colvin&
moggridge

Newhall, Harlow:

# Landscape Maintenance Specification

Area 1 (Phase 2 Linden)
Area 2 (All Phase 1)
Area 3 (Phase 2 Bellway)
Area 4 (BASE Phase 1A & 2A)

2022/2024

for Newhall Projects Ltd

V2 April 2022

DRAFT

Colvin & Moggridge
Filkins
Lechlade
Glos
GL7 3JQ

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BACKGROUND TO THIS SPECIFICATION

The landscape at Newhall comprises many elements: the pre-existing woodland, hedgerows, mature trees and farmland characteristic of the site before development; the created landscape of plantations, reedbeds, ponds and grassy open spaces of the Phase 1 Masterplan and the ornamental landscape, the immediate context of the residential development. Their management requirements range from occasional to frequent interventions that are necessary to retain original design concepts.

This specification is organised by vegetation type.

Drawing numbers 1166.12.107A – 1166.12.114A locate the vegetation types and tree locations.

# PART ONE: LANDSCAPE MAINTENANCE WORKS

## 1.0 GENERALLY

### 1.1 Standards expected

Newhall is an exceptional environment achieved by the highest standards of planning, design and construction. High standards of landscape management are required to maintain this environment, reflect the high quality of the development and meet the expectations of the residents.

### 1.2 Programme of works and record of work undertaken

The Landscape Contractor shall submit a detailed programme of maintenance works based on the guideline visits indicated on the schedule of works prior to starting work on site. The Landscape Contractor shall report any potential change to the specified programme to the contract administrator. A weekly record of work undertaken should be submitted to the contract administrator within 5 working days of the completed week.

### 1.3 Additional works

The Landscape Contractor shall report the need for extra works to the contract administrator. Any changes to the agreed programme must be agreed in writing with the contract administrator.

### 1.4 Frequency of site visits

The contractor should determine the frequency required to achieve the required standard of maintenance.

### 1.5 Hours of work

Staff hours: 45 hours per week (April to September) and 35 hours per week (October to March).

### 1.6 Additional member of staff

Include a provisional sum for an additional member of staff, as and when required (formal acceptance to be secured from Client before Contractor proceeds).

### 1.7 Frequency of cleansing and control of litter visits

The contractor is expected to have a flexible and common-sense approach to the cleansing of hard surfaces and control of litter. The frequency with which maintenance operations are needed during a week, month, season or year is hard to predict. As a result, regular inspection will be needed to determine the actual need for maintenance operations. The objective is not the robotic execution of a schedule of operations but that hard and soft landscape areas should be kept free of litter and debris.

### 1.8 Notice

Give notice before each site maintenance visit to: Appointed Newhall Representative (TBC).

### 1.9 Disposal of arisings

General: unless specified otherwise, dispose of arisings as follows:
- grass cuttings: remove from site
- tree roots and stumps: remove from site
- shrub and tree prunings: chip on site and spread over floor of woodland areas
- litter and non-biodegradable arisings: remove from site

### 1.10 Skips

Include an allowance for provision of 8 number of skips (any additional number required to be agreed with Client as and when required).

1.11 Watering

Quantity: wet full depth of topsoil
Application: even and without damaging or displacing plants or soil
Frequency: as necessary to ensure establishment and continued thriving of planting

1.12 Mulching

Quantity: 50mm depth unless otherwise specified
Application: even and without damaging or displacing plants or soil
Frequency: Annually, on a weed-free surface, as and when agreed with the Client

1.13 Water Restrictions

General: if water supply is, or is likely to be, restricted by emergency legislation, submit proposals for an alternative suitable source of water. Obtain instructions before proceeding

1.14 Reinstatement

Damage or disturbance to soil structure, planting, grass, fencing, hard landscaping, structures, buildings: reinstate to original condition

1.15 Vandalism

Where vandalism has occurred, carry out simple remedial works if possible, and report the damage. Remove any damaged trees or other plants to avoid an untidy/silly appearance

1.16 Chemicals generally

The appropriate regulations and codes of practice must be followed where chemicals are used. Observe all precautions recommended by the manufacturer and remove containers from site immediately after they are no longer required. Damage caused by excess drift will be made good at the Contractor's expense

1.17 Nesting Birds

All birds and their nests are also protected under the Wildlife and Countryside Act 1981. Site management must be aware of the need to avoid disturbance or harm to nesting birds either by avoiding the nesting season, March to August inclusive and / or by checking that no nests would be affected by particular works.

1.18 Biosecurity

The contractor is to undertake a biosecurity risk assessment for the site and the works to determine any appropriate control measures to prevent the dispersal of pests or pathogens arising from the works including any planting. The risk assessment and control measures are to be documented and agreed with the contract administrator and effectively actioned. These controls measures shall be at the contractor's expense and not treated as additional to the contract.

1.19 Safety, Health and Welfare at Work

The contractor should provide a description of the organisation and resources to safeguard the health and safety of operatives, including those of subcontractors, and any person whom the works may affect. The contractor should include:

- A copy of the contractor's health and safety policy document, including risk assessment procedures
- Accident and sickness records for the past five years
- Records of previous health and safety executive enforcement action
- Records of training and training policy
- The number and type of staff responsible for health and safety on this project with details of their qualifications and duties

## 2.0 GRASSLAND

### 2.1 Amenity grassland and lawns – communal residential areas and front gardens.

Objective

To provide an even stand of vegetation of uniform height and colour and exceptionally well-maintained clean and attractive appearance at all times.

Location: Site entrance, The Chase, Soper Square, St. Nicholas Green, Communal Grass areas within Linden, Bellway and Base residential areas; and any lawn areas to front gardens.

