PWP LANDSCAPE ARCHITECTURE

PETER WALKER, FASLA DOUGLAS FINDLAY, FASLA DAVID WALKER, FASLA ADAM GREENSPAN SANDRA HARRIS CHRIS DIMOND, FASLA JULIE CANTER CONARD LINDGREN JAY SWAINTEK JENNY SASSON MICHAEL DELLIS

> JANET BEAGLE EUSTACIA BROSSART CHELSEA DEWITT BRIAN GILLETT HEATH HOUSE LAUREL HUNTER KAZUNARI KOBAYASHI SU-JUNG PARK CORNELIA ROPPEL CHRIS WALKER

> > MI YANG

TODD MEAD

STEVEN TYCZ

Central and South Promenade Concept

The tree species selection for the foreshore promenade alee, has been made to emphasize the civic contrast with the native planting at Barangaroo Point. While Barangaroo Point is primarily a naturalistic experience, a transition is made at Central where the park becomes more civic in nature. The foreshore promenade alee of trees must have the visual strength to extend the length of the foreshore south, bordering the dense urban development at Barangaroo South. The foreshore promenade alee concept defines the western edge of The Rocks. It is critical that it has a strong visual and physical linkage to Millers Point and The Rocks in terms of historical context. Barangaroo should not be seen as outside of the context of its historical neighborhood. The planning of Barangaroo emphasizes all possible east west pedestrian linkages to the new waterfront promenade and those historical linkages through The Rocks have a planted character, which should be recalled at the western edge. George Street, Argyle Street, Kent Street, Lower Fort Street, the eastern end of Hickson Road, and Custom House Plaza at Alfred Street are all planted with Celtis australis. This is the predominant and historically planted species, traditionally endorsed and planted by the City of Sydney. Celtis is part of the predominant historical character of The Rocks and Millers Point.

The formal planting at Barangaroo Central and South foreshore promenade is comparable to the civic plantings in the great urban spaces of Sydney, primarily planted with deciduous species. Some of the greatest civic examples in Sydney include the plaza at Alfred Street at Circular Quay, Martin Place, George Street, and Pyrmont to the south west. The contrast provided by the formal alee at Barangaroo Central and South distinguishes the foreshore promenade as the public right of way, providing an urban continuity along the water's edge, while also providing the visual and physical linkage of a variety of urban public spaces along its length.

Promenade Species Design Brief Requirements

A shortlist of species has been identified which fulfill the design brief requirements which includes:

- Deciduousness To allow more sunlight in the winter and shade from the strong western sunlight in the summer.
- Texture A delicate texture, allowing reasonable visibility through its canopy, maintaining filtered view of the harbour from the east, also part of the design brief requirements.
- Consistent Canopies The species has been selected which will maintain a straight and upright trunk and consistent shaped canopy from one tree to the next, forming a continuous alee canopy.
- Mature Height The species has also been selected because its maximum mature height of around 10 to 12 meters will not create a tall visual barrier.
- Frontline Exposure The species must be salt tolerance at the frontline coastal edges.
- Seasonal variation

Promenade Species Recommendation / Alternatives

After extensive research and careful consideration, a shortlist of possible alternative species options was established which could fulfill the design brief and a recommended species stands out at the top of the list.

Recommended species:

<u>Celtis australis (Southern Hackberry</u>) - has a long proven history of success in the Rocks and Millers Point, is the alternative tree species, which best meets, the original design brief. It is a species that is fully supported and currently being procured and planted by the City of Sydney. There is little doubt the *Celtis australis* is the best suited alternate species selection with the least amount of risk for failure, while maintaining the aesthetic characteristics that best satisfies the brief, including the historic context, and the specific development interests of Barangaroo South.

739 ALLSTON WAY

BERKELEY, CA 94710

T 510.849.9494

F 510.849.9333

WWW.PWPLA.COM

Promenade Tree Recommendation Barangaroo /JPW1001 April 10, 2015 page 2 of 2

Additional appraised species:

- <u>Ulmus parvifolia (Weeping Chinese Elm)</u> Weeping Chinese Elm were observed, and the greatest concern is heavy fruiting, and a random branching structure that has a history of collapsing in strong winds as the tree ages.
- <u>Melia azedarach (White Cedar)</u> Fruits are poisonous to humans if eaten in quantity, and the trees have a messy character and invasive
- <u>Pyrus calleryana "Chanticleer" (Ornamental Pear)</u> Ornamental Pear were observed, and the crown of this tree is too dense to fulfill the brief. Possible alternative variety Pyrus calleryana 'Aristocrat', with a more open crown is also subject to wind damage as the tree matures.
- <u>Zelcova serrata 'Green Vase'</u>- was also considered to meet the design brief, however no mature examples could be found in Sydney because it is uncommonly grown in NSW. Young trees were observed with girdled roots and small branch and twig die back.

Species Availability Considerations

The Foreshore Promenade *Gleditsia triacanthos 'Shademaster'* that have been purchased and secured for Barangaroo have been under a contract grow agreement with a large NSW nursery for the past 3 years. Over the coarse of that time, <u>the trees have been maintained and trained by a</u> licensed Arborist to tightly control growth to ensure the appropriate size and upright character at the time of installation.

Availability of any alternative species at these contract grow sizes will be difficult to source within the limited timeframe, which will make an in-situ Arborist program and ongoing promenade tree maintenance provisions a necessity for the overall success of the foreshore promenade. The cost of an experienced arborist / maintenance program to maintain and train the alternative trees in-situ will need to be included in the ongoing park cost to ensure the trees will reach an appropriate size and upright character, to enable an outcome which conforms to the design brief.