



**Cherwell District
Council**



**South
Northamptonshire
Council**

**CHERWELL DISTRICT COUNCIL
AND
SOUTH NORTHAMPTONSHIRE COUNCIL
CONTRACT FOR THE PROVISION OF
LANDSCAPE MAINTENANCE
SERVICES**

01 APRIL 2018 - 31 MARCH 2024

Document 3: Technical Specifications

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SECTION 1
GRASS MAINTENANCE

1.0 MAINTENANCE OF GRASSED AREAS

1.1 General Conditions

- 1.1.1 Prior to the commencement of the works the Contractor shall have satisfied himself of the location and nature of the works. A programme of works shall be submitted to the Authorised Officer (AO) to achieve this specification. The number of visits shall be spaced over each period to meet the specification mowing regime. The height of cut should be gradually lowered at the start of the season to achieve the specified standard and gradually raised towards the end of the season to allow for the slowing down of the rate of grass growth.
- 1.1.2 The Contractor shall use mowers appropriate in type, size, shape and methods of cutting for the type of work involved. All wheeled grass cutting machinery must be fitted with appropriate grassland tyres. The Contractor shall allow in his general rates for the use of pedestrian machinery necessary to cut any steep banks found within the defined area, and ensure that they are cut to the same standard as the surrounding areas. The Contractor shall ensure that all machines are set to an appropriate height for the time of year and that all blades are sharp and in good condition to produce a true and even cut at all times. Any damage as a result of a lack of maintenance, or incorrect setting, shall be made good by the Contractor in accordance with the contract conditions contained within this Tender to the full satisfaction of the AO.
- 1.1.3 The Contractor shall at all times during the Contract ensure that machines are properly guarded and maintained so as to present no danger to the operator or any person in the vicinity of operations. The Contractor shall provide his staff with all necessary safety equipment and shall ensure that staff use these at all times where they are working on council sites.
- 1.1.4 The entire area of grass shall be cut to an even length to the appropriate specification; leaving no areas uncut between each pass, and taking care to cut as closely as possible around obstructions and to the entire boundary of the site. All moveable obstacles within the grass area shall be moved so that all the areas can be mown into one operation, and after each mowing cycle returned to their original position. Any follow up to remove clippings from adjacent hard surfaces back onto the grass area that has been cut shall be done on the same day of cutting. Any strimming works required shall be completed within 8 working hours of the cut taking place.
- 1.1.5 Where indicated in the schedules the edges to borders, beds and hard surfaces shall be clipped at the same time as cutting. On general amenity areas this can be carried out using mechanical means, however, on high profile amenity areas this operation shall be carried out using long handled shears.
- 1.1.6 Should the Contractor cause damage to the surface or levels of the ground, or create divots during grass cutting operations, the Contractor shall reinstate such damage to the satisfaction of the AO. Should the Contractor fail to carry out such works within the time period allowed within

the tender, the AO may instruct other persons to carry out the work, the costs of these works being charged to the Contractor.

- 1.1.7 The Contractor shall make good at his own expense any damage caused to walls, fences, furniture, bins, trees, grave stones, manhole covers and other obstructions during grass cutting operations. Should it be determined by the AO that the failure of a planted tree or shrub is due to damage inflicted by negligent grass cutting, the Contractor shall be required to replace the tree or shrub with the same species, age and shape at own expense to the full satisfaction of the AO.
- 1.1.8 Prior to mowing, all litter, stones and other debris, irrespective of its source shall be cleared from the grassed area and disposed of by the Contractor to an approved recycling centre at his own expense.
- 1.1.9 Clippings shall be evenly distributed across the surface of all grass areas, except where they are to be boxed off. All adjacent hard surface areas shall be left clear of any grass clippings and debris, and left in a safe and tidy condition on the same day of cutting prior to leaving the site.
- 1.1.10 Mechanical air blowers may be used when conditions are dry and are appropriate, as defined in BS7370-2:1994, as a substitute for sweeping.
- However, they **must not** be used:
- a) Between the hours of 18.00 and 07.30 inclusive
 - b) In wet conditions
 - c) In areas where they are likely to cause a nuisance (e.g. in close proximity to housing, in elderly persons dwelling gardens, or close to schools)
- 1.1.11 The AO reserves the right to instruct the Contractor to cease grass cutting operations on certain sites, or in total, during periods when ground conditions are so wet that continuing to cut the grass may cause damage to the sward or the surface of the ground, in the opinion of the AO.
- 1.1.12 During periods when conditions are so wet as to prevent grass cutting occurring without causing damage to the surface or levels of the ground, or producing divots, the Contractor shall, with the approval of the AO, cease grass cutting operations. The Contractor shall be required to resume work as soon as possible in accordance with the schedule and catch up with any work not completed to the required standard within a time deemed as reasonable by the AO.
- 1.1.13 During the period of the Contract no growth regulators or herbicides shall be applied to any area of turf without the approval by the AO.
- 1.1.14 Areas where flowering bulbs have been naturalised shall be left uncut for a minimum period of six weeks and a maximum of eight weeks, after flowering has finished. Following instructions from the AO, the Contractor shall cut these bulb areas and remove all arisings on the same day of cutting. Prior to leaving the site, the contractor shall ensure the grass is left to the same standard as found in the surrounding areas. All areas must be cleared within a maximum of 14 days from receiving the instruction to cut. The Contractor shall make allowance for this operation in his general

rates for grass cutting. This shall also apply to any “new” areas of bulb planting which may take place during the Contract period.

- 1.1.15 In areas where moles are active, the Contractor shall distribute the soil evenly around the surrounding area from the molehill prior to mowing. If requested by the AO, the Contractor shall remove the soil off the site.
- 1.1.16 Whilst mowing within cemeteries due consideration must be given at all times to members of the public visiting graves, as well as to the protection of the grave stones themselves. The Contractor should be prepared to adjust his work programme accordingly. All mowing shall cease to allow for funerals to take place. All manpower and machinery to be withdrawn from the area of the burial until the mourners have left the cemetery.
- 1.1.17 During the winter months on high profile amenity areas the contractor will edge back grass areas where they meet hard surfaces. A half moon edging iron shall be used to cut the turf back to the hard surface. A line or edging board shall be used where appropriate and all curves shall be clean, free flowing lines. As part of the edging operation any weed growth on path edges, gutters etc. within a 14 day period and adjacent to the grass area shall be scraped out and removed, unless otherwise instructed by the AO.
- 1.1.18 Where application of herbicide to obstacles or selective weed killing is specified, to take place in respect of grassed areas; operations shall be carried out twice a year with reference to specification 5 Chemical Applications.
- 1.1.19 Where a fertiliser is specified under maintenance of high profile amenity areas, the contractor shall apply a liquid fertiliser, with the make up of 12N-0P-2K-2Fe+0.5mg or similar, approved by the AO. This shall be applied to the manufactures recommendations in the second week of June prior to anticipated rain. To prevent scorching the contractor should include the possibility that hand watering may be required.
- 1.1.20 In addition to the general requirement to remove leaves prior to mowing, where leaf removal is specified as an included operation, during the Autumn months the contractor will be required to remove any build-up of leaves to ensure a healthy sward is maintained, all collected leaves shall be removed from site and taken to a recycling centre approved by the AO.

1.2 High Profile Amenity Areas (A Cut)

- 1.2.1 Unless otherwise approved by the AO rear roller propelled cylinder mowers shall be used with a front roller to control the height of cut. The maximum size mower permitted on amenity box mown areas to be 600mm cutting width unless otherwise specified.

1.3 General Amenity/Verge Areas (B Cut)

- 1.3.1 On these areas to maintain a high standard of finish a mixture of both cylinder, rotary or mulch/recycling mowers may be used to ensure the

specified standard is achieved. This can be dependent on the size of area being cut, conditions, and the time of year, i.e. the need to control bents.

1.4 Sports Pitch Areas (C Cut)

1.4.1 Football, Rugby and Cricket Outfields

Tractor drawn or ride on cylinder mowers shall be used on Football and Rugby pitches, however, a cut and collect machine will be used for the athletics facility.

1.4.2 Cricket Squares (C1 Cut)

1.4.2.1 Cricket squares will be cut with a rear roller propelled cylinder mower with a front roller to control the height of cut. The maximum size mower permitted on cricket squares is 600mm cutting width unless otherwise approved by the AO.

1.4.2.2 The Contractor will ensure cuts are clean and cause no damage to the grass sward. The Square must be cut in a way to produce a striped effect along the direction of play.

1.4.2.3 When mowing the square tip back the mower at areas of newly emerged grass seedlings until seedlings become established.

1.4.2.4 The contractor will be required to raise the height of cut out of season. All arisings and leaves shall be removed from site and taken to a recycling centre approved by the AO.

1.5 Flaied Areas (D Cut)

1.5.1 A rear or side mounted tractor rotary/flail shall be used on these areas.

1.6 Wild Flora areas

These areas will fall into three main categories:-

1.6.1 Combination Meadow (E Cut)

1.6.1.1 Grassland areas allocated under this specification will be left to grow and flower in the early months (i.e. January to late May) cut, left to grow and flower again during the summer months and then cut a second time in late September, unless instructed otherwise by the AO. On both cuts all arisings will be removed from site and disposed of in a way approved by the AO. On both occasions they grasses will have reached a height of up to 1000mm, recommended cutting machinery for this operation would be a reciprocating blade mower (such as an Allen scythe), which can cut the tall grassland at a single point near the ground level, thus facilitating removal of the arisings. If it is the Contractor's intention to bale the "hay crop" to facilitate removal, any income arising from the sale of the hay will accrue to the Contractor.

1.6.2 Spring Flowering Meadow (F cut)

1.6.2.1 Grassland areas allocated under this specification will be left to grow, and flower, uncut during the spring months (i.e. left uncut from January to June each year).

1.6.2.2 Unless otherwise instructed by the AO a "hay crop" will be taken between mid-June/early July, the grass which has been allowed to grow in the Spring (to a height of 500-800 mm) will be cut by the Contractor to a height of approximately 100mm. When dried (no sooner than one week and no longer than two weeks after cutting) all arisings will be removed from the site and disposed of in a manner approved by the AO. If it is the Contractor's intention to bale the "hay crop" to facilitate removal, any income arising from the sale of the hay bales will accrue to the Contractor.

1.6.2.3 Recommended cutting machinery for this operation would be a reciprocating blade mower (such as an Allen scythe), which can cut the tall grassland at a single point near to ground level, thus facilitating removal of the arisings. For larger areas, agricultural cutting machinery is recommended alongside the use of a forage harvester or baling machine. It is essential that the grass is properly dried before baling. Hay bales will be removed from site immediately after production.

1.6.2.4 In addition to the "hay crop" the contractor will carry out three more cuts through to the end of the growing season (i.e. August, September and October). Recommended machinery for this operation is a rear or side mounted rotary/flail. The arisings produced from this operation may be left on site.

1.6.3 Summer Flowering Meadow (G Cut)

1.6.3.1 Grassland areas located under this specification will be left to grown and flower during the summer months (i.e. will be left uncut from early June to late September each year).

- 1.6.3.2 Prior to the “hay crop” during the spring months the contractor will carry out two cuts (April, and early May). The grass will be cut to a height of approximately 100mm, and arisings may be left on site. Recommended machinery for this operation is a rear or side mounted rotary/flail
- 1.6.3.3 From early June to late September the grasslands will be left uncut until a “hay crop” is taken.
- 1.6.3.4 A “hay crop” will be taken by the Contractor in late September; the grass which has been allowed to grown during the summer (to a height of up to 1000mm) will be cut to a height of approximately 100mm. Recommended cutting machinery for this operation would be a reciprocating blade mower (such as an Allen scythe). When dry (no sooner than one week and no longer than two weeks after cutting) all arisings will be removed from the site and disposed of in a way approved by the AO. If it is the Contractor’s intention to bail the “hay crop” to facilitate removal, any income arising from the sale of the hay will accrue to the Contractor.

1.7 Grass Maintenance Performance Schedule

Category	High Profile Amenity Areas (A Cut)	General Amenity areas/Verges (B Cut)	Sports Pitch Areas (C Cut)	Cricket Squares (C1 Cut)	Cricket Wicket (C2 Cut)	Flailed Areas (D Cut)	Wild Flora Areas (E, F & G Cut)
Type of Machine	Cylinder	Cylinder/Rotary	Cylinder	12/16 bladed Cylinder	12/16 bladed Cylinder	Flail/Strimmer	Reciprocating/Baler/Flail
Max Permitted Length of Grass	40mm	75mm	50mm	12mm Summer 20mm Winter	5mm	300mm	800mm-1000mm
Length of Grass After Cutting	20mm	25mm	25mm	8mm Summer 15mm Winter	4mm	40mm	100mm
Distribution of Clippings	Collected	Flown and evenly distributed	Flown Football/Rugby/Cricket Outfield Collected Athletics	Collected	Collected	Flown and evenly distributed	Collected & Flown
Edges to Borders and Beds	Clipped at same time of Cutting	Clipped at same time of Cutting	N/A	N/A	N/A	N/A	N/A
Clearing of Hard surfaces	Removal of grass clippings from footpaths and water course same day as cut	Removal of grass clippings from footpaths and water course same day as cut	Removal of grass clippings from footpaths and water course same day as cut	N/A	N/A	Removal of grass clippings from footpaths and water course same day as cut	Removal of grass clippings from footpaths and water course same day as cut
Follow Up	Strimming of all obstacles and edges of watercourses, kerb lines and planted areas	Strimming of all obstacles and edges of watercourses, kerb lines and planted areas	Strimming of all obstacles and edges of watercourses, kerb lines and planted areas	N/A	N/A	Strimming of all obstacles and edges of watercourses, kerb lines and planted areas	Strimming of all obstacles and edges of watercourses, kerb lines and planted areas
Included Operations	Removal of Litter Apply a suitable herbicide around Tree Bases, Obstacles, Fence Lines, Wall Bases etc. within Grass Maintained Areas Half Moon Edging Leaf Clearance Apply Selective Herbicide Apply Fertiliser (Spring/Summer/Autumn/Winter)	Removal of Litter Apply a suitable herbicide around Tree Bases, Obstacles, Fence Lines, Wall Bases etc. within Grass Maintained Areas	Removal of Litter Apply a suitable herbicide around Tree Bases, Obstacles, Fence Lines, Wall Bases etc. within Grass Maintained Areas Leaf Clearance Apply Selective Herbicide Apply Fertiliser (Spring/Summer/Autumn/Winter)	Removal of Litter Leaf Clearance Apply Selective Herbicide Apply Fertiliser (Spring/Summer/Autumn/Winter)	Removal of Litter Leaf Clearance Apply Selective Herbicide Apply Fertiliser (Spring/Summer/Autumn/Winter)	Removal of Litter Apply a suitable herbicide around Tree Bases, Obstacles, Fence Lines, Wall Bases etc. within Grass Maintained Areas	Removal of Litter

SECTION 2

SPORTS PITCH MAINTENANCE

2.0 SPORTS FACILITIES

2.1 General Conditions

2.1.1 The Contractor shall allow for and provide all labour, plant, equipment and materials (except where notified) necessary to carry out the maintenance of Sports Facilities in the manner set out in the following Specification.

2.1.2 Mowing General Sports

2.1.2.1 The Contractor shall adhere to the Grass Cutting Specification for the maintenance of grass areas at Sports Facilities, Specification 1.0 and BS7370 Part 3 1991 and European equivalents.

2.1.2.2 At the request of the AO, the Contractor shall mow the pitches during periods of drought where the main objective is to remove bents. The Contractor shall cut the pitch and the surrounds to the field boundary line using an approved rotary mower. The normal period for this will be during dry periods over the summer months, and will be instead of normal mowing detailed in Specification 1.0.

2.1.3 Marking Out General Sports

2.1.3.1 Sports facilities shall be marked and ready for use by the dates shown below (these being subject to amendment at the discretion of the AO):

	Start Date First Saturday After	Finish Date Last Friday Before
Football & Rugby	1 st August	30 th April
Athletics	1 st April	30 th September
Cricket	1 st May	30 th September

2.1.3.2 All markings shall be carried out in accordance with the current requirements of the sport's governing body, which may be subject to change during the course of the contract. The positioning of pitches shall be approved by the AO. All angles and lengths should be true and lines straight.

2.1.3.3 All markings shall be carried out using materials approved by the AO, the use of creosote, lime, any pesticide or herbicide or other unapproved additive will not be permitted. All whitening shall be supplied by the Contractor, who must ensure that he is never without supplies. The Contractor shall ensure that the marking mix and the applicator are suitable for the prevailing ground and weather conditions. The Contractor shall ensure that the marking compound is of sufficient strength to persist for at least one week even under adverse weather conditions.

