



Coed Aber

**The joys and the
tears of rising to
the challenge**

The Back Ground

- The project started life as a concept “Greening Aberystwyth’s Approach Road” which was the idea of the Greener Aberystwyth Group and the NRW’s Landscape Architect Daffydd Fryer.
- Steering group was formed August 2012
- £375,000 (over 3 years) grant funding was approved by the Regeneration Board in early January 2013
- Planting commenced March 2013

Year 1 Challenges

- Identify desirable tree species for planting in the available soft verges
- Source large specimens trees for immediate delivery to Aberystwyth.
- Continually review planting plans against tree availability
- Place tender for small engineering work contract, plant, vehicles, signage and labour
- Year 1 was only 10 weeks.









Hidden challenges – a road the engineers forgot to mention!



Utilities



Total number of trees planted in Year 1 = 103

| Genus | Specie | Variety | Girth | Root Bag | Number |
|------------------|------------------|---------------------|----------|----------|--------|
| Acer | campestre | Elsrijk | 18-20 cm | 150 lt | 4 |
| Acer x freemanii | | Autumn blaze | 18-20 cm | 150 lt | 3 |
| Alnus | glutinosa | Imperialis | 16-18cm | R/balled | 6 |
| Betula | albosinensis | Fascination | 20-25cm | 150 lt | 5 |
| Betula | nigra | Heritage | 18-20 cm | 150 lt | 5 |
| Betula | pendula | Zwisters Glory | 20-25cm | 150 lt | 5 |
| Castanea | satvia | | 35-45cm | C700 | 1 |
| Catalpa | bignoniodes | | 20-25 cm | 250 lt | 1 |
| Liquidamber | styraciflua | Worplesdon | 20-25 cm | 250 lt | 4 |
| Liquidamber | styraciflua | Worplesdon | 35-40 cm | 1000 lt | 1 |
| Liriodendron | tulipifera | | 35-40 cm | 1000 lt | 1 |
| Liriodendron | tulipifera | | 25-30 cm | 250 lt | 2 |
| Malus | trilobata | | 18-20 cm | 150lt | 3 |
| Metaessequoia | glyptostrobodies | | 25-30 cm | 500 lt | 4 |
| Platanus | x hispanica | | 30-35 cm | C300 | 4 |
| Prunus | avium | Plena | 18-20 cm | 150 lt | 4 |
| Prunus | avium | Plena | 20-25 cm | c200 | 6 |
| Pyrus | calleryana | Chanticleer | 18-20 cm | 150 lt | 5 |
| Quercus | robur | | 25-30cm | 350 lt | 4 |
| Quercus | palustris | | 35-40 cm | 1000 lt | 1 |
| Quercus | robur | | 35-40 cm | 1000 lt | 1 |
| Quercus | rubra | | 20-25 cm | 1750lt | 1 |
| Quercus | cerris | | 40-45 cm | 1000 lt | 1 |
| Quercus | palustris | | 25-30cm | 350 lt | 1 |
| Sobus | aucuparia | Sheerwater Seedling | 20-25 cm | 150 lt | 4 |
| Taxodium | distichum | | 3m | 150 lt | 6 |
| Tilia | tomentosa | Brabant | 20-25 cm | 150 lt | 8 |
| Ulmus | americana | Princeton | 20-25 cm | 150 lt | 12 |
| | | Total | | | 103 |

Year 2 Challenges

To create a 230m linear pit (in 3 sections) which would allow large specie trees with full crowns to develop into an avenue.



The Site

- The pit was to be created in a strip of ground bordering the southern edge of two car parks in Park Avenue.
- The strip already contained a number of vehicle damaged Sorbus and had a surface of free formed concrete.
- Until the 60's the site had been part of the train depot coal yard
- The ground was made up from a mixture of coal waste, cinders and soil

Particular Site Challenges

- The site is used as a bus and lorry park - it is also used annually by a visiting fairground which parks its vehicles on the proposed tree zone.
- The constant foot traffic over the intended planting strip
- To design a scheme which allowed for the passage of heavy vehicles whilst avoiding soil compaction and root damage - all within the available budget.

The Design

- The Stockholm Project had provided the initial design principle.
- We looked at several contemporary products and liked the Strata Cell 30 but it was proving to be cost prohibitive as the required number of cells had a purchase value £55,000.
- We eventually came up with a hybridised design. By using strata cells to construct planting pits and then replacing cells with rock.
- The trench measured 1.75m(w) x 1m(D)

- The hybridised design made a reduction of £23,500 (42%) in the cell structure cost.
- The overall material cost of the trench was £235.56 per linner meter. (total £54,180)
- Platanus orientalis “Minaret” was tree specie chosen to give the desired avenue effect.
- In total we used 2,160 strata cells
- 134 tonnes of rock
- 406 tonnes of strata soil















The final stage (Year 3)

- We would have liked to continue planting in the paved footway in Park Avenue. Due to a mayor development this was not possible
- So in the final year we expanded the planting area to include adjacent approach roads.
- Provide information boards of a tactile design with tree and leaf in relief.
- These have been used by the local schools to do leaf rubbings



Maesarnen Lolaf
Field Maple



Gellygen Addurniadol
Ornamental Pear



Pisgwydden Arlan
Silver Lime



Cypriaswydden Foad
Swamp Cypress



The Joy (Photos from 2018)











The Tears

- The things that have not gone well
- The timing of several unforeseen events have caused major headaches, resulting in dead trees that the public viewed as poor maintenance.



During The Spring Bank Holiday 2015 gale force northerly winds hit Aberystwyth

- These cold winds caused the Oriental Planes to defoliate.
- At the planning stage we had not fully appreciated how exposed this area of town is.
- Many of the trees did not recover from this event.

The decision was made to replace all the Oriental planes with London Planes.

- New trees were purchased in January 2016, the crowns were pruned back to reduce the canopy area.
- The trees were then placed on a drip line.
- The replacement planting was delayed until mid June, it was decided that leaving it until then we would avoid the spring storms.
- Late August 2016 we got hit by another storm which again caused defoliation of the replacement trees.



The planes struggled through the summer of 2017 but all showed some signs of recovery although the canopy cover was sparse. The combination of stress and the high temperatures during 2018 proved to be too much, and we have again incurred high losses.



After Coed Aber

- The Coed Aber project finished in April 2015.
- We continue to replace some of the losses to retain the integrity of the project.
- We have now started planting in Park Avenue near the New Tesco's development
- The principles of planting in the hard landscape have been adopted by the Councils engineers and all new tree planting is carried out in properly constructed pits.







