











JAMES BLAKE

ASSOCIATES

MEASURED WORKS SCHEDULE DETAILED SOFT LANDSCAPE PROPOSAL FOR PLOTS AND POS

FOR THE SITE AT CAMBRIDGESHIRE, MEPAL, LAND OFF BRICK LANE

ON BEHALF OF PLANSURV

Over 30 Years of Service, Value and Innovation

С	PLANNING	EM	JBA	JBA	01.10.20
В	PLANNING	KK	JBA	JBA	DEC 2019
Α	PLANNING	KK	JBA	JBA	OCT 2019
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Revision Drawing Num	<u>-</u>	Originated Document Ref:	Checked	Authorised JAMES A S S O C	BLAKE

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, fertilized and planted in accordance with the drawings. Beds and plants shall be set out strictly as shown on the drawings, with any substitutions agreed with the landscape architect (Call James Blake Associates - (01787) 248216. 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; b) recess soil levels within 300mm of bed edges - by 70mm and marry in levels - to retain bark, c) Cut bed edges neatly adjacent grass areas; d) lay sheet mulch properly; e) spread bark mulch without risk of it falling onto roads or grass areas; f) plant trees suitably with free draining pits and correct stakes and ties - all as specified; g) ensure soil is suitably prepared, evenly cultivated and fertilized before planting; h) water in plants really well on planting.

The above elements feature in 80% of snagging reports, so special attention to these elements will resolve most issues on site.

Quantities and Variations: Quantities given are approximate requiring tenderers to give fixed rates regardless of possible variations required on site. Tenderers shall not vary quantities specified without agreement with the originator without written authority, variation order or instruction from the Employer, or their agent (the appointed Landscape Architect and hereafter also), 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 similar product that is both suitable, equal and approved by the Employer, or their agents, prior to submission of this priced tender document. Care must be taken to ensure structural items like railings, fences, gates, units, etc are of suitable durability and safety standards are met. Products involving public art or high public interface — e.g. play equipment, shall be provided as specified due to the inherent risks of minor variations in fall height or other specific requirements.

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

Pesticides Generally: Where reference to the use of pesticides (which includes herbicides) is made in this document, the following procedures shall be followed, and regulations complied with. The use of herbicides should only be made following a risk assessment to consider potential effects on the environment and on human health. 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.

Herbicides must have an appropriate full or "off-label" approval for use in a relevant situation. Refer to the Pesticide Safety Directive, for which the website is given here for your assistance:- www.pesticides.gov.uk. All pesticides shall be applied in suitable calm weather conditions, and allow for repeat spraying as required to achieve a complete kill. 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 killed. 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.

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, whose decision as to its acceptability shall be final. 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.

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 Program

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 be implemented before or during the construction works. Landscape works shall be monitored by a landscape professional which shall include a precommencement 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 as complete before the contractor's final payment.

THE MEASURED WORKS

1.0 CULTIVATION AND TOPSOIL

SHRUB BEDS

Check topsoil provided by the ground worker is of suitable depth and quality. Topsoil shall be a minimum depth of 400mm. Report any areas of shallow soil covering compacted ground or rubble to the Site Manager, the Construction Director, the Technical Director and the Landscape Architect and agree a way forward that resolves the soil issues. Ensure ground is free from deep compaction: Larger beds over 3m wide with suitable access and free from 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 compromised to rip, rotovate topsoil of all areas to be planted to a depth of 300mm, to ensure the ground is completely broken up and is free draining. For areas adjacent to existing trees and hedges, do not rotovate ground within 10 metres of existing trees or within 3 metres of existing hedges. Stop rotovating in areas 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 90mm below adjacent pavement or grass surfaces where sheet mulch is not specified (65mm where sheet mulch is specified) - see drawing. 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 translocated, systemic, foliaacting herbicide, strictly in accordance with the requirements and regulations given on page 3 of this document pesticides and herbicides).

CULTIVATION AND TOPSOIL Continued: -

SHRUB BEDS Continued: -

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 with a non-peat based compost at 25L/m2 and incorporate 100g/m2 of Hortibase CRF 16-8-12 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 edges to beds where adjacent to grass surfaces. All in accordance with Drawing No. JBA 18/317-01-03.

Ornamental Shrub beds Approximate quantity:-

746m2

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

Deep rip entire area to be planted by deep ripping at 500mm c/s to a depth of 600mm using a tractor mounted ripping bar. exclude areas within 10 metres of existing trees or within 3 metres of existing hedges, but stop ripping in any areas 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 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 translocated, systemic, folia-acting herbicide, strictly in accordance with the requirements and regulations given on page 3 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 edges to beds where adjacent to grass surfaces. All to be in accordance with Drawing No. JBA 18/317-01-03.