2.1.3.4 Wet Line marking shall be undertaken with a compound mix approved by the AO. The Contractor must, prior to the commencement of the contract, provide the AO with a list of the constituents of the Wet Line marking mix.

- 2.1.3.5 If ground conditions require or at the request of the AO, Dry Line marking shall be undertaken using material approved by the AO. The AO must be informed in advance of the commencement of work. The Contract shall use only approved dry line marking compound with binding compound included to ensure the marking compound holds on contact with a wet surface. Dry Line marking shall be paid for according to Schedule of Rates.
- 2.1.3.6 The Contractor shall ensure that no spillage of whitening occurs. If there is a spillage of wet or dry line marking mix it will be cleaned up immediately at the contractors own expense.
- 2.1.3.7 In certain conditions where light snow or leaves would impede the line marking operation, the Contractor must clear the lines before the commencement of marking operations; this operation shall use a blower approved by the AO.
- 2.1.3.8 On pitches specified, the Contractor shall over mark sports pitches either by wet or dry line markings to ensure that lines are clearly defined at all times during the playing season. The Council will not make additional payments for remarking from scratch when lines are lost due to grass cutting operations or lack of regular white lining. The AO will enforce the Default procedure to ensure full compliance with this important requirement.
- 2.1.3.9 Immediately prior to carrying out initial marking of pitches, a 500mm wide strip of grass, a minimum of 250mm either side of the agreed position of the lines shall be cut to ensure that the height of sward does not exceed 20mm. The areas to be marked should be free of grass cuttings, and the Contractor should make allowance in his rates for the use of box mowers. After the initial mowing and marking out, the lines will be mown out as required before over marking, with a rotary mower as agreed and approved by the AO.
- 2.1.3.10 The Contractor will ensure that following the completion of marking out, all machines are washed out and the remaining marking compound disposed of in a safe manner with due regard to the environment.

2.1.4 Selective Herbicide Application General Sports

- 2.1.4.1 The Contractor shall allow for the supply and application of an approved broad-spectrum selective herbicide to grass of all sports facility locations. The herbicide shall be applied strictly in accordance with the manufacturer's instructions at the recommended rates and with full regard for the C.O.S.H.H. Regulations. All as Specification 5.0 "Chemical Applications". When using any pesticide the Contractor must have due regard for the environment, facility users, wildlife, operatives, and the facility itself. The Contractor must notify the AO in writing 24 hours before commencing the application of any pesticide. The application of pesticides shall take into account any current Council policies on the environment, which may be subject to change during the course of the Contract.

- 2.1.4.2 Each sports facility location specified shall receive two applications of selective herbicide, one in the last two weeks of April and another in September. The AO must be issued with a spraying programme to ascertain when spraying operations are due to take place. Where grass seed is to be sown during the same period, the Contractor shall ensure that herbiciding is done sufficiently prior to sowing so as not to adversely affect grass seed germination. If herbicide does damage germinating grass, it must be put right at the Contractor's own expense.
- 2.1.4.3 The Contractor shall not spray in weather conditions likely to cause spray drift or when wet weather is imminent, or in particularly dry periods.
- 2.1.4.4 The grass shall not be cut within the three days either prior to or following the application of herbicide. The Contractor should be aware that fixtures are normally held on a Saturday or Sunday, and that the Contractor should check with the AO before commencing spraying to ensure that no fixtures are booked during this period.
- 2.1.4.5 The Contractor shall carry out monthly in season maintenance to all playing surfaces when ground conditions allow, unless otherwise directed by the AO:
- 2.2.3 Rolling (Football, Rugby and Cricket)
 - 2.2.4 Spiking (Football and Rugby)
 - 2.2.5 Harrowing (Football and Rugby)
- 2.1.4.6 The Contractor shall ensure that any operation on the playing surface such as mowing, harrowing and rolling are programmed to be carried out when they would not adversely damage the grass surface or the pitch markings. If the line marking or playing surface are affected by such operations the Contractor will be required to re-mark the lines and reinstate such damage to the satisfaction of the AO, at the Contractor's own expense.
- 2.1.4.7 Cricket Squares shall be of smooth and even surface, and maintained in a condition which will allow for a true and consistent bounce which will not shoot or lift dangerously when struck by a ball. Its pace should deviate only as a result of the angle of impact or degree of rotation imparted by the bowler. The crease must be consolidated to withstand the pounding of the bowler's feet without forming holes.
- 2.1.4.8 Prior to carry out any maintenance to sports areas, all litter, stones and other debris, irrespective of its source shall be cleared from site and disposed of by the Contractor to an approved recycling centre at his own expense.

2.2 Football and Rugby Pitch Maintenance

2.2.1 Site Inspection & Litter Picking

2.2.1.1 All sports pitches shall be inspected by the contractor during line marking operations, once per week during the playing season (usually on a Thursday or a Friday), and made clean and tidy and ready for play. Inspection sheets should be sent to the AO before 12pm on Friday. At each inspection any stones, litter and/or other debris found on the pitches or closely adjacent shall be collected and removed from site. Glass or other harmful objects shall be removed immediately, whether they are discovered during regular inspections or during other visits or brought to the attention of the Contractor by the AO. Any missing socket covers must also be reported immediately to the AO.

2.2.1.2 At the time of marking operations, the Contractor shall carefully examine the surface to ensure that there are no holes, ruts, or any other feature likely to cause injury to facility users. In the event that any dangerous areas are found they should be immediately be rectified and filled with an approved soil/sand and seed mix.

2.2.1.3 The next working day following the completion of a match/fixture the Contractor shall inspect the pitch and the posts. All divots shall be replaced and firmed into place to form a consistent level with the immediate surrounds. Any acts of vandalism to the pitch or related equipment must be reported by the Contractor to the AO immediately in writing.

2.2.1.4 All items maintained by the Contractor on this site must be inspected during other operations and any damage or irregularity reported immediately to the AO.

2.2.3 Rolling (Football and Rugby)

2.2.3.1 The Contractor shall allow for the rolling of all pitches to achieve a level profile and a firm surface, to be carried out each month throughout the playing season timing to be agreed by the AO. This should be carried out with regard to the prevailing weather conditions and not when the ground conditions are unsuitable which may damage the playing surface. This should be carried out using a tractor drawn roller at least 3m wide and weighing between 1000kg and 1500kg.

2.2.3.2 Rolling shall be carried out in one pass in one direction longitudinally. The type of roller must be approved by the AO. Any large stones or potentially hazardous objects are to be removed from the pitch before rolling commences and taken to a designated site for disposal.

2.2.4 Spiking (Football and Rugby)

2.2.4.1 In order to give players, and in particular goalkeepers, a flat dry surface, the Contractor shall be required to aerate all Rugby and Football pitches and cricket outfield using 100mm – 150mm spikes, hollow tines or slit tines at maximum 300mm centres to their full depth, each month throughout the playing season timing to be agreed by the AO. The machine passes must overlap by 300mm on each run.

2.2.4.2 The spiking machinery must be approved by the AO, and works shall only be carried out when ground conditions are suitable, not when the ground is too wet, frosted or covered with snow.

2.2.5 Harrowing (Football and Rugby)

2.2.5.1 During the playing season the Contractor shall allow for the harrowing of all pitches to maintain surface levels, to be carried out each month throughout the playing season timing to be agreed by the AO.

2.2.5.2 Harrowing shall be carried out in one pass in one direction longitudinally. Harrowing machinery shall be approved by the AO.

2.2.6 Over marking (Football, Rugby)

2.2.6.1 The Contractor shall over mark all of the football and rugby pitches listed weekly during the playing season. The Contractor must expect to mark the pitches between Christmas and New Year.

2.2.6.2 As most matches are played on weekends, over marking will be carried out on either Thursday or Friday of each week. The Contractor shall ensure that the pitch measurements remain accurate during the marking process. Throughout the season, all lines shall be clear and true.

2.2.7 Fertiliser Application (Football, Rugby)

2.2.7.1 The Contractor shall inform the AO in writing 24 hours before the commencement of fertiliser applications. The Contractor shall submit samples, for approval by the AO, of the fertiliser he intends to apply to the pitches before the commencement of operations.

2.2.7.2 In the last two weeks of April the Contractor will supply and apply to the surface of the pitches an approved application of Spring and Summer fertiliser of the ratio 20:10:10 N: P: K which will be applied at a rate of 25g/m².

2.2.7.3 In September the contractor will supply and apply to the surface of the pitches an approved application of Autumn and Winter fertiliser of the ratio 4:7:7 N: P: K which will be applied at a rate of 35/m².

2.2.7.4 Fertiliser must not be applied in windy conditions or periods of drought. Applications should be made when rain is imminent; otherwise the area

must be irrigated at the Contractor's own expense to avoid fertiliser scorch. The fertiliser shall be evenly spread at the correct rate over the whole surface of the playing area, ensuring that there are no overlaps or gaps between passes. This shall be by mechanical means approved by the AO, except for any areas, which have recently been re-seeded.

2.2.8 Sanding and Forking

- 2.2.8.1 At the request of the AO, the Contractor will be required to aerate worn areas such as the goal mouths (35m²) and centre spot areas, as directed by the AO. Payment for this element of work will be on the basis of area treated, and rates contained within the Schedule of Rates.
- 2.2.8.2 The application of sand may be requested by the AO for the purpose of counteracting wet ground conditions. The main period for sanding shall be between weeks 45-08 but the Contractor must ensure that sufficient supplies of sand are available at all times and at short notice.
- 2.2.8.3 On receipt of an instruction from the AO, the Contractor will spread; rake or lute level approved sand to a depth of approximately 10mm on areas to be specified. The Contractor will include in his rate to fork the area prior to applying the sand, to a depth of 150mm, at 150mm intervals, and removed without causing major disturbance to the playing surface.
- 2.2.8.4 Sand shall be spread to areas requested by the AO to a true and even finish and drag brushed in where necessary. Payment for this work will be on the basis of area treated at approximately 4.5kg/m², and rates contained in the Schedule of Rates, one being for two average goal mouths and a centre circle (totalling 75m²) and the other being for a whole pitch.
- 2.2.8.5 Sand for top dressing shall conform to BS7370/BS3882 and European equivalents and consist of the following proportions:

Category	Diameter	Percentage
Stones	> 8mm	0
Coarse Gravel	8mm – 4mm	0
Fine Gravel	4mm – 2mm	5
Very Coarse Sand	2mm – 1mm	13
Coarse Sand	1mm – 0.5mm	17
Medium Sand	0.5mm – 0.25mm	44
Fine Sand	0.25mm – 1.125mm	19
Very Fine	0.125mm – 0.05mm	2
Silt and Clay	< 0.05mm	0

- 2.2.8.6 The Contractor shall ensure that the addition of sand does not lead to the build-up of "shoulders", especially where it would reduce the clearance height to the goal post crossbar to below the regulation height. Action to correct such a build-up shall be at the Contractor's own expense.

2.2.9 Erection and Removal of Posts

- 2.2.9.1 At the end of the playing season, as instructed by the AO, all football and rugby posts shall be labelled to ensure that they can easily be reassembled at the correct site the following season. They shall then be dismantled and transported by the Contractor and placed in a designated safe and secure storage area approved by the AO until required for use the following season. "One Set" shall mean both sets of posts on one pitch.
- 2.2.9.2 Prior to the start of the Football playing season and timed as instructed by the AO, the Contractor shall collect, visually inspect and erect all football posts into their respective positions. Grease shall be used to ease posts into socket positions. Rugby posts are not generally to be removed, unless there is a specific request from the AO. The Contractor shall submit a Schedule of Rate for the hire of approved specialist equipment in such circumstances.
- 2.2.9.3 Care shall be exercised by the Contractor during the process of erecting, dismantling and storage of the posts. Any damage caused by the Contractor to the posts or sockets shall be repaired or replaced at his own expense.
- 2.2.9.4 During pre-match operations, the Contractor shall regularly inspect the posts whilst they are erected: it is the Contractor's responsibility to ensure that posts remain securely fixed and maintained in a safe condition at all times. The cost of this shall be included in the rate submitted for the marking out of pitches. Any damage or fault shall be reported to the AO immediately in writing, giving full details of the observed fault or damage.

2.2.10 Painting of Posts

- 2.2.10.1 At the end of the season and before the football posts are dismantled, both the football and rugby posts shall be inspected by the AO to ascertain their condition and whether painting of the posts is required. The AO shall report findings to the Contractor, and issue instructions as to which posts shall be repainted. Football posts shall be painted following their dismantling, and rugby posts shall be painted in situ.
- 2.2.10.2 Before painting, each post shall be thoroughly washed to remove any dirt or grease. Posts shall then be brushed down by the use of a wire brush or similar implement to remove stubborn dirt, rust and flaking or loose paint.
- 2.2.10.3 When dry, each post shall be painted with a primer, an undercoat and when ready a gloss coat of white lead free paint approved by the AO.
- 2.2.10.4 Any painting shall be carried out indoors in a well ventilated area, or, particularly in the case of rugby posts, outdoors in suitable dry weather conditions but not when wet weather is imminent, or in frost. All work of this nature shall be paid in an agreed Schedule of Rates.

2.2.11 Post Sockets (Football)

- 2.2.11.1 Prior to the erection of the posts, the Contractor shall inspect all post sockets for signs of damage, rot, blockage, corrosion or instability, and the results shall be submitted promptly in writing to the AO. This inspection should be undertaken 6 weeks before the marking of pitches. All sockets shall be cleaned out prior to the erection of the posts. The Contractor should at this time formally request that the AO to supply any replacement sockets required.
- 2.2.11.2 All new sockets shall be set in the ground according to manufacturer's instructions and the grass surrounds reinstated. Payment will be according to Schedule of Rates.
- 2.2.11.3 At the end of the playing season all sockets shall be sealed by a suitable method approved by the AO, to prevent soil, debris etc., clogging the sockets. The top 50mm of the sockets shall then be filled with soil to finish at ground level. Th Contractor should allow in his rates for the random recovery and reinstatement of socket covers and fillings to ensure that they remain in place throughout the closed season.
- 2.2.11.4 If Rugby Posts are removed the Contractor shall maintain these post sockets as above.

2.2.12 Post-Season Renovation

- 2.2.12.1 One month before the completion of the Football and Rugby season as determined for each site, the Contractor will be required to inspect, in conjunction with the AO, all pitches to ascertain the renovation works necessary to goalmouths, penalty areas, and centre circles. The contractor should allow in his rates for renovating an area equivalent to one third of each pitch. However any additional area, which is showing signs of bad wear, will be paid in accordance with the schedule of rates.
- 2.2.12.2 It is essential that operations progress quickly, to ensure the rapid recovery of the grass sward. Consequently, on receipt of an instruction from the AO to carry out the agreed renovation works, the Contractor shall start within 5 days of the end of the playing season and completed all post season renovations within 14 days of starting the works. All materials shall be supplied by the Contractor and included in his rates for sports pitch maintenance.
- 2.2.12.3 The areas requiring renovation will need to be cultivated using methods, materials and equipment approved by the AO. The order the operations are to be carried are:
- a) Application of pre-seeding fertiliser.
 - b) One pass slit/punch seeder machine.
 - c) Application of approved topdressing.
 - d) Watering

- 2.2.12.4 A granular pre-seeding fertiliser will be applied to the area at the ratio of 6:9:6 N: P: K as approved by the AO at a rate of 35g/m².
- 2.2.12.5 The one pass slit/punch seeder shall treat the agreed areas of each pitch ensuring that the seed is sown at a rate of 25g/m² in the slit/hole created. The seed mix shall contain 80% wear tolerant fine leaved Ryegrass and 20% smooth stalked Meadow grass or similar as approved by the AO. The second operation of the machine should cover the seed and the third operation should be a light roll to leave a level surface. The contractor shall ensure there are no gaps between passes.
- 2.2.12.6 The approved topdressing shall be spread evenly over the renovated areas, and worked well into the sward by the use of a drag mat/brush leaving a level surface.
- 2.2.12.7 The Contractor shall allow in his renovation rate to supply and apply sufficient water to moisten the soil to a minimum depth of 50mm, as required, to ensure that a healthy sward is established ready for play the next season.
- 2.2.12.8 Should, in the opinion of the Contractor, ground conditions be such that it is not possible to carry out these elements of work within the time period set, the Contractor should notify the AO as early as possible, who may at their discretion set an amended completion date, compliance with which should be treated in the same manner.

