BS5837:2012 ‘TREES IN RELATION TO DESIGN, DEMOLITION AND CONSTRUCTION - RECOMMENDATIONS’

INITIAL ARBORICULTURAL SURVEY REPORT

SITE OF SURVEY
Wern Goch Hirani Stores 53 Wern Goch West
Cardiff CF23 7AB

PLANNING REFERENCE
Proposed demolition of existing Shop, No. 56 and erection of new build development to form flats and A1 Commercial unit

CLIENTS
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Cardiff South Glamorgan CF14 2AT
United Kingdom

ARCHITECT
Mr P. Legg

SURVEYED BY:
G.M. Ayres
BSc (Hons) M Arbor A. Dip Biol ND arb
T.A. Seymour
BA (Hons) M Arbor A. Dip Geog ND arb

DATE SURVEYED
23rd..March 2018
Report valid for 12 months
1. INTRODUCTION

1.1 ASSIGNMENT

We have been instructed by Mr P. Legg to carry out a tree survey and provide a indicative soft landscaping scheme in accordance with BS5837:2012 ‘Trees in relation to design, demolition and construction - recommendations’ at Hirani stores 53 Wern Goch West Cardiff CF23 7AB.

1.2 REPORT METHODOLOGY

The methodology for preparing this report is in accordance with BS5837:2012 ‘Trees in relation to design, demolition and construction - recommendations’ is as follows:-

**Tree Survey Plan**

The purpose of the Tree Survey is to identify all trees on site that may be within influential distance of any proposed development. The plan will record the condition of the trees, their quality and benefits within the context of the development and their above and below ground constraints in relation to both the site and any proposed development.

1.3 NEXT STAGE

This document is intended to be used as an aid for the site design and layout.

Following the finalised design, and any further arboricultural consultation that this may require, the next stage is the drawing up of an Arboricultural Implications Assessment followed by an Arboricultural Method Statement.

**Arboricultural Impact Assessment**

The purpose of this part of the report is to identify, evaluate and possibly mitigate the extent of any direct and indirect impacts on the trees. It will also identify any potential impacts of the trees on the proposed development.

**Arboricultural Method Statements and Tree Protection Plan**

The Arboricultural Method Statement and Tree Protection Plan outline all necessary aspects of arboricultural work and tree protection that is required during the development process.

1.4 LEGAL CONSTRAINTS

If these trees are located in a Conservation area or designated with a Tree Preservation Order, the Local Planning Authority will need to be consulted before any work commences.

1.5 IMPLEMENTATION OF TREEWORK

All tree work should be carried out to BS 3998:2010 ‘Tree work - Recommendations’.
1.6 **SOILS**

No soil analysis has been undertaken at this site.

2. **CONCLUSION**

The tree survey and constraints plan have been completed and indicates the crown spreads and root protection areas. The impact assessment plan (AIA) has been completed and indicates trees to be removed and trees affected by the proposal. Method statements have been included within the report to ensure damage to retained trees is minimal.
APPENDIX 1

TREE SCHEDULE KEY

The trees and groups of trees at the site have been assessed as per the recommendations set out in BS 5837 2012.

