

Green Infrastructure Plan

Clonbrone, Esker Hill, Lucan, Co. Dublin

AI Submission

Ref No. SD22A/0390

05/04/23



Green Infrastructure: Methodology

The site shall be visited to review the landscape inventory on site and determine the existing green infrastructure on site and in the surrounding area. Colleagues on the design team shall be consulted notably the ecologist and arborist for their views and suggested proposals. These shall be incorporated into the Landscape Design.

The proposed landscape seeks to provide

1. Green space within 50m of every home.
2. Support an increase in species and new habitats in around the new development
3. Provide a variety of open areas with a range of habitats and amenity spaces to meet the need of both nature and people(residents)
4. Be equipped to cope with the effects of climate change and weather events, this includes the integration of Suds into the landscape design, detention basins and tree pits.
5. The landscape design be developed to fit into the landscape setting and the surrounding countryside.

The proposed landscape design seeks to use native landscape materials in a high development low impact way, ie the use of natural materials, soil rocks and planting (pollinator) to achieve a sustainable landscape that will increase the range of species and or improve the existing landscape habitat on site.

The landscape design shall be a collaborative approach with the design team to provide a sustainable landscape that shall provide. The sustainable nature of the design requires it to be used by both nature and people, with

1. Connectivity – a well connected green space network that can serve both humans – amenity and nature – biodiversity. These shall link to the external landscape wherever possible.
2. Multifunctionality, Provision of a number of ecosystems within the development, combined between human and natural needs. Liaise with the Arborist and ecologist.
3. Integration – interactions and links between grey and green infrastructure, Suds interventions. Liaise with the consulting Engineers on drainage.
4. Diversity – Enhancing the different structures that are in place – managed/artificial or natural and combine them as a sustainable landscape design. (Large or small)
5. Applicability – Considers if the proposals are realistic, this shall be developed by the design team . I,e if the solutions to sustainable issues are adaptable to the site or not.
6. Continuity – Sustainable, the landscape proposals may be realistic and useable into the future. A level of monitoring and periodic evaluation may be required. This would be seen in terms of maintenance and management.

It is proposed to provide a landscape design that is a total design combining all elements, roads, green spaces and housing into one total. A combination of all elements, amenity, suds, living and connectivity to create a unique environment in which people and nature may reside and wish to live in.



GI Context



Existing GI in the area:



Rough Site Outline

GI in our site:



Linking our site and the surrounding area:

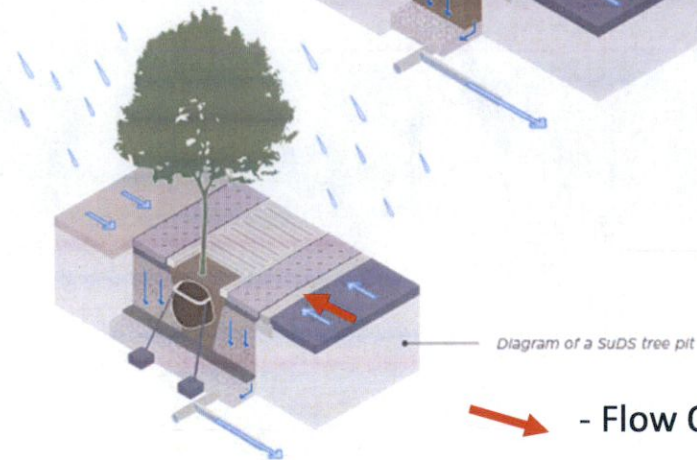
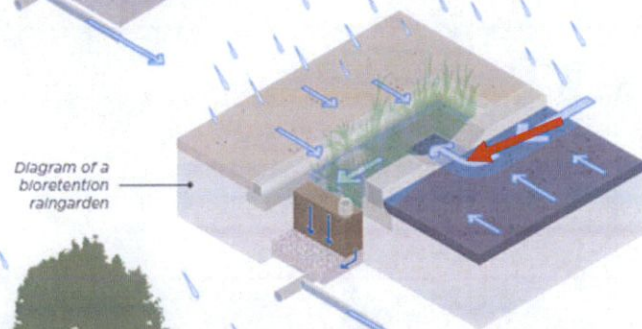
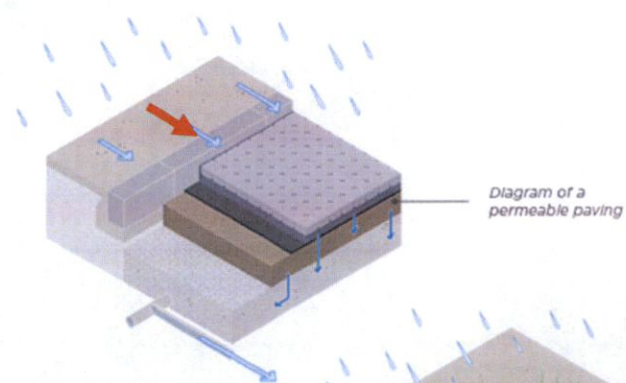


