

**Specification for
Riverside Improvements and Management
River Ock
Abingdon**

June 2005

Carried out by:
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Objectives

To enhance the bio-diversity of the river bank adjacent to the care home development site.

Once the sycamores have been removed, the banks will be largely open with occasional crack willow pollards and native shrubs including grey willow, hawthorn, elder and hazel. A more diverse natural flora and fauna will develop, which, with appropriate management, will reduce the occurrence of exotic species i.e. Himalayan balsam.

The installation of coir rolls and the establishment marginal vegetation along the water's edge will ensure the provision of a semi-natural river edge with minimal long-term management requirements.

It is important that all tree works take place outside bird nesting season (the nesting season lasts from mid-March to mid-July). Marginal planting should be carried out in April in appropriate water levels so as to ensure plant establishment, and to reduce the risk of erosion.

Future Management Objectives

1. Retain Elder bushes as these, in time, support abundant mosses and lichens, only occasional trimming required.
2. Retain all old tree stumps to provide deadwood habitat.
3. Buffer strip to be left unmanaged, i.e. no mowing.
4. Cyclic coppicing of grey willow, hawthorn and hazel of every 3 to 5 years with the objective of coppicing individual plants every 12-15 years to ensure habitat retention and repopulation.

SPECIAL REQUIREMENTS

Contract Labour, Staffing and Personnel

Only skilled labour will be used to carry out the operations and the work will be to recognised horticultural/arboricultural standards using current best practice. Staff will be qualified to the following minimum standards or similar:

- Operators; amenity horticulture NVQ Level 1.
- Skilled gardeners/arboriculturist and supervisors; amenity horticulture NVQ Level 2.
- Managers and above; amenity horticulture NVQ Levels 3 and 4.

The Contractor shall return with the tender a management structure chart, along with the CV of the proposed Contract Manager and on-site Supervisor.

Any dispute arising from these Conditions which cannot be so resolved will be deemed to be a dispute between the parties to the Contract, and will be dealt with under the Terms of the Contract accordingly.

Pesticides and Herbicides

All operations shall be carried out in a sustainable manner with due regard to the protection and conservation of the environment

Exceptionally, the Contractor is required to use pesticides to treat tree stumps and nettles. The Contractor will carry out these duties with skilled staff and to ensure that his staff apply only those pesticides and use only such methods of application for which they hold relevant certificates of competence.

The Contractor shall provide copies of the certificate of competence held by staff to the Supervising Officer for approval before commencing application.

The Contractor shall apply pesticides in strict accordance with the current legislation and codes of practice including:- Pesticides Regulations, 1986, the Food and Environmental Protection Act, 1985, the Control of Substances Hazardous to Health Regulations, 1999, and such relevant Codes of Practices that may be issued from time to time by the Department for Environment, Food & Rural Affairs (DEFRA). The Code of Good Agricultural Practice for the Protection of Water, Guidelines for the Use of Herbicides on Weeds in or Near Watercourses and Lakes.

The contract is advised the Environment Agency's consent is required before pesticides can be used adjacent to the River Ock.

Use of Chainsaws

The Contractor is required to carry out these duties with skilled staff and to ensure that his staff hold relevant certificates of competence.

The Contractor shall provide copies of the certificate of competence held by staff to the Supervising Officer for approval.

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Specification and schedule of work

Trees Felling

1. All trees to be felled are marked with yellow paint.
 - a. Obtain positive confirmation on site and fell to ground level all sycamore, hybrid black poplar and buddleia and remove arisings off site.
 - b. Treat stumps with glyphosate herbicide in accordance with manufacturers' recommendations.

Tree Pollarding and Pruning

2. Retained trees are marked with red/white barrier tape (and grey willows that could not be marked on the steep bank at the very western end of the site).
 - a. All crack willows, pollard at 2m height to restore a traditional appearance to the riverside landscape, remove arisings off site.
 - b. Remaining trees and shrubs, minimally trimmed back as required to permit access for locating coir rolls etc, otherwise, in the interest of conservation these trees are to be left intact (including deadwood) as far as practical.
 - c. Old tree stumps to be retained as deadwood habitat.

Site preparation

3. Remove (pull by hand) Himalayan balsam (before flowering as practical), removing all parts of the plants from site and dispose of off site appropriately so as to ensure re-colonisation of other land does not occur. Other alien species including buddleia also to be removed.

Riparian improvement

4. Supply and install chestnut stakes at 600mm centres and drive in to the river bed approximately 400-500mm with the top of the stakes set 50-70mm above summer water level; stakes to be set approximately 1300mm to 1500mm away from the edge of the bank in natural flowing lines as directed on site to leave at least 1000mm of margin between bank and coir roll.
5. Supply and install up to two rolls high, hazel, alder, birch or other approved wire bound faggots 400-500mm diameter and fix to stakes by use of wire. Securely fixed part-faggots may be used to adjust finish levels of coir rolls.
6. Supply and install coir rolls and secure to stake/faggots with wire and with the top of the coir rolls set approximately 100mm above summer water level.
7. Supply, install and secure biodegradable jute/coir fibre membrane and back fill area between coir rolls/faggots and bank with granular sub-soil to summer water level; scallop banks to provide marginal habitats as directed on site.

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Riparian improvement cont..