Maintenance works

Condition: Herbicide, fertiliser and scarification to be used as required to maintain a healthy vigorous sward, reasonably free from moss, excessive thatch, weeds and mole hills

Cutting height and frequency:

- March: first cut, 70mm
- March, April, May: fortnightly, 50mm
- June, July, August: weekly, 50mm
- September, October: fortnightly, 50mm
- November: once, 70mm. Any additional cuts to be agreed with Client

Arisings: Remove

Finish: neat and even, without surface rutting, compaction or damage to grass

Reinstatement of worn or damaged lawns:

- Damage: damage, however caused, should be put right immediately
- Worn or damaged areas: make good by returfing or reseeding to BS 7370-3
- Turf or seed: to match existing in appearance
- Protection and watering: provide as necessary to promote successful germination and/or establishment

Bulbs in grassed areas: Do not cut until bulb foliage has died back

Drought or wet conditions: obtain instructions

### 2.2 Amenity grassland – parkland areas

Objective

To provide an even stand of vegetation of uniform height and colour, and of well-maintained appearance all times.

Location: The Park (Area 1), Green Wedge (Areas 2 & 3), Oaks Parkland (Area 4)

Maintenance works

Condition: maintain reasonably free from weeds. Herbicide to be used as required

Before mowing: remove litter, rubbish and debris

Mowing height and frequency:

- March: first cut, 70mm
- March - October: fortnightly, 50mm
- November - February: once, 70mm. Any additional cuts to be agreed with Client

Finish: neat and even, without surface rutting, compaction or damage to grass

Strim bases of posts to keep clear of weeds and grass

Bare patches: reinstate

Report any problems requiring major remedial action

Drought or wet conditions: obtain instructions

### 2.3 Enhanced Grassland and Swales

Objective

Areas of species diverse grassland managed to avoid injury to Great Crested Newts. Includes areas of newly established grassland and oversown existing amenity grassland and improved pasture.

Cutting:

- Height: cutting heights will be set to a minimum of 200mm, to avoid injury to any great crested newts that might be sheltering in the areas.

- Timing: cutting will be carried out in February and late summer (August/early September), with only c. 50% of the area cut in any one year so that some uncut areas remain to provide over-wintering sites for invertebrates etc.
- Arisings: to be raked up and removed from the site, taking care to ensure that there is no harm to any Great Crested Newts that might be sheltering in the sward.

Weed control: control coarse perennial weeds (Docks, nettles, dandelions) by spot spraying or hand pulling before weed flowers

2.4 Wildflower meadow enhancement

Objective

Enhancement of established area of species rich sward managed as traditional hay meadow.

Location: The Park

Maintenance works

- Cut around the August bank holiday 2022 after most flowers have seeded, height 75mm
- Arisings: leave for 2-3 days after cutting then rake up and remove
- Cut again in late September/early October 2022, height 50mm, remove arisings
- Create gaps across the site with exposed soil by harrowing, aiming to expose up to 50% bare soil.
- Sow in October 2022 with Yellow Rattle seed at a rate of 0.1 to 1 g/m2 and with a general-purpose meadow mixture such as Emorsgate EM1 at 4g/m2 or similar as per supplier's recommendations, and a cornfield annual mix such as Emorsgate EC1 at 2g/m2
- Cut around the August bank holiday 2023 after most flowers have seeded, height 75mm
- Arisings: leave for 2-3 days after cutting then rake up and remove
- Cut again in October and the following March to 50mm, removing arisings
- Leave the meadow uncut until August after most flowers have seeded, and cut again in October/November to 75mm, removing arisings
- Reapeat the March, August, October/November cutting regime, removing arisings each time

Weed control: control coarse perennial weeds (Docks, nettles, dandelions) by spot spraying or hand pulling before weed flowers

2.5 Wildflower meadow

Objective

Areas of species rich sward managed as traditional hay meadow

Location: The Park

Maintenance works

Cutting:

- Height: 75mm
- Timing: cut in late August after most flowers have seeded, and again in November
- Arisings: leave for 2-3 days after cutting then rake up and remove

Weed control: control coarse perennial weeds (Docks, nettles, dandelions) by spot spraying or hand pulling before weed flowers

2.6 Fence at edge of Church Langley Playing Field

Strim bases of posts to keep clear of weeds and grass every two weeks from April to the end of September, longer if grass growing season continues.

2.7 Tree stems

Precautions: where there is no prepared bed around trees in grass, do not allow nylon filament rotary cutters and other mechanical tools closer than 100mm to the stem of a tree. Complete using hand tools.

2.8 **Self-set Oaks**

Self-set Oaks next to field boundaries and woodland should be retained and protected when practicable. Where this is not possible oaks should be lifted and potted up for planting elsewhere.

## 3.0 SHRUB AND HERBACEOUS PLANTING

The areas of landscape completed amongst housing, the Residents' Association Amenity Plantings, will be considered by many to set the standard of care to be expected throughout the development, and should receive a high level of attention. Borders should appear exceptionally well-maintained appearance at all times.

### 3.1 All shrub and herbaceous planting – general maintenance operations

Weeding: keep any visible surface soil free of weeds by hoeing and hand weeding
Gaps: report noticeable gaps in planting schemes
Dead plants: remove, record and report

### 3.2 Ground cover borders - Epimedium

Objective

Maintain a dense and weed-free cover of healthy growth.

Maintenance operations

Weeding: every two weeks during the growing season
Trimming: trim and tidy the plants once a year in winter as required to remove dead or overgrown branches. Do not trim to a shape – the natural form of the plant should not be lost

### 3.3 Ground cover borders – Prunus lusitanica

Objective

Maintain a dense and weed-free cover of healthy growth

Maintenance operations

Weeding: every two weeks during the growing season
Trimming:
- The Chase: trim and tidy the plants once a year in winter as required to remove dead or overgrown branches. Do not trim to a shape – the natural form of the plant should not be lost
- North Square: trim and tidy the plants once a year in winter as required to remove dead branches. Plants to grow to form a continuous mass of foliage at a height of 600mm, sides and topped trimmed straight/flat. Mulch between blocks of foliage to be loosened monthly and topped up annually

### 3.4 Shrub borders – residential communal areas

Objective

Maintain a thicket of shrub growth to cover as much as possible of the border area, allowing the individual plants to achieve as nearly as possible their natural form.

