

# **MEASURED WORKS SCHEDULE**

## **Proposed Soft Landscape**

FOR THE SITE AT  
Harefield Grove

ON BEHALF OF  
Comer Homes

~	Planning	DCG	JBA	JBA	15/10/2023
Revision	Purpose	Originated	Checked	Authorised	Date
Drawing Number: JBA 20\027 1-10		Document Ref: Proposed Soft Landscape			
		JAMES BLAKE ASSOCIATES			

## **PREAMBLE: GENERAL REQUIREMENTS AND STANDARDS OF WORKMANSHIP AND MATERIALS**

N.B. The following clauses apply where relevant throughout the clauses in this document and therefore do not recur in each individual clause. Contractor's pricing this document shall take these general clauses into consideration when pricing each subsequent clause.

**Competence and diligence:** The Landscape Contractor shall ensure a competent foreman on site to supervise work, ensuring that the beds are suitably rotovated, cultivated, fertilised and planted in accordance with the drawings and the foreman will keep on site an intact copy of the planting plan complete with notes and diagrams.

Beds and plants shall be set out strictly as shown on the drawings, with any plant substitutions to be agreed with the landscape architect (Call James Blake Associates – (01284 335 797). Ornamental (non-native or deciduous) hedge plants shall be planted in straight single rows, tightly to form instant hedge lines, and lightly clipped back to ensure a neat flat top and sides. Native hedges shall be planted in two parallel straight rows, each one offset, so each plant has more growing room. Ensure operatives have a plan with the specification notes on site and any details showing how to:

- a) plant hedges in straight rows in the centre of 1m hedge cultivation strip for larger growing varieties and 0.75m for small hedge types;
- b) recess soil levels within 300mm of bed edges – by 65mm and marry in levels - to retain bark,
- c) cut bed edges neatly adjacent grass areas so that there is a clear V shape division between soil and grass;
- d) lay sheet mulch properly as per the diagram on the plan;
- e) spread mulch to the depth of 50mm over the sheet mulch and ensure that there is a 15mm retaining edge at all bed extremities to prevent mulch falling onto roads or grass areas;
- f) plant trees suitably with free draining pits and correct stakes and ties and, where specified underground guying – all as specified on plan and all other elements that may be included such as irrigation pipe and cap and filter drain and soil cells if specified;
- g) ensure that tree root barriers are installed in trenches before trees are planted;
- h) ensure soil is suitably prepared, evenly cultivated, compost and fertiliser added before planting;
- i) water in plants at a rate given in the watering section of this document, on planting.

The above elements feature in all snagging reports, so special attention to these elements will result in possibility of avoiding the need for significant levels of remedial action on site.

**PREAMBLE: GENERAL REQUIREMENTS AND STANDARDS  
OF WORKMANSHIP AND MATERIALS: Continued:-**

**Quantities and Variations:** Quantities given are approximate, requiring tenderers to give fixed rates regardless of possible variations in quantity of each element being finally required on site. Tenderers shall not vary quantities specified without agreement with the originator without written authority from the Landscape Architect (call James Blake Associates – 01284 335 797), variation order or instruction from the Contract Administrator, irrespective of verbal comments received from any party. The Employer will not be liable for the cost of any additional works carried out without such written instruction being agreed and issued.

**References to brand names:** shall mean this product or any product that performs to the same standard in terms of aesthetic and colour, durability, fire retardance, function, safety standards or similar characteristic that is important in terms of the planning approval. Products involving public art or high public interface – e.g. play equipment or plants, which have specific NHBC distance criteria from foundations and to specific technical approvals with regards to underground service easements, shall be provided as specified due to the inherent risks of minor variations e.g. with play equipment, the fall height or, for example with plants, the inability to insure the property due to tree species being too close to the foundations or other specific requirements that have been important in selecting the product.

**Pesticides and Herbicides Generally:** Where reference is made to the use of pesticides and herbicides in this document, the following procedures shall be followed, and regulations complied with:

- a) The use of pesticides and herbicides should only be made following a risk assessment to consider potential effects on the environment and on human health.
- b) The purchase, transport and storage of herbicides are regulated by Part III of the Food and Environment Protection Act 1985, Control of Pesticides (Amendment) Regulations 1997; the Health and Safety at Work Act 1974; the COSHH Regulations 2002 (as amended), the product COSHH sheet and EC Directive 91/414/EEC (the “Authorization Directive”) and the Plant Protection Products Regulations 1995 as amended by the Plant Protection Products (Basic Conditions) Regulations 1997.
- c) *Herbicides* must have an appropriate full or “off-label” approval for use in a relevant situation.
- d) Refer to the Pesticide Safety Directive, for which the website is given here for your assistance:- [www.pesticides.gov.uk](http://www.pesticides.gov.uk).
- e) All pesticides and herbicides shall be applied in suitable calm weather conditions and allow for repeat spraying as required to achieve a complete kill.
- f) Do not under any circumstances plant into new topsoil that has not been allowed time for couch grass, and other perennial weed roots, to re-grow sufficiently to be sprayed and be killed.

**PREAMBLE: GENERAL REQUIREMENTS AND STANDARDS  
OF WORKMANSHIP AND MATERIALS: Continued:-**

**Pesticides and Herbicides Generally Continued:**

- g) Any damage to existing and new-planted material from incorrect spraying or spray drift by the Landscape Contractor, shall be made good to match that previously existing, at the Landscape Contractor's expense.
- h) Take special care when spraying near water courses and ecologically sensitive areas and consider alternative measures, such as a glyphosate free weed killer or "hot foam treatment" or ensure the spray guards, weed wiping and other techniques
- i) Do not spray areas of existing ground flora, that have been retained for Biodiversity Net Gain reasons or that are within Receptor Sites or other retained habitat. Contact James Blake Associates (01284 335 797).

**Sheet Mulch** Include for supplying and laying sheet mulch generally this will be "Ecortex" from Hy-Tex (UK) Limited. Tel: 01233 720097, pegged down flat and evenly, prior to planting, but for gravel areas – use "Covertex" because you need a permanent product to suppress weed growth.

**Bark or wood chip mulches:** shall be less than 5% fines, FSC Certified and/or certificated to BS EN 4790: 1997 and if play bark – to BS EN 1177: 2008 safety standard: All products and shall be submitted to and approved by the Landscape Architect prior to use (Contact James Blake Associates (01284 335 797), whose decision as to its acceptability shall be final. Mulch such as "Chunky Chip Longevity" available from Suffolk Woodchips Ltd tel. 07881 904100 or 01842 813 555, email: suffolkwoodchipsLtd@outlook.com. No costs for sweeping up, carting away or replacing mulches shall be accepted by the Employer if rejected by the Landscape Architect. All mulch products shall be pest, disease and weed free and **not have** been treated with Methyl Bromide or any additives. It shall have been tested in accordance with the requirements of BS 4790:1987, for fire resistance and have a pH of between 4.5 and 5.5.

Supply shall be consistent throughout of the duration of the works. No mulch will be accepted until a sample has been accepted by the Landscape Architect. No mulch shall be accepted unless it is a graded product with fines removed.

**Making good:** Include in all clauses for any making good to structures and surfaces disturbed by construction of any elements.

**Tidiness and Litter/ Debris:** Remove all litter and debris to an approved site of disposal throughout the construction period to ensure a clean and tidy site at all times.

**PREAMBLE: GENERAL REQUIREMENTS AND STANDARDS  
OF WORKMANSHIP AND MATERIALS: Continued:-**

**Implementation and Monitoring Programme**

All soft works shall be implemented no later than the first planting season following the substantial completion of the construction works of the principle contractor, and where reasonably practical, all softworks shall be implemented before or during the construction works. Landscape works shall be monitored by a Landscape Architect, which shall include a pre-commencement site meeting, at least two interim snagging inspections and a final snagging report on completion of the work. The Landscape Architect shall sign off the works are complete before the contractor's final payment is made. This letter of making good defect shall be submitted to the Local Planning Authority to release any implementation and monitoring conditions attached to the planning approval.

