



PROPOSED SITE LAYOUT SCALE: 1:200 @ A3 1:100 @ A1

Potential Conflict: Damage to trees due to the proximity of the new dwellings.
To the south and east of the new dwellings are trees shown on site plan. Trees within this location may have root or branch tissue that extends into the site and could subsequently be damaged during construction or could cause conflict due to light levels etc.

Mitigation / Countermeasure: As shown on the site plan the nearest, largest, and most dominant tree within the group has significant clearance from the proposed dwelling and should not be damaged or create future conflicts. All of the other trees within this group are considerably smaller and are located further away from the proposals.

Potential Conflict: Damage to Trees due to the new access driveway.
The location of the new access driveway is outside the root protection areas (RPA's) of these trees and should not lead to damage of underlying root tissue.

Mitigation / Countermeasure: A conventional driveway construction would cause unacceptable damage to the upper root plate of trees due to compaction, root severance, and none permeability; however, as no TPO'd trees are located adjacent the new driveway there is no conflict for this element.

Pre-Development and Site Preparation Works

- The tree surgery works need to be undertaken by a suitably qualified and experienced Arborist. All works must be undertaken in full accordance with BS3998 'Tree work - Recommendations' 2010.
- Prior to any further site works the tree protection barriers need to be erected in order to protect the trees from damage; this must remain in situ during the entire build process. The fencing needs to be erected according to the locations found on the Tree Protection Plan, and to the specification. All weather notices should be attached to the fencing marked with the following: 'Construction Exclusion Zone - Keep Out'.
- A site storage compound will be created in an area devoid of tree cover and outside of all retained tree RPA's.
- The site will be assessed by the project Arboriculturist to ensure that all tree protection measures are in place, appropriate, and correctly located.
- At the beginning of the construction phase, the site manager will appoint a delegated site representative who shall be responsible for continued checking of the protective fencing to ensure it is compliant with the exclusion zone.

Tree protection measures during development

- All ground levels where trees are located should be maintained. Changes to soil levels adjacent to trees can severely affect the trees structural integrity and its ability to gain moisture and nutrients from the surrounding soil. Unavoidable level changes that may affect retained trees, and not already accounted for within this method statement, should be assessed by a qualified arboriculturist so that any remedial works can be undertaken.
- Building material storage and operations that can contaminate soil, such as cement mixing, must be confined to areas outside the tree protection area.
- Fires should not be lit within 5m of the foliage or drip line of the tree. Care should be taken and the fire should not be allowed to become large, and the wind direction noted.
- The trees should not be used to attach notices, cables or other services.
- Where plant or other boomed vehicles are used on site care must be taken to ensure that no contact is made with any retained trees or the tree protection fencing, and that adequate clearances are checked prior to any lifting operations near trees cover.
- No utilities should be located within the root protection areas of retained trees. Where installation or alteration to existing underground services has been agreed near or adjacent to trees, all works shall conform to the requirements of National Joint Utilities Group Publication Volume 4 (November 2007).

Post-Construction Considerations

- Only once all construction works have been completed can any protective fencing and any ground protection be removed.
- The access driveway will be constructed to an agreed specification utilising a tree centred construction methodology with the use of minimal excavation such as required by the previously discussed flex-pave system - a hand-prepared 100mm excavation with compacted gravel on a geo-textile and a wearing layer of a fully permeable stone/rubber matrix. Further details for this system and its excavation requirements are included within Appendix 4.
- Post development landscaping should be kept to a minimum within the root protection areas of retained trees. No ground excavation or mechanised ground treatments / ratonation will be undertaken within the protected areas, with all landscaping being undertaken by hand or with hand operated machinery.

Potential Conflict: Damage to trees due to the construction process.
During any construction process trees can be damaged due to root severance, impact, soil compaction, spillages etc.

Mitigation / Countermeasure: The retained trees can be protected in accordance with BS5837:2012 'Trees in relation to design, demolition and construction - Recommendations'. They will need to be protected both above and below ground during construction by ensuring that construction works are not undertaken within their RPA's or canopy cover (where overhead branches are low and with the potential to be damaged). See site plan for expected fencing locations within the Tree Protection Plan and tree protection details for specification of fencing. No site offices, plant, or building materials will be located within the construction exclusion zone shown on site plan. Such storage requirements will be limited to the area shown on the plan that is discrete from tree cover to the rear of the existing dwelling, with a construction access using the new access driveway and bringing materials and plant into the construction area from the southern side.

Potential Conflict: Damage to trees during installation of utilities.
During the installation of utilities root tissue can be damaged during excavation.