<table>
<thead>
<tr>
<th>Type</th>
<th>Represents the type of vegetation being assessed. These are Tree (T), Group (G), Stump (S), Woodland (W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tag No</td>
<td>Each tree has been marked by a numbered tag for on site identification. Where possible this number is related to, or similar to the given tree number. There may be occasions when the tag number bears no relationship to the tree number, but is still useful for on site identification</td>
</tr>
<tr>
<td>Common Name Botanical Name</td>
<td>The tree species have been identified and both common and botanical names are given.</td>
</tr>
</tbody>
</table>
| Age        | **Young** – (Shown as Y in the schedule) juvenile tree with dominant leading shoot growth and short side branches. Vigorous growth and often of conical form.  
**Semi-mature** – (Shown as SM in the schedule) young adult tree, leading shoot growth may not always be dominant but side branches are usually ascending. Vigorous growth, flower and seed production. Minimal deadwood.  
**Early maturity** – (Shown as EM in the schedule) adult tree with the main framework of the crown formed. Not yet at full dimensions. Vigorous growth and some shedding of inner branches and deadwood. Horizontal side branches.  
**Mature** – (Shown as M in the schedule) adult tree at full crown volume and dimensions. Maximum flower and seed production. Dead wood likely within the crown and reiteration growth in the lower canopy.  
**Over mature** – (Shown as OM in the schedule) loss of overall vigor and reduction of full dimensions due to limb loss and branch tip die back. Major dead wood within the crown and possible hollowing and cavities. Retrenchment of the crown through increased reiteration growth on the lower branches.  
**Veteran / Ancient** – (Shown as V in the schedule) a tree that has passed beyond maturity and is old in comparison with other trees of the same species. They often have decayed or hollow stems and branches and abundant deadwood. They are important for heritage, landscape and ecological value. |
| **Height (m)** | Where site lines allow, tree height has been calculated by means of a laser clinometer and recorded in metres. If the use of a laser clinometer is restricted due to confined space or obscuring vegetation, the height of the tree may be estimated based on the surveyor’s experience. Adjacent trees or buildings with a clear view may be measured and used as a height scale. Where several trees are located in close proximity, one tree may be measured and the other trees estimated using the measured tree as a reference. |
| **Diameter (mm)** | The stem diameter is measured in millimetres in accordance with Annex C of BS5837 2012. |
| **Stems** | The number of stems are recorded, eg 1, 2, 3 etc. |
| **Crown Height (m)** | Is the distance from the lowest point of the crown from ground level. |
| **FSB Height (m)** /**Direction** | The height of the First Significant Branch (FSB) is recorded in metres and the direction of growth is in relation to the cardinal points of the compass. |
| **North (m)** | As it is rare that a tree's crown is asymmetric, the crown spread is measured at the four cardinal points of the compass to give an estimated representation of the crown spread which is then recorded on the tree survey plan. |
| **South (m)** |  |
| **East (m)** |  |
| **West (m)** |  |
### Condition

**Physiological Condition**

Each tree has undergone a brief preliminary visual inspection from ground level. This information is only relevant at the time of inspection because circumstances influencing a tree’s condition can change rapidly. This section is divided into two separate sections:

- **G = Good** – fully foliaged/twigged canopy for the tree’s situation with an indication of natural vigor from shoot extension growth and signs of good vitality throughout the tree’s system.
- **F = Fair** – signs of adequate vigour and vitality up to 70% canopy coverage. May show signs of slight stress such as branch tip die back, slightly sparse foliage, yellow or small foliage. Stress may be alleviated by prescribed maintenance.
- **P = Poor** – obvious signs of advance stress including less than 70% canopy coverage, crown die back, significant deadwood. Sparse and discoloured foliage.
- **D = Dead** – moribund or dead trees

### Comments

**Structural Condition**

Any structural defects are noted such as splits, cracks, tight forks, rubbing branches, cavities, decay and the presence of pests or diseases. These may compromise the mechanical integrity of the tree’s structure.

(Veteran trees may pose many physiological and structural faults yet still be considered in good condition for their age.)

### Recommendations

Following visual inspection preliminary recommended action, further detailed inspection, or maintenance may be prescribed.

### RPR (m) Root Protection Radius

This is calculated from Annex D of BS 5837 2012 ‘Trees in relation to construction - Recommendations’.

### RPA (m) Root Protection Area

This measurement is the total area of root protection. This can be modified if necessary by the Arboricultural Consultant.
The tree’s overall value is categorised in accordance to the cascade chart (table 1) of BS 5837 2005, see Appendix 2 of this report.

In brief, the purpose of the tree categorisation is to identify and quantify the value of the existing tree stock. This will allow informed decisions to be made concerning which trees should be removed or retained should the development occur.

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category A</td>
<td>Trees of high quality and value that make a substantial contribution. Marked in <strong>light green</strong> on the tree survey plan.</td>
</tr>
<tr>
<td>Category B</td>
<td>Trees of moderate quality and value that make a significant contribution. Marked in <strong>mid blue</strong> on the tree survey plan.</td>
</tr>
<tr>
<td>Category C</td>
<td>Trees of low quality and value that provide only an adequate contribution. Marked in <strong>grey</strong> on the tree survey plan.</td>
</tr>
<tr>
<td>Category U</td>
<td>Trees in such a condition that any existing value would be lost within ten years. This includes trees that should be removed for good arboricultural reasons. Marked in <strong>dark red</strong> on the tree survey plan.</td>
</tr>
</tbody>
</table>
APPENDIX 2