8. Plant up coir rolls and margin with emergent vegetation at 6 plants per square metre with the following mixture of plants:

- amphibious bistort
- branched bur-reed
- gipsywort
- greater pond sedge
- marsh marigold
- marsh woundwort
- reed canary grass
- water forget me-not
- water mint
- yellow flag iris

9. Plant banks at an average density of 2 per linear metre of bank of the following species:-

- butterbur
- common comfrey
- hemp agrimony
- marsh woundwort
- meadowsweet
- pendulous sedge
- purple loosestrife
- soft rush
- water figwort
- yellow flag iris
- wild angelica

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Maintenance and Defects

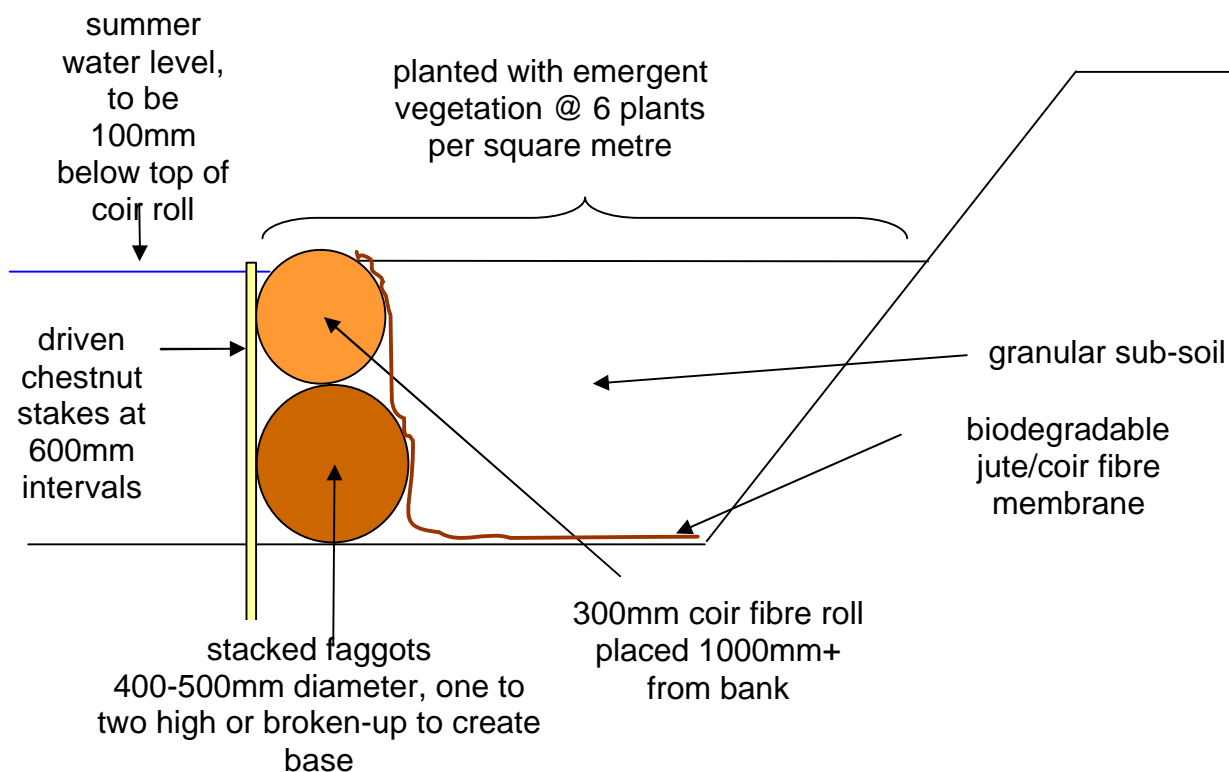
10. In April, remove (pull by hand) Himalayan balsam (before flowering as practical), removing all parts of the plants from the site and dispose of off site appropriately so as to ensure re-colonisation of other land does not occur. Other alien species including buddleia also to be removed.
11. Throughout the summer as required, remove (pull by hand) any re-growth of Himalayan balsam (before flowering as practical), removing all parts of the plants from the site and dispose of off site appropriately so as to ensure re-colonisation of other land does not occur. Other alien species including buddleia also to be removed.
12. As agreed on site carry out herbicide treatment of the nettles in spring using glyphosate herbicide with a hand held 'weed-wipe' taking care not to create bare ground and or conditions for "weeds" to colonise.
13. Agree dates and every three months check condition and security of coir rolls and faggots and rectify/re-secure as required.
14. In March/April 2006 and at contractors sole cost, carry out an inspection of the plantings and advise of plant failure; carry out replacement of failed plants.

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Price Schedule (to be completed by contractors)

		Price
Item 1	Trees Felling	
Item 2	Tree Pollarding/Pruning	
Item 3	Site preparation	
Item 4	Riparian improvement	
Item 5	Maintenance and Defects	
	Total	

Detail 1: Installation of Faggots/Coir Rolls



Detail 2: Location of Coir Roll Installation

The transverse lines across river mark 20m intervals – the whole stretch is approximately 120m. The coir roll is to be installed in two thirds (80m) as shown below

The land to the West is deeper (partly because it is on the outside of the bend) and is less suitable for installing coir rolls.

