 – 1.53	
Shrinkage	2 - 4	1.5 - 3	%
Water absorption	0.01 – 0.01	0.005 0 0.015	%

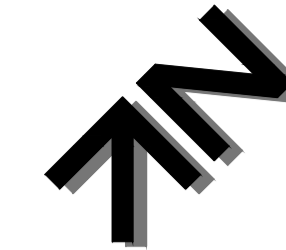
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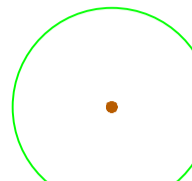
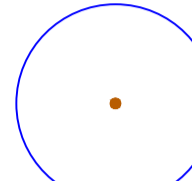
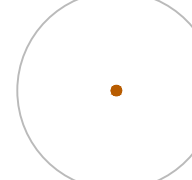
KEY

T = Individual Tree
G = Group of Trees

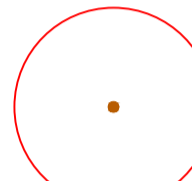
Please refer to associated Tree Survey Schedule for specific details in respect of items below:

Tree Categorisations:

Those to be Considered for Retention:

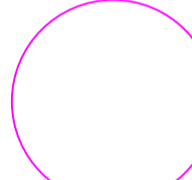
-  Category 'A' Tree/Group
Those of a High Quality with an Estimated Remaining Life Expectancy of at Least 40 Years
-  Category 'B' Tree/Group
Those of a Moderate Quality with an Estimated Remaining Life Expectancy of at Least 20 Years
-  Category 'C' Tree/Group
Those of Low Quality with an Estimated Remaining Life Expectancy of at Least 10 Years, or Young Trees

Those Considered Unsuitable for Retention:

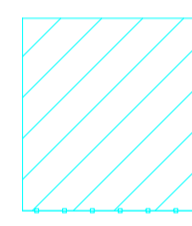
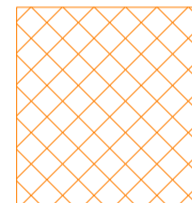
-  Category 'U' Tree/Group
Those in Such a Condition that they Cannot Realistically be Retained as Living Trees in the Context of the Current Land Use for Longer Than 10 Years

Note: Trees with their identification numbers labelled in grey are recommended for removal in the context of the development

Root Protection Areas (RPAs):

-  RPAs
Area(s) of Ground Around Trees that Should be Protected Throughout Development Works with Protective Fencing to form a Construction Exclusion Zone - see appended Temporary Protective Fencing Specification

Tree Protection Measures:

-  Construction Exclusion Zones (CEZs)
Area(s) of Ground Around Retained Trees that are to be Enclosed with Type 1 Temporary Fencing Throughout Development Works. NB: Bold Line Represents Recommended Positioning of Fencing - see Temporary Protective Fencing Specification
-  Ground Protection
Areas of Ground Around Retained Trees that are to be Protected Throughout Development Works using Temporary Ground Protection Plates - see Appended Manufacturer's Brochure

Project:
THORNEYHOLME HALL
DUNSOP BRIDGE
LANCASHIRE
BB7 3BB

Agent for Client:
PWA PLANNING

Title:
TREE PROTECTION PLAN
in relation to approved change of site use from residential (C3) to a cookery school with associated accommodation (C2), including an extension to the existing detached garage building

Scale: 1:250@A1
Date: September 2020
Drawn by: JK & JL
Checked by: PH



Ref: BTC2068-TPP Rev:

Important: The original version of this plan was produced in colour, which is essential to the plan's interpretation and usability. As such, a monochrome copy should not be relied upon

Removal of existing hard surface where within RPA of group G4, if required, to be carried out in accordance with 57 of BS5837: 2012 and restricted to wearing course only where within and adjacent to RPAs

Proposed garage extension encroaches approximately 7% into currently unsurfaced area of offset RPA of tree T1 (encroachment shown hatched)
Extension to be constructed, where within RPA, using pile and beam foundation for minimisation of tree root damage in accordance with 57.5 of BS5837: 2012 - see AMS

Existing paving surrounding garage to be retained throughout conversion of existing garage to provide ground protection. Removal and replacement following completion of conversion to be limited to depth of existing sub base to ensure protection of roots below

