

BALDERSTONE SCHOOL, ROCHDALE

Biodiversity Mitigation Plan

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Appendix A Phase 1 Habitat Map (from existing Ecology Report 415.03044.00045)

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1.0 INTRODUCTION

1.1 Terms of Reference

SLR Consulting Ltd were commissioned by Gleeson Developments Ltd to prepare a Biodiversity Mitigation Plan for the former Balderstone School site in Rochdale (approximate central OS Grid Reference SD 902 114). An application for the erection of 147 housing units has been submitted (planning ref: 16/00224/FUL). This mitigation plan provides information pursuant to Planning Condition 16, which is worded as follows:

“No above ground works shall take place until a scheme of biodiversity enhancement, including a timetable of implementation, taking into account the recommendations set out in the ecology survey (ref – 415.03044.0045), has been submitted and approved in writing by the local planning authority.”

1.2 Site Context

The brownfield site was formerly the location of Balderstone School which was demolished in 2013. The site is located off Queen Victoria Street in a largely urban setting. Immediately adjacent to the site is Balderstone Park, with playing fields to the east, and parkland and a recreation ground to the south. Residential housing lies to the west and commercial properties to the north. The site predominantly consisted of bare ground and areas of species poor, semi-improved grassland. The perimeter of the site was demarcated by a combination of hedgerow, mature and semi-mature trees and fencing.

1.3 Background

The site was subject to an Extended Phase 1 Habitat Survey and bat roost potential survey in October 2015, and an aerial tree inspection in February 2016¹. The site was found to primarily support habitats with no significant ecological value which are readily re-creatable, although a number of mature broad-leaved trees were present along the site boundaries which were assessed as being of district importance to nature conservation.

Following an aerial inspection of certain trees (T4, T6, T7, T9 and T10 – refer to Appendix A), all trees within the site boundary were assessed as having negligible potential for roosting bats using current guidance contained within the third edition of the Bat Conservation Trust Guidelines². Two trees beyond the site boundary (T21 and T24) were assessed as having Low potential for roosting bats and could not be climbed for an aerial survey, however these trees are not being directly affected by the proposals, and therefore no further recommendations were made with respect to these trees.

¹ SLR Consulting Ltd (February 2016) Balderstone School, Rochdale: Extended Phase 1 Habitat Survey, Bat Roost Potential Survey and Aerial Inspection of Trees for Bats. 415.03044.00045.

² Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn.). Bat Conservation Trust, London.

The ecology report made the following recommendations:

- If possible, the mature trees along the eastern boundary should be retained. However if this is not practicable, the loss of trees is compensated for by the inclusion of a tree planting scheme. Any tree planting scheme adopted should use native stock of a local provenance.
- Those trees within the site boundary that are to be retained, along with those trees along, or immediately adjacent to the site perimeter should be adequately protected during the construction process by the erection of fencing to create a Tree Protection Zone.
- If possible and practicable, site clearance works are phased to avoid the main bird breeding season, taken to be March to August inclusive. If this is not possible, suitable breeding bird habitat that requires removal as part of site clearance works should be searched for evidence of breeding birds by a suitably experienced ecologist and any active nests should be left untouched with a suitable buffer zone, until the young have fledged.
- The Japanese knotweed *Fallopia japonica* within the site should be treated and removed from site following the Environment Agency's Code of Practice: Managing Japanese Knotweed on Development Sites³.

The following Biodiversity Mitigation Plan incorporates the above recommendations.

³ Environment Agency's Code of Practice: Managing Japanese Knotweed on Development Sites. Available at <https://www.gov.uk/government/publications/japanese-knotweed-managing-on-development-sites>

2.0 AIMS AND OBJECTIVES

2.1 Aims

The following Biodiversity Mitigation Plan sets out mitigation measures and ecological management practices which have already been undertaken, or shall be undertaken, to achieve the following aims:

- To ensure no breach of wildlife legislation occurs on site for the duration of the site clearance and construction phase;
- To minimise ecological impacts and disturbance associated with construction;
- To protect retained adjacent vegetation;
- To control invasive non-native species; and
- To provide habitat for bats, birds and other wildlife through provision of a planting scheme.

2.2 Objectives

The aims of the project will be met through the following specific objectives:

- To safeguard nesting birds during vegetation clearance works;
- To protect adjacent vegetation and trees to be retained through the erection of protective fencing to create a Tree Protection Zone;
- To adopt sensitive lighting to reduce disturbance to foraging bats;
- To remove Japanese knotweed from the site; and
- To plant new trees and hedgerow in the interior and along the margins of the site, of predominantly native species.