## **THE MEASURED WORKS**

### **1.0 CLEARANCE, DEMOLITION AND RETAINED LANDSCAPE ELEMENTS**

#### **1.1 CLEARANCE**

Clear scrub and ground vegetation, carting away arisings to a suitable compost area identified on site (to be agreed). Larger brush wood to be stacked in eco-piles as hibernacula or bug-hotels within the site locations to be agreed or as otherwise shown on landscape drawing. All in accordance with Drawing No. JBA 20\027 1-10

#### **1.2 REMOVE TO TIP TREE SHELTERS, REPTILE FENCING REMNANTS, STAKES AND LITTER.**

Remove all shrub and tree shelters from the site and remnants of reptile fencing, litter and stakes, whether loose or still around tree stems, and cart to tip.

#### **1.3 DEMOLITION**

Demolish and cart away to a suitable and licenced tip structures and surfaces as hatched and shown on drawings. All in accordance with Drawing No. JBA 20\027 1-10

### **2.0 LANDSCAPE RETENTION**

Mark out areas of existing landscape to be retained and protected during the course of the development, to be incorporated into the finished landscape scheme.

Supply and erect suitable protective fencing (heras type or as per Arboricultural BS5837:2012).

Manage existing landscape areas annually. All in accordance with Drawing No. JBA 20\027 1-10

### **3.0 CULTIVATION AND TOPSOIL**

#### **3.1 SHRUB BEDS**

Excavated bottom shall be to the minimum depth of 365mm.

Topsoil to be provided by the groundworker from existing topsoil storage piles, if in suitable condition (weed free and still complete with structure and texture, not compacted under the weight of the storage pile, alive and containing microorganisms and capable of sustaining health plant growth). In the event that the topsoil is insufficient or of poor quality, suitable topsoil shall be imported.

Topsoil depth and suitability shall be checked by the Landscape Contractor. Topsoil depth and quality shall be comply with the following minimum requirements:

a) depth of 300mm

- b) topsoil shall comply in quality terms to BS 3882:2015 and shall be suitable for healthy growing of plants in the sole opinion of the landscape architect, who may require additional fertiliser or compost to be added and this shall be allowed for in the final tender price
- c) topsoil to be spread over free draining, de-compacted subsoil compliant to BS 8601:2013
- d) all hard pans to be broken up before topsoil spreading
- e) report any areas of shallow soil covering compacted ground or rubble to the Site Manager, the Construction Director, the Technical Director, but also to the Landscape Architect and agree a way forward that resolves the soil issues.
- f) regardless the client's time schedules and other pressures on site, James Blake Associates will always reject any plants, which have had their roots cut with a spade in order to get specified nursery stock planted in the overly shallow soils sitting over compacted and buried rubble or temporary haul roads, just to comply with the misinformed instruction
- g) ensure ground is free from deep compaction, buried rubble, crane bases, haul roads and other buried debris.

Larger beds where suitable access is available, free from underground services, shall have any hard pans or deep compaction, (caused by, inter alia, large machinery or site compounds) broken up by deep ripping at 500mm c/s to a depth of 600mm using a tractor mounted ripping bar. For these areas and those too small, or too compromised, to deep rip, shall be rotovated or broken with the teeth of the excavator bucket to a depth of 300mm, to ensure the ground is completely broken up and is free draining.



## **CULTIVATION AND TOPSOIL Continued: -**

### **SHRUB BEDS Continued:**

For areas adjacent to existing trees and hedges, except for retained and protected landscapes including ground flora habitats, do not rotovate ground within the Root Protection Area and to a minimum of 10 metres of existing trees or within 4 metres of existing hedges. Stop rotovating in areas where roots greater than 10mm are encountered. Except for retained habitat, these areas should be hand-forked with caution, taking care not to damage any roots of existing vegetation. Resume rotovating immediately where roots are no longer found.

Final grade to ensure even surface, sloping where necessary, with finished soil levels 65mm below adjacent pavement or grass surfaces.

If there is any weed growth between preparing the soil and planting, then spray such weed; (spraying to be carried out by a skilled and qualified operative, using a glyphosate free weed killer or a sustainable “hot foam” treatment, strictly in accordance with the requirements and regulations given on pages 4 and 5 of this document – pesticides and herbicides).

Remove all vegetative material, stones larger than 50mm in any one direction, litter and all other debris to leave an even and well-cultivated surface.

Ameliorate topsoil with a non-peat based compost at 25L/m<sup>2</sup> and incorporate, and mix well in, 75g/m<sup>2</sup> of HortiTop Complete 11-5-12 slow release fertilizer from Hortifeeds, contact tel. (01522) 704404, all to the manufacturers specification.

Surface cultivate, unless roots are encountered from existing trees and hedges (where hand cultivation will have to suffice). Check that the setting out lines are well defined, with smooth curves, wherever possible to radii; scribed on site with pegs and/or site marker paint. Include for forming clear edges to beds where adjacent to grass surfaces. All in accordance with Drawing No. JBA 20\027 1-10.

A) Ornamental Shrub beds

Approximate quantity:-

663m<sup>2</sup>

## **CULTIVATION AND TOPSOIL Continued:-**

### **3.2 NATIVE WHIP AND SHRUB PLANTING IN MIXES OR MATRICES (TO BE PIT OR NOTCH PLANTED)**

Deep rip existing topsoil of entire area to be planted at 500mm c/s to a depth of 600mm using a tractor mounted ripping bar.

For areas adjacent to existing trees and hedges, except for retained and protected landscapes including ground flora habitats, do not rotovate ground within the Root Protection Area and to a minimum of 10 metres of existing trees or within 4 metres of existing hedges. Stop rotovating in areas where roots greater than 10mm are encountered. Except for retained habitat, these areas should be hand-forked with caution, taking care not to damage any roots of existing vegetation. Resume rotovating immediately where roots are no longer found.

Resume ripping immediately where roots are no longer found. Ensure the ground is completely broken up and is free draining.

Spray areas to be planted, unless otherwise instructed due to ecological reasons, with spraying to be carried out by a skilled and qualified operative, using a glyphosate free weed killer or a sustainable “hot foam” treatment, strictly in accordance with the requirements and regulations given on pages 4 and 5 of this document – pesticides and herbicides). After at least 2 weeks remove all dead vegetative material, any stones larger than 50mm diameter, litter and all other debris to leave an even, and obstruction free surface.

Check that settings out lines are still well defined, forming clear 65mm minimum depth “V” shaped edges to beds where adjacent to grass surfaces. All to be in accordance with Drawing No. JBA 20\027 1-10.

## **CULTIVATION AND TOPSOIL Continued:-**

### **3.3 HEDGES – ALL TYPES.**

Excavated bottom shall be to the minimum depth of 365mm.

Topsoil to be provided by the groundworker from existing topsoil storage piles, if in suitable condition (weed free and still complete with structure and texture, not compacted under the weight of the storage pile, alive and containing microorganisms and capable of sustaining health plant growth). In the event that the topsoil is insufficient or of poor quality, suitable topsoil shall be imported.

Topsoil depth and suitability shall be checked by the Landscape Contractor. Topsoil depth and quality shall be comply with the following minimum requirements:

- a) Minimum depth of 300mm
- b) Topsoil shall comply in quality terms to BS 3882:2015 and shall be suitable for healthy growing of plants in the sole opinion of the landscape architect, who may require additional fertiliser or compost to be added and this shall be allowed for in the final tender price
- c) Topsoil to be spread over free draining, de-compacted subsoil that is compliant to BS 8601:2013.

All hard pans to be broken up before topsoil is spread. Report any areas of shallow soil covering compacted ground or rubble to the Site Manager, the Construction Director and the Technical Director, but also to the Landscape Architect and agree a way forward that resolves the soil issues.