Root Protection Area (RPA) of tree T1, which has been offset to the south and east away from existing structures and hard surfaces and into the open garden area

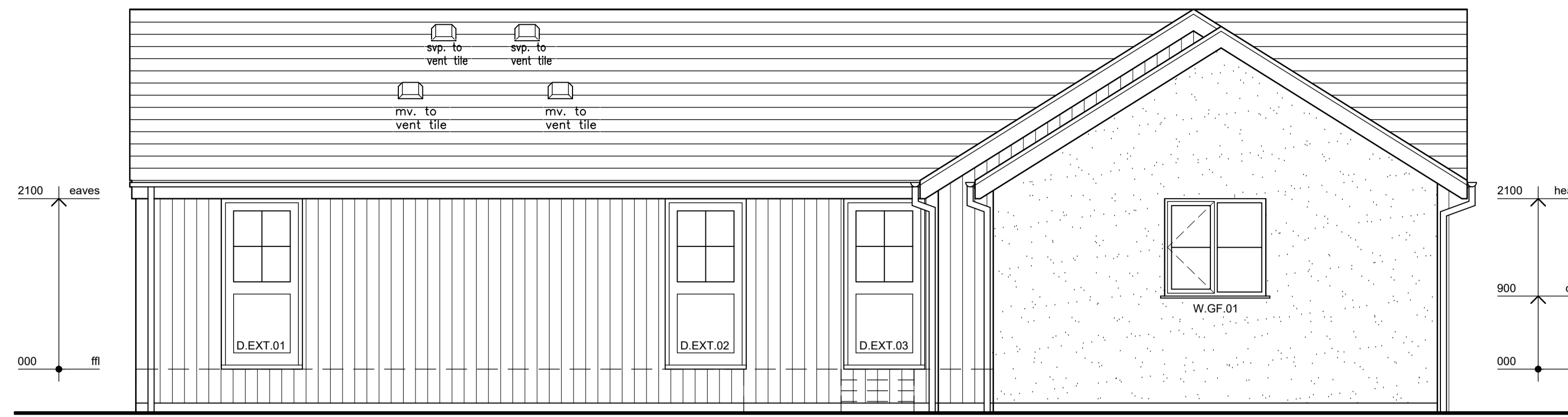
Extent of existing garden and surrounding paving demarcated by bold black line
Existing garage to be retained and converted

