# Landscape Report

Hillhouse, Lucan Road, Lucan, Co. Dublin

#### Introduction

This document provides a description of the landscape and landscape design for the site at Hill House, Lucan Road, Lucan, Co. Dublin. This report should be read in conjunction with the following drawings and reports; 4397/19/003, Landscape Plan

# Description of existing landscape on the site

The site is comprised of a single residential property with workshop/garage, enclosed by stone boundary walls. To the south and east inside the boundary wall is a well-maintained Lawson cypress hedge (*Chamaecyparis lawsoniana*), 3.7 metres tall, at the back of the workshop garage it has been topped and all lateral growth has been pruned back. Outside the wall on the northern boundary are Chery-laurel. Outside the wall to the west are Cherry-laurel, Sycamore, Cypress and Philadelphus.

Within the garden are some formed hedges and topiary bushes of Yew, Box, Euonymus and Privet. There is Red valerian (*Centranthus ruber*), on the walls and Ivy (*Hedra helix*) within the hedges. In the south west corner are two apple trees and a Pear tree. There is dead ivy clad Chery, a Laburnum and Sawara cypress and mature Lilac.

# **Proposed development**

The development shall comprise of the of a proposed residential development consists of the demolition of an existing house, Hillhouse, Lucan Road, Lucan and ancillary out buildings and the construction of one 4 storey building accommodating 19 apartments comprised of 6 one-bedroom apartments and 13 two bedroom apartments. Vehicular access to the proposed development will be via Lucan Road with 13 car parking spaces and 20 bicycle parking spaces and ancillary services all on a site of 0.1925 hectares.

## Landscape Proposals

The proposed landscape design provides for area of public open pace to the rear which is enclosed by the existing boundary wall and mature planting outside the site to the west.

Within the public areas at the base of the building area areas of shrub planting to break of the hard landscaping.

# List of principal Tree and Shrubs to be used

Cistus x corbariensis	30-40 4/m <sup>2</sup>
Lonicera pileata	30-40 3/m <sup>2</sup>
Aucuba japonica	30-40 3/m <sup>2</sup>
Prunus laurocerasus 'otto luyken'	30-40 3/m <sup>2</sup>

Ceanothus thrysiflorus repens	30-40 4/m <sup>2</sup>
Hypericum hidcote	30-40 3/m <sup>2</sup>
Escallonia macrantha 'Donard seedling'	30-40 3/m <sup>2</sup>
Euonymus 'emerald and gold'	20-30 4/m <sup>2</sup>
Vinca minor	20-30 4/m <sup>2</sup>
Mahonia aquifolium atropurpurem	30-40 3/m <sup>2</sup>
Prunus Iusitanica	50-60 2/m <sup>2</sup>
Buxus sempervirons	30-40 3/m <sup>2</sup>
Trees - rootballed	
Carpinus betulus 'frans fontaine'	20-25
	cm girth
Tilia cordata 'green spire'	20-25 cm
	girth
Alnus cordata	12-14 cm
	girth
Betula pendula	12-14 cm
	girth

# **Outline Landscape Specification**

Subject to and in accordance with the conditions of contract the contractor will be required to complete the works in accordance with an agreed programme to be agreed with the Client / Clients agents

The contractor is to provide all plant required for his own works. Attendance to be agreed with the main contractor prior to issuing contracts.

The contract Works are to be carried out on the site defined in and on the Drawing No. 4397/19/003

The site shall be prepared, cultivated, trees and shrubs supplied and planted, topsoil re-graded as required and maintained during the defects liability period (which shall be for a period of 18 months from practical completion). The contract price shall be held to include for leaving the site clean and tidy on completion.

The contractor shall have inspected the site and be clear about any site restrictions prior to the commencement of the contract works.

All landscape works to be undertaken in the first planting season after completion of buildings/construction works (November to March), grassing to be carried during suitable weather conditions after completion of building/construction works.

## Setting out

The Contractor shall be responsible for the true and proper setting out of the contract works and for the correctness of the position levels, dimensions and

alignment of all parts of the contract works, and for the provision of all necessary instruments, appliances and labour in connection therein.