Regardless the client's time schedules and other pressures on site, James Blake Associates will always reject any plants, which have had their roots cut with a spade in order to get specified nursery stock planted in the overly shallow soils sitting over compacted and buried rubble or temporary haul roads, just to comply with the misinformed instruction.

Ensure ground is free from deep compaction, buried rubble, crane bases, haul roads and other buried debris. For areas adjacent to existing trees and hedges, do not rotovate ground where roots greater than 10mm are encountered. These areas should be hand-forked with caution, taking care not to damage any roots of existing vegetation. Resume rotovating immediately where roots are no longer found.

Final grade to ensure an even surface, sloping where necessary, with finished soil levels 65mm below adjacent pavement or grass surfaces.

Spray areas to be planted, unless otherwise instructed due to ecological reasons, with spraying to be carried out by a skilled and qualified operative, using a glyphosate free weed killer, or a sustainable "hot foam" treatment, strictly in accordance with the requirements and regulations given on pages 4 and 5 of this document – pesticides and herbicides). After at least 2 weeks remove all dead vegetative material, any stones larger than 50mm diameter, litter and all other debris to leave an even, and obstruction free surface.

## **CULTIVATION AND TOPSOIL Continued: -**

### **HEDGES – ALL TYPES Continued:**

Check that settings out lines are still well defined, forming clear “V” shaped edges to beds, to a minimum depth of 65mm, where adjacent to grass surfaces.

Ameliorate with a non-peat-based compost at 25L/m<sup>2</sup> and incorporate 75g/m<sup>2</sup> of HortiTop Complete 11-5-12 slow release fertilizer from Hortifeeds, contact tel. (01522) 704404, all to the manufacturers instruction. Surface cultivate, unless roots are encountered from existing trees and hedges (where hand cultivation will have to suffice).

Check that setting out lines are well defined, with smooth curves, wherever possible to radii; scribed on site with pegs and/or site marker paint. Include for forming clear well-defined “V” shaped edges to beds, to a minimum depth of 65mm, where adjacent to grass surfaces.

All in accordance with Drawing No. JBA 20\027 1-10.

Approximate quantity: -

703m

### **3.4 SPECIMEN SHRUB PITS IN GRASS AND GRAVEL**

Excavate shrub pits, to a depth of 365mm removing all vegetative material, litter and other debris. Fork over bottom and sides of pit and add 75g/m<sup>2</sup> of HortiTop Complete 11-5-12 slow-release fertilizer from Hortifeeds, contact tel. (01522) 704404 and 5 litres of non-peat compost into backfill. For shrubs in grass areas, ensure soil level is finished 65mm below any grass surface to a radius of 300mm around the stem, to receive 50mm depth of bark mulch – ensuring the mulch is recessed to avoid bark being lost to and possibly even damaging mower blades. All in accordance with Drawing No. JBA 20\027 1-10.

A) 10L Specimen shrubs in grass.

Approximate quantity:-

296No.

## **CULTIVATION AND TOPSOIL Continued:-**

### **3.5 TREE PITS**

Excavate tree pits, to the dimensions stated below ensuring pit size is a minimum of 100mm wider than the root ball itself, taking care to stack topsoil and subsoil separately:

If there is any weed growth between preparing the soil and planting, spray areas to be planted, unless otherwise instructed due to ecological reasons, with spraying to be carried out by a skilled and qualified operative, using a glyphosate free weed killer or a sustainable "hot foam" treatment, strictly in accordance with the requirements and regulations given on pages 4 and 5 of this document – pesticides and herbicides). After at least 2 weeks remove all dead vegetative material, any stones larger than 50mm diameter, litter and all other debris to leave an even, and obstruction free surface.

Fork over bottom and sides of pit to ensure adequate drainage. Incorporate 75g/m<sup>2</sup> of HortiTop Complete 11-5-12 slow-release fertilizer from Hortifeeds, contact tel. (01522) 704404, all to the manufacturer's instructions and 30 litres of non-peat-based compost into the top 300mm layer of backfill. For trees in grass surfaces, allow for surplus subsoil to be carted away to skip, to ensure finished soil levels are 65mm below any grass surface, to a radius of 500mm around the tree, (to receive sheet and bark mulch). All to be in accordance with Drawing No. JBA 20\027 1-10.

#### **A) FTH TREE PITS;**

600mm x 600mm x 600mm: Approximate quantity:- 45No.

#### **B) CONIFEROUS & BROADLEAF EVERGREEN TREE PITS;**

800mm x 800mm x 600mm: Approximate quantity:- 11No.

#### **C) STD TREE PITS;**

1000mm x 1000mm x 700mm: Approximate quantity:- 40No.

#### **D) EXTRA HEAVY STD TREE PITS;**

1500mm x 1500mm x 800mm: Approximate quantity:- 10No.

#### **E) MULTI-STEM TREE PITS;**

1500mm x 1500mm x 700mm: Approximate quantity:- 11No.

## **CULTIVATION AND TOPSOIL Continued:-**

### **3.6 AREAS TO BE TURFED**

Rotovate areas to be turfed to a depth of 150mm and then cultivate and fine grade to a fine and even tilth.

For areas adjacent to existing trees and hedges, do not rotovate ground where roots greater than 10mm are encountered. These areas should be hand-forked with caution, taking care not to damage any roots of existing vegetation. Resume rotovating immediately where roots are no longer found.

Ensure soil levels are flush with adjacent paved surfaces (max tolerance 5mm below – 0mm above, and 65mm above planted areas).

Cultivate and then grade entire area to form an even level and tilth. Include final grading of soil to marry-in soil levels with paving, manhole covers etc.

Rake surface to form a fine tilth, removing all rocks, stones and organic debris greater than 25mm diameter.

If there is any weed growth between preparing the soil and planting, spray areas to be planted, unless otherwise instructed due to ecological reasons, with spraying to be carried out by a skilled and qualified operative, using a glyphosate free weed killer or a sustainable “hot foam” treatment, strictly in accordance with the requirements and regulations given on pages 4 and 5 of this document – pesticides and herbicides)

Water thoroughly until the soil is visibly saturated immediately prior to turfing, incorporating liquid lawn feed such as Organic NuGro by Hortifeeds contact tel. (01522) 704404 at a rate of 600L/ha (0.06L/m<sup>2</sup>; any alternative organic liquid fertiliser make and dosage to be agreed with the Landscape Architect – according to the conditions. All to be in accordance with Drawing No. JBA 20\027 1-10.

Approximate quantity: -

4622m<sup>2</sup>

## **CULTIVATION AND TOPSOIL Continued:-**

### **3.7 GENERAL AMENITY GRASS AREAS TO BE SEEDED**

For larger open spaces with tractor machine access, deep rip areas to be seeded at 500mm centres to a depth of 600mm (taking care not to deep rip anywhere that roots greater than 10mm diameter are encountered).

After deep ripping (where possible), rotovate or plough (as appropriate to size of area) existing topsoil for areas to be seeded, breaking the soil to a depth of 150mm. For areas adjacent to existing trees and hedges, do not rotovate (or for large areas, plough) in any areas where roots greater than 10mm are encountered. Areas near trees or where roots are encountered shall be hand-forked with caution, taking care not to damage any roots of such existing vegetation. Ensure the ground is loose and is free draining.

Include for surface cultivating, even in areas where rotovating is not possible, but cease cultivation immediately where surface roots are encountered from existing trees and hedges (where hand cultivation will have to suffice).

Harrow, machine-cultivate or hand-cultivate existing topsoil, as necessary, until a fine tilth is achieved. Grade soil to an even plane, removing all humps and hollows. Ensure soil levels are flush with adjacent paved surfaces (max tolerance 5mm below – 0mm above and 65mm above planted areas).

Include final grading of soil to marry-in soil levels with paving, inspection chamber covers etc.

Rake surface to form a fine tilth, removing all rocks, stones and organic debris greater than 20mm diameter. Repeat stone raking as necessary after settlement.

Top dress topsoil if the settlement results in levels dropping below the level of adjacent pavement to prevent mower damage.