Maintenance operations

Weeding: every two weeks during the growing season
Pruning: prune shrubs once a year at the appropriate time of year to develop their desirable ornamental characteristics, remove deadwood and encourage new growth. Do not cut shrubs to shape, including straight sides next to footways. Remove arisings
Thinning: Remove intermediate plants that restrict the natural and attractive development of their neighbours. Remove all arisings from site.
Climbers: prune appropriately to encourage vigour. Remove excess growth to ensure that signs, light fittings, doors and windows are kept clear at all times. Attach any insecure growth to supporting wires or structures

### 3.5 Rose borders

Objective

Maintain a free-flowering border of healthy floribunda roses by regular pruning and fertilising, in a weed free border substantially free from summer pests and diseases.

Location: The Crescent

Maintenance operations

Weeding: once every four weeks in the growing season
Fertiliser: supply and spread Toprose, or similar approved, NPK: 5:6:12 plus magnesium and iron. Apply in Spring at the beginning of the growing season and in Summer after the first flush of flowers fade. Application rate: 28g/plant
Dead-heading: remove all dead flower heads within two weeks of petal fall. Allow for doing this up to three times each season
Pruning:

- Autumn: top prune the roses to approximately two thirds of their height in the autumn and remove cuttings from site
- Late winter: hard prune the roses to 300mm from ground level. Cut to outward facing buds and remove prunings from site

Sucker growth: keep the borders substantially free of sucker growths by removing at regular intervals. Allow for clearing at least twice per season
Pest and disease control: spray with Roseclear Ultra, or similar approved. Apply according to manufacturer's recommendations

### 3.6 Herbaceous borders – residential communal areas

Objective

Maintain the herbaceous border in an attractive and free-flowering state and kept substantially free of weeds, unattractive dead flowers, or diseased and damaged shoots.

Maintenance operations

Cutting back: cut down and remove all dead shoots after the first autumn frosts
Cultivation: in winter, lightly cultivate the soil to a depth of 150mm to bury weeds surface litter and break up surface compaction
Fertilise: apply a winter mulch of well-rotted farmyard manure or similar where the soil surface is visible
Weeding: once every two weeks in the main growing season
Deadheading: remove unsightly dead flower heads within two weeks of petal fall. Allow for this operation up to five times per year

### 3.7 Yew columns in St Nicholas Green

Objective

Formal feature clipped to maintain a uniform and neat appearance and a well-developed cover of vegetation over the whole of the column surface

Maintenance operations

Trimming

- Shape: achieve a formal effect by trimming sides to maintain a square section and cut the tops flat to maintain all the columns at equal height
- Dimensions:
- Time of year: trim carefully and neatly once in August
- Remove arisings

Weeding: keep bases weed free: check weekly during growing season
Fertiliser: where plants appear to be short of nutrients, supply and spread a general slow acting fertiliser

### 3.8 Residential Front Gardens, Mixed shrub and herbaceous borders and Communal mixed borders

Objective

Maintain complete cover of shrub, herbaceous and groundcover growth to cover as much as possible of the border area, allowing the individual plants to achieve as nearly as possible their natural form.
Maintain front garden hedges as per spec clause 4.7
Maintain front lawn areas as per spec clause 2.1
Maintain roses as per spec clause 3.5

Maintenance operations

Weeding: every two weeks during the growing season

Pruning: prune shrubs once a year at the appropriate time of year to develop their desirable ornamental characteristics, remove deadwood and encourage new growth. Do not cut shrubs to shape. Remove arisings

Cutting back herbaceous perennials: Cut off dead stems at the base before new shoots appear in spring. Retain attractive stems over winter.

Cutting back ornamental grasses:

*Deciduous grasses*

- Some deciduous species, e.g. *Stipa tenuissima, Calamagrostis* × *acutiflora,* 'Karl Foerster', *Deschampsia cespitosa*'Goldtau' should be trimmed to ground level before growth starts in early spring. Other deciduous grasses, e.g. *Pennisetum orientale*, do not produce new growth until later in the season: delay clipping these types until late April

*Evergreen grasses*

- Small evergreen grasses, e.g. *Festuca glauca*: trim in spring. Remove any brown tips and cut back the dead leaves
- Evergreens such as sedges (*Carex* and *Luzula*) should not cut back completely. Spent flowering stalks can be cut off, and any unsightly scorched or diseased leaves can be removed individually

Thinning: Remove intermediate plants that restrict the natural and attractive development of their neighbours. Remove all arisings from site.

Climbers: prune appropriately to encourage vigour. Remove excess growth to ensure that signs, light fittings, doors and windows are kept clear at all times. Attach any insecure growth to supporting wires or structures

### 3.9 Pictorial Meadow – Gingko Bed

Objective

To achieve full cover of borders with colourful species rich annual plant mix

Pictorial Meadows Classic Annual Meadow Mix

Maintenance works

Cutting:

- Height: 100mm
- Timing: cut in October/November
- Arisings: rake up and remove

Weed control: control coarse perennial weeds (Docks, nettles, dandelions) by spot spraying or hand pulling before weed flowers

Re-seed annually in spring:

- Remove all herbaceous vegetation
- Cultivate the bed area and work to a tilth
- Supply and sow Pictorial meadows Classic Annual Meadow Mix and finish in accordance with Pictorial Meadows's recommendations
- Lightly roll to finish
- Leave clean and tidy

### 3.10 Perennial Wildflowers – Forge Lane & Montessori Beds

Objective

To achieve full cover of borders with colourful species rich perennial plant mix

John Chambers Impact Fields of Gold

Maintenance works

Cutting:

- Height: 100mm
- Timing: cut in October/November
- Arisings: rake up and remove

Weed control: control coarse perennial weeds (Docks, nettles, dandelions) by spot spraying or hand pulling before weed flowers

## 4.0 PLANTED HEDGES

### 4.1 All planted hedges – general maintenance operations

Hedge trimming:

- Clip the top and outside of the hedge to maintain true and even levels, using hand or machine tools. Clip sides to a batter ($5^{o}$ off vertical)
- Time of year: trim once a year outside the nesting season (1 March – 31 July).
- Arisings: remove clippings immediately

Weeding: spot treat or hand pull ragwort, docks and thistles before seeding

Replacement of failures: replace any failures to same specification as original planting between November and March. *See Appendices A & B*

### 4.2 London Road Hedge H4, H5, and H6

Objective

The objective of these hedges is, together with the adjacent woodland belt, to screen traffic from, and to provide a 'green edge' to, the development. The hedge should be clipped to maintain a uniform appearance and a well-developed cover of vegetation over the whole of the hedge surface