TREE SCHEDULE

Group 1: Stumps of recently felled trees

Group 2 woodland edge trees

with heavily end loaded limbs over property

Group 3 Trees outside of site in verge
Tree group 1 (now cut to ground level)

Woodland group 2 with overhanging branches

Group 3: 4 trees outside of site within verge
<table>
<thead>
<tr>
<th>Tree Number</th>
<th>Tag number</th>
<th>Type</th>
<th>Tree Name (Common name)</th>
<th>Tree name (Botanical)</th>
<th>Condition</th>
<th>Crown height</th>
<th>Height</th>
<th>Trunk Dia. (mm)</th>
<th>Single stem (1) or multi-stem (m)</th>
<th>North (m)</th>
<th>South (m)</th>
<th>East (m)</th>
<th>West (m)</th>
<th>BS Cat.</th>
<th>RPA radius (m)</th>
<th>RPA Area (m²)</th>
<th>Comments</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Group</td>
<td>Sycamore</td>
<td>Acer pseudoplatanus</td>
<td>Good</td>
<td>6.0N</td>
<td>17</td>
<td>560</td>
<td>9.5</td>
<td>5.5</td>
<td>6.5</td>
<td>5.5</td>
<td>B2</td>
<td>8.64</td>
<td>234.5</td>
<td></td>
<td>Felled</td>
<td>Grind out stumps</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Group</td>
<td>Mixed deciduous woodland with 2 Ash affecting site</td>
<td>Fraxinus excelsior</td>
<td>Good</td>
<td>6.0N</td>
<td>17</td>
<td>560</td>
<td>9.5</td>
<td>5.5</td>
<td>6.5</td>
<td>5.5</td>
<td>B2</td>
<td>8.64</td>
<td>234.5</td>
<td>Woodland edge trees with both with heavily end loaded limbs overhanging property</td>
<td>Reduce end loading of vulnerable limbs by approx. 4m. Monitor future growth.</td>
<td></td>
</tr>
</tbody>
</table>
TOTAL SITE AREA: 726m²

Car Parking:
6 No Resident spaces
12 No Cycle spaces

REFUSE STORAGE:
Dry Recyclables: 2 x 1100 litre bulk bins
Food waste: 1 x 240 litre bins
General waste: 2 x 1100 litre bulk bins
Compost: 1 x 240 litre bin

SCHEDULE OF ACCOMMODATION
11 No total flats
(1 No one bed flat)
(6 No two bed flats)
(4 No three bed flats)

LANDSCAPING DESIGN:
Refer to Cardiff Treeplaces design scheme

Planning Issue
3. ARBORICULTURAL IMPLICATIONS ASSESSMENT

THE DEVELOPMENT PROPOSAL
We have been supplied with the following plan shown above (P555 L002) detailing the proposal to demolish the existing shop and No. 56 to build flats.

3.1 DIRECT LOSS OF TREES
As the only two trees on site have now been removed there will be no loss of trees related to this development.

3.2 CONSTRUCTION WITHIN ROOT PROTECTIVE AREAS LIKELY TO RESULT IN ROOT SEVERANCE
N/a

3.3 CONFLICT WITH BRANCHES AND FACILATATIVE PRUNING
It is likely that branches within the lower crown from two Ash trees within the woodland group 2 to the south of the site, may conflict with demolition and building works. These have been assessed as likely to fail due to heavy end loading and should be either removed back to the main stem and the remaining crown re-shaped or reduced in length by up to 4.0m. Other trees outside of the site are unlikely to be affected.

4. TREE PROTECTION REQUIRED DURING DEVELOPMENT PHASE
It seems unlikely that any specific protection measures will be required for trees outside of the development area although it is recognized that access to the site for vehicles and machinery is limited. It is therefore essential that any proposed access routes for construction vehicles, storage of materials or machinery or temporary site offices use the existing hard surfaced areas.

5. SITE MONITORING
Once planning permission has been granted it is important that an open line of communication is maintained between the developers, contractors, arboricultural consultant and the local Planning Authority.

The arboricultural consultant should be called upon to give advice and act as a watching brief where trees are likely to be impacted by construction operations.