Mitigation / Countermeasure: No new utility runs must be located within any of the retained trees RPA's. Any works to existing utilities must be undertaken with regard for the retained tree cover and be in accordance with NJUG (National Joint Utility Groups) guidelines.

Potential Conflict: Damage to trees following construction due to landscaping.
Trees can be damaged following construction when landscaping of gardens and tree planting is undertaken.

Mitigation / Countermeasure: Post development landscaping will be kept to a minimum within the root protection areas. Tractor mounted ratonation or other heavy mechanical cultivation must not be used within the root protection areas of retained trees. All cultivation within RPA's will be carefully undertaken by hand or pedestrian controlled light machinery to avoid root damage.

Proposed Native Hedgerow Mix

Species	Mix	Size	Condition
<i>Corylus avellana</i>	5%	60-80cm	B
<i>Crataegus monogyna</i>	60%	60-80cm	B
<i>Ilex aquifolium</i>	15%	50-60cm	2L
<i>Prunus avium</i>	5%	60-80cm	B
<i>Prunus spinosa</i>	5%	60-80cm	B
<i>Rosa canina</i>	5%	60-80cm	B
<i>Sambucus nigra</i>	5%	60-80cm	B

Above to be planted in species groups of varying sizes between 5No and 10No at a rate of 5 per linear metre in double staggered row 30cm apart for lengths of new native hedgerow and to gap up existing where necessary or as indicated on plan.

Proposed Trees

Code	Plant Name	Form	Ht(cm)	Girth(cm)	CSm(cm)	Root	Cntr(l)
PaP	<i>Prunus avium</i> 'Plena'	Standard (Heavy)	350-425	12-14	175-200	C	45
Sar	<i>Sorbus aria</i>	Standard (Heavy)	350-425	12-14	175-200	C	45

GENERAL NOTES

Plant Sourcing and Handling
All plants shall be of a native source grown in the UK. Wherever possible, plants will have been grown from seed, cutting or root stock of a local provenance. Plants and trees shall comply with BS 3936, being healthy, vigorous, bushy plants with a fibrous, well rooted system that is in proportion to the size of the plant. Planting shall be in accordance with BS 4428.

Seeding
All areas of placed sub/topsoil within the site which are not planted or surfaced will be seeded with a low maintenance wildflower weed mix such as British Seed Houses A22 Mix or equivalent approved.

Planting Preparation
Topsoil depths are to be a minimum of 300mm for planted areas and 150mm for seeded areas; if it is unlikely that topsoil will need to be imported, however, if necessary it will comply to BS 3882:1994. Notch planting will generally be used for bare root transplants. Pit planting will be used for root-balled, container grown, feathered stock and standard trees. The preparation of planting pits will comply with BS 4428 and BS 5837 and will not take place when the ground is either frozen or waterlogged.

Rubbish and Debris
A certain amount of litter, debris and redundant objects have accumulated around the site. Where possible this should be removed from site or buried locally. All litter is to be removed from site and recycled where possible.

Maintenance
All planting will be maintained in such a way as to exclude competitive plants. Any herbicides will be used with care to avoid spray drift damage. All trees and shrubs will be maintained in a firm upright growing position and all dead wood, diseased tissue, suckers and epicormic growth will be removed from all plants at the end of each growing season. All planting shall be maintained and dead or dying material shall be replaced for a period of five years from the agreed date of planting to the satisfaction of the LPA.

Implementation
Structural landscaping to be implemented within first planting/seedling season following commencement. Garden landscaping to be implemented in first planting season following occupation of building or completion of development whichever is sooner.

Replacements
Any trees, shrubs or hedges planted in accordance with these proposals which are removed, die, become severely damaged or become seriously diseased within five years of planting shall be replaced within the next planting season by trees, shrubs or hedging plants of similar size and species to those originally required to be planted.

SPECIFICATION

PLANTING SPECIFICATION
All work and materials shall be in accordance with current British Standards Components and to Code of Practice.

SITE CLEARANCE
a) Remove general builders rubble, rubbish and the like from the areas to be planted. Such materials to be collected and taken to Contractors tip or disposed of on site as directed.
b) Approved translocated herbicide to be applied to planting area.

EARROWHOLES (if not supplied by Main Contractor)
a) Areas for transplants to be ripped with fixed lines at 500mm centres to a depth of 500mm in two directions at 90 degrees to each other to the Employers satisfaction.

Transplant Areas
It is assumed that the existing topsoil will be suitable for re-use. If this is not the case then the Contractor should provide a note for the supply of approved topsoil.