3.0 MITIGATION MEASURES BEFORE AND DURING CONSTRUCTION

3.1 Removal of Vegetation Outside of the Bird Nesting Season

Removal of all vegetation which has potential to support nesting birds has already been undertaken at the site. This includes all trees within the site boundary, as well as the hedgerow along the northern boundary. The vegetation removal was undertaken in February 2017, and was timed to avoid the bird breeding season of March to August inclusive. Therefore impacts upon nesting birds in terms of damage or destruction of nesting birds and their nests, eggs and chicks, has been avoided. As such, the site no longer has the potential to support nesting birds, and no further mitigation or survey work is required during the construction phase to safeguard nesting birds.

The loss of nesting bird habitat shall be compensated through the planting of replacement trees, shrubs and hedgerow (see Section 4.1).

3.2 Tree Protection Zone

Works will be restricted to the designated development area (i.e. the site boundary) and the impact of works on adjacent habitats will be avoided by the clear demarcation of the working area. This will be achieved through the erection of protective fencing (heras fencing or similar) along the full perimeter of the site boundary. No storage of materials or driving of vehicles will take place outside of the site boundary.

No trees within the site boundary have been retained, and therefore no protective fencing is required within the site itself. Protective fencing along the full site boundary will be sufficient to protect retained trees beyond the site boundary, and will act as the Tree Protection Zone. The protective fencing will be erected prior to construction activities on the site, and will remain *in situ* for the entirety of the construction phase.

3.3 Lighting

Any lighting required during the construction phase will be angled away from the parkland beyond the eastern and southern boundaries. This will ensure that those features that are likely to be used by bats and other wildlife will be kept dark during the night-time hours. Lighting will be limited to only that which is absolutely necessary (e.g. where required along footpaths for health and safety reasons, or around the site compound for security purposes). Security lights will be fitted with hoods to ensure lighting is directional and light spill into areas beyond is minimised.

3.4 Treatment of Japanese Knotweed

Several stands of Japanese knotweed are present in the south eastern corner of the site (see Appendix A). Japanese knotweed is listed on Schedule 9 of the Wildlife and Countryside Act (WCA) 1981. Section 14(2) of the WCA 1981 states: ‘*..if any person plants*

*or otherwise causes to grow in the wild any plant which is included in Part II of Schedule 9, he shall be guilty of an offence.*⁴

The stands of Japanese knotweed will therefore be eradicated from the site prior to construction. Treatment and removal will be undertaken following the Environment Agency's Code of Practice: Managing Japanese Knotweed on Development Sites⁵.

The infested area will be fully excavated in order to remove all infested soil. The infested soil will be disposed of at a suitably licensed or permitted disposal facility. Prior to excavation, the Japanese knotweed will be treated with a suitable non-residual herbicide.

It should be noted that:

- Removing Japanese knotweed contaminated soil from a site will need a waste licence.
- Great care must be taken to avoid excess waste, and to avoid the excavated Japanese knotweed from contaminating surplus soil that is currently free from infestation.
- Great care must be taken to avoid losing material en-route to the disposal facility.
- Vehicles must be thoroughly cleaned after being used for excavation or transportation of infested soil. Vehicles that are likely to trap pieces of rhizome, particularly those with caterpillar tracks, should be avoided.
- Treatment must be undertaken by a suitably competent and qualified contractor.

⁴ Full WCA legislation text can be accessed at: <http://www.legislation.gov.uk/ukpga/1981/69/contents>

⁵ Environment Agency's Code of Practice: Managing Japanese Knotweed on Development Sites. Available at <https://www.gov.uk/government/publications/japanese-knotweed-managing-on-development-sites>. It should be noted that this document has now been withdrawn (11/07/2016) as the EA no longer provides best practice guidance. However, the document still provides useful guidance. Further information can be obtained from the following source: <https://www.gov.uk/guidance/prevent-japanese-knotweed-from-spreading>

4.0 BIODIVERSITY MEASURES POST-CONSTRUCTION

4.1 Landscape Planting

The existing trees within the site (including 14 mature or semi-mature trees along the margins and a cluster of semi-mature trees in the south-west corner - see Appendix A for tree locations), and the hedgerow along the northern boundary measuring *circa* 220 m in length (see Appendix A), have been removed to accommodate the development.

A landscape plan has been developed in which a total of 39 new trees shall be planted across the development, 56% of which comprise native species.

New sections of native hedgerow shall also be planted along the eastern boundary, a section of the southern boundary, and a section close to the northern boundary of the site. The new hedgerow planting will total *circa* 235m in length.

The planting plan is provided in Appendix B, which also includes notes on appropriate preparation, cultivation and planting methods.