During the period of intensive construction, it is advisable that regular (every 1 to 2 weeks) random site visits are carried out by the arboricultural consultant to ensure tree protection has not been contravened and to provide general advice. Site visit inspection sheets should be completed and made available to the developer, tree officer and contractors.
6. CHRONOLOGY OF EVENTS FOR ARBORICULTURAL WORK

PLANNING STAGE

1. Pre-development Tree Survey – completed.
2. Arboricultural Implications Assessment – completed.
3. Site meeting with Arboricultural Officer –
4. Once planning permission granted, application to local authority to carry out tree work.

PRE-CONSTRUCTION PHASE

5. Carry out tree work.

CONSTRUCTION PERIOD

6. Carry out landscaping and light construction work and ameliorate any soil compaction.

POST CONSTRUCTION

7. Regularly inspect the trees every 1 to 2 years to monitor condition and assess for hazard risk.

7. ARBORICULTURAL METHOD STATEMENTS

The function of the Arboricultural Method Statements and Tree Protection Plan is to provide the construction contractors with a clear and concise instruction on how to carry out tree related work. This includes guidance on care to be taken in respect of trees outside the development area. The method statements have been attached to this report as appendices so they can readily be reproduced as work sheets for the contractors.

8. FUTURE CONSIDERATIONS

If the proposed development goes ahead there are several factors that should be considered.

If this site has any protected trees agreement will be required and consent gained from the local authority for tree removal and replacement planting.
ARBORICULTURAL METHOD STATEMENTS

SITE SPECIFIC ARBORICULTURAL METHOD STATEMENT

GENERAL TREE PROTECTON OUTSIDE THE EXCLUSION ZONE

1. INTRODUCTION

Trees that have been protected by constructing an exclusion zone, erecting protective fencing and ground protection can still be detrimentally effected from activities outside these areas. The following additional precautions should be taken outside the exclusion zone.

2. METHODOLOGY

a) Care should be taken when planning site operations 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 damage to them and might make their safe retention impossible. Consequently, any transit or traverse of plant in close proximity to trees should be conducted under the supervision of a banks man to ensure that adequate clearance from trees is maintained at all times.

b) Material which will contaminate the soil, e.g. concrete mixings, diesel oil and vehicle washings should not be discharged within 10m of tree stems.

c) Fires should not be lit in a position where their flames can extend to within 5m of foliage, branches or trunk. This will depend on the size of the fire and wind direction.

d) Notice boards, telephone cables or other services should not be attached to any part of the tree.

e) It is essential that allowances should be made for the slope of the ground so that damaging materials such as concrete washings, mortar or diesel oil cannot run towards the trees.
SOFT LANDSCAPING, PLANTING AND MAINTENANCE SCHEDULE

SITE OF SURVEY
Wern Goch Hirani Stores 53 Wern Goch West
Cardiff CF23 7AB

CLIENT
D L P Architecture
89 Heol Don
Cardiff South Glamorgan CF14 2AT
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DATE
23rd March 2018 Report valid for 12 months

Reference documents BS 8545 2014
BS 3882 2015
BS 8601 2012
BS 3998 2010
BS 5837 2012
BS 4043 1989
BS 4428 1989
BS 3936-1 1992

Defra leaflet: CONSTRUCTION CODE OF PRACTICE FOR THE SUSTAINABLE USE OF SOILS ON CONSTRUCTION SITES
1. **INTRODUCTION**

1.1 **DEVELOPMENT SITE LANDSCAPING**
This document is being prepared in response to conditions on the consent for planning in relation to a proposal for a new build of flats at Wern Goch Hirani Stores 53 Wern Goch West Cardiff CF23 7AB. The aim of the planting scheme is to provide guidelines for the planting of shrubs around the grounds of the site to enhance the visual amenity of the site.

1.2 **ASSIGNMENT**
We have been instructed by Peter Legg BA(Hons) Dlp. Architecture to:

Prepare an outline landscape schedule for the site above in accordance with BS5837:2012. It should be noted that the hard landscaping scheme, including detail on paving, and surfaces for parking is detailed in plans from D L P. Architecture. This plan includes details on finished ground levels and has been used as a basis for the soft landscaping plan provided with this report.

1.3 **SCOPE OF WORKS**
The scope of the soft landscape works will include:

- The supply and planting of the specified shrubs;
- A programme for maintenance of new plants;
- A condition for replacement of plants that fail within the first five years of completion of the project.

