

**ATTACHMENT D**

**CIRCULAR QUAY SIGNAGE TESTING  
CONSULTATION SUMMARY**

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<b>Circular Quay Signage Testing Consultation Summary</b>			
	<b>Issue</b>	<b>Response</b>	<b>Recommended Design Changes</b>
<b>1.0</b>	<b>Tactile Indicator Signage</b>		
<b>1(a)</b>	<b>Braille</b>		
(i)	All Braille readers commented that the Braille was excellent/ easy to read	Focus group feedback during design development reviewed and tested Braille prior to on site trial.	No change required.
(ii)	Braille was well formed and readable		
<b>1(b)</b>	<b>Font</b>		
(i)	White text on dark background had good contrast and was legible at night	Test plates of white text on black background and bronze background most visual contrast	Design manual recommend plate to be white text on black background with option for bronze background for signage mounted on bronze S2 smartpoles.
(ii)	Sentence case is preferred although one person preferred capitals.	Sentence case is the usual standard convention for presenting tactile signage. Test plate used sentence case.	Sentence case specified in Design Manual
(iii)	Text is well presented however street Numbers are too close to Street name and spacing between numbers too large.  Font size should be bigger.	Undertake review of letter spacing and font size in design refinement stage.	Design Manual specification modified to provide improved clarity of information presented.
<b>1(c)</b>	<b>Colour combination</b>		
(i)	The luminance contrast of white text on dark background preferred by people with low vision: white on black as providing the best colour contrast.	Australian Standards require signs to have a luminance contrast of at least 30% with their surroundings with membranes with black and bronze backgrounds providing acceptable contrast.	Design manual recommend plate to be white text on black background with option for bronze background for signage mounted on bronze S2 Smartpoles
(ii)	Black on silver background blended with the colour of the smart pole and the letters lost their significance.	Assessment revealed that black on silver membrane does not provide sufficient contrast between membrane and smartpole.	Silver background not included as a recommended design option.

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	Issue	Response	Recommended Design Changes
	<b>Tactile Indicator Signage (Con't)</b>		
<b>1(d)</b>	<b>Technology</b>		
(i)	QR codes would greatly assist people with disabilities and visitors to the City, as they would add value to the information provided on the pylon and tactile street name signs.	Use of digital download technology applications have merit to provide voice output or large print formats for download.  Pylon signs will have space dedicated to accommodate QR tag or similar	Design manual to allow space on signage plate for option to place a QR code or similar at a future date.
<b>1(e)</b>	<b>Position on pole</b>		
(i)	Most participants agreed that the sign should be located on the right-hand side of the pole as the reader faces the kerb.	The location of the tactile sign on the pole needs to be standardised to ensure consistency for users locating the sign and ease of use.	Design Manual recommends to locate the sign on right hand side with the middle of the sign at the height of the audio tactile button, no matter what the length of the street name.  This height was also selected to assist people with impaired vision who use a wheelchair
(ii)	Preference having an edge on the sign to delineate between the pole and where the sign is positioned.	Signage plates will not be flush with the pole but approximately 15mm in relief to the pole which provides a distinct edge to locate the sign.	No change required.
<b>1(f)</b>	<b>Text Orientation</b>		
(i)	Strong preference signs to be read from top to bottom with the exception of one low vision user who preferred reading bottom to top.	A consistent approach is required to ensure predictable	Design Manual recommends text / Braille placed to be read downwards from the top.
<b>1(g)</b>	<b>Backing plate</b>		
(i)	Backing plate corners were too sharp.	Sharp edges deemed too uncomfortable for tactile users. Additional prototype prepared for testing with more rounded corners was well received by users.	Design Manual specifies rounded corners for all edges of the signage plate.
<b>2.0</b>	<b>Pylon Signage</b>		
<b>2(a)</b>	<b>Header Panel</b>		
(i)	"I" Information Circle – tone down yellow colour so not like transport signs – colour too intense	Alternative yellow colour tones tested to reduce intensity.	Design Manual specifies revised yellow colour selection for header panel.
<b>2(b)</b>	<b>Font Selection</b>		
(i)	Frutiger condensed preferred as the preferred / most legible font tested at the Circular Quay trial.	Frutiger condensed type is a proven font type suitable for external signage applications	Design Manual specifies Frutiger condensed for pylon signage.