2.3 Athletics Facility

2.3.1 General Conditions

- 2.3.1.1 The Athletics Facility is situated at Drayton School, Drayton Road, Banbury. The Athletics facility is managed and booked by through the Council. For the purposes of this specification the Athletics area is deemed to be the whole of the open space up to and enclosed by the fence surrounding the synthetic track. The facility consists of the track, steeplechase, run-ups for long jump, high jump, triple jump and pole vault and three associated sandpits. The large grassed area enclosed by the track is used for various field events such as shot putt, javelin, hammer and discus. You will be required to carry out the following operations on the Athletics Facility.

2.3.2 Inspection & Litter Picking

- 2.3.2.1 All sports pitches shall be inspected during line marking operations, once per week during the playing season (usually on a Thursday or a Friday), and made clean and tidy and ready for play. At each inspection any stones, litter and/or other debris found on the pitches or closely adjacent shall be collected and removed from site. Glass or other harmful objects shall be removed immediately, whether they are discovered during regular inspections, during other visits or brought to the attention of the Contractor by the AO.

2.3.2.2 At the time of marking operations, the Contractor shall carefully examine the surface to ensure that there are no holes, ruts, or any other feature likely to cause injury to facility users. In the event that any dangerous areas are found they should be immediately be rectified and filled with soil/sand and seed.

2.3.2.3 The next working day following the completion of a match/fixture the Contractor shall inspect the pitch and the posts. All divots shall be replaced and firmed into place to form a consistent level with the immediate surrounds. Any acts of vandalism to the pitch or related equipment must be reported by the Contractor to the AO immediately in writing.

2.3.2.4 All items maintained by the Contractor on this site must be inspected during other operations and any damage or irregularity reported immediately to the AO.

2.3.2.5 The Contractor must ensure that any litter or debris is removed from any sports area prior to carrying out any operations on the site.

2.3.3 Mowing

2.3.3.1 The Contractor shall carry out general mowing all as Specification 1 Sports pitch mowing for the Athletics Facility.

2.3.3.2 When crossing the artificial track with machinery, equipment or materials the Contractor must exercise extreme care not to damage the surface. If the track is damaged, the Contractor will be held responsible for any repair or replacement costs resulting. The Contractor shall take care when crossing the track not to drive over the aluminium kerbing, but shall instead cross from the track to the central grass at designated access points where removable kerbing has been installed. When crossing the track the Contractor shall include in his mowing price for the laying of polythene sheeting and approved boarding to protect the track and spread the load.

2.3.4 Marking Out of Grass

2.3.4.1 The marking out of artificial surfaces is undertaken as a separate specialist contract.

2.3.4.2 Prior to the commencement of the Athletics season, the Contractor shall mark out field events all as specification clause 2.1.3 ensuring all marking conform to the current AAA regulations.

2.3.4.3 The Contractor shall allow for the Overmarking of the Field Events markings once per week from 1st April to 30th September inclusive. This shall be on a Thursday or Friday, in preparation for weekend fixtures, unless otherwise instructed by the AO. Prior to over marking the lines shall be mown as per specification 2.1.3.9.

2.3.5 Field Event Maintenance

- 2.3.5.1 The run-ups for javelin, long, triple and high jumps and the pole vault have all weather synthetic Polyflex 950-4 surfacing edged with PCC kerbing. The Throwing circles for Hammer, Discus and Shot Putt are of concrete construction. The Contractor shall edge up to concrete (e.g. kerbs, slabs, and the discus circle) using a half-moon edging iron.
- 2.3.5.2 The cleaning operations of the hard surfaces associate with the field events shall be undertaken during the “off season” as and when determined by the AO and paid for in accordance with Schedule of Rates.
- 2.3.5.3 Jumping pits shall be maintained immediately preceding the marking of Athletics Facilities. The whole pit shall have the sand weekly raked level with the pit surrounds and deleterious material (e.g. litter, stones, glass, etc.) removed. The grass, slabs or tarmac around the pits and the associated run-ups shall be swept once per week during the season.
- 2.3.5.4 The contractor shall, once per month throughout the athletics season, ensure that the surrounds of all throwing and jumping areas are cut, or edged back to ensure that the facility remains maintained in a tidy state. Before the start of the season this shall be done with a half-moon edging iron, and on the other six occasions edging sheers shall be used. The Contractor shall supply and apply an approved herbicide once per annum to the hard surfaces around the jumps, in accordance with Specification 5.0.
- 2.3.5.5 Between weeks 10 and 12 inclusive the pits shall once per annum be completely dug and riddled as required to remove any debris and weeds. Fresh white sand approved by the AO, sample to be and supplied by the Contractor prior to purchase, shall then be added to the pits by the Contractor in sufficient quantity to bring the surface of the sand, when raked, level with the pits surrounds.
- 2.3.5.6 Once a year the Contractor shall clean all Charmin Safticurb drainage kerbs on the outside perimeter of the track by rodding and jetting and all gully pits and catch pits shall be cleared out.
- 2.3.5.7 The Contractor shall between weeks 10 and 12 inclusive supply and apply one application of herbicide to the base of the hammer and discus net, in accordance with Specification 5.0.
- 2.3.5.8 The Contractor shall once per annum supply and apply a herbicide to the track kerbing to kill the weeds/moss immediately either side of the kerbing, in accordance with Specification 5.0.

2.3.6 Cleaning the Athletics Artificial Surfaces

- 2.3.6.1 The Contractor shall price a rate to hose down the artificial areas using a high-pressure water hose. This work will only be carried out following receipt of written instructions from the AO. The Contractor shall allow for an annual wash down of these areas using water and a non-foaming

detergent, approved by the AO, which shall be brushed onto the surface to prevent a build-up of atmospheric dirt deposits to maintain a clean appearance. This shall be paid for in accordance with Schedule of Rates.

- 2.3.6.2 The Contractor shall clean the 400m of aluminium inner kerbs monthly during the athletics season using an approved liquid detergent and a damp cloth.
- 2.3.6.3 The Contractor shall keep the artificial surfaces of the track and runways clear of grass cuttings, leaves and sand and any other debris not covered under litter as defined at 6.3.1 by sweeping/vacuuming fortnightly during the athletics season. This should be done using a stiff broom or using an approved light ride-on sweeper with rotary nylon or polypropylene bristle brushes (not with wire brushes) as appropriate. The exception to this shall be the Throwing circles which shall be brushed weekly, on a Friday, from 1st April to 30th September only. Arisings will be removed to a designated site for disposal. Artificial surfaces shall be maintained by the Contractor in accordance with the manufacturer's specifications for such playing surfaces.
- 2.3.6.4 Care should be taken by the Contractor that machines crossing the track do not spill any petrol, diesel or other oil onto artificial surfaces. Any such deposits must be immediately removed using detergent and water, at the Contractor's own expense.

2.4 Cricket Square Maintenance

2.4.1 Switching and Brushing

- 2.4.1.1 Prior to carrying out any other operations the contractor will switch or brush the square with either a cane, drag mat or drag brush, to ensure that any worm casts and early morning dew are removed from playing surface.

2.4.2 Cricket Square Preparation

- 2.4.2.1 Before the commencement of the cricket season the table shall be squared by 3/4/5 triangulation, optical sight square or other approved method. The wickets will then be cut and marked parallel to the corners of the square. The square shall have room for ten 3m wide wickets.
- 2.4.2.2 The Contractor will carry out scarification of the table in two contra directions. The playing surface will be scarified with an AO approved pedestrian motorised scarifier set to operate at soil surface, the aim being to remove stolons, weed grasses, thatch and dead matter. All debris from this operation will be collect by box mowing and disposed of away from site to an approved tip.
- 2.4.2.3 The contractor will carry out a roll to achieve a firm and level playing surface. Passes shall be made in contra directions using a roller weighing between 500kg and 1000kg, type to be approved by the AO. The

Contractor must ensure that the table is not too wet, too dry or frosty (surface water should not be present as roller moves along).

2.4.3 Fertiliser Application

- 2.4.3.1 The Contractor shall inform the AO in writing 24 hours before the commencement of fertiliser applications. The Contractor shall submit samples, for approval by the AO, of the fertiliser he intends to apply to the pitches before the commencement of operations.
- 2.4.3.2 In April the Contractor will supply and apply a fine turf fertiliser at a rate of 30g/m² or as specified by the fertiliser manufacturer. The fertiliser shall have an N:P:K ratio of 14:2:7.
- 2.4.3.3 In September the Contractor will supply and apply a fine turf Autumn/Winter fertiliser at a rate of 35g/m² or as specified by the fertiliser manufacturer. The fertiliser shall have an N:P:K ratio of 5:5:12 + 6% iron.
- 2.4.3.4 Fertiliser must not be applied in windy conditions or periods of drought. Applications should be made when rain is imminent; otherwise the area must be irrigated at the Contractor's own expense to avoid fertiliser scorch. The fertiliser shall be evenly spread at the correct rate over the whole surface of the playing area, ensuring that there are no overlaps or gaps between passes. This shall be by mechanical means approved by the AO, except for any areas, which have recently been re-seeded.

2.4.4 Fungicide/Insecticide/Lumbricide/Moss Applications

- 2.4.4.1 The contractor shall inspect the cricket square weekly for any signs of fungal, insect or moss development and report any findings to the AO.
- 2.4.4.2 If any fungi is identified the Contractor will make any necessary applications of an approved broad spectrum fungicide to the square to eradicate and control any fungi infections.
- 2.4.4.3 To control any turf pests the contractor will make any necessary applications of an approved broad-spectrum or contact insecticide to keep the square free from fine turf pests like leather jackets, chafer grubs, etc.
- 2.4.4.4 To control worm activity on the square the contractor will make any necessary applications of an approved lumbricide.
- 2.4.4.5 To control the development of moss on the square the contractor will make any necessary applications of an approved moss killer.

2.4.5 Rolling

- 2.4.5.1 The contractor will carry out a roll once per month to achieve a firm and level playing surface. Passes shall be made in contra directions using a roller weighing between 500kg and 1000kg, type to be approved by the AO. The Contractor must ensure that table is not too wet, too dry or frosty (surface water should not be present as roller moves along).

2.4.6 Irrigation

- 2.4.6.1 The Contractor may be required to supply irrigation equipment, approved by the AO, to irrigate the square during the playing season where periods of insufficient rainfall could lead to deterioration of the grass sward. This operation will be paid for at the schedule of rates.

2.4.7 Post-Season Renovation

- 2.4.7.1 The Contractor will, within two weeks of the end of the playing season, thoroughly scarify the entire surface of the table to remove all thatch, stolons, weed grasses, weed and dead material. Scarification should be carried out so that the soil is clearly visible between the grass plants and with a tine penetration not normally exceeding 9mm. Arisings shall be removed from site and taken to a recycling centre approved by the AO.
- 2.4.7.2 After scarification, the table will be mown to a height of 10mm. Cuttings shall be removed from site and taken to a recycling centre approved by the AO.
- 2.4.7.3 Aeration or spiking shall then take place. This will be carried out in at least two directions to a depth of 100mm minimum with an approved solid tined spiker to relieve surface compaction and with 100 mm minimum centres. Every third year hollow tinning will be required.
- 2.4.7.4 The Contractor shall over-seed table at a rate of 30g/m² with a suitable cricket square mix approved by the AO.
- 2.4.7.5 Following over-seeding, top dressing shall be applied. The top dressing shall be applied at the rate of 3kg/m² where the table has been solid tined and 6kg/m² where the table has been hollow tined. Method of application will normally be by hand or powered equipment approved by the AO. An even spread of top dressing is essential to avoid undulations in playing surface. Unless otherwise instructed by the AO, the top dressing shall be an approved suitable proprietary recommended loam (BS3882:2015), stone-free and having been sifted through a 4mm mesh. No equipment shall be brought onto the table that may cause damage to the surface levels, to the grass sward, any drainage lay outs or nearby water facilities. All such damage shall be repaired at the Contractor's expense.
- 2.4.7.6 As soon as the top dressing is evenly spread over the table, it will be worked into the surface and aeration holes thus creating a level surface. The top dressing will be worked in by use of either a lute, drag mat or drag brush or other method approved by the AO.
- 2.4.7.7 Once the top soil has been worked into the surface, the table will be thoroughly watered with a minimum of 16 litres of water/m².

2.5 Cricket Wicket Maintenance

2.5.1 Wicket Preparation

- 2.5.1.1 A cricket wicket is a strip of turf, 3m wide and 23m long, which is prepared on a cricket square prior to a match. The aim is that the wicket is firm, smooth and flat with no divots, lumps or depressions and free from stones or other foreign bodies. The ball should not be significantly slowed or diverted from its line on impact with the wicket. To achieve a good wicket, the Contractor will follow the routine detailed below no more than two days prior to each game.
- 2.5.1.2 Ensure that the cricket table is squared off before preparing any wickets. Plan the wicket positions so as to gain best use of wickets. Adjacent wickets to the one prepared should never be used for successive matches.
- 2.5.1.3 Measure out centre stump from edge of square.
- 2.5.1.4 Mow out a 3m strip (wicket), i.e. 1.5m each side of the centre of the centre stump. Mowing height will be 4mm. Grass will be double mown (up and down same row) to avoid shading (stripes). All clippings will be boxed and disposed of away from site at an approved Contractor's tip.
- 2.5.1.5 Scarify wicket with either a pedestrian motorised scarifier, which has been approved by the AO or by hand. Mechanical scarification will be done by setting machine to operate just above soil surface to remove stolons, thatch, weed grasses and any dead matter. All debris will be removed and disposed of off-site at an approved Contractor's tip.
- 2.5.1.6 Mow again as described above.
- 2.5.1.7 The contractor will carry out a roll to achieve a firm and level playing surface. Passes shall be made along the wicket in the direction of play with a roller weighing between 500kg and 1000kg, type to be approved by the AO. The Contractor must ensure that table is not too wet, too dry or frosty (surface water should not be present as roller moves along).
- 2.5.1.8 No earlier than two days prior to the match the wicket will be marked out, (Friday for weekend matches). Wicket will be marked out accurately using measuring tape, template or any other method approved by the AO. Crease markings will be marked with a brush using an approved marking compound. Lines will be 25mm wide and no wider and in accordance with cricket rules and regulation dimensions.

2.5.2 Post Match Wicket Repair

- 2.5.2.1 The Contractor will undertake wicket repairs on the first working day following the playing of the game. The Contractor will follow the routine detailed below:

- 2.5.2.2 Brush to remove debris (including boot studs) and dispose of away from site.
- 2.5.2.3 Shallow spike by use of sorrel roller, hand fork or pedestrian operated motorised machine as approved by the AO. This is done to facilitate water penetration (on very hard surfaces irrigation may be necessary to allow entry of tines).
- 2.5.2.4 Using suitable loam, fill in stump holes and repair divots to original level; ensure loam is consolidated by firming. Lift sunken areas with a fork; this allows top dressing soil to filter through holes thus preventing further sinking.
- 2.5.2.5 General worn areas: Using a springbok or lawn rake scratch up a seed bed and over-seed with an AO approved seed mix at the rate of 20-35g/m²; rate depends on extent of baldness. For quick establishment, chitted seed may be used (chitted grass seed is where seed is mixed with slightly moist top dressing mixture and left to start the germination process this mixture gives a better chance of re-established grass growth onto the wicket). Lightly rake in seed to surface. The whole length of the wicket shall be repaired if worn or damaged areas exist; the Contractor will be responsible for achieving the full reinstatement of the grass sward.
- 2.5.2.6 Irrigation: It is essential to irrigate the wicket to re-establish the grass growth on to the worn wicket. To avoid possibility of uneven grass growth, water shall be applied evenly to the length of the wicket.
- 2.5.2.7 Check repairs weekly and water as needed.

2.6 Cricket Outfield Maintenance

2.6.1 Boundary Marking

- 2.6.1.1 Outfields will be marked with a boundary line once a week. Markings shall be made with an AO approved marking compound and applicator. Lines shall be 50mm wide and at a minimum distance of 37m from the bowler's crease to each corner of the boundary. The lines shall be continuous and even curves. The Contractor shall ensure that the marking compound is of sufficient strength to persist for at least one week even under adverse weather conditions. Boundaries shall be clearly marked throughout the playing season.
- 2.6.1.2 Immediately prior to carrying out initial marking of pitches, a 500mm wide strip of grass, a minimum of 250mm either side of the agreed position of the lines shall be cut to ensure that the height of sward does not exceed 20mm. The areas to be marked should be free of grass cuttings, and the Contractor should make allowance in his rates for the use of box mowers. After the initial mowing and marking out, the lines will be mown out as required before over marking, with a rotary mower as agreed and approved by the AO.

2.6.2 Rolling

- 2.6.2.1 The Contractor shall allow for the rolling, of the cricket outfield to achieve a level profile and a firm surface, to be carried out each month throughout the playing season timing to be agreed by the AO. This should be carried out with regard to the prevailing weather conditions and not when the ground conditions are unsuitable which may damage the playing surface. This should be carried out using a tractor drawn roller at least 3m wide and weighing between 1000kg and 1500kg.