The specification for plants included within this report is subject to the use of approved top and subsoil soils for planting beds which will be filled with subsoil to BS 8601:2013 and topsoil to BS 3882:2015 to a depth of no less than 300mm for trees and shrubs being brought to site. Imported topsoil should be supplied with certificate of compliance with BS3882 : 2015. A cross section and soil profile has been included as part of this proposal.

1.4 **LIMITATIONS AND USE OF COPYRIGHT**
All rights in this report are reserved. No part of it may be reproduced or transmitted, in any form or by any means without our written permission. Its contents and format are for the exclusive use of Peter Legg BA(Hons) Dlp Architecture and his client. It may not be sold, lent out or divulged to any third party not directly involved in this situation without the written consent of Cardiff Treescapes.

We have no connection with any of the parties involved in this situation that could influence the opinions expressed in this report.
2. THE SITE

2.1 SITE DESCRIPTION AND LOCAL CONTEXT
The property is currently being used as a shop within a larger residential estate with terraced houses and semi detached houses. There are recreational green spaces and pockets of woodland.

2.2 SOIL EVALUATION AND IMPROVEMENTS REQUIRED
Soils within planting beds will need to be assessed for suitability in accordance with guidelines set out in BS8545 and if found to be in poor condition and unsuitable for plant growth will be replaced with certificated sub soil and top soil compliant with BS 3882 2015 and to BS 8601 2013. Plant beds will need to have a profile of 300mm of free draining top soil over de-compacted sub soil

2.1 Planting beds for shrubs
The soils within planting beds indicated on the planting plan will need to be filled with suitable top soil overlaying de-compacted sub soil to comply with standards set out in the British standards as stated above. The top 100mm of soil should be broken down into a fine tilth and levelled in preparation for planting, and will need to be subjected to percolation tests as set out in BS 8545 B.2.4 and table B1.

2.2 Selection of plants:
Plants will need to be manageable for owners, suitable for location, sourced locally, and where possible provide potential habitat or foraging opportunity for wildlife. If plants are stored they will need to be regularly watered to avoid drying out. The plants selected have been chosen for their drought tolerance and low maintenance.
### 2.4 TABLE 1: The Shrubs

<table>
<thead>
<tr>
<th>Species</th>
<th>Size</th>
<th>Supplier</th>
<th>Photograph</th>
<th>Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Betula medwedewii</td>
<td>4 L Container grown plant 1m Ht</td>
<td>BlueBell Arboretum and Nursery, Annwell Lane, Smisby, Ashby de la Zouch, Leicestershire LE65 2TA England, UKPhone: (01530) 413700 Email: <a href="mailto:sales@bluebellnursery.com">sales@bluebellnursery.com</a></td>
<td><img src="BETULA.png" alt="BETULA.png" /></td>
<td>Deeply veined dark green leaves which turn bright yellow in autumn before falling. A small tree with a reasonably compact and bushy habit.</td>
</tr>
<tr>
<td>’Gold Bark’</td>
<td></td>
<td></td>
<td><img src="BETULA2.png" alt="BETULA2.png" /></td>
<td></td>
</tr>
<tr>
<td>5 x Juniperus squamata</td>
<td>3 litre Container grown 0.2-0.25m ht.</td>
<td>Wyevale Nurseries Kings Acre Hereford</td>
<td><img src="JUNIPERUS.png" alt="JUNIPERUS.png" /></td>
<td>Evergreen conifer forming prostrate shrub up to 2 m blue grey foliage</td>
</tr>
<tr>
<td>’Blue Carpet’</td>
<td></td>
<td></td>
<td><img src="JUNIPERUS2.png" alt="JUNIPERUS2.png" /></td>
<td></td>
</tr>
<tr>
<td>2 Corylopsis sinensis</td>
<td>5 litre Container grown Ht 1-1.5m</td>
<td>Ashwood Nurseries Ashwood Lower Lane Kingswinford West Midlands DY6 0AE United Kingdom</td>
<td><img src="COROLOPIS.png" alt="COROLOPIS.png" /></td>
<td>Slow growing medium sized shrub with fragrant pale yellow flowers</td>
</tr>
<tr>
<td>’Spring Purple’</td>
<td></td>
<td></td>
<td><img src="COROLOPIS2.png" alt="COROLOPIS2.png" /></td>
<td></td>
</tr>
<tr>
<td>2 Cretaegus pedicellata</td>
<td>Nursery standard trees container grown 2-2.25m Ht</td>
<td>Thornhayes Nursery St Andrews Wood Dulford Cullompton Devon EX15 2DF</td>
<td><img src="CRECTAEGLUS.png" alt="CRECTAEGLUS.png" /></td>
<td>Small growing tree with good foraging fruit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><img src="CRECTAEGLUS2.png" alt="CRECTAEGLUS2.png" /></td>
<td></td>
</tr>
</tbody>
</table>
AMS 2
PLANTING CONTAINERISED SHRUBS, AND POST MAINTENANCE

1.0 INTRODUCTION

1.1 This method statement describes the procedure required for the planting and post maintenance of containerised shrubs.

