Maintenance plan

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WARNING: READ BEFORE CARRYING OUT MAINTENANCE

= planting with hazardous potential (detailed below)

Iris pseudacorus: fresh root is toxic if eaten

Caltha palustris: Highly toxic if eaten

Actaea simplex 'Brunette': Highly toxic if eaten - even in relatively small quantities.

Rheum palmatum : this is not ordinary culinary rhubarb, toxic if eaten.

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When carrying out any maintenance work where one might feasibly touch or break plant material, wear gloves and full clothing on arms and legs. Nothing in the garden is edible. Users are generally adults and occasionally older children under close supervision - the likelihood of ingestion is very low.

OVERVIEW

The idea behind the planting is that it supports the garden's use as a diagram to explain how dark matter can be detected. Dark matter is invisible but can detected by the way it bends light rays. The planting is heavy on ornamental grasses that move in the wind and on plants that have either a tall stem with the same 'diverted' characteristic as the steel structure or star burst / plume shapes such as the central bamboo.
The colour pallet is intended to complement the rusted finish of the steel structure - flowers are in the cream - yellow - orange spectrum; foliage ranges from glaucus - fresh green - orange - purple and black. There is intentionally considerably more foliage than flower as a reference to there being considerably more black space between stars than light in the night sky.

The planting plan has developed, initially from its move from Chelsea flower show in which it was rotated 180 degrees and moved from a dappled shade condition to a full sun condition. During moving and subsequent replanting some species were substituted in order to spread visual interest over a long season (it was initially designed to flower in late May). The garden has now settled into a more low maintenance regimen and some of delicate species have been lost while other more vigorous species have spread.

It is accepted that the planting layout may need minor adjustment going forward. So long as the overall aim of the planting is faithful to the three basic selection criteria above (form, colour, foliage-flower ratio), the garden is capable of accommodating change. With this in mind, it may be useful to know what species have been used and why they are no longer in the garden:

Species tried but no longer present:

Humulus lupulus 'Aureus' (Golden Hop)
Trollius 'Golden Queen'
Carex Grayi
Deschampsia cespitosa
Digitalis ferruginea
Geum x intermedium 'Diane'
Geum 'Totally Tangerine'
Verbascum 'Clementine'
Miscanthus sinensis 'Zebrinus'
Briza media
Saxafrage umbrosa

Notes:

The soil is a sand-silt loam and the boundaries of the garden create a sun trap environment. The soil dries out quickly in hot weather. There is an automatic watering system but there have been spells where this has been offline and there are also areas that it does not reach. It is assumed the species no longer present were lost because they needed more water than the automatic system could provide.
Any of these plants could make a comeback in the garden if they were planted nearer the watering lines and the system became more dependable.

Species still present but not thriving:

Libertia peregrinans
Rudbeckia fulgida
Sesleria nitida
Anemanthele lessoniana

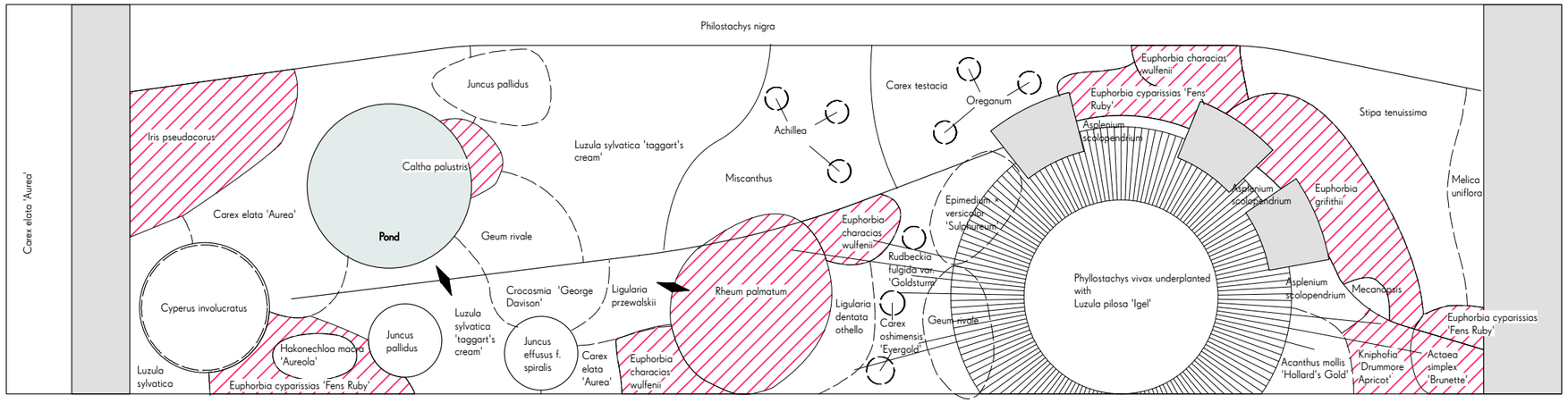
Of the species still present but not thriving, Libertia would prefer more humus rich soil, Rudbeckia has been attacked by slugs, Sesleria is either being crowded out by neighbours or the soil is not alkaline enough for it, Anemanthele tends to become strawy on top and is very sensitive to cutting back and having its roots disturbed. It had become an overgrown mess so was replaced with Stipa tenuissima.