2.6.3 Fertiliser Application

- 2.6.3.1 The Contractor shall inform the AO in writing 24 hours before the commencement of fertiliser applications. The Contractor shall submit samples, for approval by the AO, of the fertiliser he intends to apply to the pitches before the commencement of operations.
- 2.6.3.2 In April the Contractor will supply and apply to the surface of the pitches an approved application of Spring and Summer fertiliser of the ratio 20:10:10 N: P: K which will be applied at a rate of 25g/m².
- 2.6.3.3 In September the contractor will supply and apply to the surface of the pitches an approved application of Autumn and Winter fertiliser of the ratio 4:7:7 N: P: K which will be applied at a rate of 35/m².

2.7 Sports Pitch Maintenance – Performance Schedule

Category	Football & Rugby Pitches Senior	Football & Rugby Pitches Junior	Cricket Facility	Athletics Facility
Included Operations				
Marking Out	✓	✓	✓	✓
Selective Herbicide Application	✓	✓	✓	✓
Inspection	✓	✓	✓	✓
Rolling	✓	✓	✓	
Spiking	✓	✓	✓	
Harrowing	✓	✓	✓	
Marking Out	✓	✓	✓	✓
Fertiliser Application	✓	✓	✓	✓
Fungicide/Insecticide/Lumbricide/ Moss Treatment			✓	
Checking/Cleaning Posts & Sockets	✓	✓		
Post Season Renovation	✓	✓	✓	
Field Event Maintenance				✓

SECTION 3

HORTICULTURAL MAINTENANCE

3.0 HORTICULTURAL MAINTENANCE

3.1 General Conditions

- 3.1.1 All works undertaken in the maintenance of shrubs, roses and mixed perennial borders shall be carried out in accordance with sound horticultural principles, which are acceptable to the AO. DURING ALL OPERATIONS the Contractor shall make allowance in his rates for the proper disposal of all weed growth, prunings and arisings at a recycling site approved by the AO.
- 3.1.2 During each maintenance visit to all shrub borders, woodland areas, hedges and any other areas which are pruned on the contract, all litter, non-organic material and any other debris, irrespective of its source, shall be removed from these areas and disposed of at an approved recycling centre at the Contractor's own expense.
- 3.1.3 Following each maintenance visit, all traces of footprints within the borders shall be removed and all adjacent hard surface areas shall be properly cleansed. Any works required to repair damaged areas resulting from the Contractor's operations shall be carried out at his own expense.
- 3.1.4 To maintain them in a weed free condition borders indicated within the schedules shall require regular maintenance visits to remove and dispose of weed growth. This shall be achieved by a combination of shallow hoeing, hand weeding and the digging out of tap rooted perennial weeds, leaving a clean and weed free surface. Any brambles found growing in the woodland areas shall be removed by forking out the root and disposed of at a recycling centre, approved by the AO, at the Contractor's own expense.
- 3.1.5 Once a year Borders indicated within the schedules shall be lightly cultivated by forking to 50mm in depth, removing all weed growth, litter and debris leaving a fine and level tilth. This operation will normally be carried out during the period January to March.
- 3.1.6 Borders indicated within the schedules shall be treated with a suitable herbicide following operation Clause 3.1.2 during the period January to March. The Contractor shall make allowance in his rates for spot treating the borders with a suitable herbicide during the growing season; any borders, not yet established, require regular maintenance without the use of chemicals.
- 3.1.7 Borders indicated in the schedules shall be edged up in accordance with specification 1.0 maintenance of grass areas.
- 3.1.8 Borders indicated within the schedules shall be cut back with a half moon edging iron to a minimum depth of 75mm and slightly sloped to avoid an undercut appearance. A clean flowing edge shall be produced and the Contractor shall allow in his rates for any realignment works necessary to achieve this. The border soil shall be pushed back and left sloping at a 45 degree angle from the edge starting slightly below the surrounding levels.

This operation shall normally take place once during the period January to March.

3.1.9 The contractor will during the winter months apply a layer of mulch over the entire area of Shrub Borders, Rose Beds, Perennial Borders, with the exception of Woodland Areas where the Council estimates only 50% of the area specified in the schedules is accessible to be mulched, to ensure a depth of 50mm is maintained. It is expected the majority of this material will be produced by the contractor from green waste arisings as a result of providing the service, however, any additional material required will be supplied by Cherwell District Council and delivered in bulk to the contractors depot.

3.1.10 The Contractor shall allow for four pruning visits per annum to each site listed in the schedules:

- Visit 1: February/March
- Visit 2: June
- Visit 3: August
- Visit 4: October

During each pruning visit the Contractor shall carry out all necessary works to meet the standards as set out in clauses to meet all standards as specified within the Schedules.

The specific requirements for individual genera are outlined below.

The Contractor shall satisfy himself that he is familiar with all the necessary works required for each site and submit a cost per annum for carrying out the works as set out in the schedules.

3.1.11 Pruning Schedule Descriptions

PP	Prune previous season's wood to within two to three buds of the old wood.
RO	Remove 33% of old wood, retaining younger growth but shortening the laterals.
SE	Shorten existing growth and laterals to within two/three buds of the current year's growth.
RC	Reduce canopy by 25%-33% by shortening extension growth and laterals to maintain a well-balanced and bushy habit.
DH	Deadhead after flowering.

3.1.12 Pruning Schedule

TIMING OF OPERATIONS				
Description	February/ March	June	August	October
Berberis spp	RC		SE	
Buddleja davidii	PP			
Bergenia spp		DH		
Calluna spp				DH
Caryopteris	PP			
Ceratostigma	PP			
Cornus alba	PP			
Cotoneaster spp	RC		SE	
Deutzia		DH	RO	
Elaeagnus spp	RC		SE	
Erica spp		RO		
Escallonia	RC		SE	
Forsythia				
Fuchsia	PP			
Geranium	RC			DH
Hedera			SE	
Hydrangea	DH			
Hypericum	RC			
Kerria		RO		
Lavandula	PP		DH	
Leycesteria	PP			
Ligustrum	RC		SE	
Lonicera spp (evergreen)	RC		SE	
Nepeta			DH	
Osmanthus				
Perovskia	PP	SE		
Philadelphus			RO	
Polygonum (Russian Vine)	PP		SE	
Potentilla	RC			
Prunus spp (Laurel)	RC	SE		
Pyracantha	RC	SE	SE	
Ribes		RO		
Rudbeckia				DH
Rosa spp (groundcover & shrub)	RC		DH	DH
Salix	RC		SE	
Sambucus	PP		SE	
Santolina	PP		DH	
Senecio	RC			
Spiraea x arquata		RO		
Spiraea x bumalda	PP			
Stachys			DH	
Symphoricarpos	RC		SE	
Ulex europaeus				DH
Viburnum tinus		RC		
Weigela			RO	

3.2 Shrub Pruning

- 3.2.1 The objectives of pruning shall be as outlined below:
- 3.2.2 To build a strong framework, keeping plants healthy and vigorous whilst maintaining their natural shape and balance wherever possible.
- 3.2.3 To promote the maximum amount of flowering growth by the thinning out of older material along with the removal of any growth that is weak, diseased, damaged, showing signs of reversion or any suckering growth from the rootstock.
- 3.2.4 The Contractor shall be expected to display competence at both the theory and practice during all pruning operations.
- 3.2.5 Short or long handled secateurs shall be used for all deadheading or formative and restrictive pruning operations. Mechanical hedge-trimmers shall only be used when shortening soft semi-ripe lateral extension growth (e.g. Pyracantha in June/August) or for removing old flowering spikes (e.g. Lavendula in October).
- 3.2.6 All spent flowering growth from shrubs should be removed during the first scheduled pruning visit after flowering has finished see timing of operations chart for guide.
- 3.2.7 To prevent any plant, irrespective of genera, from becoming a nuisance or danger, they should be pruned to avoid interference with doorways, windows, pathways, fence-lines, car parking areas, drying areas, seats and signs. In addition any material deemed to be creating visibility problems for traffic or interfering with services shall be pruned in the interests of public safety.
- 3.2.8 Any brambles found growing in shrub borders shall be removed by forking out the root and disposed of at a recycling centre, approved by the AO, at the Contractor's own expense.

3.3 Rose Pruning

- 3.3.1 Prune all roses indicated in the schedules during February/early March by removing all growth that is weak, dead or diseased and any suckering growth from the rootstock which should be removed as close as possible to the soil surface.
- 3.3.2 All remaining growth should be pruned as below:
- Floribunda roses – leaving 5-7 buds per stem;
Hybrid tea roses – leaving 3-5 buds per stem;
All cuts should be made cleanly to an outward facing bud using by-pass or parrot type secateurs.

- 3.3.3 During the period June – October inclusive the Contractor shall remove all dead flowers and suckering growth.
- 3.3.4 The contractor shall ensure the health of roses by applying an approved systemic insecticide and/or fungicide to control any pests and diseases.
- 3.3.5 During the period November – December roses specified in the schedules shall be pruned back to remove one third of the previous season's growth.

3.4 Pruning of Herbaceous Perennials

- 3.4.1 All spent flowering growth from shrubs should be removed during the first scheduled pruning visit after flowering has finished see timing of operations chart for guide.

3.5 Pruning of Hedges

- 3.5.1 All hedges as specified in the Schedules, shall be cut using secateurs, shears or reciprocating hand held cutters, dependent upon the type of hedges e.g. on laurel hedges only secateurs and long handled pruners are to be used.
- 3.5.2 The contractor should note that a tractor mounted flail approved by the Authorised Officer, may be used on hedges, which in the opinion of the Authorised Officer require any additional cuts during the winter period. All obstacles positioned or growing in these hedges should be cut around by hand to ensure the complete hedge is cut. Payment for this work will be paid for in accordance with the submitted Schedule of Rates for flail cutting.
- 3.5.3 Risk assessments of the work to be carried out must be completed by the Contractor prior to work commencing. The outcome of such assessments should be taken into account in the working procedures employed on site.
- 3.5.4 The Contractor shall provide traffic safety control in accordance with the relevant clauses of chapter 8 Traffic Signs Manual British Standard 873 1980.
- 3.5.5 Areas surrounding hedges being worked on should be coned off, and/or arrangements should be made to prevent the public gaining access to the danger zone in accordance with the relevant new Roads and Street Works Act.
- 3.5.6 The Contractor shall allow in his rates for the use of access platforms, cherry pickers, ladders etc., where required and for any difficulties of access. Where necessary he shall allow for any re-aligning of the hedge using long handled pruners where necessary to achieve a profile to the satisfaction of the AO.

3.5.7

4.2 Ground Bedding

4.2.1 Sequence for Planting - Spring

- 4.2.1.1 The contractor shall remove all Summer bedding plants and dispose/recycle to a site approved by the AO. All dot plants detailed for salvage shall be potted up and looked after by the Contractor as directed along with any other plants, which the AO deems to be worth saving.
- 4.2.1.2 The beds shall then be prepared for planting by rotavating to a minimum depth of 250mm, treading and raking until a good tilth and smooth flowing levels are achieved. The soil at the perimeters of the beds shall be earthed up and levelled across the centre of the beds.
- 4.2.1.3 The edges of the beds shall be re-cut using a half moon, all arisings being removed from site.
- 4.2.1.4 The beds shall then be planted with plant/bulb material provided by the Council to details/designs provided by the AO. All plants shall be firmed in during planting, with no roots left exposed.
- 4.2.1.5 On completion of planting all surrounding areas shall be left in a clean and tidy condition and all debris removed for proper disposal.

NB No bed shall be stripped in excess of 10 working days in advance of planting unless otherwise agreed with the AO.

4.2.2 Maintenance

- 4.2.2.1 All beds indicated within the Schedules shall be kept weed and litter free throughout the season.
- 4.2.2.2 The beds shall be kept clear of leaves from October to December.
- 4.2.2.3 The Contractor shall make allowance in his rates for the dead heading of plant material and removal of the spent flowering stalks of some of the earlier flowering Spring bulbs which may be detracting from the main display. This operation shall be carried out during routine weeding operations. All traces of footprints etc. to be removed.
- 4.2.2.4 The Contractor shall notify the AO promptly of the presence of any pest or disease attacking or infesting the plants. Upon receipt of instructions from the AO the Contractor shall within 3 working days treat such pests or diseases with chemicals as agreed with the AO.

4.2.3 Sequence for Planting – Summer:

- 4.2.3.1 The contractor shall remove all Spring bedding plants/any weed growth to be disposed of/recycled to a site approved by the AO.

- 4.2.3.2 The beds shall be single dug to one spit deep; all weed growth debris etc. will be removed. The surface of the beds shall then be evenly covered with well-rotted manure (or other organic matter approved by the AO) to a depth of 75mm. and then incorporated into the soil.
- 4.2.3.3 The beds shall be prepared for planting by rotavating to a minimum depth of 250mm, treading and raking until a good tilth and smooth flowing levels are achieved. The soil at the perimeters of the beds shall be earthed up and levelled across the centre of the beds.
- 4.2.3.4 An appropriate fertiliser agreed with the AO shall be spread evenly across the surface and incorporated during the final preparations.
- 4.2.3.5 The beds shall then be planted with material provided by the council to details/designs provided by the AO. All plants to be firmed during planting.
- 4.2.3.6 The Contractor shall make provision for the staking of dot plants in the scheme using canes or other supports approved by the AO.
- 4.2.3.7 To ensure establishment the Contractor shall make provision for the initial watering in of the bedding material immediately after planting, ensuring penetration to achieve moisture to a minimum 100mm depth. This shall be carried out at the Contractor's own expense and he shall be responsible for obtaining standpipes etc. where appropriate. The method of watering must be approved by the AO.

NB No bed shall be stripped in excess of 10 working days in advance of planting unless agreed with the AO.

4.2.4 Maintenance

- 4.2.4.1 All beds indicated within the Schedules shall be kept weed and litter free throughout the season.
- 4.2.4.2 All beds indicated within the Schedules shall be deadheaded between June and the end of September.
- 4.2.4.3 All dead heads are to be removed from beds during routine weeding operations. All traces of footprints etc. to be removed.
- 4.2.4.4 Over periods of dry weather the Contractor will be required to monitor the beds and water as necessary to ensure plant material thrives and flourishes, this will need to be reflected within the Contractor's rates for summer bedding.
- 4.2.4.5 The Contractor shall notify the AO promptly of the presence of any pest or disease attacking or infesting the plants. Upon receipt of instructions from the AO the Contractor shall with three working days treat such pests or diseases with chemicals as agreed with the AO.

4.3 PLANTERS AND BARRELS

4.3.1 General Conditions

4.3.1.1 Planters and Barrels fall into the following three categories:

- A Type Planter – 1.5 Metre Square
- B Type Planter – 1.0 Metre Square
- C Type Barrel – 1.0 Metre Diameter

4.3.2 Sequence for Planting – Spring:

- 4.3.2.1 All Summer bedding plants and, if present, any weeds or debris shall be removed for proper disposal/recycling to a site approved by the AO. All dot plants detailed for salvage shall be potted up by the Contractor as directed along with any other plants, which the AO deems to be worth saving.
- 4.3.2.2 The Planters and Barrels shall then be prepared for planting by forking and firming to achieve a smooth level surface. The finished soil level shall be 75mm below the perimeter edge of the planter or barrel.
- 4.3.2.3 The units shall then be planted with plant/bulb material provided by the Council, to details/designs provided by the AO. All plants shall be firmed in during planting, with no roots left exposed.
- 4.3.2.4 On completion of planting all surrounding areas shall be left in a clean and tidy condition and all debris removed for proper disposal.

NB No Planter or Barrel shall be stripped in excess of 10 working days in advance of planting unless otherwise agreed with the AO.

4.3.3 Maintenance

- 4.3.3.1 All Planters and Barrels indicated within the Schedules shall be kept weed and litter free throughout the season.
- 4.3.3.2 The Planters and Barrels shall be kept clear of leaves from November to December.
- 4.3.3.3 The Contractor shall make allowance in his rates for the dead heading of plant material and removal of the spent flowering stalks of some of the earlier flowering Spring bulbs which may be detracting from the main display. This operation shall be carried out during routine weeding operations.
- 4.3.3.4 The Contractor shall notify the AO promptly of the presence of any pest or disease attacking or infesting the plants. Upon receipt of instructions from the AO the Contractor shall within 3 working days treat such pests or diseases with chemicals as agreed with the AO.