If there is any weed growth between preparing the soil and seeding, then spray such weed using a using a glyphosate free weed killer or a sustainable “hot foam” treatment, strictly in accordance with the requirements and regulations given on pages 4 and 5 of this document – pesticides and herbicides)skilled and qualified operative.

After a minimum of two weeks, rake off any dead growth and cart away. Water thoroughly until the soil is visibly saturated immediately prior to seeding, incorporating liquid lawn feed such as Organic NuGro by Hortifeeds contact tel. (01522) 704404 at a rate of 600L/ha (0.06L/m<sup>2</sup>; any alternative organic liquid fertiliser make and dosage to be agreed with the Landscape Architect – according to the conditions. All to be in accordance with Drawing No. JBA 20\027 1-10.

Approximate quantity:-

5705.03m<sup>2</sup>

## **CULTIVATION AND TOPSOIL Continued:-**

### 3.8 WILD FLOWER MEADOW AREAS TO BE SEEDED

For larger open spaces with tractor machine access, deep rip areas to be seeded at 500mm centres to a depth of 600mm (taking care not to deep rip near existing tree stems or within 3m of existing hedges, and desist deep ripping anywhere that tree roots are encountered greater than 10mm diameter).

Areas near trees or where roots are encountered shall be hand-forked with caution, taking care not to damage any roots of such existing vegetation.

After deep ripping (where possible), rotovate or plough (as appropriate to size of area) existing topsoil for areas to be seeded, breaking the soil to a depth of 150mm. Ensure the ground is loose and is free draining. Include for surface cultivating, even in areas where rotovating is not possible, but cease cultivation immediately where surface roots are encountered from existing trees and hedges (where hand cultivation will have to suffice). Harrow, machine-cultivate or hand-cultivate existing topsoil, as necessary, until a fine tilth is achieved.

Grade soil to an even plane, removing all humps and hollows. Include final grading of soil to marry-in soil levels with paving, manhole covers etc. Ensure soil levels are flush with adjacent paved surfaces (max tolerance 5mm below – 0mm above and 65mm above planted areas).

Finally, rake surface to form a fine tilth, prior to seeding - removing all rocks, stones and organic debris greater than 20mm diameter. Repeat stone raking as necessary after settlement.

N.B. leave cultivated ground fallow for 3 - 5 weeks as necessary to allow ruderal indigenous seed dormant in the soil to germinate.

After 3 – 5, as required to ensure all weed germination has occurred, spray herbicide over all weed growth and allow to die for a minimum of 2 weeks (or until all plants are entirely dead), in order to achieve a sterile soil medium largely free from dormant weed seed, as only this will be suitable to receive wildflower/meadow seed – but DO NOT spray where indigenous seed is required to regenerate, refer to Landscape Architect and to plan annotation for clarity before carrying out herbicide treatment. Even areas where regeneration is required, some spot herbicide spraying is required to ensure invasive species are controlled, unless specific instructions to the contrary are given for special ecological areas or designations. This is important. Spray the entire area; carried out by a skilled and qualified operative, using a non-glyphosate herbicide product, or sustainable hot foam treatment, strictly in accordance with the requirements and regulations given on page 1 of this document. After all the weeds have died, rake off any residual vegetative matter to leave a clean surface ready for seeding. If any weed has been left too long (over 6 weeks) and has produced seed, then the site will be re-contaminated with weed seed and another fallow period will be needed. Do not fertilise the soil. All to be in accordance with Drawing No. JBA 20\027 1-10.

Approximate quantity: -

786m<sup>2</sup>



## **4.0 PLANTING TREES AND SHRUBS**

### **4.1 PLANTING SHRUBS AND HERBACEOUS PLANTS**

Check soil levels are adjusted to a minimum of 65mm below pavement and grass surfaces, the detail and instructions for this are on the main full sized drawing. Supply and plant shrubs (or herbaceous plants) in groups and individual specimens (**topiary specimens to be costed separately below**) in exact positions as drawn, (to be inspected by the Landscape Architect). Include for supplying and laying sheet mulch prior to planting, type "Ecortex" from Hy-Tex (UK) Limited. Tel: 01233 720097, pegged down flat and evenly, prior to planting, - see drawing, strictly in accordance with the specification instructions on the drawing, so all edges are tucked in and will not show. Supply and evenly spread above sheet mulch to a depth of 50mm of coarse, graded, largely free of fines bark or wood chip mulch available from an approved source (e.g. "Chunky Chip Longevity" available from Suffolk Woodchips Ltd Tel. 07881 904100 or 01842 813 555, email: [suffolkwoodchipsLtd@outlook.com](mailto:suffolkwoodchipsLtd@outlook.com), or similar graded product. Allow for pruning back leggy growth after planting. Water in within 4 hours of planting with 20L water per m<sup>2</sup>, applied with a fine spray hose. All to be in accordance with Drawing No. JBA 20\027 1-10.

A) Shrub and herbaceous planting

Approximate quantity: -

663m<sup>2</sup>

### **4.2 NATIVE WHIP AND SHRUB PLANTING IN MIXES OR MATRICES (TO BE PIT OR NOTCH PLANTED)**

Supply and notch plant native open ground whips and pit plant container grown shrubs where specified, and in the case of a species mix, then plant each variety in groups. The numbers of each species for the groups is specified on the planting schedule on the drawing (and will be inspected by the Landscape Architect). Supply and fix mulch mat per stem "Ecortex" from Hy-Tex (UK) Limited. Tel: 01233 720097, pegged down flat and evenly, after planting, & evenly spread 50mm depth of coarse, graded, free of fines large wood chip mulch available from an approved source (e.g. "Chunky Chip Longevity" available from Suffolk Woodchips Ltd Tel. 07881 904100 or 01842 813 555, email: [suffolkwoodchipsLtd@outlook.com](mailto:suffolkwoodchipsLtd@outlook.com), or similar graded, fines-free product, spreading it around the radius of each whip or shrub stem to a diameter of 500mm. All plants shall have a well-developed fibrous root system with a good root to shoot balance, and the roots of open ground stock shall never be allowed to dry out.

## **PLANTING TREES AND SHRUBS Continued:-**

### **4.3 NATIVE WHIP AND SHRUB PLANTING IN MIXES OR MATRICES (TO BE PIT OR NOTCH PLANTED) Continued:-**

Where no rabbit fencing has been specified in this document or on the plan, include for anti-rabbit and protective paper box shelter 1 No 0.75m high 68mm dia "Rainbow Biodegradable Spiral Tree Guard" per whip plus support cane (Contact Rainbow Professional 131 Cumberland Street, Hull, HU2 0PP. Tel: (01482) 616861 or email on [info@rainbow.eu.com](mailto:info@rainbow.eu.com)): or similar and approved. Allow for pruning back leggy growth after planting.

Allow for initial spraying of ruderal weed growth before planting and for any growth during the month after planting using a suitable glyphosate free herbicide, or sustainable alternative such as hot foam treatment, as per the requirements within the 'preamble' of this document. Allow for pruning back leggy growth after planting. Water in all whips, shrubs and trees, within 4 hours of planting, with 20L water per m<sup>2</sup>, applied with a fine spray hose. All to be in accordance with Drawing No. JBA 20\027 1-10.

## **PLANTING TREES AND SHRUBS Continued:-**

### **4.4 GROUND COVER MIX SHRUB PLANTING Continued:-**

Check soil levels are adjusted at the edges of the bed to a depth of 65mm below adjacent grass or paved surfaces. Supply and plant ground cover shrubs where specified and in the case of a species mix, then plant each variety in groups – preferably with at least 10 of each species. The numbers of each species for the groups is specified on the planting schedule on the drawing (and will be inspected by the Landscape Architect). Include for supplying and laying sheet mulch “Ecotex” from Hy-Tex (UK) Limited. Tel: 01233 720097, pegged down flat and evenly, prior to planting, - see drawing, strictly in accordance with the specification instructions on the drawing, so all edges are tucked in and will not show.