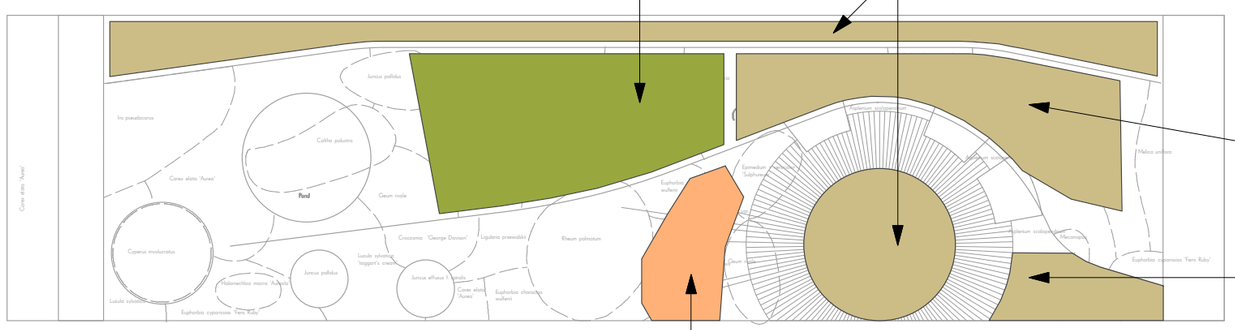
GENERAL APPROACH

The planting scheme is intended to have visual richness for an extended season: In April, new shoots of herbaceous planting and ornamental grasses should start to appear and early flowering perennials should start to flower. In summer the grasses will grow to their maximum height and the early herbaceous planting will start to flower. In Autumn the grasses will start to turn autumnal and develop their seed heads, later flowering herbaceous planting will complement this. In winter the dead foliage of both ornamental grasses, some of the more structural herbaceous planting and the bamboos will create a rich mat of textures, forms and ranges of red, brown and black. In late winter (January / February) most of the planting is to be cut back to just above the ground ready for the whole process to begin again. This period where there is not much to see is a good time to carry out a burst of maintenance.

Rough calendar of activities:

late January / early February - major clear out, cut most plants back to just above ground. Dig out any invasive weeds, thin out vigorous clumps, apply a thick mulch rich in organic matter (5-10cm) to whole area.
Feb - late May - weed around the planting with a hoe and dig out nettles with a trowel. Divide plants, thin out vigorous clumps, re-plant any plants as necessary. Apply a controlled release fertiliser. Apply Nematodes for slug and snail control.
June - July - carry out occasional weeding if necessary. Generally check watering system is working and hand water areas are not reached or need more water than the system provides. Heavy watering of bamboos, especially in hot weather.
August - October - Deadhead Rudbeckia, Ligularia, Achillea and Kniphofia to encourage repeat flowering.
November - December - Cut back herbaceous planting if it looks particularly untidy but otherwise, leave until the major clear out in January.





THINGS TO WATCH OUT FOR

This area had developed a large and deep rooted colony of nettles which was completely dug out and replanted Autumn 2017. The sculpture rods make access problematic in this area. Nettles will re-grow here if the issue is not kept on top of. Continually pull out nettles as they appear bringing up as much of the root as possible with the plant each time.

Bamboos in hedge and pot need far more water than they have been getting. the one in the pot has green stems under normal conditions. When the pot has been left to dry out on occasion, the soil in the pot has shrunk and cracked leaving a gap between the soil and the side of the pot - any subsequent watering therefore just goes straight down the crack. As of summer 2018 consider this plant on life support, it needs a hose directed on it for a number of days continuously to replenish the moisture levels around the rootball and following this, application of fertiliser.

This area is exceptionally dry as it has a sloped surface and is raised in a bed which aids drainage. It needs additional watering especially in hot weather

This area is partially shaded and is planted with species that like sun to partial shade. However, in hot weather it dries out quickly and needs additional watering especially in hot weather.

Ligularias are being devastated by snails and slugs. Carry out culls of slugs using yeast traps, standing on them, and using nematode treatments.

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Howard Miller Design Ltd.
63 Blundell Street, Liverpool, L1 0AJ

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