Total Tree and Shrub Belt Matrix Areas Approximate quantity: -

CULTIVATION AND TOPSOIL Continued: -

HEDGES - ALL TYPES.

Check topsoil provided by the ground worker is of suitable depth and quality. Topsoil shall be a minimum depth of 400mm. Report any areas of shallow soil covering compacted ground or rubble to the Site Manager, the Construction Director, the Technical Director and the Landscape Architect and agree a way forward that resolves the soil issues. Ensure ground is free from deep compaction: Larger beds over 3m wide with suitable access and free from 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 compromised to rip, rotovate topsoil of all areas to be planted to a depth of 300mm, to ensure the ground is completely broken up and is free draining. For areas adjacent to existing trees and hedges, do not rotovate ground within 10 metres of existing trees or within 3 metres of existing hedges. Stop rotovating in areas 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 90mm below adjacent pavement or grass surfaces where sheet mulch is not specified (65mm where sheet mulch is specified) - see drawing. 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 translocated, systemic, foliaacting herbicide, strictly in accordance with the requirements and regulations given on page 3 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 with a non-peat based compost at 25L/m2 and incorporate 100g/m2 of Hortibase CRF 16-8-12 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 edges to beds where adjacent to grass surfaces. All in accordance with Drawing No. JBA 18/317-01-03.

Approximate quantity: -

CULTIVATION AND TOPSOIL Continued:-

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, then spray such weed; carried out by a skilled and qualified operative, using a translocated, systemic, foliaacting herbicide, strictly in accordance with the requirements and regulations given on page 1 of this document. Fork over bottom and sides of pit to ensure adequate drainage. Incorporate Hortibase CRF 16-8-12 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 backfill. For trees in grass surfaces, allow for surplus subsoil to be carted away to skip, to ensure finished soil levels are 75mm 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 18/317-01-03.

A) FTH AND CONIFER TREE PITS:

650mm x 650mm x 650mm: Approximate quantity:- 11No.

B) STD TREE PITS;

1000mm x 1000mm x 850mm: Approximate quantity:- 58No.

C) EXTRA HEAVY TREE PITS;

1200mm x 1200mm x 950mm: Approximate quantity:- 18No.

AREAS TO BE TURFED

Rotovate areas to be turfed to a depth of 150mm and then cultivate. For areas adjacent to existing trees and hedges, do not rotovate ground within 10 metres of existing trees or within 3 metres of existing hedges. Stop rotovating in any areas where roots greater than 10mm are encountered. These areas should be hand-forked with caution, taking care not to damage any roots of such existing vegetation. Ensure the ground is completely broken up and is free draining. Include for surface cultivating, even in areas where rotovating is not possible, but cease cultivation immediately where roots are encountered from existing trees and hedges (where hand cultivation will have to suffice). Ensure soil levels are flush with adjacent paved surfaces (max tolerance 10mm 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 turfing, then spray such weed; carried out by a skilled and qualified operative, using a translocated, systemic, folia-acting herbicide, strictly in accordance with the requirements and regulations given on page 1 of this document.

CULTIVATION AND TOPSOIL Continued:-

AREAS TO BE TURFED Continued:-

Water thoroughly to field capacity immediately prior to turfing, incorporating a little liquid lawn feed; the make and dosage to be agreed with the Landscape Architect – according to the conditions. All to be in accordance with Drawing No. JBA 18/317-01-03.

Approximate quantity: -

1963m2

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 within 10m of existing tree stems or within 3m of existing hedges, or anywhere that roots are encountered greater than 10mm diameter). 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) ground within 10 metres of existing trees or within 3 metres of existing hedges. Stop rotovating 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 10mm below -0mm above and 65mm above planted areas). 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 20mm diameter. Repeat stone raking as necessary settlement. If there is any weed growth between preparing the soil and seeding, then spray such weed using a skilled and qualified operative, using a translocated, systemic, folia acting herbicide, strictly in accordance with the requirements and regulations given on page 1 of this document. After a minimum of two weeks, rake off any dead growth and cart away. Supply, spread and rake in British Seed Houses "B. S. H. 1" granular fertilizer, obtainable from BSH Ltd on (01925) 654411, at a rate of 70g/m2, 9-10 days prior to seeding to the manufacturer's instructions. All to be in accordance with Drawing No. JBA 18/317-01-03.

Approximate quantity:-

CULTIVATION AND TOPSOIL Continued:-

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 within 10m of existing tree stems or within 3m of existing hedges, or anywhere that roots are encountered greater than 10mm diameter). 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) ground within 10 metres of existing trees or within 3 metres of existing hedges. Stop rotovating 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. 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 10mm below – 0mm above and 65mm above planted areas). 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. 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 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: (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, will need some spot spraying 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 translocated, systemic, folia-acting herbicide, 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 recontaminated with weed seed and another fallow period will be needed. Do not fertilise the soil. All to be in accordance with Drawing No. JBA 18/317-01-03.