Supply and evenly spread above sheet mulch to a depth of 50mm of coarse, graded, largely free of fines bark or wood chip mulch available from an approved source (e.g. “Chunky-Chip Longevity” available from Suffolk Woodchips Ltd Tel. 07881 904100 or email: [suffolkwoodchipsLtd@outlook.com](mailto:suffolkwoodchipsLtd@outlook.com), or similar graded product from Melcourt Industries. Allow for pruning back leggy growth after planting. Water in within 4 hours of planting with 20L water per m<sup>2</sup>, applied with a fine spray hose. All to be in accordance with Drawing No. JBA 20\027 1-10.

### **4.5 PLANTING ORNAMENTAL SHRUB HEDGES.**

Supply and plant hedge plants in a single straight row, butted up together in as even a line as possible (using 3 plants per metre), to form an immediate hedge form.

Where topiary or other specimens specified at ends of hedgerows by front doors include for supply and planting of container grown 10L shrubs (listed separately below).

Include for supplying and laying “Ecotex” biodegradeable sheet mulch from Hy-Tex (UK) Limited. Tel: 01233 720097, pegged down flat and evenly, prior to planting, strictly in accordance with the notes on the JBA landscape plans (and in particular the see inset detail) and as per manufacturer’s instructions, so all edges are tucked in, pegged, so they will not show through the bark mulch. Where hedges are planted adjacent to gravel areas, supply and construct a 75 x 25mm pressure treated (with Tanolith “E”), timber gravel boards, laid flush with the pavement level (15mm above the mulch and gravel level), secured with 50 x 50 x 450mm long, pressure treated (With Tanolith “E”), timber stakes, twice nailed to boards with flat headed galvanised nails.

## **PLANTING TREES AND SHRUBS Continued:-**

### **PLANTING ORNAMENTAL SHRUB HEDGES Continued:-**

Stain timber gravel boards with 2 No. coats of Sadolin "Classic" non-plant-toxic preservative wood-stain, colour "Jacobean Walnut". Where such boards are used to separate gravel from bark mulch, supply and evenly spread a 50mm depth (over the sheet mulch), a coarse, graded, largely free of fines bark or wood chip mulch available from an approved source (e.g. "Chunky-Chip Longevity" available from Suffolk Woodchips Ltd Tel. 07881 904100 or 01842 813 555, email: suffolkwoodchipsLtd@outlook.com, or similar and first approved (by JBA) graded product. Allow for pruning back leggy growth after planting. Water in within 4 hours of planting with 20L water per m<sup>2</sup>, applied with a fine spray hose. All to be in accordance with Drawing No. JBA 20\027 1-10.

A) HEDGE TYPE 12- ( <i>Ligustrum ovalifolium</i> )	
Approximate quantity:-	72m
B) HEDGE TYPE 16- ( <i>Euonymus "Jean Hugues"</i> )	
Approximate quantity:-	143m
C) HEDGE TYPE 17- ( <i>Euonymus japonica</i> )	
Approximate quantity:-	488m

#### **4.6 PLANTING ORNAMENTAL SHRUB HEDGES AND SPECIMEN SHRUBS OR TOPIARY FEATURE PLANTS WITHIN SHEET AND GRAVEL MULCH AREAS:**

Grade, level, and allow soil to settle, re-grading by rake, where it is uneven. Ensure that soil levels are finished 65mm below turf and paving. Supply and spread approved woven sheet mulch ( "Covertex" from Hy-Tex (UK) Limited. Tel: 01233 720097, pegged down flat and evenly, ), prior to planting strictly in accordance with the specification instructions and inset construction detail on the drawing. Supply and plant hedge plants in a single straight row, butted up together in as even a line as possible (using 3 plants per metre), to form an immediate hedge form.

Where topiary or other specimens specified at ends of hedgerows by front doors include for supply and planting of container grown 10L shrubs (listed separately below). Ensure there is no soil whatsoever over the sheet mulch and that the plants are watered in on planting with 20L of water per m<sup>2</sup>.

Where hedges are planted adjacent to bark areas, supply and construct a 75 x 25mm pressure treated (with Tanolith "E"), timber gravel boards, laid flush with the pavement level (15mm above the mulch and gravel level), secured with 50 x 50 x 450mm long, pressure treated (With Tanolith "E"), timber stakes, twice nailed to boards with flat headed galvanised nails.

## **PLANTING TREES AND SHRUBS Continued:-**

### **4.7 PLANTING ORNAMENTAL SHRUB HEDGES AND SPECIMEN SHRUBS OR TOPIARY FEATURE PLANTS WITHIN SHEET AND GRAVEL MULCH AREAS Continued:-**

Stain timber gravel boards with 2 No. coats of Sadolin "Classic" non-plant-toxic preservative wood-stain, colour "Jacobean Walnut".

For the gravel surfacing, supply and spread a 40mm maximum depth of washed and rounded pea shingle, 15-20mm gauge, colour 'buff' if adjacent to houses of buff brick, and Scottish Sea Cobbles 20mm grade if adjacent to red brickwork. All gravels to be supplied by from CED Engineering Ltd Tel 01 973 570 7383 or similar and approved. Roll gravel to firm using a 500kg roller until even and firm, but not within 200mm of shrubs planted through the gravel. Ensure that any adjacent turf or paving are 15mm higher than the top surface level of gravel. All to be in accordance with Drawing No. JBA 20\027 1-10.

### **4.8 STANDARD (OR LARGER NURSERY STOCK) TREES**

Supply and plant individual standard trees in exact positions as drawn. In the event that trees cannot be planted where shown, reposition further away from building foundations than shown, but never closer. Include for 2 No. 100mm diameter, 2m+ long, chestnut tree stakes per tree, vertically driven, (height according to tree size and height above ground to be one third the height of the tree). Include also for a half round cross-brace, cut to length, and include for a rubber tie and spacer block, in accordance with tree pit detail (if these accompany the drawings(s) listed below). Include for supply and fitting of a flexible hose watering tube, to be fitted horizontally around the top of the root ball, so the water drains down over the rootball, with 2No. end caps fitted at both ends, the top one elevated above ground to facilitate watering.

## **PLANTING TREES AND SHRUBS Continued:-**

#### 4.9 STANDARD (OR LARGER NURSERY STOCK) TREES

Continued:-

For trees planted in grass areas, include for a 500mm radius recessed 65mm below the grass base level – cut crisply and vertically and supply and install a circular cut piece of “Ecortex” biodegradable sheet mulch from Hy-Tex (UK) Limited. Tel: 01233 720097, pegged down flat and evenly, and evenly spread over this to a depth of 50mm a coarse, graded, largely free of fines, bark or wood chip mulch available from an approved source (e.g. “Chunky-Chip Longevity” available from Suffolk Woodchips Ltd Tel. 07881 904100 or email: suffolkwoodchipsLtd@outlook.com, or similar, graded, fines free (and approved by JBA) product, evenly spread around the base of the tree, over a cut out circle (or square) of sheet mulch pegged well down at 300mm centres, with metal hoops, all recessed so that the mulch level is 25mm below the grass level, to allow for mowing, (i.e. the soil level will be 75mm below the grass level). Water in trees with 50 litres of water per tree position, within 4 hours of planting. All to be in accordance with Drawing No. JBA 20\027 1-10.

A) Standard trees

Approximate Quantity:- 40No.

B) Multi-stem trees

Approximate Quantity: - 11No.

C Extra Heavy or Mature Standard trees;

Approximate quantity:- 10No.

#### 4.10 FEATHERED TREES

Supply and plant trees in exact positions as drawn. In the event that trees cannot be planted where shown, reposition further away from building foundations than shown, but never closer. Supply and fix single 100mm diameter, 1.6m long stake (height above ground to be one third the height of the tree), complete with tie and spacing device set 575mm above ground, in accordance with tree pit detail if these accompany the drawings(s) given below. Include for flexible hose watering tube fitted around top of root ball, with end caps at both ends.