4.3.4 Sequence for Planting – Summer:

- 4.3.4.1 All Spring bedding plants, bulbs and, if present, any weeds or debris shall be removed for proper disposal/recycling to a site approved by the AO.
- 4.3.4.2 The top 200mm of the growing medium will be removed and replaced with a mixture compost and sterilised screened topsoil, approved by the AO.
- 4.3.4.3 The units shall then be prepared for planting by forking and firming to achieve a smooth level surface. The finished soil level shall be 75mm below the perimeter edge of the Planter or Barrel.
- 4.3.4.4 An appropriate fertiliser agreed with the AO shall be spread evenly across the surface and incorporated during the final preparations.
- 4.3.4.5 The unit shall then be planted with material, details/designs provided by the AO. All plants to be firmed in during planting.
- 4.3.4.6 The Contractor shall make provision for the staking of dot plants in the scheme using canes or other supports approved by the AO.
- 4.3.4.7 To ensure establishment the Contractor shall make provision for the initial watering in of the bedding material immediately after planting, ensuring penetration to achieve moisture to a minimum 100mm depth. This shall be carried out at the Contractor's own expense and he shall be responsible for obtaining standpipes etc., where appropriate. The method of watering must be approved by the AO.

NB No Planter or Barrel shall be stripped in excess of 10 working days in advance of planting unless agreed by the AO.

4.3.5 Maintenance

- 4.3.5.1 All Planters and Barrels indicated within the Schedules shall be kept weed and litter free throughout the season.
- 4.3.5.2 The Planters and Barrels indicated within the Schedules shall be deadheaded between June and the end of September. Dead heads are to be removed from each unit during routine weeding operations. In addition any damaged plant material is also to be removed.
- 4.3.5.3 Planters and Barrels will need to be watered three times a week (Monday, Wednesday and Friday). This operation shall normally take place from June until late September.
- 4.3.5.4 The Contractor shall allow for a high potash liquid feed, added at the manufacturer's recommended rate, to each Wednesday's watering cycle. The AO may take samples from water bowser on Wednesdays during June – late September

- 4.3.5.5 The Contractor shall notify the AO promptly of the presence of any pest or disease attaching or infesting the plants. Upon receipt of instructions from the AO the Contractor shall within 3 working days treat such pests or diseases with chemicals as agreed with the AO.

4.4 MODULAR FLORAL DISPLAYS

4.4.1 General Conditions

- 4.4.1.1 The AO will provide pre-planted reservoir floral display units which will be delivered to the Contractors depot facilities. The Contractor will allow in his rates for staff to be available to take all such deliveries.

The floral display units will largely fall into the following categories:

- (A) Hanging Baskets 590mm (Reservoir)
- (B) Hanging Baskets 470mm (Reservoir)
- (C) Column Baskets 590mm (Reservoir)

NB (2 No. half “round the column” baskets shall be deemed to be equal to one 590mm hanging basket)

- (D) Up the Pole Baskets 590mm (Reservoir)
- (E) Barrier Unit 1270mm (Reservoir)
- (F) Window Boxes 1270mm (Reservoir)

4.4.2 Maintenance

- 4.4.2.1 Erection of Units “In Situ”

- 4.4.2.2 This operation will normally take place during the first two weeks of June, each unit shall be secured by:

Category (A) Fixed using metal “D Shackles”

Category (B) Fixed using heavy duty “Cable Ties”

- 4.4.2.3 The Contractor shall allow for the transporting of all units to site, and for the provision of any necessary hoists and other equipment necessary to secure the units.

4.4.3 Watering

- 4.4.3.1 All hanging baskets and barrier units provided by the Council have water reservoirs, the Contractor will need to top up these reservoirs three times a week (Monday, Wednesday and Friday). This operation shall normally take place from June until late September. The appropriate reservoirs shall be filled and the units shall be watered to field capacity to ensure effective capillary action.
- 4.4.3.2 The Contractor shall allow for a high potash liquid feed, added at the manufacturer's recommended rate, to each Wednesday's watering cycle. AO may take samples from water bowser on Wednesdays during June to late September.

4.4.4 Deadheading and Weeding

- 4.4.4.1 The Contractor shall ensure that all dead flower heads, damaged plant material and weeds are removed on a weekly basis from June until late September.

4.4.5 Pest and Disease Control

- 4.4.5.1 The Contractor shall notify the AO promptly of the presence of any pest or disease attacking or infesting the plants. Upon receipt of instructions from the AO the Contractor shall within 3 working days treat such pests or diseases with chemicals as agreed with the AO.

4.4.6 Removal of Units and Plant Material

- 4.4.6.1 During early October the Contractor shall allow for dismantling all the floral display units and returning them to a storage area specified by the AO, where they should be cleaned and carefully stored. All old plant material and organic debris shall be disposed of at a composting site approved by the AO. All capillary matting to be saved and stored in the bottom of each floral unit. Any replacements needed should be reported to the AO immediately.

4.4.7 Installation of Ironwork for Floral Displays

- 4.4.7.1 During late May the Contractor will transport from the store approved by the AO, the ironwork necessary for erecting floral poles and floral tree units. The base plates will be removed and safely stored for re-use at the end of the season. The base of each pole will be greased prior to being properly secured into the base sockets.

4.4.8 Dismantling of Ironwork for Floral Displays

- 4.4.8.1 During October the Contractor will remove the ironwork for careful storage over winter and transport them back to the store approved by the AO. Immediately after removal the base plates must be re-positioned and properly secured to prevent trip hazards.

4.4.9 Painting of Ironwork

4.4.9.1 Upon receipt of instructions from the AO the Contractor may be asked to paint all of the ironwork and poles with a Zinc based paint approved by the AO. Payment will be made in accordance with the appropriate price per item in the Schedule of Rates.

- (A) Pole Unit
- (B) Shroud Unit
- (C) Top Cluster Unit
- (D) Hanging Basket Bracket

4.5 Floral Provision – Performance Schedule

Category	Spring & Summer Bedding	Planters & Barrels	Modular Displays Reservoirs
Included Operations			
Planting	✓	✓	
Removal of Plant Material	✓	✓	✓
Dead heading	✓	✓	✓
Weed removal	✓	✓	✓
Litter Removal	✓	✓	✓
Watering	✓	✓	✓
Erection of Floral Units			✓
Removal of Floral Units			✓
Pest and Disease Control	✓	✓	✓

SECTION 5
CHEMICAL APPLICATIONS

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5.0 CHEMICAL APPLICATIONS

5.1 General Conditions

- 5.1.1 This section provides the specification for all operations relating to the application of pesticides to be used during the course of the contract. As defined within the Food and Environment Protection Act 1985 the term pesticides shall be deemed to include fungicides, herbicides, insecticides, lumbricides and growth regulators within this contract.
- 5.1.2 All pesticides to be used in the undertaking of the works will be approved by the AO; no other materials shall be used on any site included within the Schedules and shall be used only for the purposes, and at the rates specified on the manufacturer's product labels.
- 5.1.3 All pesticides used, all methods of application, storage and all tanks mixes shall be strictly in accordance with the Food and Environment Protection Act (1985) (FEPA) and the Control of Pesticides Regulations (1986), made under this Act and the manufacturer's instructions. Further guidance is available in the "Code of Practice for the use of Approved Pesticides in Amenity Areas" (1988), and subsequent editions.
- 5.1.4 All operatives engaged in undertaking the application of any "Pesticide" as defined within the terms of the Act shall be in excess of 18 years of age, and shall hold a certificate from a training establishment recognised by the Minister of Agriculture as being an approved assessment centre under the terms of the Act. Prior to the commencement of the Contract the Contractor shall present to the AO proof that employees to be engaged in such work are suitably qualified and assessed and shall ensure that only those operatives are engaged in the application of such materials. In relation to this Contract only those personnel qualified will be allowed to mix and/or apply pesticides.
- 5.1.5 The Contractor shall provide his staff with all protective clothing applicable to the materials being applied at any one time, and shall give his staff access to such washing and cleaning facilities as may be required. The Contractor shall ensure that his staff whilst engaged in application of pesticides wear such protective clothing as is required, and that they observe all safety precautions as required.
- 5.1.6 The Contractor shall ensure that all materials are properly stored and transported, providing a secure store as required under the terms of the Act. Should such a store hold at any one time in excess of 200 litres of liquid material or 200kg of dry material or any combination of liquid and dry material in excess of 200 units this store shall hold a certificate approved by the Minister of Agriculture. Details of registration of the store and of the storekeepers shall be provided to the AO prior to the commencement of the Contract.

- 5.1.7 When on site the Contractor must ensure that all pesticides are stored properly in accordance with the above legislation, in a lockable container which will contain liquid gaseous leakages. Pesticides must not be stored in vehicles used as mess facilities.
- 5.1.8 The AO reserves the right to instruct the Contractor to cease any pesticide application operations if the Contractor's operatives are not wearing the appropriate protective clothing.
- 5.1.9 The Contractor shall provide and make available for inspection containers for measuring quantities of pesticides. Spray equipment shall be fitted with an approved effective guard to prevent drift onto neighbouring plants, a pressure regulating device and an approved spray nozzle of the poli-jet type as recommended by the manufacturer. Equipment shall be free of leaks, and shall be cleaned thoroughly before and after use. All machinery used in the application of materials shall be carefully maintained throughout the period of the contract to ensure correct application takes place, and that no leakage occurs.
- 5.1.10 In carrying out mixing of chemicals, the Contractor shall ensure that no spillage of chemical takes place and that no damage results to vegetation, surfaces, plants or equipment, any such damage will similarly be held to be the responsibility of the Contractor.
- 5.1.11 The Contractor shall ensure that the method of application and the undertaking of such works proceeds in such a manner as to cause no damage or injury to any desirable plant, animal, machine or item of equipment. Any such damage will be held to be the responsibility of the Contractor and he will be required to make good any damage and will be responsible for any claims for compensation arising from his actions or omissions.
- 5.1.12 The timing of work shall be such that no spraying takes place during inclement (e.g. wet or windy) weather, or when rainfall is expected in a time period which is less than that specified by the manufacturer of the chemical being used.
- 5.1.13 The Contractor shall ensure that pesticides are never left mixed in tanks overnight or unattended during the working day.
- 5.1.14 The Contractor shall ensure that the method of application and the undertaking of works do in no way lead to the pollution of any watercourse or water supply. Any such pollution will be held to be the responsibility of the Contractor and he will be required to make good any damage and will be held to be responsible for any claims for compensation arising from his actions or omissions.

- 5.1.15 The Contractor shall ensure that all-waste containers, tank washings and chemicals are correctly disposed of. Prior to the commencement of the Contract, the Contractor will present to the AO details of the arrangements he has made for such disposal, and the Contractor will immediately inform the AO of any changes in these arrangements immediately they occur.
- 5.1.16 In carrying out the applications of materials the Contractor shall ensure that no area is overdosed, and that dosages of each particular treatment are in accordance with the manufacturer's recommendations, or the instructions of the AO, and that the total area specified is treated.
- 5.1.17 Prior to carrying out any application of material the Contractor should notify the AO of his working plans giving 2 working days notice and updating the AO at regular intervals. The progress of such work should be reported daily using a form produced by the Contractor with a format approved by the AO.
- 5.1.18 The Contractor shall by methods approved under the terms of the Act notify the public, neighbours of sites and the users of facilities of the fact that spraying operations are to be, are, and have been undertaken. This is especially important when spraying is programmed close to or on the pedestrian route to schools.

5.2 Herbicide Treatment around tree bases, obstacles, fence lines & walls

- 5.2.1 Where indicated in the schedules, the Contractor shall apply an approved liquid herbicide during February/March, when weather conditions are suitable, to achieve a total sprayed area of no more than 600mm diameter round each tree/obstacle and no more than a 200mm wide band along walls and fence lines.

5.3 Selected Herbicides on Turf

- 5.3.1 Where indicated in the schedules the Contractor will apply a broad-spectrum selective herbicide approved by the AO to the areas specified within the schedule at the frequencies indicated. The AO may at his discretion require an interim application. Payment for such work shall be paid for in accordance with rates indicated in the schedule of rates. The material should be applied at times when soil is moist and grass actively growing preferably during March/April with a second application during September unless otherwise instructed by the AO.
- 5.3.2 If within 10 working days of application, the AO is not satisfied with the degree of mortality shown by broad-leaved weeds within the turf sward, the Contractor shall repeat the treatment. This shall be undertaken within 5 working days of receipt of instruction and shall be carried out at the Contractor's expense.

5.4 Treatment of Roadside Kerbs and Channels

- 5.4.1 The Kerbs and Channels adjacent to all roads included within the boundary lines of each of area, as indicated in the schedules, shall be treated with an approved liquid herbicide during April and September, to achieve a weed-free appearance. Any weed growth above 200mm shall be trimmed and arisings removed prior to herbicide being applied. At the AO's request blue dye shall be added to the herbicide to assist with the monitoring of the spraying operation.

5.5 Treatment of Hard Surfaces

- 5.5.1 All areas, e.g. paths, drives, parking bays, play surfaces, other hard surfaces, as indicated in the schedules shall be treated with an approved liquid herbicide during April and September, to achieve a weed-free appearance.

5.6 Treatment of Gravel Areas

- 5.6.1 All areas, e.g. gravel paths, drives, parking bays, other gravel areas, as indicated in the schedules shall be spot treated with an approved liquid herbicide during April to September, to achieve a weed-free appearance throughout the year

SECTION 6
CLEANSING OPERATIONS

6.0 LITTER COLLECTION AND SWEEPING

6.1 General Conditions

6.1.1 The collection of litter is an important part of grounds maintenance operations, and shall take place throughout 52 weeks of each year, including in the week between Christmas and New Year. The Environmental Protection Act is an important piece of legislation in the area of litter collection and the Contractor shall be expected to comply with it and be fully aware of its requirements.

6.2 Scope of De-Littering Operations

6.2.1 All operations shall be carried out at frequencies indicated in the Schedules. All litter and debris shall be disposed of at a designated site for disposal at the Contractor's own expense. The operations broadly consist of the following:

- a) The Cleaning and Maintaining of Litter Bins.
- b) The Emptying of Litter Bins.
- c) The De-littering of shrub borders, grass areas, cemeteries, play areas, sports pitches and certain hard surface areas that appear within the scope of this Contract.
- d) The Sweeping of Hard Surface Areas by either mechanical means or by hand.

6.3 The Removal of Fly-tipped Rubbish.

6.3.1 Definition of Litter

- a) Litter is defined as ALL extraneous materials including: paper, cans, bottles, plastic, metals, glass fragments, cigarette butts, blossom, etc.

6.4 Litter Bins

6.4.1 The litter bins within the District largely consist of the following types:

- a) EARTH ANCHOR
- b) GLASDON
- c) RUSTIC STYLE
- d) CONCRETE

6.4.2 The Contractor shall carry out the following maintenance to bins, and shall supply all materials required to complete the operations:

6.4.3 Lubricate locking mechanisms category every 3 months using an appropriate lubricant. Inspect the locking mechanism and report any damage to the AO promptly.

- 6.4.4 Clean the outside of all litter bins every 20 working days, using materials approved by the AO.
- 6.4.5 These maintenance costs are to be included in the cost of emptying all the bins.
- 6.5 Empty Litter Bins**
- 6.5.1 The Contractor shall remove all contents from litter bins, de-litter the area immediately below the bin of any small items that may have fallen through, and then ensure the bins are properly locked and secured afterwards. The Contractor shall then de-litter an area of 2m radius surrounding the litter bin immediately after emptying. All these items of rubbish shall be removed from the site with the litter emptied from the bins. The Contractor shall recycle all litter in a method approved by the AO.
- 6.5.2 The bins are to be emptied twice weekly (Mondays & Fridays irrelevant of bank holidays) The Contractor shall allow in his rates for the supply and installation of approved disposable black plastic liners to all litter bins to be renewed on each collection from the bins unless otherwise approved by
- 6.5.3 the AO.
- 6.6 De-litter an Area**
- 6.6.1 The Contractor shall scavenge for, collect and dispose of, to a recycling centre approved by the AO, all litter and debris within the areas defined in the Schedules, irrespective of its source and any other cleansing operations in adjacent areas. For the proper disposal of needles and syringes see Contract Conditions 41. Any damage caused to shrub beds, paved or grassed areas due to litter picking operations carried out by the Contractor must be made good at the Contractors own expense and to the satisfaction of the AO.
- 6.6.2 Sites are to be de-littered twice weekly (Mondays & Fridays irrelevant of bank holidays) throughout the year. Each site will be de-littered on a whole-site basis.
- 6.7 Sweeping Footpath/Hard Surface Areas**
- 6.7.1 Sweeping Areas**
- 6.7.1.1 The Contractor shall cleanse the areas listed in the schedule by manual or mechanical means. The area should be left free of all litter, sand, soil, debris, leaf and blossom fall, along with any grass cuttings. "Sweeping" is deemed to include the raking of hoggin, gravel or similarly surfaced area, with a springbok rake or similar approved implement. The Contractor shall sweep the full length and width of an area in a methodical manner and remove all arisings from the site to an approved site for disposal. Any

damage caused to surrounding areas as result of mechanical sweeping shall be made good at the Contractors own expense.