Creating New GI Corridors
linking to the wider area

SuDs

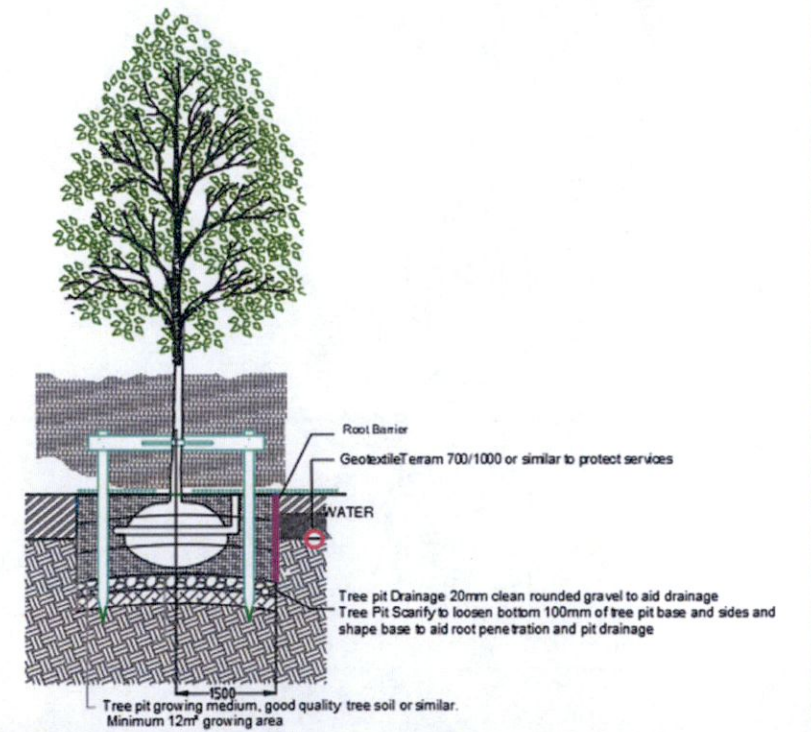


 - Permeable Paving

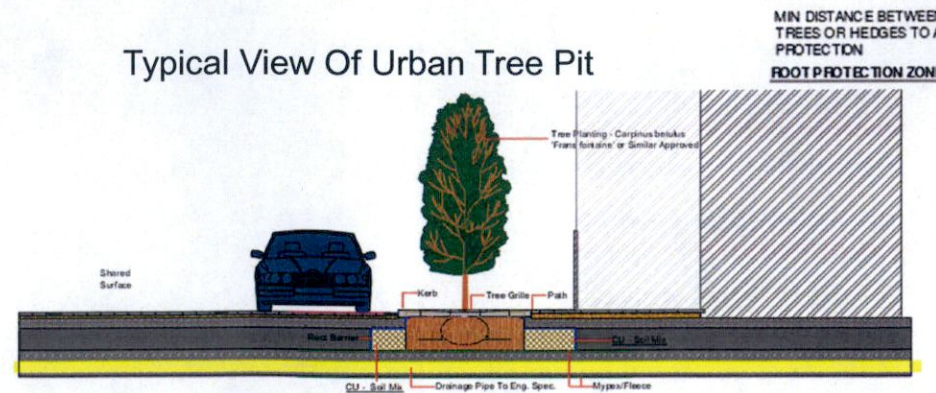


 - Flow Of Water

 - Trees requiring a tree pit



Typical View Of Urban Tree Pit



Tree Planting

SCHEDULE OF IMPLEMENTATION:

1. ALL TREE AND HEDGEROW PLANTING IS TO BE CARRIED OUT DURING THE FIRST WINTER SEASON, I.E. NOVEMBER TO FEBRUARY INCLUSIVE.
2. ALL LAWN AREAS ARE TO BE PREPARED AND SEEDED DURING THE GROWING SEASON, I.E. APRIL TO OCTOBER INCLUSIVE.
3. ALL CONTAINERISED SHRUB PLANTING MAY BE CARRIED OUT AT ANY TIME OF WHEN SOIL IS NOT FROZEN, WATERLOGGED OR EXCESSIVELY DRY.

PLANTING NOTES:

ALL TREES, SHRUBS AND HEDGEROW PLANTS SHALL COMPLY WITH BS 3936, SPECIFICATION FOR NURSERY STOCK. ALL PRE-PLANTING SITE PREPARATION, PLANTING AND POST PLANTING MAINTENANCE WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF BS 4428 (1989) CODE OF PRACTICE FOR GENERAL LANDSCAPE OPERATIONS (EXCLUDING HARD SURFACES).

ALL NEW TREE PLANTING SHALL BE POSITIONED IN ACCORDANCE WITH THE REQUIREMENTS OF TABLE 3 OF BS 5837: 2005 TREE IN RELATION TO CONSTRUCTION: RECOMMENDATIONS, WHICH SPECIFIES MINIMUM DISTANCES BETWEEN NEW PLANTING AND STRUCTURES.