## **PLANTING TREES AND SHRUBS Continued: -**

### **FEATHERED TREES Continued:-**

or trees planted in grass areas, include for a 500mm radius recessed 65mm below the grass base level – cut sharply and and supply and install a circular cut piece of “Ecortex” biodegradeable sheet mulch from Hy-Tex (UK) Limited. Tel: 01233 720097, pegged down flat and evenly. Then evenly spread over this to a depth of 50mm a coarse, graded, largely free of fines, bark or wood chip mulch available from an approved source (e.g. “Chunky-Chip Longevity” available from Suffolk Woodchips Ltd Tel. 07881 904100 or 01842 813 555, email: suffolkwoodchipsLtd@outlook.com, or similar, graded, fines free (and approved by JBA) product, evenly spread around the base of the tree, over a cut out circle (or square) of sheet mulch pegged well down at 300mm centres, with metal hoops, all recessed so that the mulch level is 25mm below the grass level, to allow for mowing, (i.e. the soil level will be 75mm below the grass level). Water in trees with 50 litres of water per tree position, within 4 hours of planting. All to be in accordance with Drawing No. JBA 20\027 1-10.

#### **A) Feathered Trees**

Approximate Quantity:- 45No.

#### **B) Conifer Trees**

Approximate Quantity:- 11No.

### **4.11 PLANTING NATIVE HEDGES**

Supply and plant hedge plants in a **double** row, each row offset from the last so no plants are planted exactly opposite each other: This ensures 6 plants per metre in two straight rows. Include for supplying and laying sheet mulch prior to planting, sheet mulch to be “Ecortex” biodegradeable sheet mulch from Hy-Tex (UK) Limited. Tel: 01233 720097, pegged down flat and evenly, strictly in accordance with the specification instructions on the drawing. Supply and evenly spread to a depth of 50mm a coarse, graded, largely free of fines, bark or wood chip mulch available from an approved source (e.g. “Chunky-Chip Longevity” available from Suffolk Woodchips Ltd Tel. 07881 904100 or email: suffolkwoodchipsLtd@outlook.com, or similar, graded, fines free (and approved by JBA) product, evenly spread, all recessed so that the mulch level is 25mm below the grass level, to allow for mowing. Watering in with 20L per m2. Allow for pruning back leggy growth after planting. All in accordance with Drawing No. JBA 20\027 1-10.

#### **A) NATIVE HEDGE TYPE 2:- (Mixed native species)**

Approximate quantity:- 148m

#### **B) NATIVE HEDGE TYPE 4:- (Carpinus betulus)**

Approximate quantity:- 57m

## **PLANTING TREES AND SHRUBS Continued:-**

### **4.13 SPECIMEN SHRUBS IN GRASS**

Supply and pit plant individual specimen shrubs in exact positions as drawn. In the event that specimen shrubs cannot be planted where shown, reposition further away from building foundations than shown, but never closer. Shrubs in grass require soil levels within 300mm radius of stem to be recessed 65mm below grass level. Supply and peg down evenly, a cut out circle of sheet mulch, pegged well down 4 times with metal hoops, all recessed so that the sheet mulch is 65mm below the grass level. Sheet mulch to be "Covertex" non-biodegradable sheet mulch from Hy-Tex (UK) Limited. Tel: 01233 720097, pegged down flat and evenly, strictly in accordance with the specification instructions on the drawing, pegged down at 200mm centres. When the 50mm of bark or chip mulch is laid over this, there is 15mm below the grass level, to allow for safe mowing around the edges of the shrub pit. Supply and evenly spread 50mm of coarse, graded, largely free of fines, bark or wood chip mulch e.g. "Chunky-Chip Longevity" available from Suffolk Woodchips Ltd Tel. 07881 904100 or email: [suffolkwoodchipsLtd@outlook.com](mailto:suffolkwoodchipsLtd@outlook.com), or similar, but MUST BE a graded, fines free (and approved by JBA) product, evenly spread around the base of the shrub.



## **PLANTING TREES AND SHRUBS Continued:-**

### **SPECIMEN SHRUBS IN GRASS Continued:-**

Where specimens in grass areas and are proposed in groups, combine the individual specimen pits, ensuring soil levels are recessed 75mm below adjacent grass level, with sheet and bark mulch as before, to merge the areas to form one planted bed. Water in shrub within 4 hours of planting, with 20 litres of water per shrub position. All in accordance with Drawing No. JBA 20\027 1-10.

Approximate quantity:-

296No

#### 4.14 CLIMBING SHRUBS IN SHRUB BEDS

##### I. SELF CLINGING VARIETIES: (S)

Supply and plant climbing shrubs in shrub beds in exact positions as drawn. In the event that climbers cannot be planted where shown, reposition further away from building foundations than shown, but never closer. Supply and fix stainless steel eyed screws, 125mm long, (2No. per climber) fixed into suitably drilled and rawl-plugged walls/fences, one at 250mm above the ground and the second 250mm from top of wall/ fence. Fix 2No. Lengths of heavy duty (3mm) plastic coated garden wire tightly between the eyed screws. Train climbers to training wires, using plastic coated wire tags. This procedure ensures that the leaders adhere to the wall more quickly, and this avoids wind damage to stems that are unsecured, and that would otherwise trail away from the wall/ fence. Water in with 20L per plant. Allow for pruning back leggy growth after planting. All to be in accordance with Drawing No. JBA 20\027 1-10.

##### II.TWINING VARIETIES: (T)

Supply and plant climbing shrubs in shrub beds in exact positions as drawn. In the event that climbers cannot be planted where shown, reposition further away from building foundations than shown, but never closer. Supply and fix pre-formed 1.8m square trellis panels to wall, mounted on 4 No. 50mm cube spacing blocks at each corner, fixed into walls with 150mm long brass or similar non-rust screws, into rawl plugged – suitably drilled holes. Stain the trellis panels and spacers with 2no. coats of Sadolin 'Classic' Colour "Jacobean Walnut," (a non-plant-toxic, water based, preservative wood stain). Carefully train climbers to trellis panel using plastic coated wire tags. This procedure ensures that the leaders adhere to the trellis more quickly, and avoids wind damage to stems that are unsecured, and that would otherwise trail away from the panel. Allow one trellis panel per climber where climbers are specified and shown on plan, with panels never fixed at closer centres than 2.5m.

## **PLANTING TREES AND SHRUBS Continued: -**

### **II.TWINING VARIETIES: (T) Continued:-**

Water in with 20L per plant. Allow for pruning back leggy growth after planting. All to be in accordance with Drawing No. JBA 20\027 1-10.

#### **A) PLANT CLIMBING SHRUBS**

Approximate quantity:- 7No.

#### **B) TRELLIS PANELS**

Approximate quantity:- 7No.

### **III. CLIMBING SHRUBS IN GRASS AND GRAVEL**

Supply and plant climbing shrubs in grass areas, in exact positions as drawn. In the event that climbers cannot be planted where shown, reposition further away from building foundations than shown, but never closer. Supply and fix stainless steel eyed screws, 125mm long, (2No. per climber) fixed into walls/fences, one at 250mm above the ground and the second 250mm from top of wall/ fence into suitably drilled and rawl-plugged holes. Fix 2No. Lengths of heavy-duty (3mm gauge) plastic-coated garden wire tightly between the eyed screws.