Planting works

- Replant a section of H6, 10m in length. Species composition, planting specification and establishment maintenance described in Appendices A & B

Maintenance works

Trimming:

- Ultimate height: 2.5m. Where hedge has yet to reach specified height, trim top lightly each year allowing the hedge to become taller each year

Cutting verge: cut to a height of 75mm in May and September

Rubbish removal: carry out at each hedge maintenance visit

### 4.3 Hedge at entrance from Church Langley H7

Objective

To define the edge of Newhall in this area and to form part of the reed bed enclosure. The hedge should be clipped to maintain a uniform appearance and a well-developed cover of vegetation over the whole of the hedge surface

Planting works

- Replant a short section 3m in length at north end. Species composition, planting specification and establishment maintenance described in Appendices A & B

Maintenance works

Hedge trimming:

- Clip the top and outside of the hedge to true and even levels, using hand or machine tools. Clip sides to be vertical. Trim inside face of H7 to a batter every other year
- Height: 1.5m consistently along length of hedges

Cutting herbaceous vegetation at base of hedge: maintain within the range of 75-150mm by regular mowing or strimming

Fencing: Extend knee rail by 3m and repair 3m of fence

### 4.4 Park Hedge H8

Objective

To maintain this single species Hawthorn hedge as a sculptural feature within the Park. The hedge should be clipped to maintain a uniform appearance and a well-developed cover of vegetation over the whole of the hedge surface.

Maintenance works

Hedge trimming: Height – 2.0m

Cut herbaceous vegetation at base of hedge: included elsewhere

4.5 L Block planting and Chase Extension Hedges H9, H10, H11, H12, H13, H25 and H26

Objective

These hedges should screen parking areas from, and create an edge to, adjacent footpaths. The hedges should be clipped to maintain a uniform and tidy appearance and a well-developed cover of vegetation over the whole of the hedge surface.

Establishment maintenance works

Weed control: check for weed growth every four weeks during the growing season and hand pull

Hedge trimming: lightly cut back any over extended side-shoots and leaders of new hedge plants to encourage bushiness in September

Height: Hawthorn hedges (H9, 11, 12, 13, 25, 28, 31) 0.9m; Hornbeam hedge (H10,H26) 1m; Mixed native hedge (H29) 1.2m

Cut herbaceous vegetation: included elsewhere

4.6 Hit and Miss Hedge Prunus lusitanica H27

Objective

These hedges should screen parking areas from, and create an edge to, adjacent footpaths. The hedges should be clipped to maintain a uniform and tidy appearance and a well-developed cover of vegetation over the whole of the hedge surface.

Establishment maintenance works

Weed control: check for weed growth every four weeks during the growing season and hand pull

Hedge trimming: lightly cut back any over extended side-shoots and leaders of to maintain formal shape twice during growing season

Height: 0.9m;

4.7 St. Nicholas Green play area Pyracantha hedge H30

Objective

These hedges should screen parking areas from, and create an edge to, adjacent footpaths. The hedges should be clipped to maintain a uniform and tidy appearance and a well-developed cover of vegetation over the whole of the hedge surface.

Establishment maintenance works

Weed control: check for weed growth every four weeks during the growing season and hand pull

Hedge trimming: lightly cut back any over extended side-shoots and leaders of to maintain formal shape twice in Spring and Autumn

Height: Same height as knee rail;

4.8 Organic Yew hedges on St Nicholas Green

Objective

A series of hedges planted in a way that will help to stop balls escaping the Green from the kickabout area and will also provide niches for sitting in and opportunities for play. Once established, the hedges are intended to be organically shaped, rounded and billowing, of varying width and height within each bed, rather than be trimmed to formal straight lines. The established hedge would have a minimum height of 900mm.

Establishment maintenance operations

Weeding: check for weed growth every two weeks during the growing season and hand pull

Formative pruning: Lightly trim side shoots twice in summer (June, September). Do not trim leading shoots unless instructed otherwise

Fertiliser: where plants appear to be short of nutrients, supply and spread a general slow acting fertiliser

## 4.9 Residential Front Garden Hedges

Objective

These hedges provide definition to the front of buildings and provide a unifying element to the streetscape. The hedges should be clipped to maintain a uniform and tidy appearance and a well-developed cover of vegetation over the whole of the hedge surface.

Establishment maintenance works

Weed control: check for weed growth every four weeks during the growing season and hand pull

Hedge trimming: lightly cut back any over extended side-shoots and leaders of new hedge plants to encourage bushiness in September

Where hedge has yet to reach specified height, trim top lightly each year allowing the hedge to become taller each year.

Maintenance works

Hedge trimming: Ultimate Height – 0.9m

## 5.0 FIELD HEDGES

Objective

To maintain and enhance retained hedgerows in order to maximise their nature conservation value, sustain their contribution to the natural framework of the development, and their visual role in screening and breaking up the mass of development. A well-developed cover of vegetation over the whole of the hedge surface to the ground should be maintained. In order to optimise nature conservation value of established hedges, adjacent tall herbaceous vegetation should be retained.

### 5.1 All field hedges – general maintenance operations

Hedge trimming:

- Where accessible, the sides of the remaining established hedge to be trimmed annually to a battered profile (5° off vertical), alternate sides in alternate years
- Time of year: trim once a year outside the nesting season (1 March – 31 July)

### 5.2 Field hedge H14

Outgrown hedge, formerly a single hedgerow, gaps have developed to create a fragmented hedgeline. In addition 70m of the hedge is either weak or dominated by bramble. If development takes place to the west of these hedges, access routes (mainly footpaths) should utilise gaps in the hedgerow, wherever possible.

Maintenance works

Hedge trimming: cut sides to a height of 3m. Do not reduce hedge height

## 6.0 PLANTED SINGLE TREES/GROUPS OF SINGLE TREES

The areas of landscape completed amongst housing will be considered by many to set the standard of care to be expected throughout the development, and should receive a high level of attention. The trees provide landscape diversity and bring early maturity to the designed landscape.

### 6.1 General objective

Single trees should be stable and healthily growing of good appearance at all times.