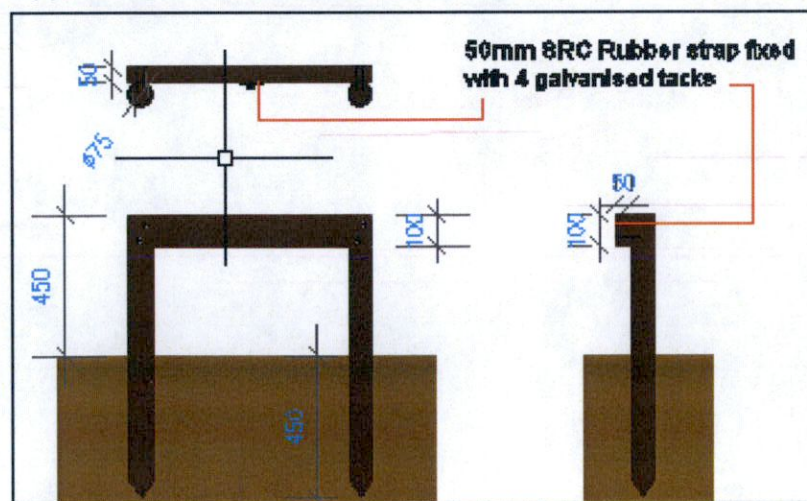


Tree Planting

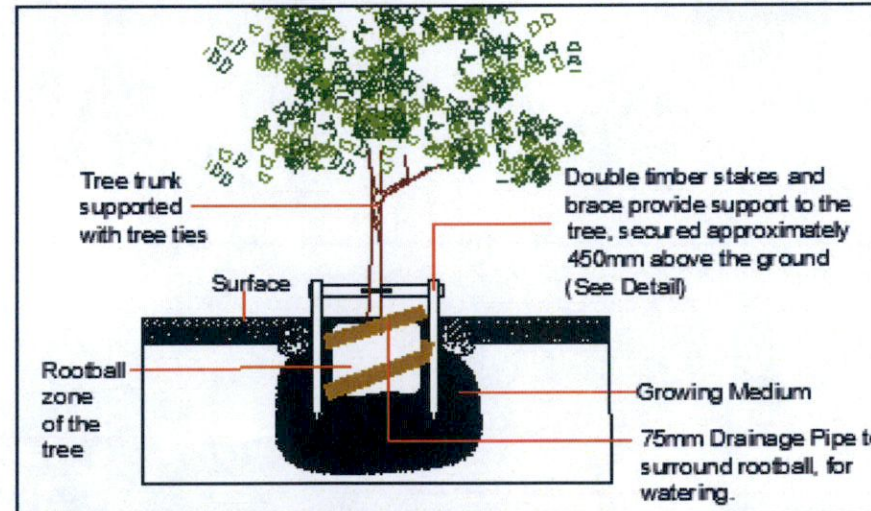


Tree Planting

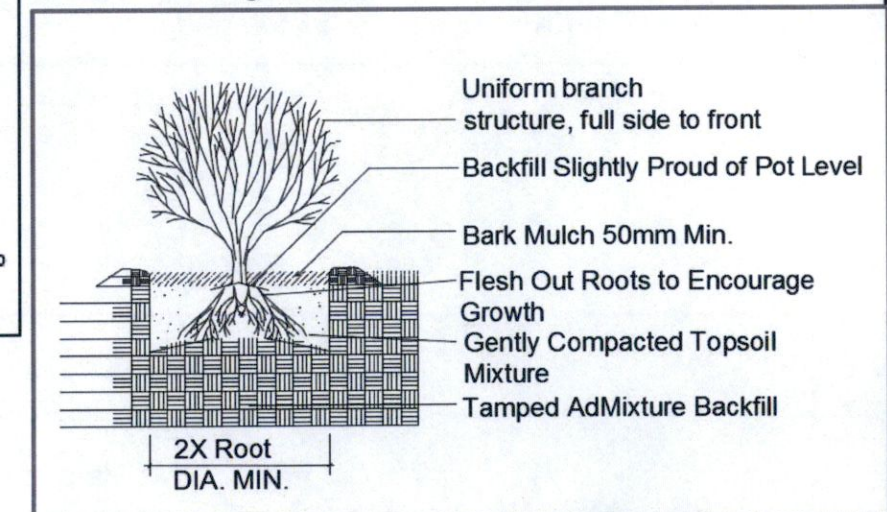
Typical double Tree staking detail



Tree Planting Detail

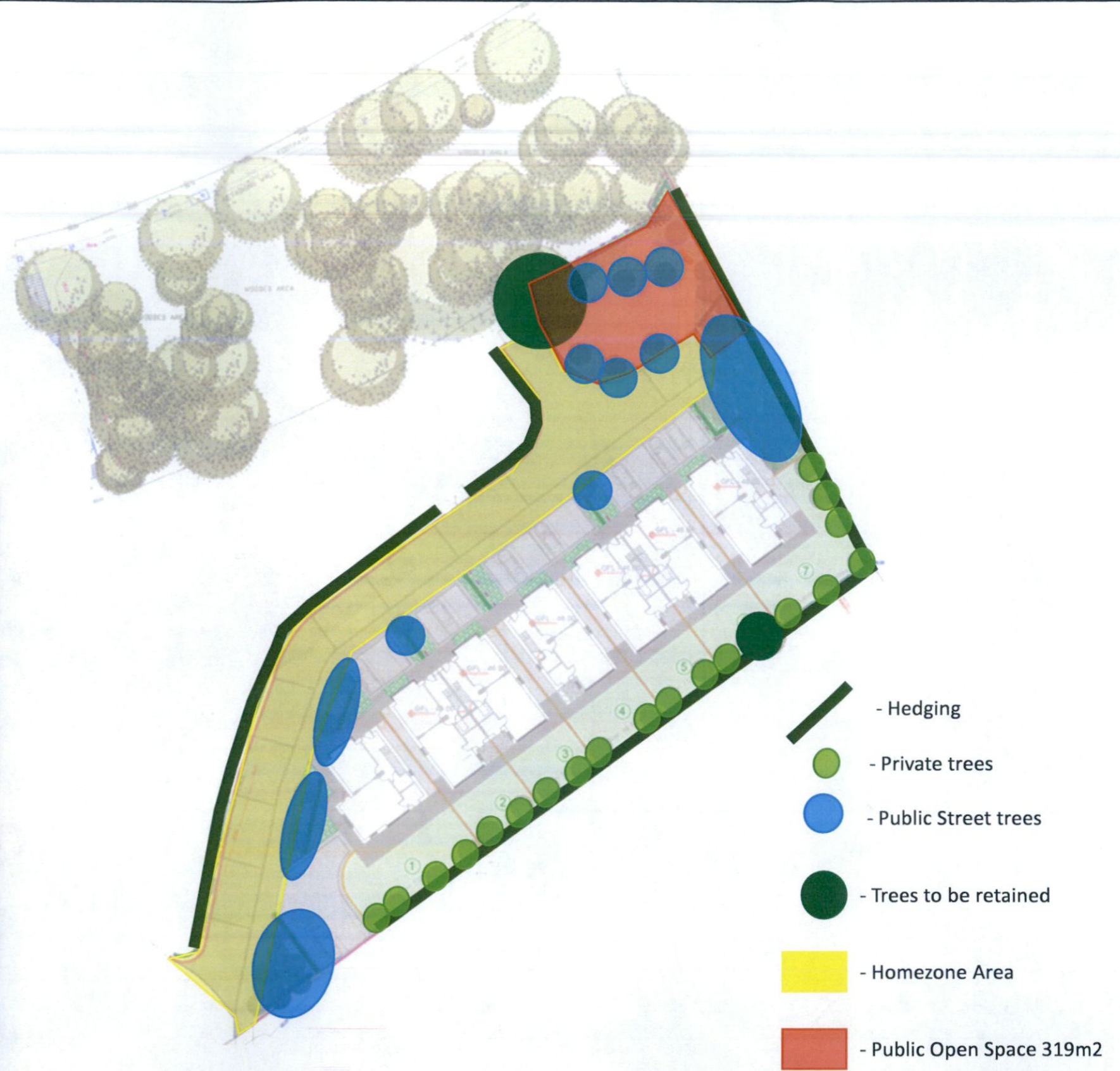


Shrub Planting Detail

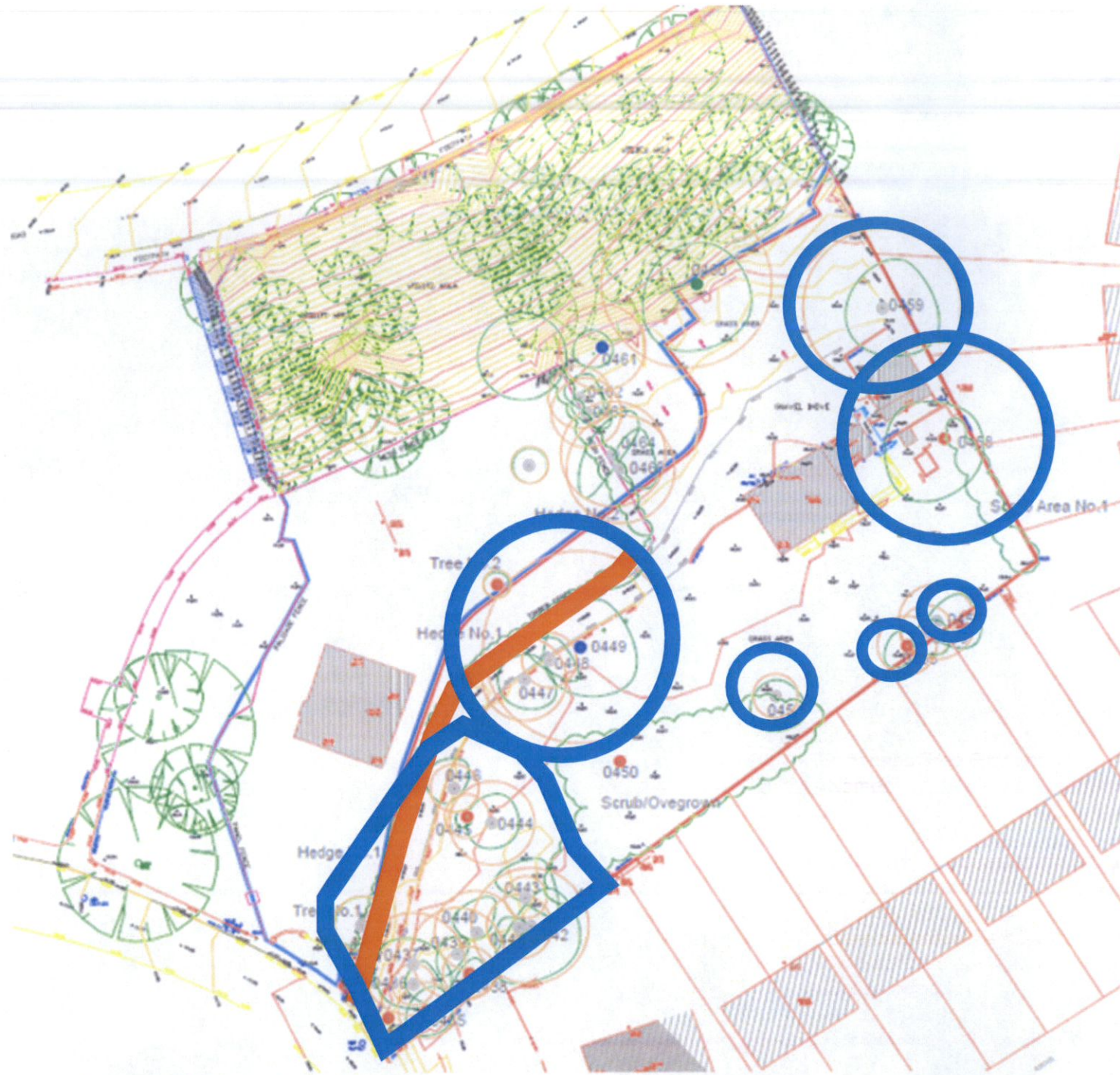


Other Information:



Reference Images; with street trees and open spaces



Arborist plan/ Trees and Hedging



Please refer to arborists drawings for more details

-  - Trees to be removed
-  - Hedge to be removed

We are proposing to add 30+ street trees to the design with a proportion of them being in two 'Miyawaki' pockets.

- Street trees will be planted at 14-16/16-18cm
- 'Miyawaki' planting (Alnus, Corylus) will be at 8-10cm

We are proposing to plant a total of 66 trees through the site which is significantly more than the 23 to be removed. Some of the trees that are being removed are of poor quality and weren't expected to have more than 10 years life expectancy.

Trees 456 (Ash) and 460 (Oak) are to be retained

While 66metres of hedge is being removed we are going to plant 290 linear metres of hedging through the site.

Proposed Tree Planting Name.	Size.
Acer platanoides	12-14cm
Platanus acerifolia	12-14cm
Aesculus hippocastanum	12-14cm
Fagus sylvatica 'Dawyck'	14-16cm
Quercus ilex	12-14cm
Quercus robur 'Fastigiata'	16-18cm
Tilia cordata	14-16cm
Betula pendula	12-14cm
Alnus glutinosa	8-10cm
Corylus avellana	8-10cm