6.7.1.2 Mechanical air blowers may be used when conditions are dry and are appropriate, as defined in BS7370 part 2 (1994), as a substitute for sweeping. However, they **must not** be used:

- a) Between the hours of 18.00 and 07.30 inclusive
- b) In wet conditions
- c) In areas where they are likely to cause a nuisance (e.g. in close proximity to housing, in elderly persons dwelling gardens, or close to schools).

6.8 Removal of Fly-Tipped Rubbish

6.8.1 Large items of rubbish, such as discarded furniture, mattresses etc., which require two or more people to lift, and deposits of rubble, tarmac or similar, will be treated as fly-tipping. Upon discovering fly-tipping the Contractor will inform the AO at the earliest possible opportunity. When appropriate the AO will issue instructions to the Contractor to remove the fly-tipped material. Payment will be in accordance with schedule of rates. The Contractor will be required to submit an hourly rate for the rapid removal of tipped rubbish to a site approved by the AO. Following such instructions from the AO the Contractor is to ensure collection of the litter within 24 hours.

6.9 Clearance of Snow from Hard Surfaces.

6.9.1 When snow fall, heavy frost and ice occurs the contractor will be expected to suspend any other non-emergency works and make their staff, vehicles and plant available to the Council for snow clearance and to maintain a full complement of staff for this operation.

6.9.2 The AO shall identify priority snow and ice clearance areas. The contractor shall then immediately carry out snow clearance and gritting to all identified sites in order to maintain a safe and easy access, particularly for people with disabilities or who are elderly.

6.9.3 Immediately after clearance of snow, or during freezing conditions leading to the formation of ice on paths, steps and ramps, apply an application of rock salt and grit at a sufficient rate to prevent re-freezing and to provide satisfactory grip underfoot for pedestrians.

6.9.4 Take care during the application of salt and grit to avoid damage to grassed areas, trees and shrubs.

6.9.5 Supply all necessary salt and grit, maintaining an emergency supply throughout the winter period from the beginning of November through to the end of March. Make all arrangements for loading and transport to site of the material and return any surplus to storage.

SECTION 7

AQUATIC MAINTENANCE

7.0 AQUATIC AREAS

7.1 General

7.1.1 The need for minimum disturbance

7.1.2 Aquatic habitats are generally rich in wildlife interest, supporting a range of specialised plants and animals, whose continued survival depends upon the maintenance of the correct conditions in and around the water. The specifications set out under this category are intended to achieve and sustain such conditions.

7.1.3 Many aquatic plants and especially animals are very sensitive even to small scale or temporary changes in their habitat. When carrying out maintenance operations in aquatic areas therefore, disturbance to the habitat will be carried out as sensitively as possible and cause the minimum disruption. In this respect, the timing of maintenance operations is crucial and operations will only be carried out during the specified periods.

7.1.4 All works shall be carried out in accordance with BS7370:Section 5 1998.

7.2 Rubbish Removal

7.2.1 Unfortunately aquatic areas usually attract rubbish. The accumulation of rubbish in such areas is not only unsightly but is potentially a pollution hazard, particularly where chemical containers are dumped. For these reasons it is essential that rubbish is removed on a regular basis. Where there is evidence of pollution of the water this will be reported immediately to the AO.

7.3 Maintenance of Artificially Lined Ponds

7.3.1 Prior to any specific maintenance operations on a pond, the Contractor will consult the AO as to whether the pond is artificially lined or not. If this information is not readily available, the Contractor will assume that the pond does have an artificial liner and will carry his maintenance responsibilities accordingly.

7.3.2 The most common artificial liner contains of a butyl sheet sandwiched between protective layers of fibrous matting. If this membrane is cut the pond water levels will fall and in extreme cases the pond will dry up completely. It is essential therefore; that no sharp or jagged tools are used in the maintenance of artificially lined ponds. Clearly, mechanical excavators will never be used in the maintenance of such ponds.

7.3.3 The Contractor will monitor water levels in artificially lined ponds in case they have been breached accidentally or through an act of vandalism. If water levels are consistently low even after topping up, this will be immediately reported to the AO. Similarly if any sharp object is found

inserted in a lined pond (e.g. a tree stake) this will be immediately reported to the AO.

7.4 Safety

7.4.1 Working in or near water presents special dangers which must be taken into account before works are organised and implemented, whilst in general most aquatic areas to which the following specifications relate are fairly shallow, it would nevertheless be advisable to ensure that anyone working in or near water is able to swim. Suitable footwear will always be worn, i.e. waders or wellington boots depending on the task. Remember that wet surfaces are slippery and will be treated with great care and the soles of footwear will provide good grip. Never wade into water without testing the depth with a wading stick (this must be a blunt stick in artificially lined ponds) and continue to test the depth at each move. Although the base may look solid, it could be a deep deposit of silt. In some cases, it may be necessary to lower water levels temporarily with a pump before carrying out maintenance operations. It is advisable that at least two people will work together at all times and that one person will remain on the bank to provide assistance should the other get into difficulties in the water.

7.4.2 For a comprehensive list of safety precautions Contractors will refer to the 'Waterways and Wetlands' handbook published by the British Trust for Conservation Volunteers (BTCV), 2001 available from:-

36 St. Mary's Street
Wallingford
Oxfordshire
OX10 0EV

7.5 General Working Practices

7.5.1 The Contractor will refer to the above practical handbook before organising and carrying out works in or near water. This handbook will be used as a guide to indicate the standards required and the detailed methods that will be used in carrying out management works in aquatic areas. These will be read in addition to the detailed requirements of the attached specifications.

7.6 Litter Removal: Ponds/Streams

7.6.1 Floating and submerged debris and litter will be cleared by the Contractor by non-mechanical means, removed from site and disposed of as directed by the AO. Particular attention will be given to ensuring that the entrances to culverts are kept clear of rubbish. Care will be taken to ensure that rocks and stones in the stream channel are retained and not disturbed. These provide shelter and an anchorage for many aquatic creatures. Rubbish removed from the stream channel will be removed from the site on the same day, to prevent it being dumped or washed back

into the stream.

- 7.6.2 Litter clearance will be carried out by the Contractor during each month of the year. This operation will cause the least possible disturbance to aquatic plants and animals.

7.7 Waterweed Control: Ponds/Streams

- 7.7.1 When requested by the AO, the Contractor will clear specified vegetation from designated areas of the pond(s) and remove from site. Cleared vegetation to be left on site adjacent to pond for a minimum of 24 hours before removal from site. This is to allow time for aquatic animals caught in the vegetation to find their way back to the pond. This operation will be performed manually using nets, rakes, drag-chains or other approved methods. Under no circumstances will aquatic herbicides be used.

- 7.7.2 This operation will be carried out only in September/October.

7.8 Scrub Clearance: Ponds/Streams

- 7.8.1 When requested by the AO, designated shrubs and trees, overhanging or adjacent to the ponds(s) the Contractor will cut back as directed by the AO. This operation will be performed using bow-saws, pruning shears, mechanical trimmers, chain-saws or other approved mechanical means, to the satisfaction of the AO. All cut surfaces to be left clean with no tears or jagged ends and cut faces to be at an angle to the horizontal. Arisings will be removed from site or stacked on site as directed by the AO. This operation will be carried out during the winter months (November to March).

7.9 Sediment Excavation and Removal: Ponds

- 7.9.1 When requested by the AO, the Contractor will excavate designated areas of sediment, debris and encroaching vegetation from the ponds(s). On artificially lined ponds this operation must be carried out manually. In naturally based ponds, the operation can be performed using approved mechanical means.

- 7.9.2 This operation will only be undertaken during the winter months (November to February). Excavated material will either be spread or mounded adjacent to the pond or removed from the site as directed by AO. In either case excavated material is to be left adjacent to the pond for a minimum of 48 hours to enable overwintering aquatic animals to return to the water. This will also give time for the sediment to become substantially drained of water thus facilitating easier transport where it is to be removed from site. Where 7.3 has been specified, this scrub clearance operation will be undertaken first. Where it proves necessary to remove any trees or shrubs to enable excavation, the tree/shrubs to be removed must be approved and marked by the Authorised officer.

7.10 Bank Cutting

- 7.10.1 The grassed banks of streams, where indicated will be cut by the Contractor to 100mm, in height. All arisings are to be removed from site on the same day as cutting and disposed of as directed by the AO. Cut vegetation left on site may be blown or washed into the stream channel resulting in possible blockages leading to flooding.
- 7.10.2 The vegetation needing to be cut will be at a height of some 0.5 – 1 metre and as cuttings have to be removed immediately, a reciprocating blade mower is recommended. Care will be needed in cutting steeply sloping banks. In some situations a mechanical strimmer may be more appropriate.
- 7.10.3 Prior to cutting, all litter dumped or deposited along stream banks will be removed from site.
- 7.10.4 During cutting operations care will be taken to avoid damaging trees and shrubs. Unless otherwise specified all trees and shrubs will be assumed to be retained.

7.11 Litter Removal: Ditches

- 7.11.1 Litter and other rubbish will be removed by the Contractor from all ditches manually and taken from site on the same day and disposed of to the satisfaction of the AO. This operation will be carried out with extreme care between February and June, to minimise disturbance to amphibian life, which may be using the ditch habitat for breeding, or to get to breeding areas.

7.12 Sediment Excavation/Removal: Ditches

- 7.12.1 Where specified, the Contractor will excavate mechanically or manually, sediment and organic debris in an upstream direction (i.e. against the natural fall and flow of the ditch) using tractor and back end hoe with ditching bucket or hand tools. Excavated material is to be deposited on one bank in the ditch only, to be designated by the AO. Care will be taken to remove only that vegetation which is impeding the drainage function of the ditch. This can be achieved by excavating from within one side of the ditch only leaving the other side undisturbed. This in turn may necessitate widening the ditch on the side to be excavated.
- 7.12.2 This operation will only be carried out during the winter months (November to February) and preferably during frosty weather and when the ground is solid so as to avoid damage to adjacent habitat by rutting from the wheels/tracks of the excavator. Care will be taken to ensure that any trees or shrubs adjacent to the ditch are not damaged during this operation. Where it proves necessary to remove any trees or shrubs to enable excavation, the trees/shrubs to be removed must be approved and marked by the AO.

7.12.3 Sediment excavated from ditches is to be removed from site. Excavated material will be left on the ditch bank for a minimum of 48 hours before removal so that overwintering aquatic creatures can find their way back to the ditch. Excavated material will be removed from site to an agreed by AO.

7.13 Maintaining Water Levels

7.13.1 During the summer months, water loss from ponds by evaporation often exceeds input from rainfall and run-off. Under these circumstances water levels may fall critically low and in extreme cases may dry up altogether. This is particularly true for artificial ponds. During the peak summer months therefore, water levels in ponds will be monitored and when necessary topped-up from a convenient freshwater supply (e.g. from a standpipe). Where there is no convenient supply, a water bowser will be supplied and used by the contractor.

SECTION 8

**ARBORICULTURAL
OPERATIONS**

8.0 ARBORICULTURAL OPERATIONS

8.1. General Conditions

- 8.1.1 The Contractor will adhere to all clauses within this section when carrying out arboricultural operations as specified in Section 2.
- 8.1.2 All arboricultural operations carried out within Cherwell District will be carried out in accordance with BS 3998:2010 recommendations for tree work and any future amendments to BS 3998.
- 8.1.3 When carrying out arboricultural operations any defects or potential hazards in connection with trees the Contractor will report them immediately to the AO.
- 8.1.4 All pruning operations will take into account the natural and aesthetic appearance of the tree.
- 8.1.5 All pruning cuts will be undertaken in accordance with British Standards 3998:2010.

8.2 Employment

- 8.2.1 The Contractor will at all times during the Contract period employ sufficient persons of sufficient arboricultural qualifications and associated competencies (including the methods and techniques required by the hazards likely to be encountered and methods of preventing accidents) for the proper performance of the Services.
- 8.2.2 A minimum of 3 persons should be employed in the arboricultural unit in the event of an accident there will be at least one operative qualified to render first aid. Only people who are qualified, physically fit and competent should undertake work in trees or work with chainsaws. Work shall not be undertaken by persons under the influence of alcohol, or non-prescription drugs.
- 8.2.3 When a chainsaw is to be used the legs, feet and hands of the operator will be protected with chain-arresting materials e.g. ballistic nylon. Complying with British Standards BS EN 381. Eye and ear protection should be worn by chainsaw operators. ALL chainsaw operators should hold certificates of competence for use on the ground and operation of chain saws from ropes and harness up trees. All arboricultural ground staff must possess CS30, 31 & 32 with at least two arboricultural operatives in possession of CS38 (Aerial Rescue). All climbing operatives are to possess CS38, 40 and 41. Copies of these certificates must be made available to the AO prior to the start of the contract; in addition two members of each work gang should be trained in aerial rescue technique. Evidence of such training will also be required.
- 8.2.4 Any persons working in trees should wear a safety helmet complying with British Standards 4423 1970. Persons working on the ground beneath trees should wear appropriate reflective clothing, a helmet complying with

British Standards 5240. Attention is also drawn to the protection of Eyes and Ears.

8.3 First Aid

- 8.3.1 All members of every arboricultural unit should be a trained and competent first aider. An appropriate first aid kit should be carried at all times, inspected and maintained on a regular basis by the arboricultural supervisor

8.4 Safety in Tree Works

- 8.4.1 Because of the inherent dangers of tree work it is essential that adequate safety precautions are taken. There are 4 elements of risk:

The arboricultural operatives (climber and groundsmen)
The general public in the vicinity of the operations
Property and equipment
Traffic

8.5 Risk Assessments.

- 8.5.1 The Contractor will undertake a written Risk Assessment for all arboricultural operations. This will be carried out prior to work commencing. The outcome of such assessments should be taken into account in the working procedures employed on site.

8.6 Identification

- 8.6.1 Trees specified to receive work will be identified by house numbers where applicable, or by some other easily identifiable landmark, e.g. next to garden shed or adjacent to highway lamp post No 3, other trees will be identified on survey plans provided with the schedule of works. The Contractor will exercise great care to ensure that only the denoted trees are worked on. Should there be any doubt whatsoever, the Contractor will seek clarification from the AO before proceeding.

8.7 Enquiries

- 8.7.1 The Contractor is not to discuss details of the operations with any unauthorised persons. Any member of the public making enquires to the Contractor regarding any aspect of work being undertaken will be politely referred to the AO.

8.8 Working Practise

- 8.8.1 If work is not completed by the end of a working day the contractor will leave the site in a clean, tidy and safe condition. No arisings are to be left on site without prior consent from the AO.

8.9 Emergency Work

- 8.9.1 The contractor will have a system in place for responding to requests to carrying out tree works 24 hrs a day 7 days a week. Work will commence on site within two hours of a verbal order being issued by the AO.
- 8.9.2 The Contractor will provide the AO with a list of staff names and contact telephone numbers, to enable the AO and his representative or the emergency services to notify the need for attendance on site.
- 8.9.3 The Contractor must maintain and administer its own system for responding to individual emergency calls. Such a system must record details of tree sizes, extent of damage, location of tree(s), time spent on site and operatives present.
- 8.9.4 Emergency works will be paid in accordance with the appropriate rates listed in the schedule.

8.10 Disposal of Materials

- 8.10.1 All arisings, unless otherwise stated by the AO, are to be chipped on site and taken to a recycling centre approved by the AO.
- 8.10.2 Any material that cannot be chipped will become the responsibility of the Contractor to dispose of in an appropriate manner approved of by the AO.
- 8.10.3 Trees will fall into four categories:
- a) Small 100mm to 300mm Diameter
 - b) Medium 301mm – 600mm
 - c) Large 601mm – 900mm
 - d) Extra Large 901mm and over
- 8.10.4 The size of trees for the purpose of pricing will be determined by the diameter of the trunk measured at 1.5 meters. For all multi-stemmed or co-dominant trees, the size of the tree for the purpose of pricing will be determined by the diameter of the trunk measured at the narrowest point below the main union(s).

8.11 Tree Felling

- 8.11.1 Trees will be felled, using sound arboricultural techniques and equipment suitable for the work.
- 8.11.2 All trees to be felled will be identified by the AO.
- 8.11.3 The trees will be completely removed to ground level, unless otherwise stated by the AO.