The tree schedule is as follows:

Species	Number
<i>Acer campestre</i>	2
<i>Acer platanoides</i>	2
<i>Betula pendula</i>	7
<i>Carpinus betulus</i>	3
<i>Laburnum waterei</i> 'Vossii'	2
<i>Malus tschnoskii</i>	3
<i>Prunus avium</i>	2
<i>Prunus sargentii</i>	7
<i>Sorbus aria</i>	5
<i>Sorbus aucuparis</i> 'Joseph Rock'	3
<i>Tilia cordata</i>	3

The hedgerow schedule is as follows:

Species	Percentage
<i>Crataegus monogyna</i>	70
<i>Ilex aquifolium</i>	10
<i>Prunus spinosa</i>	20

As the new trees and hedgerows mature, they are likely to provide foraging opportunities for bats, foraging and nesting opportunities for birds, and habitat for invertebrates and small mammals such as hedgehog *Erinaceus europaeus*.

Ornamental shrub planting and amenity turf shall also be provided, although the details of these are not provided within this biodiversity plan, as they have limited value for biodiversity.

5.0 IMPLEMENTATION TIMETABLE

The below implementation timetable provides a list of tasks and the timescales.

Task	Timing	Notes
Vegetation Clearance	February 2017	Vegetation clearance has been undertaken outside of the breeding bird season (which for most species runs from March to August inclusive).
Erection of Tree Protection Zone	Prior to construction	Protective fencing (heras or similar) shall be erected along the full perimeter of the site boundary to protect trees and vegetation beyond the site boundary.
Removal of Japanese Knotweed	Prior to construction	Japanese knotweed and infested soil will be excavated and disposed of off-site at a suitable licensed disposal facility prior to construction.
Tree and Hedgerow Planting	In the first available planting season following construction	Refer to Planting Plan (Appendix B)

6.0 CLOSURE

This report has been prepared by SLR Consulting Limited with all reasonable skill, care and diligence, and taking account of the manpower and resources devoted to it by agreement with the client. Information reported herein is based on the interpretation of data collected and has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of Gleeson Developments Ltd.; no warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

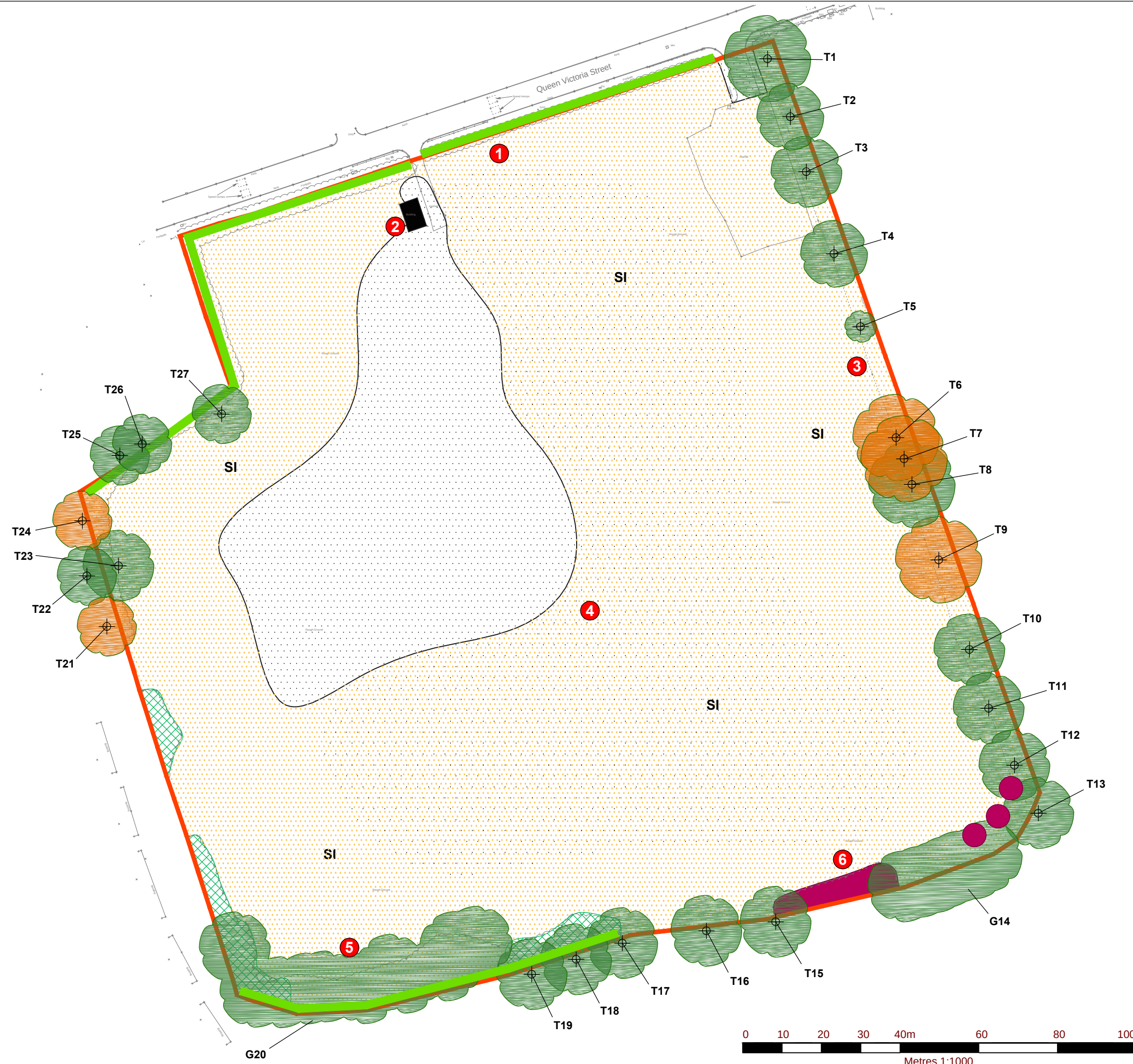
SLR disclaims any responsibility to the client and others in respect of any matters outside the agreed scope of the work.