### 6.2 General maintenance

Timing of checks: every 6 months

Stakes, braces and ties: where relevant, remove supports and ties where no longer required.

- Timing: remove stake and tie as soon as tree is firmly anchored. Check this at the start of the growing season by releasing the tie(s) and seeing if the tree leans
- Removal: do not remove stake by shaking and wriggling the stake around. If the stake cannot be removed by pulling upwards, insert a crow bar into a cut made at the base of the stake and lever out using a brick/block of wood as a pivot
- Backfill: once removed, fill the hole with soil or other open rooting material

Where still required, check stakes, braces and ties for firmness/tightness and adjust as necessary on a annual basis

Pruning: prune to establish a balanced head, remove all dead and damaged shoots. Keep lower trunks clean by pruning back any shoots growing from the base of the trunk or the trunk itself. Prune when dormant, outside the bird nesting season in late autumn or winter except for maple, birch, and cherry trees which should be pruned in mid-summer after new growth has matured. No trees should be trimmed to shape.

Trees in poor health, dead or vandalised trees: report immediately and replace during the next planting season

Drought: water trees thoroughly in times of prolonged dry weather

### 6.3 Informally planted groups of single trees planted in grass/planting beds/open ground

Location: T1, T2, T3, T4, T5, T7

Maintenance works

See also 6.2

Stakes, braces and ties:

- remove 2no. stakes at T5

Stumps: cut down to ground level – 1no. T4, 1no. T5

Thinning: T1 – mark up cherries/holm oak for removal/crown-lifting to enhance view towards mound; to be confirmed by Landscape Architect.

### 6.4 Formal single tree planting in grass or planting beds

Location: T6 (Church Langley Playing Field), T8 (The Chase, The Chase extension), T9 and T10 (Area 2 residential areas), T16 (Area 4), T23 (Area 1 Residential Areas), T27 (Area 3 residential areas), T29 (Along Mobility Path), T30, T31 (Area 4), T33 (Area 4), T35 (Area 4 parkland)

Maintenance works

See 6.2

6.5 Single trees in paving

Location: T24 (Area 1), T25, T26 (Area 2), T28 (Area 3), T32 (Area 4), T34 (Area 4)

Maintenance works

See also 6.2

Tree grilles

- Open tree grille: annually lift grilles, remove weeds and debris. Mulch to be applied annually – min depth 100mm; keep mulch clear from the base of the tree. Refit grilles to correct level
- Tree grille with tray and block paving – top-up central opening around trunk with SuperCedec from CED, to match original, as required. Lay in accordance with maker's recommendations
- Tree grille with tray and self-binding gravel - top-up tray with SuperCedec from CED, to match original, as required. Lay in accordance with maker's recommendations

Guards: Remove where causing rub damage to tree trunks and report

Mulch to be applied annually – min depth 100mm; keep mulch clear from the base of the tree.

## 7. BROADLEAF PLANTATIONS

The tree and shrub plantations all form part of the 'natural' landscape framework but vary in their intended role and character.

### 7.1 General maintenance

Thinning:

- Selective thinning should seek to reduce the total tree number by the percentage specified below. Weak, diseased, forked or dead trees should be thinned out, though where growth is good throughout removal of viable trees will be necessary. Tree selection should be made in winter 2022/23 by a competent person and agreed with contract administrator.
- Standard: good forestry practice
- Do not thin during the bird-breeding season from March to August

Coppice selected trees and shrubs:

- Standard: good forestry practice
- Avoid coppicing during the bird-breeding season from March to August
- Cut stems: as low as possible
- Finish: leave sloping upward towards the centre to promote rainwater runoff
- Protection of regrowth: none

Create deadwood habitat:

- Contractor to remove brashings from arisings
- Stems to be cut into 1.2m lengths and stacked between trees/shrubs

Note – thinning may lead to bramble establishment which will need to be cut back when carrying out future management.

### 7.2 London Road Frontage Plantation P4, P5 and P6

Objective

The design objective of these belts is to is to establish a closed canopy of mixed indigenous broadleaves with woodland ground flora that will screen traffic from the development, provide a buffer between Newhall and adjacent developments and to create, in conjunction with the hedges referred to above, a 'green edge' to the development. The plantations are at thicket stage and need thinning.

Maintenance works

See also 7.1

Weeds: control coarse perennial weeds in sward by spot spraying before flowering

Rabbit guards: remove any remaining guards

Pruning: prune any damaged shoots

Stakes and ties: remove all remaining stakes and ties in P4, P5 and P6

Thinning percentage: 25% (mark up and confirm with Landscape Architect)

### 7.3 Green corridor woodland plantation P7

Objective

Develop the diversity of the green corridor. The plantation is now well established and needs thinning to favour the Hornbeam.

Maintenance works

See also 7.1

Thinning: 25%. Selectively thin trees and coppice shrubs to give maturing Hornbeam more space to develop. (mark up and confirm with Landscape Architect)

Timing: Winter 2022/23

### 7.4 Green corridor woodland plantation P8

Objective

The design objective of this plantation is to establish a small closed canopy of mixed indigenous broadleaves with woodland ground flora. The plantation is now well established and requires first thinning.

Maintenance works

See also 7.1

Thinning percentage: 25% as glades (mark up and confirm with Landscape Architect)

Coppice selected trees and shrubs at the P8 woodland margin:

- Material to be coppiced: selected trees and shrubs at woodland margin

Create deadwood habitat

### 7.5 Green corridor shrub plantations P9 and P10

Objective

The design objective of these plantations is to add structural diversity to the green corridor, specifically good edge habitat to woodland P8. The plantations are now well established and coppicing is required to maintain structural diversity

Maintenance works

See also 7.1

Coppicing:

- P9 - Carry out selective coppicing of Hawthorn. Landscape Architect to mark up
- P10 – Remove guards and stakes. Selectively coppice 25% of shrubs over the next four years. Landscape architect to define coupes.

Create deadwood habitat

Path clearance: path at rear of mound is difficult (for an adult) to scramble up because of shrub growth to both sides and overhanging the path. Carry out careful pruning to create a tunnel 1m wide x 1m tall

### 7.6 Scrub patch P11

Objective

Probably originally part of the remnant woodland belt connecting New Pond Spring Wood with Barnsley Wood is dominated by Bramble and Willow. Management should enhance ecological value by diversifying species and structure.