8.12 Coppicing

- 8.12.1 Coppicing means that the contractor will remove all the stem or stems down to approximately 15cm above ground. In the case of old coppice care should be taken to avoid cutting below the previous coppice point. No chemicals should be applied to the cut stump.

8.13 Tree Stump Removal – Grass Areas

- 8.13.1 Where stump removal is specified, stumps will be ground down or removed to a minimum of 200mm below ground level; all Chipping's will be removed from the site.
- 8.13.2 Any buttress or surface roots, or suckers arising from, or near, the base of the main trunk, will be included and removed as part of the stump removal operation.
- 8.13.3 All stump removal operations must be carried out within 24 hours of felling a tree, unless specified by the AO.
- 8.13.4 Where stumps are removed, the excavated area must be backfilled, firmed and made level with good quality topsoil complying with British Standards. 3882. Unless otherwise specified grass seed will be applied in accordance with British Standards 4428:1989

8.14 Tree Stump Removal – Hard Surfaces

- 8.14.1 Where stump removal is specified, stumps will be ground down or removed to a minimum of 200mm below ground level; all chippings will be removed from the site.
- 8.14.2 Any buttress or surface roots, or suckers arising from, or near, the base of the main trunk, will be included and removed as part of the stump removal operation.
- 8.14.3 All stump removal operations must be carried out within 24 hours of felling a tree, unless specified by the AO.
- 8.14.4 Where stumps are removed, the excavated area must be backfilled with Type 1 Stone and compacted to within 25mm of the surrounding level and topped with tarmacadam to leave a flat even finish.

8.15 Stump Killing

- 8.15.1 Where stumps are to be killed, appropriate chemicals should be applied to stumps as soon after felling as possible. Solutions or crystals of the chemical should be applied to the cut stump surface. The appropriate chemical will be applied to a cut, created with a chainsaw, and located around the circumference of the stump adjacent to the cambium layer, and the bark. Any regrowth from a treated stump will be removed and treated at the expense of the Contractor.
- 8.15.2 All chemicals should be used strictly in accordance with manufacturer's recommendations. Operators should hold a certificate of competence for the use of pesticides; copies of these certificates must be made available to the AO, prior to the start of the contract.

8.16 Climbing Inspections

- 8.16.1 The contractor will arrange for a climbing inspection of the tree (or trees) to be carried out by a suitably qualified and competent Arborist who will provide a written report to the AO. The report will be provided in an agreed format and will include such details as the identification of the tree(s) species concerned and accurate assessments of any noted defects.

8.17 Ivy Cutting

- 8.17.1 This operation will be specified where it is not necessary to remove all the ivy but to prevent the continued growth a section of 900mm in height from the base shall be cleared all the way round the trunk. The contractor shall use only non-mechanical tools for this operation.

8.18 Ivy Removal

- 8.18.1 This operation will completely remove all Ivy from the tree. The contractor shall use only non-mechanical tools for this operation.

8.19 Formative Pruning

- 8.19.1 The Contractor will carry out corrective and formative pruning to remove competing leaders and undesirable branch structures in order to produce trees of the desired form. Formative pruning will be undertaken in accordance with BS3998. Such a pruning technique will influence the eventual shape and form of the tree in maturity. On completion of this work the tree will exhibit a characteristic shape and will have a retained, developing branch structure which foreseeably provides adequate future clearances from adjacent features and structures.

8.20 Removal of Dead Wood

8.20.1 Unless otherwise specified, this refers to the removal of all dead, diseased and damaged branches, wood and broken stumps, throughout the Crown.

8.21 Initial Pollarding

8.21.1 Pollarding is to be undertaken in accordance with BS3998. Pollarding is a traditional management technique used to regulate the size and shape of the tree to develop the branch framework with cyclic pruning resulting in a “pollarding head”. This technique is only suitable on certain species e.g. Tilia, Platanus, Salix. Pollarding should not be confused with the unacceptable practice of topping.

8.21.2 The Contractor will reduce the whole crown to points, determined by the AO, on the forks off the main stem.

8.22 Re-Pollarding

8.22.1 The Contractor will remove the whole crown by 100% back to previous pollard points.

8.23 Removal of Epicormic Growth

8.23.1 The Contractor will remove all sucker growth and/or epicormic shoots from the root, buttresses and bole up to the main fork. All cuts should be made level with the source of the stem or root. Epicormic removal operations will be carried out using only non-mechanical tools.

8.24 Crown Lifting

8.24.1 The Contractor will remove complete limbs and/or small branches as appropriate to increase the clearance between ground level and the lower branches, maintaining a balanced well-shaped crown, conducive to the future growth and development of the tree, in keeping with the species and varieties concerned.

8.25 Crown Thin

8.25.1 The Contractor will initially remove all dead, defective, damaged or diseased wood. The Contractor will remove a specified percentage of secondary and small live branch growth throughout the crown, to produce an even density of foliage around a well spaced and balanced branch structure as far as possible.

8.26 Crown Reduction

- 8.26.1 The Contractor will reduce the height and spread of specified trees by cutting each branch back to a side bud or branch to leave a flowing line without stumps. Following this work the trees must exhibit well-balanced and even crown characteristic of the species or variety concerned. To avoid ambiguity, the extent of reduction will be specified in metres e.g. 1.0m, 2.0m, 3.0 and 4.0m.

8.27 Reduce from overhead obstruction

- 8.27.1 Means that the contractor will reduce branches away from a specified overhead obstructions e.g. a roof, phone wires, electricity wires. Where at all possible cutting back to a suitable side bud or branch.

8.28 Restoration/storm damage/fallen branches

- 8.28.1 This consists of the careful treatment of otherwise healthy trees, which have been damaged by gales, vandalism or vehicle impact. Work will include the removal of damaged and fallen branches, thinning of new shoots on sound wood and the encouragement of new leading shoots where appropriate in order to restore the tree's natural shape.

8.29 Branch Removal

- 8.29.1 The Contractor will remove specific limbs back to source as specified by the AO.

8.30 Root Pruning

- 8.30.1 This will only be carried out where roots of individual trees have been damaged, are raising footways or where root action has been implicated in an insurance claim. Individual trees to be root pruned will be agreed on site with the AO in each case. Exploratory excavations will be carefully undertaken using hand tools only. Final cuts will be made cleanly into sound tissue. Other operations, extent of work and individual rates will be agreed with the AO. In situations where retained roots are to be temporarily exposed for a prolonged period the Contractor will ensure that all retained, exposed roots above 25mm in diameter are carefully wrapped in hessian to avoid moisture loss and drying.

8.31 Tree Planting - Standard & Extra Heavy Standard

- 8.31.1 The Contractor will be familiar with BS8545 'Tree from nursery to Independence in the Landscape – Recommendations'. All planting operations will be undertaken in accordance with said document.
- 8.31.2 Unless alternative dimensions have been approved by the AO, each pit will be three times the size of the root ball/container to accommodate the

entire root without restriction, in all cases the bottom and sides of the pit needs to be broken up with a fork. The contractor should allow in his rates to include a perforated watering tube, approved by the AO, to be installed in every tree pit.

8.31.3 All trees {provided by the Local Authority} shall be positioned in the planting pit to their natural depth, so that the nursery root collar is level with the surface of the ground. Any broken or damaged roots or shoots shall be pruned to sound wood. The stake and the tree should be presented in the planting pit before planting commences to ensure that they both fit within the tree pit. The tree shall be placed in position parallel to the stake to provide the most satisfactory appearance whichever staking method is specified. The roots shall be spread out ready for the back-fill mixture (in the case of bare root stock). The tree roots will be covered by the planting mixture and the tree shaken gently so that all the spaces around the roots are filled. The remaining back-fill will be added in layers of 150mm deep. At each stage it should be firmly consolidated to eliminate air pockets under and around the root system. Any surplus backfill to be removed from site and disposed of. Following planting any settlement that occurs shall be made up at the contractor's expense. On occasion underground guying (supplied by the Local Authority) will be specified. The kits are to be installed in accordance with the manufacturer's instructions.

8.31.4 Where specified by the AO, a galvanised metal cage (supplied by the Local Authority) will be installed by the contractor and secured to the ground with at least 3 pins in such a way that no part of the tree will rub on the cage.

8.31.5 If deemed necessary the contractor will install strimmer guards/watering bags (to be supplied by the Local Authority.) at the base of the trees.

8.32 Tree Planting - Feathered

8.32.1 The contractor must excavate a pit at least 75mm greater than the depth and width of the roots and be at least 300mm square and deep. The stake and the tree should be presented in the planting pit before planting commences to ensure that they both fit within the tree pit. The tree shall be placed in position parallel to the stake to provide the most satisfactory appearance. The stake must be positioned on the leeward side of the tree. Side shoots that impede the effective attachment of the stake must be removed cleanly with appropriate tools.

8.33 Tree Planting – Whips

8.33.1 The Contractor will plant whips (provided by Cherwell District Council) using a straight backed planting spade, the slit must be made in the ground to the full depth of the spade and a second slit made joining the first forming a L shape. The soil will then be lifted by levering the spade backwards; the tree shall be inserted into the notch produced at greater depth than required. The spade must then be removed from the soil and

the tree pulled upwards (without stripping the roots) to bring it to the correct nursery collar level. The tree will then be firmed into the ground. The trees will be supported by canes and protected by planting tubes (supplied by the Local Authority).

8.34 Single Stake Method

- 8.34.1 The stakes should be 2400 mm long (2000mm in the case of feathered trees) by 60mm diameter positioned upright, normally on the windward side of the tree. A minimum of 600mm of the stake shall be driven into undisturbed ground. The stake shall be driven into the ground before planting commences.
- 8.34.2 All stakes supplied for tree planting shall be tanalised. They should be round free of noticeable distortions, pointed at one end and of uniform thickness with a minimum of 60mm and a maximum of 75mm in diameter.
- 8.34.3 Each tree tie will include a rubber resilience spacer to prevent chaffing between the tree and stake. Where necessary an additional spacer shall be fitted if the tree has a kinked stem
- 8.34.4 All tree ties will be of an expandable rubber type, approved by the AO. All ties to be secured with a galvanised nail.

8.35 Double Stakes

- 8.35.1 The stakes should be 2400 mm long by 60mm diameter positioned upright. The Stakes will be 2400mm long and set upright, normally on the windward side of the tree. A minimum of 600mm of the stake shall be driven into undisturbed ground. The stakes should be positioned outside of the root ball of the tree. A cross bar of wood will be attached between the stakes, or loops of rubber and spacers attached to each stake as specified by the AO. The stake shall be driven into the ground before planting commences.
- 8.35.2 All stakes supplied for tree planting shall be tanalised. They should be round free of noticeable distortions, pointed at one end and of uniform thickness with a minimum of 60mm and a maximum of 75mm in diameter.
- 8.35.3 Rubber spacers and tie will be attached to the cross bar to hold the tree in place and prevent chaffing of the trees bark. Where necessary an additional spacer shall be fitted if the tree has a kinked stem
- 8.35.4 All tree ties will be of an expandable rubber type, approved by the AO. All ties to be secured with a galvanised nail.

8.36 Removal stakes ties, guards and watering bags

- 8.36.1 If fitted means that the Contractor will completely remove tree stakes, ties, guards and watering bags, and will fill the resultant holes with good quality topsoil lightly compacted. Disposal of the trees/stakes and guards will be the responsibility of the Contractor. If cages and watering bags are fit for

reuse these should be removed and kept either in the Contractors yard or taken to the Local Authorities lock up for re-use at a later date.

8.37 Re-tie – Single/Double Staked Tree

- 8.37.1 The Contractor shall supply and fit replacement tie/ties to a young tree, which has come adrift from its stake.

8.38 Removal of Vandalised / Failed Standard Tree

- 8.38.1 The contractor will remove all parts of the tree, stake, tie and guard and backfill any holes with suitable material and lightly compact.

8.39 Mulch

- 8.39.1 The contractor will apply a layer of fresh mulch around the base of the tree to a depth of 100 mm to a distance of 1m away from the trunk of the tree after weeding, and removing any rubbish, around the base of the tree. The circular mulch ring will be edged and clearly defined.

8.40 Irrigation

- 8.40.1 The Contractor will water trees to field capacity as required to achieve good establishment and maintain healthy growth. In addition, if fitted, watering bags should be filled to full capacity.

8.41 Young Tree Maintenance (YTM)

8.41.1 The AO will issue a monthly Tree Work Order between April to October (inclusive) The Contractor will visit all trees specified within the Tree Work Order. By the end of the third working week of the month all YTM operations will be complete. During the visit the contractor will ensure that:

- a) the tree pit is kept weed and litter free.
- b) the circular mulch base is consistently maintained at 100mm in depth and 2.0m in diameter, edged and clearly defined.
- c) any dead, damaged or diseased branches are removed with all pruning undertaken in accordance with BS3998
- d) the cage & pins / underground guys / stakes are upright, level, checked for stability and repaired as necessary. The Contractor is to notify the AO of any stakes or cages that require replacing.
- e) the ties are checked for looseness / tightness and adjusted or replaced as necessary.
- f) the ties are preventing the tree rubbing against the supporting cages / stakes.

8.41.2 In addition to the above, during the months of April to October inclusive, each tree receives irrigation to field capacity on two occasions each month. In addition, any watering bags fitted will be filled to full capacity. Unless instructed otherwise by the AO, the contractor will programme the timing of each visit for the first and third week of each month.

8.41.3 The contractor is to immediately notify the AO of any tree, stake, cage, tie included within the schedule, which appears to be in a poor condition, or has suffered from recent damage or vandalism.

8.41.4 Any trees specified in the schedule to receive young tree maintenance which either fail or appear to be in poor health or decline for any reason other than vandalism will be removed and replaced during the first available planting season at the contractors own expense. Any replacements must be purchased from an agreed supplier and be of the same size and quality as originally supplied by the Council unless otherwise approved by the AO.

8.42 Normal Day Rate

8.42.1 The Contractor will provide a three man crew, vehicle and machinery to perform arboricultural operations between the hours of 07:30 and 17:30 Monday to Friday.

8.43 Out of Hours Rate

8.43.1 The Contractor will provide a three-man crew, vehicle and machinery to perform arboricultural operations out of hours as requested by the AO.

SECTION 9
LANDSCAPE DEVELOPMENT
WORKS

9.0 TURFING AND GRASS SEEDING

9.1 General Conditions

- 9.1.1 All work specified shall be carried out in accordance with B.S. 4428 – 1989 General Landscape Operations, Section 6. Turf shall be in accordance with B.S. 3969 -1998+A1:2013 Recommendations for Turf for General Landscape Purposes.
- 9.1.2 Turf should not, unless otherwise instructed by the AO, contain weed grasses such as Annual Meadow Grass, Cocksfoot, Creeping Soft Grass, Meadow Barley, Yorkshire Fog or Perennial Weeds.
- 9.1.3 The soil of the turf should be medium loam and free from stones over 15mm gauge. Soil may vary from heavy to light loam but should be consistent in character for the whole of each requirement.
- 9.1.4 Turf should be of a rectangular shape and of uniform thickness. Unless otherwise agreed, they should have a minimum thickness of 25mm.
- 9.1.5 The grass should be close texture, of even density and green in colour. The turf should be sufficiently fibrous for turf to hold together when handled, but excess mat or fibre is undesirable. The grass should have been closely mown. It should not be affected by any pests or diseases. The standard and quality of turf required for the job shall be agreed with the AO and paid for in accordance with the Schedule of Rates. (See Appendix in the schedules)
- 9.1.6 Turf should not be stacked for longer than 3days unless agreed with the AO. When turfing large areas supplies of turf should be delivered at appropriate intervals throughout the work, so as to avoid stacking for long periods. Turf unloaded by hand should not be stacked higher than 1 metre and appropriate measures should be taken to prevent any inconvenience or danger to the public.

9.2 Establishment Period - Seeding and Turfing

- 9.2.1 The Contractor will establish a good sward of the specified mixture free from pernicious weeds. During the period of establishment all newly grassed areas shall be cut twice, each cut reducing the growth height by half. The first and second cuts shall take place when the growth height reaches 75mm. Cutting must be undertaken using an approved mowing machine when conditions are not excessively wet or damp. The Contractor must remove all stones and other deleterious material from site, prior to grass cutting operations.
- 9.2.2 Thereafter the areas shall be treated as per their appropriate specification i.e., Sports turf, amenity turf etc., and incorporated into regular maintenance schedules.