The Contractor shall obtain the approval of the Landscape Architect to the line and position of planting areas and individual trees, before commencing planting.

The Contractor shall at his own expense, rectify any errors that arise, in position, levels, dimensions, or alignment, to the contract works. Unless such an error is based on incorrect data supplied by the Landscape Architect.

The checking of setting out by the Landscape Architect shall not in any way relieve correctness thereof.

## Protection

The Contractor shall carefully protect and preserve all bench works, site rails, pegs and other things used in setting out the contract works.

#### **Variations**

Any error in description or quantity or omission of items from contract documents shall not invalidate the contract but shall be corrected and deemed to be a variation by the Employer, to be covered on a fair and reasonable basis using where relevant the appropriate price submitted by the contractor in his tender. Any variation or instruction given verbally shall be confirmed in writing within seven days.

## Supervision

The contractor shall ensure a full and adequate supervision of the site during the period of the works. He shall provide in his tender for a competent foreman to be continuously on site while work is in progress.

# Programme of works

All operations shall be carried out during suitable weather conditions only. Exact dates for completion of works will be finalised after the awarding of the Contractor. The Landscape Architect shall be informed as to the timing of all works prior to commencement. The contractor shall satisfy the Landscape Architect that all works have been carried out to comply with BS 4428: 1991 recommendations for general landscape operations, BS 3936: 1992 part 1-specifications for trees and shrubs, part 4- forest trees and part 10- ground cover plants and BS 3882.

# **Site Preparation**

Before commencing operations on site, the Contractor shall confirm with the Landscape Architect the starting date and the extent of the work to be executed.

The Contractor shall take all necessary precautions to protect existing services and shall be responsible for any repair or accidental damage caused to services, and/or consequently the internal works, during the contract works and/or up to the issuance of the certificates of making good defects.

In this specification the words 'remove' and/or dispose shall be deemed to include for loading and transporting off site.

# **Ground Preparation**

Soil mix shall be as follows: See Appendix One (Topsoil supplied by main contractor)

The Contractor shall be responsible for maintaining the soil structure and pH level of the topsoil after re-spreading by the main contractor.

The Contractor shall provide a sample of topsoil from an approved source for the Landscape Architects approval.

The level of the topsoil shall be at least 50mm above all finished levels to allow for settlement.

All peat used in the topsoil shall be coarse textured horticultural peat and shall conform to **BS 4156** 

#### PLANT MATERIAL AND PLANTING

## Quality and Supply of Plant Material

The Contractor shall be responsible for the supply, planting and satisfactory establishment of all plant material, maintenance of planting up to issuance of the Certificate(s), making good defects and reinstatement of losses due to natural causes.

All plant material must comply in all respects with the current edition of **BS 3936** parts 1, 4 and 10. Any plant material supplied, which does not meet this standard, will be rejected and replaced with suitable material with additional costs to the Contractor.

No plant species shall be accepted in substitution for the specified plant species without the prior written approval of the Landscape Architect.

The Landscape Architect reserves the right to inspect all or any plant material in the nursery prior to supply date to the site.

## **Setting Out of Planting**

All trees and shrubs are to be planted in the positions and in the numbers as shown on the drawing. All plants shall be planted in individual pits, excavated by the Contractor.

All shrub bed preparations shall be as specified and the Landscape Architect reserves the right to inspect all shrubs before planting commences. Any work falling below this specification will require to be redone before any planting is allowed to be carried out.

Shrubs are to be planted in a random manner (unless otherwise stated) at equal spacing as shown on the drawing. Groups of plants are to be set out as shown on the drawing unless specific dimensions are given and setting out shall be agreed with the Landscape Architect prior to planting commencing.

Shrub beds shall be prepared to a minimum depth of 125mm to form a fine tilth. When a fine tilth has been produced, the areas shall be graded to form a uniform and even grade. Any vegetable matter, rubbish, deleterious matter and all stones having one dimension of 20mm or more shall be removed off site.