1.2 Although containerised plants can be planted throughout the year, we would recommend planting in the dormant season between November and early March. Planting outside this period would require careful watering management.

1.3 The recommendations for shrub species and dimensions are detailed below and were available at the time of this report but will be subject to availability:

2.0 METHODOLOGY

2.1 The planting beds for shrubs will be no less than 0.75m. wide and dug to a depth of no less than 450mm. The soil resource survey and soil resource plan will determine whether existing soils or imported soils are used, and planting beds will be filled with subsoil to BS 8601:2013 and topsoil to BS 3882:2015 to a depth of no less than 450mm.

2.2 Planting beds will need to be formed with edging stones set in concrete or treated timber rails supported on short stakes at 1.0m intervals driven into the ground.

2.3 The plants should be spaced out evenly across the prepared beds and pits made for the plants. If dry the pits should be filled with water and the plants plunge planted ensuring they are planted to the correct depth with soil levels at the root collar. Soil should then be firmed around each root ball to avoid frost lift.

2.4 Prune any damaged branches.

2.5 Any weed growth will be removed from the surface of the root ball and disposed of.

2.6 The approved backfill soil mix as determined by the SRP will be placed into the planting pit, filling the void between the root ball and the sides of the planting pit. The approved top soil will be used for topping up, if required. The backfill shall be worked around the root ball in layers of 10 – 15 cms with each layer being carefully firmed using the sole of the foot without damaging the root ball.

2.7 During the process of backfill, the trees/shrubs will continually be checked for straightness.

2.8 Any leftover soil and debris arising from the planting will be removed and disposed of accordingly.

2.9 The shrubs will be mulched with a well composted organic mulch such as woodchip to a depth of 8cms when settled. The mulch will be placed across the length and breadth of the shrub beds to control weed growth and for water retention. No build-up of mulch will be situated around the base of the stems as any heat produced by the mulch may kill the cambium and also prevent respiration.

2.10 The shrubs will be watered immediately by slowly filling the mulch bund with ten litres of water allowing for the water to soak into the root ball and planting pit.

3. MAINTENANCE

3.1 During the first two growing seasons after planting, the/shrubs will be watered regularly especially during dry periods from March to October. The amount of water required will be dependent on the soil type, but water logging will be avoided. Any water should be applied
slowly avoiding run off away from the root ball. All grass and weed competition shall be eliminated in the first three growing seasons.

3.2 The mulch shall be topped up to maintain a depth of 8cm during the first three growing seasons.

3.3 Shrubs will require clipping annually after flowering in the dormant months and grasses will require old growth removed early in the new year. Hedgerow plants will require clipping once established at required height.

3.5 Any trees or shrubs dying within the first 5 years of completion will be removed and replaced with similar size and species.

4.0 MATERIALS

4.1 Subject to the outcome of the Soil Resource Survey and Soil Resource Plan
Imported Subsoil: Handled stored and of quality to comply with specifications in guideline BS8601 ; 2013
Imported top soil should supplied with certificate of compliance with BS3882 : 2015 (if required )
Contact: Crown Hill Top soil supplies

4.2 Organic Matter (if soil condition poor), Mulch,
**PLANTING SCHEDULE:**

- 5 x Juniperus squamata 'Blue Carpet'
  - 3 litre container grown 0.2-0.25m ht

- 2 Betula medwedewii ‘Gold Bark’
  - 4 L Container grown plant 1m Ht

- 2 Corylopsis sinensis ‘Spring Purple’ 5 litre container grown Ht 1-1.5m

- 2 Cretaegus pedicellata
  - Nursery standard trees container grown 2-2.25m ht

**PLANTING BEDS:**

- 300mm top soil (BS 3882 2015)

- Concrete edging to retain soil

**SUB SOIL:** (TO BS 8801:2013)