Approximate quantity: -

2.0 PLANTING TREES AND SHRUBS

SHRUBS

Check soil levels are adjusted to a minimum of 90mm below pavement and grass surfaces, where no sheet mulch is specified on the drawing (65mm where sheet mulch is specified), the detail and instructions for this are on the main full sized drawing if it is to be used. Supply and plant shrubs 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, if specified - 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 to a depth of 75mm (50mm depth of the above if sheet mulch used and installed correctly), of coarse, graded, largely free of fines bark or wood chip mulch available from an approved source (e.g. 'Rustic Mulch' from CPA Horticulture (Tel. 01994 231121) 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 m2, applied with a fine spray hose. All to be in accordance with Drawing No. JBA 18/317-01-03.

A) Shrub and herbaceous planting Approximate quantity: -

746m2

B) Topiary Specimens in beds Approximate quantity: -

2No.

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 & evenly spread 50mm depth of coarse, graded, free of fines large wood chip mulch available from an approved source (Such as Rustic Mulch from CPA Horticulture (Tel. 01994 231121) or similar graded product from Melcourt Industries, 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. Where no rabbit fencing has been specified in this document or on the plan, include for antirabbit and protective paper box shelter 1 No 0.8m high "Greenguard" per whip (Contact Greenguards Ltd, Tel. 01243 200765 or email at: sales@greenguards.com): or similar and approved. Allow for pruning back leggy growth after planting.

PLANTING TREES AND SHRUBS Continued:-

NATIVE WHIP AND SHRUB PLANTING IN MIXES OR MATRICES (TO BE PIT OR NOTCH PLANTED) Continued:-Allow for initial spraying of ruderal weed growth before planting and for any growth during the month after planting using a translocated, systemic herbicide, as per the requirements within the 'preamable' 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 m2, applied with a fine spray hose.All to be in accordance with Drawing No. JBA 18/317-01-03.

Native Shrub Mix Approximate quantity:-

356m2

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 sheet mulch prior to planting, if specified - see drawing, strictly in accordance with the specification instructions on the drawing, so all edges are tucked in and will not show. Where hedges are planted adjacent to gravel areas, supply and construct a 75 x 25mm pressure treated (to BS 4071 part 1), 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 (to BS 4071 part 1), timber stakes, twice nailed to boards with flat headed galvanised nails. Stain timber gravel boards with 2 No. coats of Sadolin "Classic" colour Walnut. Where such boards are used to separate gravel from bark mulch, supply and evenly spread to a depth of 75mm (50mm depth of the above if sheet mulch used and installed correctly), of coarse, graded, largely free of fines bark or wood chip mulch available from an approved source (e.g. 'Rustic Mulch' from CPA Horticulture (Tel. 01994 231121) 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 m2, applied with a fine spray hose. All to be in accordance with Drawing No. JBA 18/317-01-03.

HEDGE TYPE 1:- (Viburnum tinus "Eve Price") Approximate quantity:-

PLANTING TREES AND SHRUBS Continued:-

STANDARD 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, tree stakes per tree, vertically driven, (height according to tree size and height above ground to be one third the height of the tree), cross-brace, sackcloth tie and spacer, in accordance with tree pit detail (if these accompany the drawings(s) listed below). Include for flexible hose watering tube fitted around top of the root ball, with 2No. end caps at both ends. For tree in grass areas, include for a 500mm radius 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. 'Rustic Mulch' from CPA Horticulture (Tel. 01994 231121) or similar graded product from Melcourt Industries, 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 18/317-01-03.

A) Standard trees Approximate Quantity:-

58No.

B) Extra Heavy Standard trees; Approximate quantity:-

18No.

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. For tree in grass areas, include for a 500mm radius 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. 'Rustic Mulch' from CPA Horticulture (Tel. 01994 231121) or similar graded product from Melcourt Industries, 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 18/317-01-03.

PLANTING TREES AND SHRUBS Continued:-

FEATHERED TREES Continued:-

A) Feathered Trees

Approximate Quantity:- 10No.

B) Conifer Trees

Approximate Quantity:- 1No.

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. Include for supplying and laying sheet mulch prior to planting, if specified - see drawing, 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. 'Rustic Mulch' from CPA Horticulture (Tel. 01994 231121) or similar graded product from Melcourt Industries, evenly spread, 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). Watering in with 20L per m2. Allow for pruning back leggy growth after planting. All in accordance with Drawing No. JBA 18/317-01-03.