## **Plant Material**

All plant material will have been propagated from healthy vigorous stock, be true to type and form, free from disease and pests and any damage detrimental to the future growth of the plant. All plant material shall have been adequately prepared for lifting in the nursery so that all roots systems will be adequate in relation to the size of the plant and be conducive to successful transplanting. The age, size, and other characteristics are to be as specified on the drawing.

All open ground shrubs shall have been under cut and shall have a well balance root to shoot ratio and have a single strong leader unless otherwise specified. All plant sizes should be as specified on the drawings or in the schedule of quantities.

All pot grown shrubs shall be vigorous bushy plants, they should be in an adequate size containers to ensure they have not become pot bound.

## General planting

Tree and shrub planting operations are to undertaken in suitable weather conditions, no planting shall be carried out in periods of drought unless the contractor undertakes watering at his own expense. Such watering shall be taken to mean thorough soaking of the tree pits, shrub, ground cover and climbing plants to the full depth of the rooting system.

All plants are to planted in separate pits. The minimum size of planting pit shall be 20% bigger than the root ball or container size.

Maximum care shall be taken at all stages when handling plants to ensure as little disturbance as possible to the root ball of the plants.

# Shrub planting

Position of shrubs to be planted shall be marked out in accordance with the planting plan. Polythene and other non-perishable containers shall be deposited off site and any badly damaged roots carefully pruned. The shrubs shall then be set in holes so that the topsoil level, after settlement will be at the previous soil level mark of the stem of the shrub.

All container grown plants shall be thoroughly watered before planting. All spiralling roots and potential girdle roots shall be removed or straightened before planting.

On completion of the planting operation, prune any broken or damaged branches back to sound wood. All material produced by pruning shall be deposited off site.

# **Tree Planting**

Excavate a tree pit to a min depth of 800mm and allow at least 250mm space around and below the overall rootball. Place the tree in the centre of the hole (taking care to avoid damaging the roots and/or rootball) to a depth of the nursery soil mark on the stem. Back fill with well mixed topsoil and firm as filling proceeds, taking care to avoid damaging the roots and ensuring that the tree is positioned upright.

## Tree staking

Tree stakes shall be cylindrical and pointed at one end, peeled and pressure treated. Tree stakes shall be at least 300mm long with a minimum diameter of 60 mm. Tree shall be secured to the tree stakes using nail on type tree ties with space pads, as approved by the Landscape Architect. Secure the tree to the stake using two ties per tree.

## **Post Planting Operations**

As soon as the planting operations have been completed in the shrub beds the surface of the soil shall be raked over and levelled out. Any weeds exposed shall be removed of site. On completion a residual herbicide such as *Simazine* shall be applied to the ground the manufactures recommended rates.

After applying the herbicide the contractor shall apply a 50mm thick layer of mulch under and around the plants of all shrub planted areas. The mulch shall be raked after spreading to leave an even surface.

#### GRASSING

Cultivation must only be carried out in dry weather and when ground conditions are not waterlogged or sticky, unless authorised to the contrary by the Landscape Architect.

After cultivation the area cultivated shall not be traversed by vehicles.

Any surplus matter, rubbish, deleterious matter and all stones having one dimension of 50mm or more brought to the surface by cultivation preparations shall be raked up and removed off site.

## Cultivation

Cultivation shall be by rotovation to produce an even bed free from weeds and surplus vegetable matter and stones greater than 50mm. The area shall then be levelled and consolidated.

## **Broadcasting**

All grass seed shall be broadcast. The total quantities of seed required shall be divided in half, each half being sown evenly by approved means in transverse directions to provide a total rate of sowing as specified.

Grass seed to be 75% Elka Perennial Rye Grass and 25% Borial Creeping Fescue sown at a rate of 35g per square metre or similar approved seed mix.

# **Fertiliser and Post Seeding Operations**

Prior to seeding, the area shall be fertilised using PBI Gromore fertiliser (or similar approved) at a rate of 35g per square metre.

In the Spring following sowing, a top dressing of NPK (10:10:20) at a rate of 40g per square metre shall be applied.

When the grass is 100mm long and conditions are suitable, the grass is to be lightly topped, removing not more than 25mm.