Train climbers to training wires, using plastic coated wire tags. This procedure ensures that the leaders adhere to the wall more quickly, and avoids wind damage to stems that are unsecured, and that would otherwise trail away from the wall/ fence. Climbing shrubs in grass require soil levels within 300mm radius of stem to be recessed 75mm below grass level. Supply and peg down evenly, a cut out circle (or square) of sheet mulch pegged well down 4 times, with metal hoops, all recessed so that the sheet mulch is 65mm below the grass level, and the 50mm of mulch laid over this is 15mm below the grass level, to allow for safe mowing around the edges of the shrub pit. Supply and evenly spread 50mm of coarse, graded, largely free of fines, bark or wood chip mulch e.g. "Chunky-Chip Longevity" available from Suffolk Woodchips Ltd Tel. 07881 904100 or email: [suffolkwoodchipsLtd@outlook.com](mailto:suffolkwoodchipsLtd@outlook.com), or similar, graded, fines free (and approved by JBA) product, evenly spread around the base of the shrub. Water in with 20L per plant. Allow for pruning back leggy growth after planting. All to be in accordance with Drawing No. JBA 20\027 1-10.

## **5.0 TURFING**

Water the entire area to be turfed thoroughly, until the ground is visibly saturated, and to a minimum of 15 litres per m<sup>2</sup>. Keep turf stored on site in moist and healthy condition. Supply and lay cultivated low maintenance fine lawn-grade turf, such as Rolawn "Medallion" or similar and approved, including for cutting turf around manhole covers, rodding eyes, stop cocks etc, and adjusting soil levels to suit. Use timber planks to spread the load where access across wet turf is needed to prevent rutting/potholes, and to ensure an even surface finish. Roll using a suitable light roller. Ensure surface of turf is even and level. Protect new turf with metal rods and orange tape to prevent other trades trampling it. Water new turf to field capacity with a fine spray hose fitting. Allow for top dressing any cracks occurring within 14 days of turfing, using a 70/30 sand/soil mix containing grass seed. All to be in accordance with Drawing No. JBA 20\027 1-10.

Approximate quantity: -

4622m<sup>2</sup>

## **6.0 SEEDING**

### **6.1 SEEDING GENERAL AMENITY AREAS AND SPORTS OR KICKABOUT AREAS**

No later than three weeks following final spray, sow seed mix specified below at a rate of 30g/m<sup>2</sup>, evenly over specified areas. Carefully rake in thoroughly to ensure that the seed is a few millimetres below surface levels. Roll using a light roller or a cylinder mower. Ensure surface is even and level. In the event of unexpected dry spell water thoroughly to field capacity using a fine spray hose and continue to water to maintain soil in a moist condition until establishment. Protect new turf with metal rods and orange tape to prevent other trades trampling it and maintain this temporary barrier until the grass has established.

Mow when the grass reaches 50mm tall cutting to a height of 35mm. Mow again within 10 days to a height of 30mm. Mow again after 10 days to a height of 25mm. Include for all subsequent mowing and further stone raking until the grass is free from any loose surface stones and protruding stones and has fully established. Include also for hand weeding out or spot spraying persistent residual and pernicious perennial weeds and moreover for spraying with a suitable selective herbicide to remove weeds after the grass has properly established. Spray strictly in accordance with the requirements and regulations given on page 1 of this document. All to be in accordance with Drawing No. JBA 20\027 1-10.

A) General Amenity Areas: Use Seed Mix BAR 11 from Barenbrug (Tel: 01359 272 000).

Approximate quantity:-

5705.03m<sup>2</sup>

B) Sports/ kickabout area: using Barenbrug Mix BAR 9 (Tel: 01359 272 000), at a rate of 30g/m<sup>2</sup>

Approximate quantity:-

2833m<sup>2</sup>

## **SEEDING Continued:-**

### **6.2 SEEDING WILD FLOWER MEADOW MIX**

Sow EM2 mix of wildflowers (20%) and grasses (80%) in September obtainable from Emorsgate Seeds, Tel.(01533) 829 028. Sow at a rate of 4g/m<sup>2</sup>, evenly over specified areas.

Because wildflower seed takes time to germinate, overseed (or simultaneously) with a further mild meadow grass mix EG1 mix sown at 10g/m<sup>2</sup>, to ensure a more instant greening.

Carefully rake in thoroughly to ensure that the seed is a few millimetres below surface levels. Roll using a very light roller or a cylinder mower.

Ensure surface is even and level. In the event of an unexpected dry spell water thoroughly to field capacity using a fine spray hose and continue to water to maintain a moist soil until complete establishment.

Protect new seeded areas where necessary with metal rods and orange tape to prevent other trades trampling it and maintain this temporary barrier until the grass has established.

For slopes leading to balancing or infiltration lagoons, swales or basins, add for hydroseeding – because this increases germination significantly and prevents complaints from excessive ruderal weed from growth from wind blown seeds.

Strim once in late October to a height of 125mm and once in mid-March to a height of 150mm. Strim again at the end of August or early September to a height of 75mm. Include for all subsequent strimming until seed mix has fully established, and for hand weeding out persistent residual weeds. Include for the immediate removal from site of all cut material **except** for the summer cut, when the cut material should be removed 7 days after strimming to allow the seed to set. All to be in accordance with Drawing No JBA 20\027 1-10.

A) Wildflower mix. Use 'EM2' Mix and EG1 mix by Emorsgate Seeds. (Tel: 01553 829 028)

Approximate quantity: -

786m<sup>2</sup>

## **7.0 PLANTING BULBS IN GRASS**

Supply and plant bulbs as specified in the plant schedule generally between September and January, except for snowdrop. Clean the bulbs removing any loose outer coatings and old roots. Plant all daffodil (Narcissus) bulbs 12-15cm (5-6 inches) deep in late summer or early autumn into seeded areas in the locations specified at a density of 6/m<sup>2</sup>. For Snowdrop – plant “in the green” (January to February), for bluebell – plant 100mm deep (4 inches), and for Crocus plant 50mm below surface). Firm back all soil (and turf) afterwards.

If your firm is responsible for initial and or ongoing maintenance, do not mow areas planted with bulbs until Mid June. All as drawing No. JBA 20\027 1-10.

A) Bulb Mix A

Approximate quantity:- 264m<sup>2</sup>.

B) Bulb Mix C

Approximate quantity:- 739m<sup>2</sup>.

C) Bulb Mix D

Approximate quantity:- 49m<sup>2</sup>.

## **8.0 HARD WORKS TO BE CARRIED OUT BY THE LANDSCAPE CONTRACTOR**

### **8.1 PREPARATION, EXCAVATION AND GROUND WORKS**

#### **8.1.1 AREAS TO RECEIVE HARD SURFACINGS:**

Unless already covered by others, include for excavation and carting away existing ground to licenced or agreed tip, storage area, skip etc, to required invert levels. Include for breaking out concrete bases or other obstructions. Take care to locate and avoid damage to services, pipes, wires, cables, ducts and the roots of trees or hedges to be retained: Stop work, and seek advice if any services are so affected or damaged in conducting the works. Seek to effect repairs only once agreed with the site manager and the relevant statutory undertaker.

Grade, level, and consolidate the subgrade to falls, generally of 1:150 and cross falls: of 1:60, unless specific falls or levels are shown on the plans provided - as per drawing No. JBA 20\027 1-10.

#### **8.1.2 AREAS TO BE EXCAVATED FOR FOOTINGS:**

Unless already covered by others, include for excavation and carting away existing ground to required invert levels for footings to specific dimensions on construction details - as per drawing Nos. JBA 20\027 1-10

## **9.0 MAINTENANCE OF ALL PLANTED AND GRASS AREAS**

### **A) MAINTENANCE GENERALLY.**

Maintenance shall commence from the completion of works on site and shall cease 12 months following the date of Practical Completion. The Landscape Contractor shall be responsible for the timing of visits to ensure the site has a well-maintained appearance. The Landscape Contractor shall not price for maintenance where the land will be conveyed to residents on occupation (with the exception of the replacement clause - which shall apply to all situations). The Landscape Contractor's maintenance rate shall include for all the following items:-

### **B) WEEDING.**

Remove all weed growth by hand as necessary to ensure weed free and tidy planting beds. Take great care not to disturb sheet or bark mulch. All weeds shall be removed from the site. Two visits are required per growing season where sheet mulch is specified, and 6 visits per growing season are required where no sheet mulch is specified. Visits should occur approximately monthly, subject to weather conditions.