APPENDICES

Appendix A

Phase 1 Habitat Map

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NOTES

1. DRAWING IS BASED ON POWER & TILTMAN LTD LAND SURVEYORS TOPOGRAPHICAL SURVEY, DRAWING NUMBER 7357 / 01, DATED SEPTEMBER 2015.

LEGEND

	SITE BOUNDARY
	BUILDING
	BARE GROUND
	SPECIES POOR, SEMI-IMPROVED GRASSLAND
	DENSE, CONTINUOUS SCRUB
	SCATTERED, BROAD-LEAVED TREES
	TREE REFERENCE
	HEDGEROW
	JAPANESE KNOTWEED
	TREE WITH BAT ROOST POTENTIAL
	TARGET NOTE

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BALDERSTONE SCHOOL

PRELIMINARY ECOLOGICAL APPRAISAL

PHASE 1 HABITAT MAP

FIGURE 1

Scale
1:1000 @ A3

Date
NOVEMBER 2015

Appendix B

Planting Plans



Tree Planting

Shrub Planting (Suggested)	Height/Spread	Container	Density
Blackberry (Thornless) Red Chiff	40-60cm	3L	4.0/m ²
Banana	30-40cm	3L	4.0/m ²
Ceanothus Blue Mound	30-40cm	3L	3.0/m ²
Elaeagnus ebbingei Twilight	40-60cm	3L	4.0/m ²
Hebe alberta Red Edge	30-40cm	3L	4.0/m ²
Hebe salicifolia	30-40cm	3L	4.0/m ²
Leucodermis Rebel Bagpiper's Gold	30-40cm	3L	4.0/m ²
Leucodermis Rebel Rebel	30-40cm	3L	4.0/m ²
Philadelphus Blueberry Bliss	30-40cm	3L	4.0/m ²
Prunus laurocerasus Zazzleberry	30-40cm	3L	4.0/m ²
Prunus laurocerasus	40-60cm	3L	3.0/m ²
Spirea x bumalda Anthony Waterer	40-60cm	3L	3.0/m ²
Yucca filamentosa	40-60cm	3L	3.0/m ²

Hedge Planting (Suggested)

Plant Name	Height/Spread	Container	Mix Percentage	Density
<i>Crateagus monogyna</i>	60-80cm	BR	70.00%	5.0hm
<i>Ilex aquifolium</i>	40-60cm	3L	10.00%	5.0hm
<i>Prunus spinosa</i>	60-80cm	BR	20.00%	5.0hm

[illegible]

11. All planting beds to be mulched using an approved no-till bark mulch, to a depth of 50mm, ensuring top of the mulch layer is 15mm below adjacent pavements or other surfaces, to prevent spillage.

ties. Stakes to be driven 500mm into ground prior to placement of rockball. Timber cross-brace to be fitted to top of posts and trees to be secured with steel reinforced rubber bulb SP15 & 200, Clumpy Pua (04), per tree. Tree ties and spacers available from J.Tones Ltd, Ashford, TN27 9XT or similar and approved products may be used.

Client
Gleeson Homes

Drawing title
Planting Plan 1 of 2

Scale 1:250 @ A0
 Drawn by AKL
 Mar 2017
 Drawing No.

LD5403-01

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