Proposed building to form Cookery School

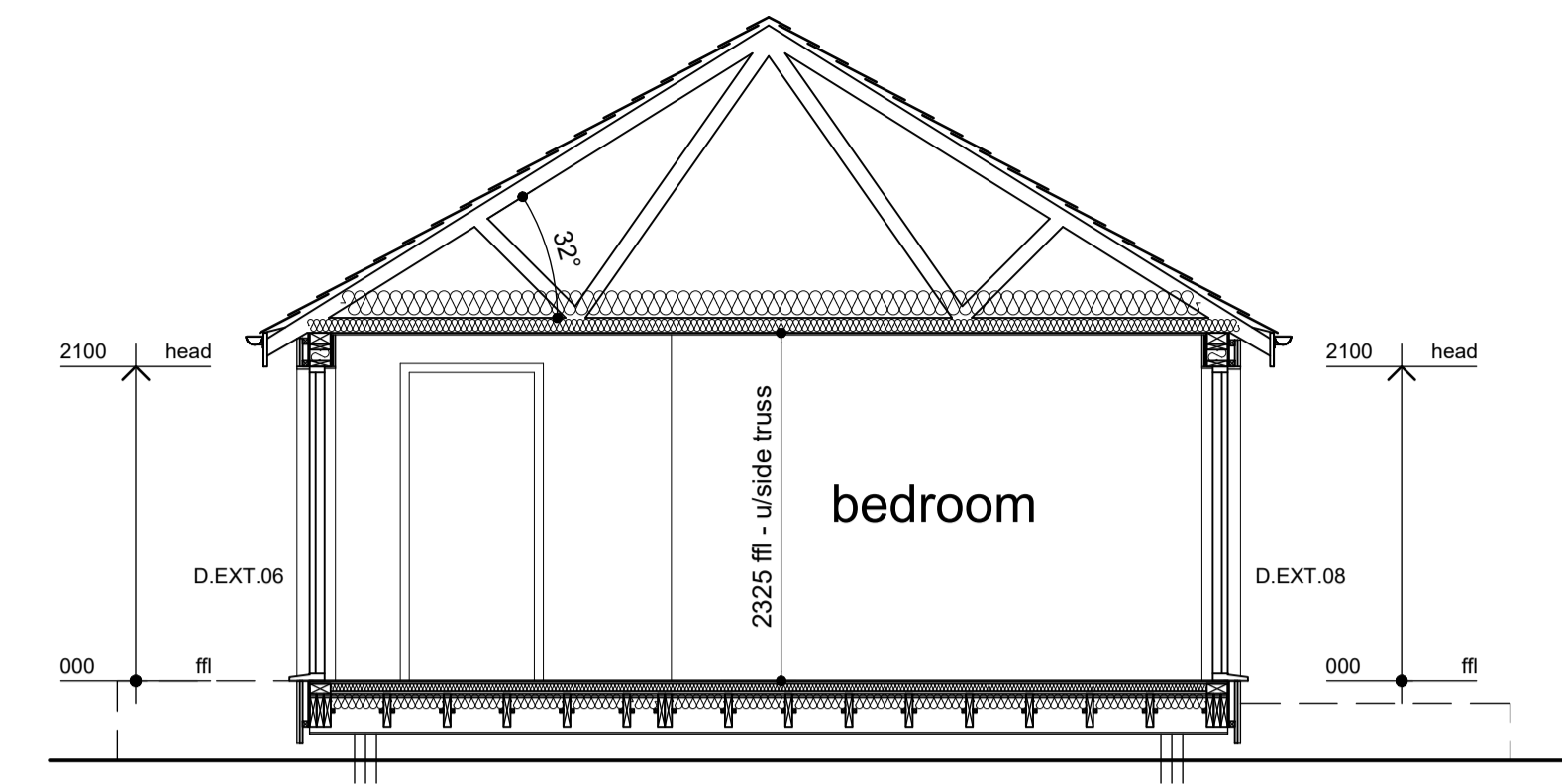
Hall made available for B+B

Proposed car parking - not to exceed area of existing compacted gravel hard-standing