### **C) SPOT HERBICIDING.**

Persistent perennial weeds shall be controlled using a suitable herbicide to the manufacturers' instructions, as required and at intervals to ensure no regeneration of weed. Extreme care must be taken to avoid damage to surrounding plants and grass, and to avoid spray drift. Any herbicide treatment shall be applied strictly in accordance with the requirements and regulations given on page 1 of this document, and the type of herbicide shall first be agreed with the landscape architect. Spraying shall be carried out by a qualified and skilled operative, and shall not be undertaken in windy conditions. All damage resulting from incorrect usage, spillage, and spray drift, to be rectified at the Landscape Contractors expense. One application is required per growing season where sheet mulch is specified, and 4 visits per growing season are required where no sheet mulch is specified. Visits should occur approximately every 6 weeks, subject to weather conditions.

### **D) WATERING.**

#### **(i) Watering Generally.**

Watering shall be carried out during dry periods (less than 20mm rainfall at end of any 14-day period) and the Landscape Contractor shall be responsible for determining such dry periods and for contacting the Landscape Architect and agreeing the timing of each watering visit. The Landscape Contractor shall replace at his own expense any non – conveyed planting or grass that fails due to lack of water. During periods of drought, when restrictions are placed on the use of water, the Landscape Contractor shall be responsible for notifying the Landscape Architect of sources of second-class water and the costs of obtaining such water.



## MAINTENANCE OF ALL PLANTED AND GRASS AREAS

Continued: -

### D) WATERING Continued:-

#### (ii) Shrubs and Trees.

Where sheet mulch is specified, allow two watering visits during any spell of continuous hot weather lasting more than 14 days at the rates given below. Where sheet mulch is not specified water all shrubs on 10 separate and agreed occasions during the growing season and the maintenance period. Increase frequency and number of visits during hot, dry weather, with any extra-over watering costs quoted for in advance to the Employer. Instruction for this additional watering shall be actively sought before commencement of the same. All watering shall be to field capacity (minimum 50 litres per tree position and 20 litres per m<sup>2</sup> for all other planting)

#### (iii) Turfed and Grass seeded areas.

Water as necessary according to weather conditions, to ensure the soil remains in a damp condition, ensuring that water is applied to field capacity (minimum 15 litres per m<sup>2</sup>) approximately weekly, but more often if dry and not at all if wet, until fully established. Once established, water during any spell of continuous hot, dry weather lasting more than 14 days, during the maintenance period. Failure of seeded areas resulting from lack of watering shall be re-seeded, including any preparation required, at the Landscape Contractor's own expense. Do not water areas that have been conveyed to residents in occupancy without clear instruction to do so from the Employer.

### E) SHRUBS, TREES & TIDYING BEDS.

Remove all litter and debris at each visit, leaving the site clean and tidy. Firm in and straighten any plants loosened and prune out dead, leggy and broken branches, without damage to natural habit of the plant. In the case of trees a suitably skilled and qualified arboriculturist shall carry out such pruning. Tree stakes and ties shall be checked, adjusted and replaced as necessary. Prune hedges back to an even hedge line to encourage thickening twice within the first growing season after planting. All trees and shrubs shall be fertilised using an approved liquid feed (N10:P15:P10) at a rate of 60g/ m<sup>2</sup> during early May and late September.

## MAINTENANCE OF ALL PLANTED AND GRASS AREAS

Continued: -

### F) GRASS CUTTING

Mow the seeded areas as set out in the seeding clause above, and continue to mow as follows:-

#### (i) General Amenity Areas:-

Mow to height of 25mm, generally at 14-day intervals (21 days in peak summer if in drought conditions and there is no growth), throughout the growing season, and allow 14-20 cuts in total as required. Vary the mowing frequency to ensure that there is no excessive cutting during dry periods, increasing the cutting height to 40mm, and ensure that mowing is continued until the grass stops growing. Conversely cut weekly if damp and warm weather conditions prevail and grass is growing rapidly. The Landscape Contractor shall take responsibility for the timing of these cuts to ensure that the grass always looks well maintained. Remove grass cuttings from site from May to August, to an approved composting facility. Strim edges and mowing margins. Roll grass in April, June and August. Apply and approved turf fertiliser, selective weed killer and moss retardant in May and September.

#### (ii) Wild Flower Areas:-

Strim to height of 75mm, Once in late August, once again in Mid October and in mild winters once again in mid March. Rake off all cut material at once, except for the August cut which shall be left for 3 - 5 days after cutting to allow to dry. Rake off cut material to set the seed and then remove from site, to an approved composting facility.

#### (iii) Sports Areas:-

Mow to a height of 20mm, at 7-14 day intervals throughout the growing season, and allow 20-25 cuts in total. Remove grass cuttings from site after each visit, to an approved composting facility. Trim edges and mowing margins. Roll grass in April, June and August. Apply and approved turf fertilizer, selective weed killer and moss retardant in May and September strictly in accordance with the requirements and regulations given on page 1 of this document.

### G) CONTROL OF INSECTS/ DISEASES.

Control insects, fungus and other diseases by spraying with an approved insecticide or fungicide. Pest problems and methods of control shall be agreed in advance with the inspecting Landscape Architect. Any pesticide treatment shall be carried out by a skilled operative strictly in accordance with the requirements and regulations given on page 1 of this document.

### H) REPLACEMENT.

A full snagging list including all defective preparation, construction and plant stock shall be prepared by the contractor in the presence of the inspecting Landscape Architect at the end of the growing season following planting (around the 30th of September of each 12-month period of the maintenance term).

## **MAINTENANCE OF ALL PLANTED AND GRASS AREAS**

### **Continued: -**

#### **H) REPLACEMENT Continued:-**

Monitor and record trees and shrubs for the duration of the maintenance period (12 months), and replace at once any plants that fail to thrive or develop full foliage during this period (including plants damaged during maintenance operations), which shall be replaced at the Landscape Contractors expense, (including any works necessary to enable planting to be properly carried out, i.e. removal and disposal of dead material), within the first planting season thereafter. Any plant that, after Practical Completion, is destroyed by vandalism, theft or similar cause through no fault of the Landscape Contractor, shall be replaced, following the submission of a detailed record and costing and the receipt of an order from the Employer for the same. The opinion of the Employer or his inspecting Landscape Architect shall be final in judging damaged and unhealthy plants to be replaced. Shrubs and trees, and their planting and mulching so replaced shall be to a specification agreed in writing with the Local Planning Authority.

#### **I) FINAL STONE RAKING AND PICKING.**

Stone rake all seeded areas and remove stone to tip on at least one further occasion, taking care to remove all stone greater than 20mm in any one direction. Carry out stone raking no more than 10 days before final inspection and handover (by whoever is the adopting authority). It is entirely the responsibility of the Landscape Contractor to contact the Landscape Architect to agree a date for this operation and to programme the work into his maintenance schedule.

#### **J) FERTILIZING OF GRASS SEEDED AREAS.**

Allow for 3no. applications of a suitable and approved granular slow release fertiliser to a ratio of 15:10:10 N.P.K, strictly in accordance with the manufacturer's instructions. The fertilizer product name and application rates shall be agreed with the Landscape Architect before use. DO NOT FERTILIZE WILDFLOWER SEEDED AREAS.

#### **K) REPLACEMENT OF SEEDED AREAS.**

Re-seed at once any areas that, before the end of the maintenance period, fail to show good growth or develop into a full, healthy, dark green sward. Any such re-seeding works shall first be agreed as to the required extent of the works with the Landscape Architect. All works shall comply strictly in accordance with the clauses for preparation works and seeding set out above.

#### **L) NOTIFICATION**

The Landscape Contractor shall notify the Site Manager, the Landscape Architect and company Q.S. of the date of each visit and a full account of the works carried out. In the event that such documentation is either not received or does not meet the standards and requirements of these parties, then maintenance invoices will not be authorised for payment.