#### **MATERIALS**

## **Tree Stakes**

Tree stakes shall be cylindrical and pointed at one end, peeled and pressure treated. Tree stakes shall be 300mm long with a minimum diameter of 600mm.

#### Fertiliser

The contractor shall incorporate a slow release fertiliser in the top 150mm of the topsoil. Fertiliser shall be *Osmocote* or similar approved and shall be incorporated at a rate of 70grms/sq.m

# Approved chemicals

All approved chemicals used shall be non toxic to humans and animals under normal use, and shall be applied to the manufactures instructions only.

#### TOPSOIL

## APPENDIX ONE: TOPSOIL

All topsoil shall conform with **BS 3882**, having pH range of 5.7 to 6.7, except acid soil and be of a clay loam with a medium texture.

Topsoil shall be moved and/or mixed only when dry weather conditions prevail.

Topsoil shall be a suitable medium for growing the ordinary range of cultivated plants under satisfactory conditions of management and shall be of an adequate nutrient value and from an approved source. Samples must be made available for testing by the landscape architect.

Topsoil shall be free from pernicious weeds and roots, clay lumps, rubbish, bricks and other builder's materials, subsoil foreign matter and chemical contamination. It shall be reasonably free from stones with a maximum size in any dimension of 50mm.

#### MAINTENANCE

# Scope of Work

The maintenance of grass, trees and shrubs, for the period of each contract.

During this period the Contractor shall keep all roads and pavements clear of weeds, grass mowings, mulch and rubbish from site at the conclusion of each days work.

#### Trees and Shrubs

Tree stakes and ties shall be checked at least once a month to make sure they are still performing their function correctly. Any loosened tree stakes shall be refirmed and any damaged or broken stakes shall be replaced immediately and the ties adjusted so the tree is held firm.

Shrubs and trees loosened by wind, frost or any maintenance operations shall be firmed up, (check at least four times a year). If any plants have been completely lifted out of the ground, they shall not be replanted but replaced.

## **Weed Control**

Any weed growth occurring during the maintenance period in the shrub areas shall be spot treated with a translocated herbicide 'Round Up' or similar approved, or removed by hand. An application of pre-germination herbicide 'Simazene' or similar approved shall be applied in the Spring each year. All herbicides shall be applied according to their manufacturers instructions using directional spraying of adjacent shrubs. Spraying shall be done only in calm conditions to prevent drift damage.

## Watering

Watering shall be carried out when it will be most beneficial to the plants, preferably later in the day when transpiration and evaporation rates are at their lowest. Trees and shrubs shall be watered when the Contractor deems it necessary and/or at the discretion of the Landscape Architect after the initial planting operation and during the maintenance period.

Watering shall be taken to mean a thorough soaking of the soil within the area of the plant pit, to the depth of the roots. Under no circumstances shall small amounts of water be applied to trees or shrubs.

#### **Plant Deaths**

All tree and shrub losses due to natural causes after planting shall be replaced by the Contractor within the following season with plants equal in size and shape to those first planted.

### **Pests and Diseases**

All plants shall be inspected by experienced personnel at least twice a year for the presence of pests and diseases. If either or both are present, the Contractor shall report the conditions and implement the appropriate control measure immediately.

All chemicals to be used for the control of pests and diseases shall be approved, and applied in accordance with the manufacturers written instructions.

If any plants are so heavily infested that even after control measure have been taken death is likely, they shall be removed from site and replaced with new healthy stock.

## Litter Removal

The Contractor shall clean up all litter and rubbish in the planted areas and grass areas at least once a month and remove it off site.

# **Grass Cutting**

Grass cutting is to take place at regular intervals to maintain the grass no longer than 40mm.

Should the maximum permissible length be reached, cuttings shall be collected and removed off site.

In very wet conditions all operations involving grass cutting shall cease until conditions allow operations to continue without damaging the surface, levels or contours of the ground and/or creating grass cutting divots from rollers or cutters.

Grass clippings need not be removed once the required frequency of cutting and general performance is maintained.

Mowing will take place over the maximum area of grass up to adjacent paving, fencing, trees and shrubs beds.