Maintenance works

See also 7.1

Protect 3no. Oaks in shelters

Cutting vegetation: cut vegetation around Oaks to 75mm by strimming in May, August and September, 1.2m diameter centred on Oaks

### 7.7 Green corridor shrub plantation P12

Objective

Manage for play and to perpetuate ‘coppice with standards’ structure

Maintenance works

See also 7.1

Path creation: Cut a narrow path 600mm wide and make a small clearing 2m in diameter for play

Coppicing:

- Cut back hazels on the inside of the plantation in 2022/23, the outside in 2023/24. Repeat every 10 years.
- Material to be coppiced: Landscape Architect to mark up
- Coppiced timber: shred and spread thinly within area of plantation

### 7.8 Green corridor plantation P13

Objective

This plantation is now well established and needs to be managed to retain it as single species coppiced Willow.

Maintenance works

See also 7.1

Coppicing:

- Material to be coppiced: Coppice 25% willows in winter 2022/23 and repeat every other year until all willows have been coppiced, then repeat on a twelve year rotation.
- Coupe location: details to be agreed with Landscape Architect
- Coppiced timber: shred and spread thinly within area of plantation
- Protection of regrowth: Fencing

7.9 Green corridor plantations P14

Objective

The design objective of this plantation is to establish a small indigenous woodland with ground flora to add diversity to the green corridor. The plantations are now well established and need thinning to allow the establishment of new trees and shrubs to establish good structural diversity. Maintenance should aim at keeping the area tidy whilst encouraging the development of a species-rich ground flora under the trees. Litter should be cleaned out regularly to prevent an impression of neglect.

Maintenance Works

See also 7.1

Thinning percentage: 25% to create mini-glades (mark up and confirm with Landscape Architect)

7.10 Green corridor plantations P15, P16 and P17

Objective

The design objective of these plantations is to add diversity to the green corridor. The plantations are now well established and need thinning and coppicing to develop their ecological potential. Maintain view of church steeple.

Maintenance works

See also 7.1

Thinning percentage: 25%.

Coppicing:

- Material to be coppiced: LA to mark up

7.11 Green corridor plantation P18

Objective

Open views, easy access to the water's edge, single trees and open groups in grass, interesting ground flora. The plantations are now well established and require thinning, coppicing and pollarding to achieve the intended effect and, on the dam, reduce their height

Maintenance works

See also 7.1

Thinning:

- Carry out selective thinning. Allow 25% - LA to mark up trees. Arisings to be stacked in New Pond Spring Wood

Coppicing:

- Establish a rolling programme
- Material to be coppiced: Allow for 10% - LA to mark up

Pollarding:

- Establish a rolling programme
- Material to be coppiced: Allow for 10% - LA to mark up

Create deadwood habitat:

- Stems to be stacked in New Pond Spring Wood

## 8.0 WETLAND

### 8.1 Marsh

Objective

To add ecological diversity to the green corridor. To maintain moist soil conditions in order to support a diverse range of native herbaceous wetland plants.

Maintenance works

Weeding: spot treat docks, thistles, nettle and ragwort with a systemic herbicide in April/May, or hand pull/dig before flowers appear

Cutting: cut in late July/ early August after most flowers have seeded, and again in October/November to a height of 75mm

Arisings: leave for 2-3 days after cutting then rake up and remove

## 9.0 TREE SAFETY

Formal inspection N/A to this contract.

Ongoing observation: Contractors are expected to inform the contract administrator as soon as possible if they observe any tree that poses a risk to public health; stating location and the nature of the risk.

## 10.0 HARD LANDSCAPE AREAS

### 10.1 Cleansing hard surfaces generally

The contractor is expected to have a flexible and common-sense approach to the cleansing of hard surfaces. Regular inspection will be needed to determine the actual need for maintenance operations. Inspection is likely to entail no more than a quick glance from operatives as they carry out other work in the vicinity. The objective is not the robotic execution of a schedule of operations but that hard surfaces should be kept free of litter (see Section 11), dog mess and debris including vegetation (weeds, fallen leaves, twigs, blossom).

### 10.2 Hard surfaces and gravel areas

Paths in parkland areas: Check once a week. When necessary sweep paths and remove leaves and other debris that may detract from the appearance of the parkland.

Other hard surfaces, including roads: Check once a week. As necessary, sweep and remove leaves and other detritus that may detract from the appearance of the site.

Loose gravel surfaces within residential areas: Check once a week. As necessary, remove leaves and other debris that may detract from the appearance of the site.

Drainage gullies: Check once a month, weekly during Autumn. As necessary, remove leaves and other debris from the gully covers.

Weed removal from hard surfaces: Check once every two weeks. As necessary, remove weed growth.

### 10.3 Play areas

Sweep play surface and remove any litter found: weekly
Inspect equipment for damage, missing parts, sharp edges: weekly, report problems immediately
Vandalism or other problems: report immediately to Contract Administrator and agree remedial action

## PART TWO: CONTROL OF LITTER, VANDALISM AND FLY TIPPING

### 11.0 TASKS

11.1 **Generally**

Regardless of the sources of litter, fly tipping and vandalism, it is important that a build up of rubbish and damage cannot build up to detract from the amenity value of the completed landscape areas and encourage further deposit of litter. It is the Contractor's responsibility to make the Contract Administrator aware of any problems of that kind arising on site, and to agree a method of dealing with them, should they fall beyond the scope of the specific clauses below.

11.2 **Litter**

Extraneous rubbish not arising from the contract work e.g. paper, bottles, cans, builders' packaging: collect and remove from site
Timing: weekly full site litter pick including wooded areas, Chase Roundabout and London Road approach

11.3 **Dog Bins**

Arisings: remove from site to proper disposal facility
Timing: empty twice weekly on Mondays and Fridays

11.4 **Dog Fouling**

Arisings: when observed during the course of other duties, remove from pathways and pedestrian areas in and around the site perimeter to a proper disposal facility.

11.5 **Disposal of rubbish**

All materials arising from the site are to be taken away and disposed of in accordance with local by-laws and regulations.

