

Ground Preparation:

Protection of existing woodland, trees and hedges against damage to be in accordance with the BS 5837:2012 - Trees in relation to design, demolition and construction - Recommendations. Protective fence to be approved.

Excavations to B.S. 8000 part 1:1989. Excavated material removed off-site; good quality subsoil/topsoil stored on-site for re-use.

Landscape planting areas to have a minimum depth of soil of 500mm and grass areas will have 300mm.

Loosen formation level with single tine ripper, driven 450mm deep at 1m centres, when ground conditions are dry.

Soil

Clean capping: Lovell have included 600mm depth soil to gardens and landscaped areas which comprises 450mm subsoil and 150mm depth topsoil. Lovell confirm that they have included site won Clean and inert capping which will be resolved through detailed design. For clarification, Lovell have only allowed for the importation of site won clean and inert subsoil and topsoil. There is no allowance for it to achieve BS 8601 for subsoil or BS 3882 for topsoil.

Excavate planting pits to the following dimensions:
Extra Heavy Standard Trees: 1200 x 1200 x 700mm depth
Shrubs: 300 x 300 x 300mm depth

Backfill tree pits with 100/300mm depth subsoil and 400mm topsoil including Melcourt Topgrow peat free planting compost or similar approved at a rate of 0.125m³/pit.

Backfill shrub pits with topsoil including Melcourt Topgrow peat free planting compost or similar approved at a rate of 1.0m³/20m³.

Cultivate all landscape areas to a loose and friable tilth suitable for grass seeding or planting.

Collect and remove from site all stones, builders' rubble and other deleterious material over 50mm in any dimension.

Grass Areas:

Supply and spread pre-seeding N:P:K. fertiliser (10:15:10) at a rate of 30g/m²

Grass areas to be sown at a rate of 35g/m² with a suitable grass seed mix such as Germinal A19. Initial grass cutting and edge trimming down to 50mm

Annual meadow (Wildflowers):

Do not spread fertiliser.

Supply and sow a 100% wildflower mixture such as EM2F Standard General Purpose Wild Flowers by Emorsgate Seeds, or similar, at a rate of 1.5g/m².

100% wild flower mixtures are best sown into existing grass or combined with a suitable grass seed mix. If sown alone without grass onto bare soil the spaces left between the sown flowers will be filled by grasses and other weeds.

When sowing wild flower seed directly into existing grass the site must be carefully chosen and the ground preparation must be good. Select grassland on poor to moderately fertile soil with a fine sward structure and few perennial weeds or vigorous grasses. Unless yellow rattle is already established in the sward, results can often be improved by adding yellow rattle seed at up to 1g/m2 to this mix.

Control any perennial weeds such as docks or thistles.

Prepare the ground for sowing in late summer by cutting and/or grazing very hard and create gaps either with harrows or by raking (aiming to create around 50% bare soil). Alternatively spray patches or strips with a herbicide like glyphosate to create gaps in the vegetation.

Sow in the autumn using a 100% wild flower mixture. Bulk up the seed with an inert carrier such as sand to make distribution easier. The seed must be surface sown and can be applied by machine or broadcast by hand. Rolling is not usually necessary.

Ref: <https://wildseed.co.uk/mixtures/view/24>

Hazels on embankment

Hazels to be protected from mowing/machinery and/or animals with spiral shelter guards such as Tubex Shrub Shelter Guard by Green-tech or similar (Product Code: 160PS1165).

Coppicing shall be undertaken to create a multi-stemmed shrub, generate new stems and rejuvenate the plants. Cut back stems in late spring, after the catkins have dropped. For best results and more robust stems, coppice on a rotation every 5-10 years to give the roots a chance to establish. Cut stems down to around 30cm for a clean stool. Then cut down further to no more than 5cm above the ground. After five years, the coppiced hazel will be about 3m tall and 3m wide, with lots of stems bearing catkins - it will now be time to cut it back again, before the stems thicken.

Native shrubs on embankment

Plants to be protected with spiral shelter guards such as Tubex Standard Tree Shelter Guard by Green-tech or similar (Product Code: 160PS1130-pro). It is envisaged that the plants should be left to grow in the long-term, but following the initial establishment period, the long-term management would be to cut back vegetation as necessary and away from car parking spaces. Any dead/dying or diseased vegetation is to be removed. Thin the vegetation in the longer term, if necessary. A review once a year would need to be undertaken to establish the maintenance regime.

Species-rich grass

Do not spread fertiliser.

Supply and sow Emorsgate Flowering Lawn Mixture EM1 (or similar) which contains 20% wildflowers and 80% grasses.

Description
Mixture EL1 contains slow growing grasses with a selection of wild flowers that respond well to regular short mowing.

Ground Preparation
Endeavour to select ground that is not highly fertile and does not have a problem with perennial weeds. Good preparation is essential to success so aim to control weeds and produce a good quality seed bed before sowing.

To prepare a seed bed first remove weeds using repeated cultivation. Then plough or dig to bury the surface vegetation, harrow or rake to produce a medium tilth, and roll or tread to produce a level firm surface.

Sowing
Seed is best sown in the autumn or spring but can be sown at other times of the year if there is sufficient warmth and moisture. The seed must be surface sown and can be applied by machine or broadcast by hand. To get an even distribution and avoid running out, divide the seed into two or more parts and sow in overlapping sections. Do not incorporate or cover the seed, but firm in with a roll, or by treading, to give good soil/seed contact.