9.3 Initial Ground Preparation for Turf or Seed

- 9.3.1 The Contractor will be supplied with site plans where appropriate for the area, or the area for planting may be marked on the ground by the AO. Any of the following works may be necessary according to the requirements of the individual site.
- 9.3.2 Cut down herbage by strimming or flailing to 50mm above ground level and remove from site for proper disposal.
- 9.3.3 Apply translocated herbicide 20 days prior to planting preparation.
- 9.3.4 Apply contact herbicide 10 days prior to planting preparation.
- 9.3.5 The topsoil shall be cultivated to a depth of 125mm avoiding the disturbance of the subsoil by mechanical means or by hand cultivation on banks or confined areas as approved by the AO. All stones, weeds, roots and other deleterious materials which are brought to the surface shall be removed from site and disposed of.
- 9.3.6 Soil must be cultivated to a friable tilth and include treading, firming and raking to a level soil surface by methods to be approved by the AO. Where applicable the degree of accuracy in determining a level profile shall be determined by boning rods and/or site levels after firming in accordance with B.S. 4428:1989.
- 9.3.7 With the exception of new wildflower areas, unless otherwise specified all areas to be seeded or turfed will have a base dressing of an approved granular pre-seeding fertiliser in the ratio of 10:12:15 (N.P.K.), applied at the rate of 40 grams per square metre. The dressing shall be applied by means of approved fertiliser distributor machinery or by hand in small or confined areas, and then lightly worked into the surface with a harrow or rake.
- 9.3.8 Operations must not be carried out during periods of inclement weather, i.e., when the ground is wet, frosty or waterlogged. Timing of operations will generally be confined to the Spring and Autumn periods or as instructed by the AO in accordance with specifications.

9.4 Turf Laying

- 9.4.1 The Contractor shall only lay turf when weather and soil conditions are suitable, normally between October - April. Turf should not be laid in exceptionally dry or frosty conditions.
- 9.4.2 Turf should not be laid until the top soiling in whole or in part has been satisfactorily completed by being brought to an even tilth and firmness. Turf from the stack should be wheeled across site on planks laid closely side by side. Adequate timber planks should be used to support workmen and barrows, and provide access. Turf should be laid on the prepared soil

bed and firmed into position in consecutive rows with broken joints (as in stretcher bond brickwork), closely butted and to the correct levels.

- 9.4.3 The turf should be laid off planks working over turf previously laid. Where necessary, the turf should be lightly and evenly firmed with wooden beaters, the bottom of the beaters being frequently scraped clean of accumulated soil or mud. Where specified by the AO, a dressing of finely sifted topsoil (complying with B.S. 3882:2015 "Specifications for Topsoil") or fine peat should be applied and well brushed into joints. Any inequalities in finished levels owing to variation in turf thickness or uneven consolidation of soil should be adjusted by raking and/or by packing fine soil under the turf. A roller should not normally be used. The finished level of the turf should conform to the levels specified, allowing for final settlement, normally 10mm proud of any surrounding hard surface area. Turf edges and margins should be laid with whole turves.

9.5 Turfing on Banks Exceeding 30 Degrees

- 9.5.1 Stability and retention of soil and seed may be a problem when turfing banks with a gradient of/or exceeding 30 degrees. Turfing should not be undertaken until the bank has been satisfactorily graded and stabilised.
- 9.5.2 Turf should comply with BS: 3969 +A1:2013. It is important that turves to be used on banks should be sufficiently fibrous to withstand handling conditions.
- 9.5.3 Turfing on banks will normally be carried out during the Autumn and early winter period. Spring operations should be avoided due to the harmful effects of prolonged dry weather and drying winds.
- 9.5.4 Sufficient timber planks and ladders should be used to ensure safe and efficient working. The turf may be laid diagonally or horizontally. They should be laid to stretch bond pattern, butt-jointed, firmed and secured by stout biodegradable pegs 200mm in length. Finely sifted topsoil should be worked well into the joints. On very steep banks or where stability is a major problem, netting should be laid over the turf and pegged down. Where necessary the wire netting should be reinforced at the top and bottom immediately, with stout wire cable threaded through the mesh.

9.6 Irrigation

- 9.6.1 Where irrigation is required to ensure establishment and healthy growth the Contractor will use either sprinklers or oscillating sprays so as not to wash soil out of the joints. If shrinkage occurs and the joints open, fine topsoil or compost must be brushed in and well watered. Where necessary, the responsibility for the use of standpipes and liaising with the Local Water Authority shall lie with the contractor.

9.7 Grass Seeding

9.7.1 The Contractor will carry out work in this specification in accordance with B.S. 4428:1989 General Landscape Operations and ensuring that the correct grass seed mix is used in the right situation.

9.7.2 GRASS SEED MIXTURES

MIXTURE 1	USE
10% Small Leaved Timothy	High Profile Amenity Areas
45% Smooth Stalked Meadow Grass	
25% Chewings Fescue	
15% Creeping Red Fescue	
5% Browntop Bent	

MIXTURE 2	USE
20% Perennial Rye Grass	General Amenity Areas
15% Small Leaved Timothy	
40% Smooth Stalked Meadow Grass	
20% Blend of Chewings	
5% Fescue & Creeping Red Fescue	

MIXTURE 3	USE
10% 4Turf Tetraploid Ryegrass	Football Pitches Rugby Pitches Athletics Facility
30% Perennial Ryegrass Variety 1	
30% Perennial Ryegrass Variety 2	
30% Strong Creeping Red Fescue	

9.7.3 The Authorised Officer must approve any deviation from the above recommendation.

MIXTURE 4
Meadow Mix (To be agreed with AO dependent on location and type of Meadow)

9.7.4 Mixtures for conservation areas and/or areas identified for rural management techniques must be approved by the AO.

9.8 Final Cultivation

- 9.8.1 Prior to seeding, the area shall be brought to a fine tilth by approved mechanical means or by hand raking, and if necessary regarding of the surface will be carried out to conform to the specified finished level. The Contractor will remove all stones over 30mm in diameter. The final level will be 10mm above any adjacent hard surface area.
- 9.8.2 After cultivation has been carried out, the area will be sown with grass seed specified by the AO and be of an appropriate mix for the site. Seed will be sown at the rate of 35 grams per square metre by either hand or mechanical means, ensuring even distribution.
- 9.8.3 Grass seed shall be stored off the ground in a clean, dry place free from vermin. The Contractor will be required to submit certificates for all grass seed stating the seed source, mixture percentage, percentage purity and percentage germination.
- 9.8.4 The AO will be entitled to take samples of the grass seed mixture for testing. The seed mixture must meet the requirements for germination and purity laid down in B.S. 4428:1989.
- 9.8.5 Following an even distribution of seed, the Contractor will carry out a light raking or harrowing of the area and ensuring a consolidation of seed with soil by use of a light roller.
- 9.8.6 All reasonable precautions shall be taken to ensure that pedestrians and other traffic do not cross the area during cultivation until the grass is established.
- 9.8.7 All grassed areas will only be accepted by the AO for practical completion when germination has proved satisfactory and all weeds and deleterious matter have been removed.
- 9.8.8 Where, in the opinion of the AO, excessive subsidence of seeded areas arise, such subsidence must be rectified at the Contractor's expense. All depressions to be made good with quality topsoil, carrying out the necessary cultivations, fertilising and seeding as previously specified and as required by the AO. The Contractor will allow for re-seeding any bare patches with previously specified mixture. In instances where establishment of re-seeding is unlikely to be satisfactory, the AO may require the area to be turfed at the Contractor's own expense.

9.9 NEW PLANTING SCHEMES

9.9.1 General

- 9.9.2 The majority of new landscape works shall be carried out during the period October to March unless instructed otherwise by the AO. The quantity of work required may vary from year to year but will normally comprise of a

number of the operations listed below, tailored to meet the requirements of the individual project.

9.9.3 The Contractor shall be familiar with BS 4428:1989 - Code of Practice for general landscape operations and shall work to this as a minimum standard.

9.9.4 The Contractor shall submit a unit rate for each of the operations outlined in the schedules and his rates should allow for the following:

- Supplying all the necessary materials, excluding plant material;
- Transport to and from the site of all materials;
- The interruption of works due to unfavourable ground conditions, such as waterlogging, frost etc.;
- The reinstatement of surrounding areas where damage has been caused by the Contractor's operations.
- The removal of all surplus materials from site and the cleansing of any adjacent hard surface areas.

9.10 Preparatory Works

9.10.1 The Contractor will be supplied with site plans where appropriate for the area, or the area for planting may be marked on the ground by the AO. Any of the following works may be necessary according to the requirements of the individual site.

9.10.2 Cut down herbage by strimming or flailing to 50mm above ground level and remove from site for proper disposal.

9.10.3 Apply translocated herbicide 20 days prior to planting preparation.

9.10.4 Apply contact herbicide 10 days prior to planting preparation.

9.10.5 Supply and spread topsoil as per BS 3882 Premium Grade.

9.10.6 Supply and spread topsoil as per BS 3882 General Purpose Grade.

9.10.7 Supply and spread topsoil as per BS 3882 Economy Grade.

9.10.8 Supply and spread spent well-rotted farmyard manure to be specified by AO, to a depth of 75mm and incorporate it into the top 225mm of the soil surface.

9.10.9 Cultivate existing ground to a depth of 225mm removing all stones in excess of 50mm in diameter weeds and other deleterious material for proper disposal. Grade and rake level taking out any deviations in the finished level in preparation for planting.

- 9.10.10 Supply and spread an approved pre-planting fertiliser across the whole of the area to be planted incorporating it into the top 225mm of the soil surface.

9.11 Planting

- 9.11.1 Unless otherwise specified all plant material shall be delivered by the AO to the contractors depot facilities. If the Contractor should be required to provide any plant material this should comply to a minimum standard of B.S. 3936-1:1992.
- 9.11.2 Care should be taken when transporting plant material to site to prevent any wind desecration to foliage and root systems. Any bare root plants shall remain covered until the actual moment of planting.
- 9.11.3 Plants shall be set out on site in a methodical manner, adhering to the plant centre spacings provided by the AO.
- 9.11.4 Planting pits should be excavated 150mm wider and deeper than the root spread. Polythene and other non-biodegradable containers should be removed and any damaged roots carefully pruned.
- 9.11.5 A pre-planting fertiliser should be incorporated into each individual planting pit backfill material. Plants should be positioned at the nursery level with due allowance for settlement. The planting pit should be backfilled to half its depth and firmed by treading, the remainder of the backfill then being incorporated and firmed.
- 9.11.6 The Contractor should allow in his rates for any formative pruning e.g. reducing native hedging plants, Cornus, Pyracantha, and Shrub Roses by 33% after planting and the removal of all traces of footprints from the soil surface, leaving it in a tidy level condition.
- 9.11.7 Plant herbaceous/shrub material in 1 to 3 litre pots.
- 9.11.8 Plant open ground shrubs in 5 to 20 litre pots.
- 9.11.9 Plant herbaceous/alpines/heathers.

9.12 Bulb Planting

- 9.12.1 Unless otherwise instructed by the AO, Spring flowering subjects will normally be planted during the period September-November.
- 9.12.2 Summer flowering subjects during March-April.
- 9.12.3 Autumn flowering subjects during July-August.

- 9.12.4 Unless otherwise indicated, all bulbs and corms will be supplied by the AO.
- 9.12.5 Species of bulbs shall be categorised as follows
- a) Bulbs less than 20mm in diameter e.g. Galanthus, Iris, Crocus, Chionodoxa;
 - b) Bulbs greater than 20mm but less than 40mm in diameter e.g. Dwarf Narcissus, "Thalia" etc.
 - c) Bulbs greater than 40mm in diameter e.g. Larger Narcissus, "Carlton" etc.
- 9.12.6 "Naturalise bulbs in grass" shall mean to disperse bulbs in a random manner across the area to be planted and carefully lifting the turf with a fork/spade and plant the bulbs as they fell 2.5 to 3 times their own depth. The area of the planting shall be lightly firmed after planting. The density of the planting should be as determined by the AO.
- 9.12.7 "Naturalise bulbs in borders" shall mean to plant as above, but not encroaching into existing plant material. All traces of footprints etc. to be removed after planting.

9.13 Plant Hedge Material

- 9.13.1 Strip and dispose of turf and surface vegetation from planting strip and thoroughly cultivate a strip 600mm wide and to a minimum depth of 450mm. Remove all stones and debris over 50mm. Incorporate approved planting compost at a rate of 20 litre per square metre and approved fertiliser at 50g per square metre. Cultivate and fork in well to the full depth of the planting strip. Hedging plants to be supplied by the AO shall be planted as directed in straight lines and to the mix as directed by the AO. At all times the plants and their roots shall be protected either in sacks or by heeling in to prevent the roots from drying or being frozen. For hedging types such as beech, hawthorn, hornbeam and mixed native hedging, the planting shall be in double rows planted staggered apart at 450mm centres and 450mm between rows. Plant to the depth as previously grown in the nursery and firm. Each plant to be protected with a plastic mesh vermin guard with cane. Immediately water the entire planting strip to field capacity and then apply bark mulch to a minimum depth of 75mm over the full width of the planting strip.

9.14 Prepare Ground and Plant Wild Flower Plugs

- 9.14.1 The Contractor will be supplied with site plans where appropriate for the area, or the area for planting may be marked on the ground by the AO. Any of the following works may be necessary according to the requirements of the individual site.

- 9.14.2 Cut down herbage by strimming or flailing to 50mm above ground level and remove from site for proper disposal.
- 9.14.3 Apply translocated herbicide 20 days prior to planting preparation.
- 9.14.4 Apply contact herbicide 10 days prior to planting preparation.
- 9.14.5 Strip and dispose of turf and surface vegetation from the planting area and thoroughly cultivate to bring topsoil to a fine tilth. Remove all stones and debris over 50mm. Wildflower plugs supplied by the AO shall be planted to the mix or planting plan as directed by the AO to an average density of 60 plants per square metre. Plant each plug with a trowel and gently firm. Immediately on completion water the entire planting area to field capacity.

9.15 Mulching

- 9.15.1 On receipt of instructions from the AO, the areas indicated shall be mulched to a depth of 50mm. The mulch should be spread evenly across the surface taking care not to bury any plant material. The AO will deliver the mulch to the Contractors depot the Contractor shall allow in his rates for transporting the material to site and spreading/m³.
- 9.15.2 Transport and spread medium ornamental conifer bark, 25mm-60mm.
- 9.15.3 Transport and spread wood chip mulch.
- 9.15.4 Transport and spread spent mushroom compost.
- 9.15.5 Transport and spread recycled green waste produced from contract arisings.

9.16 Supply and Erect Chestnut Fencing

- 9.16.1 Supply and erect chestnut pale fencing to BS 1722 Pt 4:1972 1200mm high cleft pale fencing, pales at 75mm spaces pointed at top on three lines of wire. Posts to be larch posts 1800mm by 100mm girth, driven vertically 600mm into firm ground at 3m centres. Secure each line wire to posts with 25mm galvanised staple nails. Over long lengths of fencing the line wires shall be tensioned and secured to 2320mm x 125mm x 125 mm straining posts and struts at 50m centres.

9.17 Supply and Install Stockproof Fencing

- 9.17.1 Supply and install stock proof fencing including straining, intermediate and strutting posts, 1m height galvanised sheep netting of a maximum mesh size of 150 x 150mm B8/80/15, one wire line (4mm (8 swg) galvanised) and a top barbed wire line (two strand 2.5mm (12.5 swg) galvanised four point). Straining posts with struts at the end of a run, corners or change of direction. Netting should be properly strained and stapled. Staples to be

placed on the top, third, fifth and bottom wires of the netting on each post. Staples shall be 40mm x 4mm galvanised wire. All wires to be re-tensionable. All work to be to BS 1722 and all wire to confirm to BS 4102/BS EN 10223.

9.18 Supply and Install galvanised 5 bar gate

- 9.18.1 Supply and install single galvanised 3.6m wide five bar gate to BS 5709:2006. To include tubular steel hanging and shutting posts with caps and all associated latches, fixings and bolts.

9.19 Set and Maintain Irrigation System

- 9.19.1 The only irrigation system is at Banbury Cross and comprises of the following components:

Netafim Aqua Pro electronic timer
Main line pipework – approx 50 LM
Flexible drip line – approx 150 LM
Sprinklers – 4 no.
Pipework for 3 no. floral hobby horse features
Various fixtures and fittings

- 9.19.2 The system detailed above will need to be installed, prior to the planting of the bedding, at the start of each summer season, on instruction by the AO. The contractor will be responsible for setting the timer at a frequency agreed with the AO.

- 9.19.3 The contractor will check for any failures throughout the season and report any such failings to the AO. At the end of the summer the system will need to be drained down, removed by the contractor and stored over winter at his own expense. During this period the contractor should inspect all parts removed and any requiring replacement must be reported to the AO.