11.6 **Site inspection**

At the intervals set out in the schedule inspect site, including adjoining land awaiting development, note any fly tipping requiring special machinery to remove, spread of building materials from developer's compounds and signs of vandalism and report to the Contract Administrator. Also report damage to fences, rails and notice boards.

11.7 **Litter clearance**

At the stated maximum intervals remove all items of litter including cans, bottles, broken glass, sheets of polythene, household rubbish, fly-tipping, dumped garden refuse etc. Dismantle any constructions by children as necessary, remove loose materials to prevent further problems.

11.8 **Water courses**

Ensure that the flow of water is not impeded either accidentally or through vandalism.

11.9 **Report on site**

At the stated intervals fill in the record sheet and ensure that it arrives with the Contract Administrator within three days of the site inspection.

11.10 **Timing of operations**

The site should be kept looking tidy at all times as far as is reasonably possible. Therefore the Contractor should plan his work to clean the site in response to school holidays and other periods of high use. The intervals set out in the schedule indicate the maximum time allowed between visits.

# APPENDICES

## TREE PLANTING

### Preparation

Herbicide
Manufacturer and reference: Monsanto Roundup (Glyphosate)
Application: In advance of planting, allowing a period of time to elapse as recommended by manufacturer before cultivation.
Woodland planting: 1 metre diameter treated at each planting location.
Semi-mature trees, advanced nursery stock trees, nursery stock trees: 1.5 metre diameter treated at each plantation location.

Planting pits
Where necessary increase dimensions to ensure that pits are at least 100mm (250mm extra heavy standards, semi-mature) deeper than root system and wide enough to accommodate roots when fully spread. Break up the bottom of the pit to a depth of 150mm and roughen the sides of the pit with a fork.
Excavate pits to not less than the following:

| Tree | Pit dia. | Depth |
|---|---|---|
| Transplant/whip | 300mm | 300mm |
| Bush/feathered tree to 1.8m | 600mm | 450mm |
| Standard/feathered tree over 1.8m | 1000mm | 600mm |
| Selected/Heavy standard | 1200mm | 750mm |
| Ex. Heavy standard | 1200mm | 900mm |
| Semi-mature | 1500mm | 900mm |

Root dip for bare root trees and shrubs
Manufacturer and reference: Broadleaf Root Dip from Agricultural Polymers Ltd or similar.
Rootdip all trees as soon as possible after lifting or just prior to planting on site, to manufacturer's instructions. Where dipping takes place immediately prior to planting all plants to be placed in position in a moist condition.

### Planting

Transplants/whips
Trees to BS 3936:Part 1, size designation as scheduled.
Planting pits: see table above
Backfilling material: arisings from planting pit
Fertiliser: slow release fertilizer Sierra Agroblen Yellow 15+9+9+3, or similar
Guards: suitable tree shelter secured with a stake or rabbit guard supported with a cane

Feathered tree
Trees to BS 3936:Part 1, size designation as scheduled.
Planting pits: see table above
Backfilling material: arisings from planting pit
Fertiliser: slow release fertilizer Sierra Agroblen Yellow 15+9+9+3, or similar
Guards: if required, suitable tree shelter secured with a stake

Standards
To BS 3936 Part 1, size designation as schedule. Heavy standard trees to BS 5236.
Planting pits: see table above
Backfilling material: a thoroughly previously prepared mixture of topsoil (65% by volume either excavated from the pit or imported as required), compost (35% by volume organic material), fertilizer (e.g.Sierra Osmocote Plus, 250g per planting pit)

and soil conditioner (water retaining polymer such as Broadleaf P4 incorporation rate 1g/litre (1kg/$m^3$)
Support: Single stake bare root trees; double stake root balled trees
Stakes: 75mm thick (100mm for trees over 3m high) softwood

Advanced nursery stock trees (selected heavy standard, extra heavy standard)
To BS 5236.
Planting pits: see table above. Where necessary increase these dimensions to ensure that pits are at least 250mm deeper and 500mm wider than root system when fully spread. Break up bottom of pits to a depth of 200mm.
Backfilling material: as for standards.
Support: vertical double staking to BS 5236, underground guying to BS 4043

Semi-mature trees
To BS 4043.
Planting pits: see table above. Where necessary increase these dimensions to ensure that pits are at least 250mm deeper and 600mm wider than rootball. Break up bottom of pit to a depth of 300mm or excavate and place loose aggregate.
Backfilling material: as for standards
Protection: wrap trunk and lower branches with hessian strips, straw ropes or treated crepe paper, and leave on for two growing seasons.
Support: underground guying to BS 4043

Street trees
Seek advice from contract administrator

Irrigation tube
Landscape contractor to recommend, contract administrator to approve

Tree planting generally
Plant trees upright, unless otherwise instructed, in centre of pit and at original soil depth. Place backfilling material in 150-250mm layers, shaking tree to ensure close contact with roots and elimination of air pockets. Firm the soil as backfilling proceeds taking care not to damage any roots. Heel in firmly around root collar.
Root balled trees: firm backfilling material around root ball in 150mm layers taking care not to disturb roots.
Water plants thoroughly immediately after planting using a fine rose. Immediately after planting shrubs carefully cut back any damaged, dead or diseased branches and remove any weak, thin, or malformed growth. Where and to the extent appropriate for the species cut back to encourage growth.

Single staking bare root nursery stock
Position stake close to tree on windward side and drive vertically at least 150mm into bottom of pit and cut off just below first crotch of tree. Consolidate material around stake during backfilling.
Secure tree firmly but not rigidly to stake with at least two ties of approved type. Use three ties if necessary to prevent tree touching stake. Position top tie within 25mm of top of stake and lower tie approximately halfway down.

Single short stake for feathered trees less than 1.8m
Position 1.10m stake close to tree on windward side and drive vertically at least 150mm into the firm soil below broken bottom of pit base. Consolidate material around stake during backfilling. Secure tree firmly but not rigidly to stake with tie of approved type within 25mm of top of the stake.

Single short stake for standard trees and feathered trees more than 1.8m
Position 1.4m stake close to tree on windward side and drive vertically at least 200mm into the firm soil below broken bottom of pit base. Consolidate material around stake

during backfilling.  Secure tree firmly but not rigidly to stake with tie of approved type within 25mm of top of the stake.