First Year Management

The wild flower and grass species in this mix are perennial; they will be slow to germinate and grow and will not usually flower in their first growing season. There will often be a flush of annual weeds from the soil in the first growing season. This annual weed growth is easily controlled by repeated mowing.

Mow newly sown flowering lawns regularly (every 7 -10 days during growing season) throughout the first year of establishment. Cut to a height of 40-60mm, removing cuttings if dense. This will gradually develop a good sward structure, help maintain balance between faster growing grasses and slower developing wild flowers, and control annual weeds. Dig out any residual perennial weeds such as docks.

Management Once Established

Do not mow regularly. To permit flowering, mowing can be relaxed from late June. Cut again when the sward gets untidy (after 4-8 weeks). Suspend mowing earlier in the year to allow cowslips to flower. Heavy quantities of cuttings should be collected and removed from site.

EL1 is a complete mix composed of 20% wild flowers and 80% slow growing grasses (by weight). The flower and grass components are also available to order separately as EL1F for the flower component and EG1 for the grass component. For quicker establishment of grass cover EL1 may be sown with an additional 10g/m2 EG1 or lawn mixtures EG21 or EG22. Higher grass sowing rates will however reduce the time and space available for flower establishment, especially in good growing conditions.

Planting Areas:

Plant specification to be in accordance with the HTA National Plant Specification: 03/02

Tree planting to be in accordance with BS 8545:2014 - Trees from nursery to independence in the landscape recommendations.

Supply and plant, incorporating slow release fertiliser N:P:K - 4:19:10 ENMAG or similar approved at the following rates:
Extra Heavy Standard Trees: 130g / tree pit
Shrubs: 70g / m²

Provide and fix tree stakes and ties to the following dimensions:
Extra Heavy Standard Trees: overall length 1500; height above ground: 750mm

Bark mulch:

Provide and spread evenly over all planting areas an organic graded bark flakes or similar approved bark mulch to a depth of 50mm.

Maintenance:

Soft landscape areas to be maintained in accordance with B.S. 7370 Part 3:1991 and Part 4:1993. The maintenance of trees should be in accordance with BS 3998:2010 and BS 8545:2014. Maintenance operations to successfully establish plants shall be carried out for the first 5 years after planting. Maintenance operations for successful plant establishment shall include watering; weed control; fertiliser application; pest and disease control; pruning; and litter picking. Watering for trees should follow an irrigation plan in accordance with BS 8545:2014 and must be in anticipation of drought. Tree pruning should be in the winter months or summer (July-August). Cherries must be pruned only in the summer months after flowering.

The replacement of failed trees should occur once reasons for failure have been identified and amendments to the specification are made as necessary. Shrubs which die, are removed or become seriously damaged shall be replaced in the next planting season with others of similar size and species, to be agreed in writing by the Local Planning Authority.

For all new landscape areas, the following maintenance programme shall be undertaken:

- **Inspections:** January - December. Replace dead plants when necessary.

- **Watering:** When necessary in accordance with an irrigation plan. Water trees in accordance with an irrigation plan as per BS 8545:2014. Watering shrubs shall be carried out to maintain vigorous plant growth. Water shall soak into the ground; it is not sufficient to dampen the surface. Water must be applied slowly to avoid damage to plants.

- **Pest and disease control:** January. To be carried out if necessary and in accordance with best practice.

- **Litter removal:** January - December. Collect and remove all extraneous rubbish.

- **Weed control:** February - May; July; and September. Hand weed to remove all weeds and their roots using a hoe, trowel or fork. Apply a herbicide to kill re-growth when required.

- **Prune:** Winter months or summer. At the appropriate season for the species, pruning to be carried out to remove all damaged diseased or dead wood. Prune shrubs to ensue the plant is kept well balanced and in good shape. For trees, pruning shall be in accordance with BS 3998:2010.

- **Fork over planting beds:** March. Prick up trodden or compacted soil surfaces to aerate the soil without damaging the plants.

- **Cut grass and trim edges:** March - October. Amenity grass areas shall be managed to a height of 40mm. Species rich grass areas to be mowed as advised by the supplier.

- **Apply fertiliser:** April. Applications of fertiliser to be carried out early in the growing season. Ensure correct fertiliser application. Inspect once a month and after very heavy winds. Adjust ties if necessary to conform to stem growth or to prevent chafing.

- **Lightly fork over planting beds:** September.

- **Rake / scarify grass:** September. Relieve thatched conditions and remove dead grass in the autumn over all grassed areas.

- **Mulch:** Mid to late spring. Mulching to be topped up annually over the duration of the agreed maintenance period. At the end of the maintenance period, undertake a final mulch. Ensure that the soil is thoroughly moistened prior to remulching, applying water where necessary. Planting beds and trees: re-mulch to a minimum depth of 50 mm.

- **Spiking (Aeration):** Aerate to increase water, nutrient and oxygen movement into the soil.

- **General:** If grass surface is disturbed by over use, restore by firming or lifting with a fork

Any newly planted trees, plants or hedgerows, which within a period of 5 years from the completion of the development die, are removed, become seriously damaged or diseased, or in the opinion of the Local Planning Authority otherwise defective, shall be replaced. Replacement planting shall take place during the first available planting season

General Notes:

Substitutions, if made, should be similar in size, form and water demand.

Plants shall be arranged to avoid straight lines and geometric patterns.



Ringland

Implementation specification LA.6

NMA Issue