CULTIVATIONS AND PLANTING

Tree and Shrub Planting - Planting Pits

a) Excavate tree pits as follows:
Std. HS, EHS trees: 1000x1000x1000mm deep
b) Loosen base to a further depth of 200mm and scarify sides. Dispose of unsuitable excavated material off site to approved tip.
c) Tree stakes to be pressure treated, minimum diameter 45mm and pointed at one end. Stakes to be driven into the pit before planting to a minimum depth of 300mm below the base of the pit.
Std. HS, EHS trees, Double Staked Feathered: Single staked
a) Tree or transplant to be planted in pit to a depth and orientation related to the original growing position in the nursery and backfilled with soil to a minimum depth of 300mm with approved tree and shrub planting compost in the following amounts:
Std. HS, EHS trees: 80 litres/tree
Feathered: 50 litres/tree
Transplants: 4 litres/transplant
e) Trees to be tied to the supporting stakes with adjustable reinforced rubber free ties with solid rubber spacers, positioned at an approved point suitable to the habit of the tree.
f) Water to be applied to all trees and transplants on the same day as planting.
Std. HS, EHS trees: 30 litres/tree
Feathered: 18 litres/tree
Transplants: 5 litres/transplant

MAINTENANCE - SOFT LANDSCAPE

General
a) The Contractor shall be responsible for the maintenance of the planting area for a sixty month period following the completion of the works and will be responsible for any defects due to faulty materials, including plant failures, or workmanship during this time.
b) The Contractor shall carry out maintenance work at suitable intervals and in suitable weather conditions.
c) 48 hours notice in writing shall be given before commencement of any maintenance operations. Failure to do so will result in non payment for any supposed work carried out.

Defects Liability Period
a) Any trees and transplants, found to be defective or missing for any reason before practical completion shall be replaced by the Contractor entirely at his own expense.
b) Thereafter any failures within sixty months of the date of practical completion shall also be replaced to the original specification by the Contractor entirely at his own expense.

PLANTING AREAS

Weed Control
a) Keep areas around trees and transplants free from annual and perennial weeds by hand weeding. All arising to be removed from site.
Allow 7 no. visits per year.
b) Apply translocated herbicide to a 1.0m. dia around each transplant and tree or as directed by Landscape Designer.
Allow 3 no. visits per year.

Mulch
a) Bark mulch to be reinstated to original depths at the end of each growing season.

Watering
a) All planting shall be watered with a low pressure hose during dry spells within the first year only at the following rates:
Std. HS, EHS trees: 30 litres/tree/visit
Feathered: 18 litres/tree/visit
Shrubs/transplants - 5 litres/plant/visit

Fertiliser
a) At the end of the establishment period, 30gms of slow release fertiliser to be applied around each plant.
Allow 1no. visit at end of Year 2.

Firming in
a) All plants and tree stakes loosened by planting operations, wind or frost shall be firmed in.
Allow 1no. visit per year.

Litter Collection
a) Whole site to be kept in a clean and tidy conditions throughout the establishment period. Litter to be removed from site.
Allow 20 no. visits per year.

- NOTES:**
DO NOT SCALE FROM THIS DRAWING.
- This drawing is copyright of sjd Architects Ltd. No part of this drawing may be reproduced in any material form without the written permission of sjd Architects Ltd. WARNING the doing of an unauthorised act in relation to a copyright work may result in both a civil claim for damages and criminal prosecution.
 - All dimensions to be verified on site prior to any shop or site works being commenced.
 - Any discrepancies to be reported to the Architect BEFORE any work is put in hand.
 - This drawing must be read in conjunction with relevant consultants and specialists drawings.
 - This drawing must be read in conjunction with the drawings specified.
 - sjd Architects Ltd accepts no liability to third parties arising out of the unlawful reproduction or use of this drawing.

C	22-08-23	RED LINE AMENDED TO REAR OF 437 & 439
B	18-08-23	SITE LAYOUT AND HOUSE TYPES AMENDED
A	04-01-23	FENCE DETAILS UPDATED - SBC HIGHWAYS
REV	DATE	DETAILS

sjd Architects Ltd
Tanners Bank Design Studio
Aislaby Road
Eaglescliffe
Stockton-on-Tees
TS16 0JJ

01642 780129
sjdarch@btconnect.com
www.sjdarchitects.co.uk

ARCHITECTS

CLIENT:
1987-21

PROJECT:
LAND TO REAR OF 439-443 THORNABY ROAD
THORNABY

DRAWING TITLE:
LANDSCAPE PROPOSALS

PURPOSE OF ISSUE:
PLANNING

SCALE:
AS NOTED

DATE:
OCT 22

DRAWN:
sjd

DRAWING NO:
1987-21-201