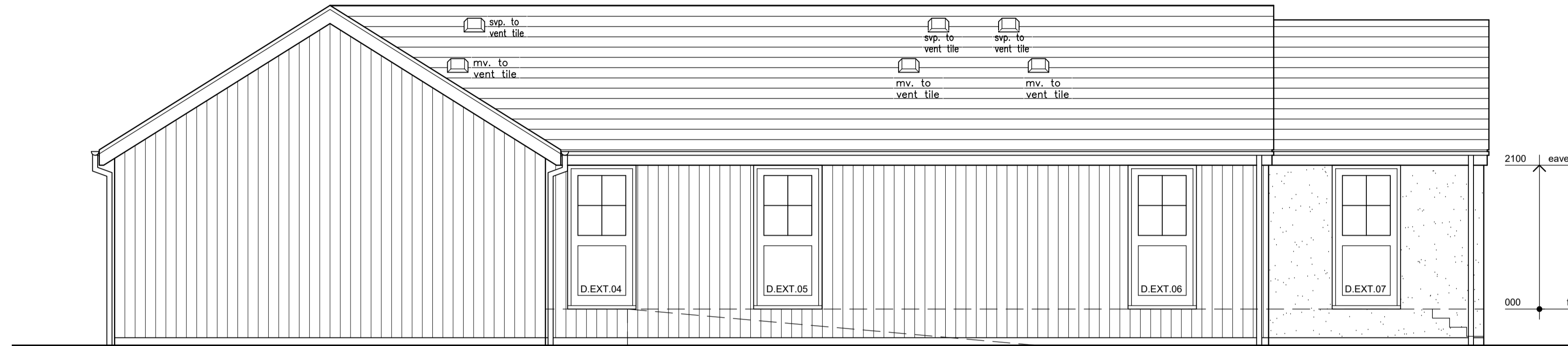
Nature Garden



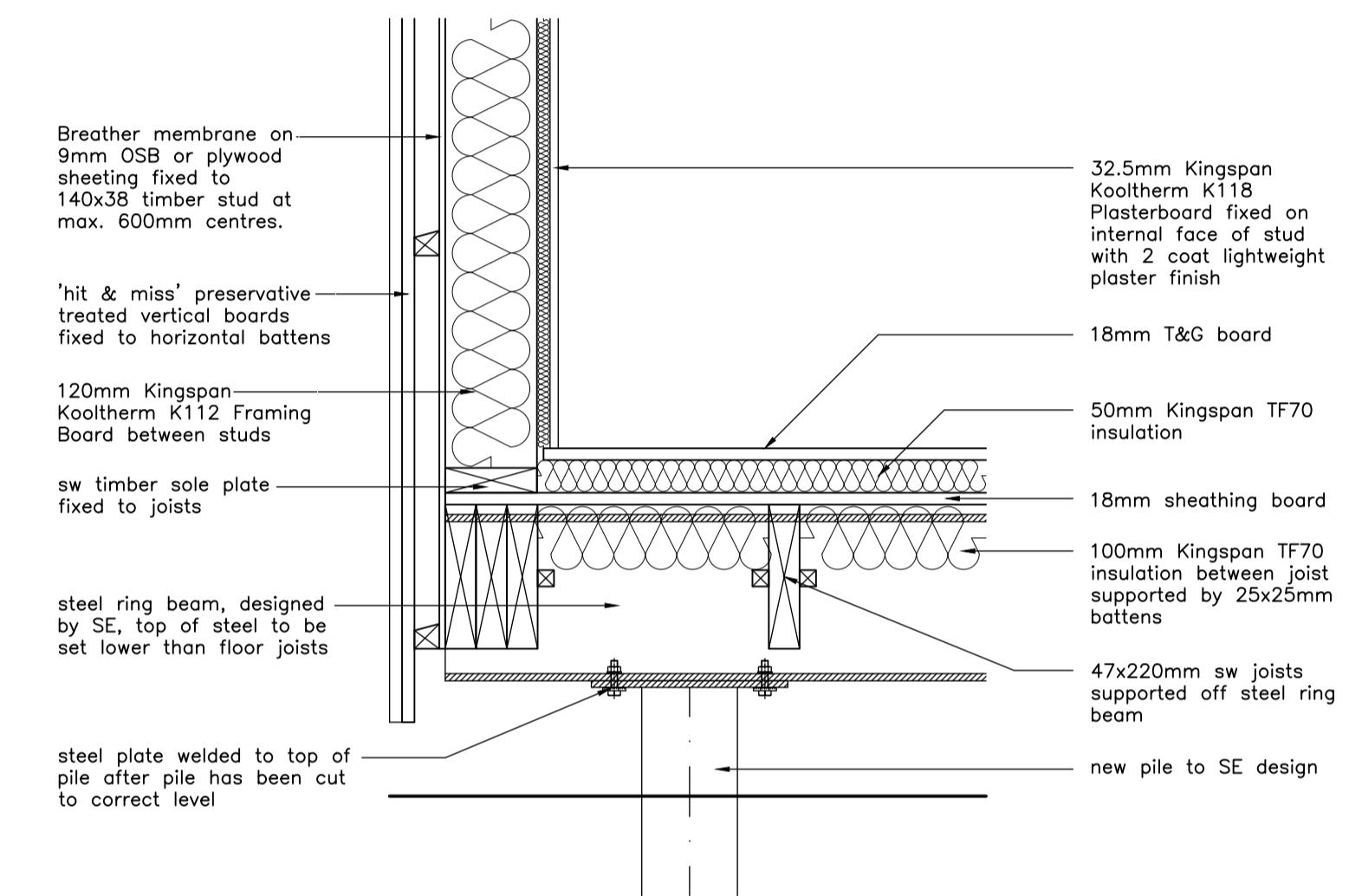
Proposed Front Elevation (West)