A) NATIVE HEDGE TYPE 2:- (Mixed native species) Approximate quantity:-

93m

B) NATIVE HEDGE TYPE 4:- (Hornbeam) Approximate quantity:-

75m

TURFING

Water the entire area to be turfed thoroughly, to field capacity, and to a minimum of 15 litres per m2. 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 18/317-01-03.

Approximate quantity: -

SEEDING GENERAL AMENITY AREAS

No later than three weeks following final spray, sow seed mix specified below at a rate of 30g/m2, 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. Include for temporary protection until 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 18/317-01-03.

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

Approximate quantity:- 2893m2

SEEDING WILD FLOWER MEADOW MIX

Sow EM2 mix of wild flowers (20%) and grasses (80%) in September obtainable from Emorsgate Seeds, Tel.(01533) 829 028. Sow at a rate of 4g/m2, evenly over specified areas. 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. Include for temporary protection until grass is established. 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 18/317-01-

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

Approximate quantity: - 986m2

<u>HARD WORKS TO BE CARRIED OUT BY THE</u> LANDSCAPE CONTRACTOR

GRAVEL SURFACING AND PLANTS

Grade, level, and allow soil to settle, including final grading by rake where uneven. Ensure that soil levels are finished 50mm below adjacent turf and paving surfaces. Supply and construct edging along to separate gravel areas and all shrub beds, flush with gravel surface (see plan). If timber edging is specified, supply and construct a 75 x 25mm pressure treated (to BS 4071 part 1), 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 (to BS 4071 part 1), timber stakes, twice nailed to boards with flat headed galvanised nails. Stain timber gravel boards with 2 No. coats of Sadolin "Classic" colour Walnut. For curves greater than a 4m radius, cut grooves along the back of the board at 50mm c/s with a saw to achieve a smooth bend (grooves on the inside of the bend). Where edgings involve curves less than 4m radius use stainless steel strips, 100 x 3 x 2000mm. Fix all timber and metal edgings to 50 x 50 x 450mm, pressure treated timber stakes (as above), driven into the ground to below finished levels, at 1000mm centres. Timber boards or metal strips shall be secured to stakes by twice nailing with galvanised flat-headed nails. Metal edgings will require predrilling and the use of non-rust screws, instead of the nails. Supply and spread sheet mulch to excavated and evenly graded bottoms, pegging down at 500mm centres, (200mm centres along edges) and burying flaps at edges, but ensuring that margins have no soil over, see inset detail on drawing. Supply and pit plant shrubs at the locations as specified on the drawing. Ensure that the pit is well cultivated and broken up and free draining, incorporating compost and fertiliser. For clay soil, mix in equal quantities of sharp sand. Ensure there is no soil whatsoever over the sheet mulch, and that sheet mulch flaps have been tucked back around the stem of any specimen plants and secured with a peg. Water in plants with 10 litres of water per plant and within 4 hours of planting. Supply and spread a consolidated layer of 40mm depth of washed rounded pea shingle, 20mm gauge and colour "buff" over the entire area. Roll with garden roller. Ensure that the turf and paving are 15mm higher than the top level of the gravel. All to be in accordance with drawing No. JBA 18/317-01-03.

A) Gravel Area - all areas. Approximate quantity:-

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 m2 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 m2) 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/ m2 during early May and late September.

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.

MAINTENANCE OF ALL PLANTED AND GRASS AREAS Continued: -

(i) General Amenity Areas Continued: -

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.

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). 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.

MAINTENANCE OF ALL PLANTED AND GRASS AREAS Continued: -

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.

COLLECTION

Page 1		£
Page 2		£
Page 3		£
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Page 5		£
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Page 18		£
Page 19		£
Page 20		£
	TOTAL	£

PLOT BREAKDOWN/SUMMARY SHEET

In pricing this document the Landscape Contractor must take into account the construction sequence and programme of the developer. The development will be constructed in phases and the Landscape Contractor will be released a number of plots at a time. The employer will set out the build sequence and phasing below following the Landscape Contractor's appointment. The employer reserves the right to alter the build sequence and the number of plots released at any time, without variation to the Landscape Contractor's rates. The employer reserves the right to request works carried out without notification of the build sequence or phasing. This form may be completed by the employer and issued before landscape works commence.

PHASE 1 - Plots	to Plots					
PHASE 2 - Plots						
PHASE 3 - Plots						
PHASE 4 - Plots						
PHASE 5 - Plots						
PHASE 6 - Plots						
PHASE 7 - Plots						
PHASE 8 - Plots	to Plots					
PHASE 9 - Plots						
PHASE 10 – Plots						
PHASE 11 - Plots						
PHASE 12 – Plots						
PHASE 14 – Plots						
TOTAL - Plots	to Plots					
SITE SPECIFIC INSTRUCTIONS: -						