Double staking root balled nursery stock or container-grown feathered trees
Drive stakes vertically at least 150mm into firm soil below broken bottom of pit base on either side of tree position and cut off just below first crotch of tree or 500mm maximum above ground level.  Consolidate material round stakes during backfilling.
Firmly fix cross bar on windward side of tree and as close as possible to stem.
Secure tree firmly but not rigidly to cross bar with tie of approved type.

Double short stake for extra heavy standard trees
Drive 2.5m stakes at least 300mm into the firm soil below broken bottom of pit base either side of the tree, and consolidate material round stakes during backfilling.  Firmly fix 38 x 75 x 600mm cross bar on windward side of tree as close as possible to the stem.
Secure tree firmly but not rigidly to cross bar with approved tie.

Underground guying of extra heavy standard trees
Position durable timber "deadmen" in base of the planting pit, over two lengths of seven strand galvanised wire.  Place the rootball onto the timber and adjust to correct height relative to ground level.  Using three stakes and a triangular timber frame around the root collar, secure the rootball by passing the wire over the timber frame and stapling.

Herbicide
Along all hedgelines to a width of 1.5m centred on the hedgeline.

Trees in hard landscape Area 4
Seek advice of Newhall Project's Landscape Architect

# APPENDIX B

## SPECIES LIST

List of species originally planted with reference to original planting plan (where known). Where no information provided seek advice of Newhall Project's Landscape Architect. All replacements to be agreed with Newhall Project's Landscape Architect.

### AREA 1 – Linden site and Lower Parkland

HEDGES
**H7** (103.111B The Park Planting and Seeding, Pirkko Higson)
*Crataegus monogyna*
*Prunus spinosa*
**H8** (103.111B The Park Planting and Seeding, Pirkko Higson)
*Crataegus monogyna*
**H9** (1166.1.203B Chase Extension Planting Plan, C&M)
*Crataegus monogyna*
**H10** (1166.1.201C Linden approach road planting plan, C&M)
Carpinus b*etulus*

TREES
**T1** (103.111B The Park Planting and Seeding, Pirkko Higson)
*Prunus 'Tai Haku'*
*Quercus ilex*
**T2** (103.111B The Park Planting and Seeding, Pirkko Higson)
*Quercus rubra*
**T3**
*Quercus rubra*
**T4**
*Quercus rubra*
**T5** (103.111B The Park Planting and Seeding, Pirkko Higson)
*Malus 'Golden Hornet'*
*Fraxinus oxycarpa 'Raywood'*
**T23**
*Acer campestre*
*Alnus glutinosa*
*Betula pendula*
*Carpinus betulus*
*Malus sylvestris*
*Prunus avium*
*Quercus robur*

TREE PLANTATIONS
**P6**
Quercus robur
*Fraxinus excelsior*
*Carpinus betulus*
*Sorbus torminalis*
*Corylus avellana*
*Crataegus monogyna*
**P7** (103.111B The Park Planting and Seeding, Pirkko Higson)
Carpinus betulus
*Carpinus betulus 'Frans Fontaine'*
*Fraxinus oxycarpa 'Raywood'*
**P8**
*Acer campestre*
*Carpinus betulus*
*Crataegus monogyna*
*Corylus avellana*
**P9** (103.111B The Park Planting and Seeding, Pirkko Higson)
*Acer campestre*
*Corylus avellana*
*Crataegus monogyna*
*Prunus spinosa*
*Querus robur*
**P10** (103.111B The Park Planting and Seeding, Pirkko Higson)
*Larix eurolepis*
*Prunus spinosa*
**P11**
*Prunus spinosa*
*Larix eurolepis*

**P12** (103.111B The Park Planting and Seeding, Pirkko Higson)
*Corylus avellana*
*Crataegus monogyna*
*Prunus avium*
*Quercus robur*
*Salix caprea*

## AREA 2 – Phase 1 site and Mid Parkland

HEDGES
**H6**
*Crataegus monogyna*
**H11** (1166.1.202A L-Block Planting, C&M)
*Crataegus monogyna*
**H12** (1166.1.202A L-Block Planting, C&M)
*Crataegus monogyna*
**H13** (1166.1.202A L-Block Planting, C&M)
*Crataegus monogyna*

TREES
**T6** (103.145 Edge of Church Langley Sports Field Barrier and Bridleway – Stage 1, Pirkko Higson)
*Fraxinus oxycarpa* 'Raywood'
**T7**
Quercus ilex
**T8 & T25**
*Tilia cordata* 'Greenspire'
**T9, T10, T26 & T30**
Seek advice from Newhall Project's Landscape Architect

## AREA 3 – Bellway site and Upper Parkland

HEDGES
**H25** (1166.03.302A Montessori Area B Planting Plan, C&M)
*Crataegus monogyna*
*Prunus spinosa*
**H26** (1166.03.301 Montessori Area A Planting Plan, C&M)
*Carpinus betulus*

TREES
**T8** (1166.1.203C Chase Extension Planting Plan, C&M)
*Tilia cordata* 'Greenspire'
*Quercus rubra*
**T27**
*Acer campestre* 'Streetwise'
*Amelanchier arborea* 'Robin Hill'
*Betula pendula* 'Tristis'
*Carpinus betulus* 'Frans Fontaine'
*Malus baccata* 'Street Parade'
*Prunus* 'Spire'
*Pyrus calleryana* 'Chanticleer'
*Quercus ilex*
*Sorbus aucuparia* 'Sheerwater Seedling'
*Sorbus aucuparia* 'Edulis'
**T28**
*Betula pendula* 'Tristis'
*Carpinus betulus* 'Frans Fontaine'
*Malus baccata* 'Street Parade'
*Prunus* 'Spire'
*Pyrus calleryana* 'Chanticleer'
*Sorbus aucuparia* 'Sheerwater Seedling'
*Sorbus aucuparia* 'Fastigiata'
**T29**
*Quercus robur*
*Acer campestre*
*Quercus palustris*

## AREA 4 – Base
Seek advice from Newhall Project's Landscape Architect