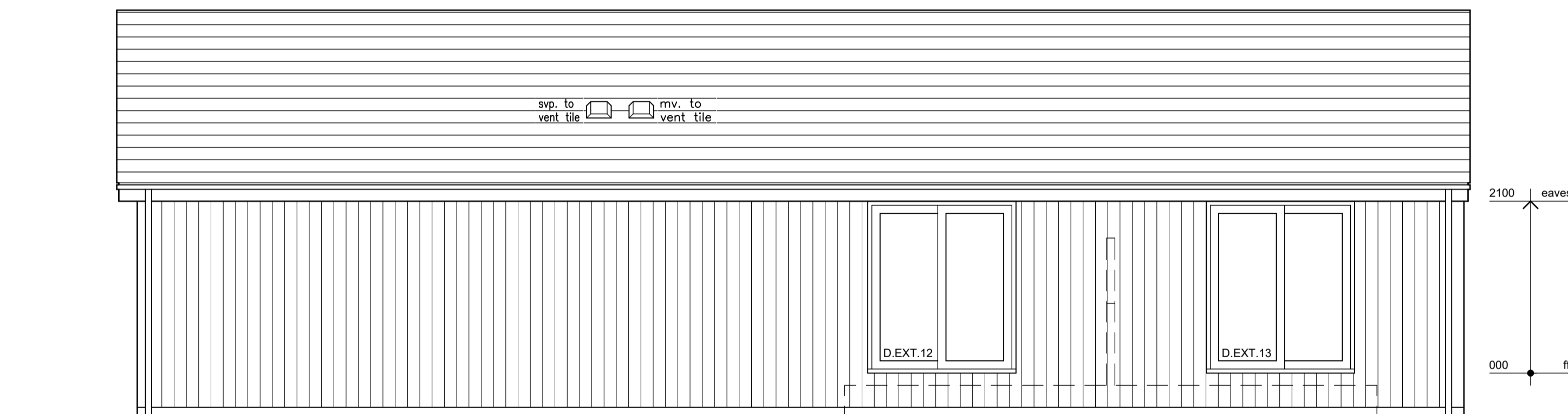
Section A-A



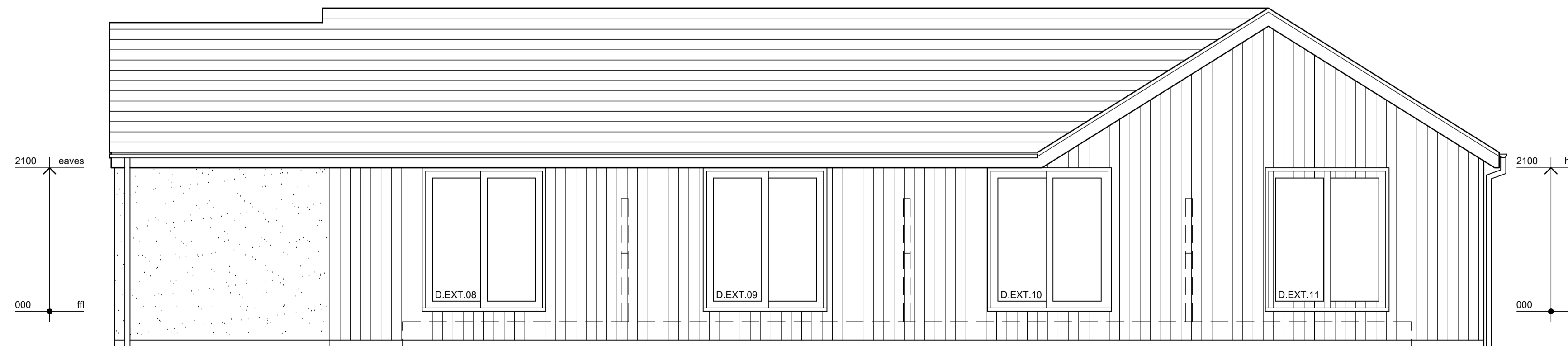
Proposed Front Elevation (North)



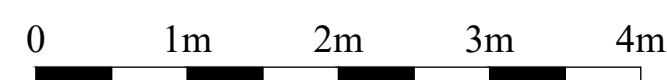
Detail 1



Proposed Front Elevation (East)



Proposed Front Elevation (South)



Project
Proposed Development At
Thorneyholme Hall, Dunsop Bridge
For Reilly Developments

Title
Elevations & Section
PWL

ARCHITECTURE

31 Chapel Brow Leyland Preston PR25 3NH
Tel 01772 467404 E Mail: info@pwlarchitecture.com

Scale
1:50@A1 +
1:100@A3

Date
January 2019

Drawn
CTA

Drwg No
1178-WD04