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	<b>Issue</b>	<b>Response</b>	<b>Recommended Design Changes</b>
<b>2(c)</b>	<b>Font Size</b>		
	<p>Increase font size to provide improved clarity and legibility of information.</p> <p>Font on directory needs to be bigger</p>	<p>Further testing of increased font sizes has provided improve presentation of information.</p>	<p>Font size has been increased to tracking (+25) for better visibility for reading from a distance</p>
<b>2(d)</b>	<b>Information Provision Content</b>		
(i)	<p>Too much information provided on the signs, including excessive amount of text and information on maps which reduces legibility and</p> <p>Directory could be simplified to show only key civic, cultural and tourist destinations</p>	<p>Further testing confirmed that information content/ complexity needs to be reduced</p> <p>Other wayfinding products such as digital/ web applications, hard copy maps can provide a richer set of detail than street based signage.</p>	<p>Recommended format reduces and simplifies information on mapping and directory panels.</p> <p>Reducing content has allowed the font size of text to be increased which will also improve legibility.</p>
<b>2(e)</b>	<b>Accessibility Provisions</b>		
(i)	<p>TGSIs may assist people that are blind to find their way to the sign. Similarly hazard TGSIs may assist people from colliding with the sign (particularly from side-on approach) as the lack of luminance contrast may create a safety hazard for pedestrians at night.</p> <p>Brighter base/edge colour or reflective strips would reduce collision hazard (for pedestrians, cyclists, and service vehicles using the footpath</p>	<p>Advice from access consultant is that TGSIs not required as use of these devices should be limited to public transport functions only. Attention to appropriate luminance contrast on side panels and placement of element outside the path of travel will address hazard issues.</p>	<p>Placement guidelines to ensure accessibility requirements are a prime consideration.</p>
<b>2(f)</b>	<b>Map Graphics</b>		
(i)	<p>Intensity of map colours selections reduce legibility of information</p>	<p>Additional map colour combinations were developed and tested that creates more distinct hierarchy of information and discern city structure better.</p> <p>Colour selection work well with the bronze colour of the sign structure</p>	<p>Recommended colour palette has a reduced intensity of map colours that provides background with highlights of key information.</p> <p>Colour selection meets appropriate contrast requirements for accessibility.</p>
(ii)	<p>Signage should be more colourful to reflect vibrancy of the city</p>	<p>Design aim was to develop a refined / distinguished sign rather than a “showy” element</p>	<p>No change required</p>

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	<b>Issue</b>	<b>Response</b>	<b>Recommended Design Changes</b>
(iii)	Bronze colour of sign structure blends into surroundings too easily	Bronze selection was based on ensuring signs are complementary to the new City public domain furniture suite as well as  Stainless steel framing will provide appropriate luminance contrast for the sign.	No change required
(iv)	Reduce map complexity by providing one green tone for open space – not differentiated on open / access times/ ownership status	Map colours for parkland reviewed to use one colour	Map specification has one green tone for open space/ parkland
(v)	Provide more prominence on map for pedestrian areas to walk particular in instances where overhead structures indicated on a map obstruct the ground level pedestrian area eg – Cahill expressway at Circular Quay at least dot areas where people can walk under the structure.	Intention has been to highlight pedestrian / public space areas with specific colour differentiation	Map manual provide graphic directions on treatment of pedestrian areas including instances
<b>2(g)</b>	<b>Overview Map</b>		
(i)	Could be simplified to be more conceptual given its purpose to provide a broad overview of a city area. Remove labelling that is too small to read/ be useful on the sign Label only key streets and precincts only – not micro detail.	Overview map reviewed to simplify graphic style and messages	Map Manual to provide directions on graphic / information development of overview map.
<b>2(h)</b>	<b>Pictograms</b>		
(i)	The pictograms could be enlarged to provide easier reference to commonly sought utilities such as toilets etc. The pictograms get lost in the background colours in some sections.	Map review has enlarged pictograms and assessed placement to improve clarity of information.	Map Manual to provide directions on use of and style of pictograms to be used.
(ii)	Use of more symbols and 3D imagery on map to denote key landmarks to allow quick reference to destinations and improve orientation.	Key feature of mapping is to utilise 3D imagery and symbols to reduce reliance on text which increases accessibility across language barriers	No change required
(iii)	Text sometimes runs over more than one colour and in some cases coloured lines ran through the text. This may be difficult for some people to comprehend.	Map development needs to be mindful of text placement to ensure legibility of information.	Map Manual to provide directions and convention on text placement

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	<b>Issue</b>	<b>Response</b>	<b>Recommended Design Changes</b>
(iv)	Use of “T”, “B”, “L”, and “F” transport pictograms – Should use graphic symbols so non English speakers can understand.	Transport pictograms indicated are being developed and testing by Transport for NSW. The objective of the City system will be to use the adopted Transport symbols for consistency across the systems.	City wayfinding system will use the Transport for NSW public transport symbols and terminology
(v)	Bus and Ferry logos on pylons are too pale and do not provide sufficient contrast		Transport NSW be made aware of feedback received as part of their design development/ testing program
(vi)	Map Orientation Need to ensure correct orientation of map to user to avoid confusion.	Strategy advocated “heads up” mapping which orientates the map to the direction the user is facing.	Pilot testing stage to assess merits of conventional orientation ( north ) or heads up orientation.
<b>2(i)</b>	<b>Contact / Assistance Phone Number</b>		
(i)	Any provision of a help/ assistance contact number needs to be supported by appropriate training to call centre staff to ensure meaningful service can be provided.	Provision of help/ assistance contact numbers on wayfinding signage reflects to same message located on the City parks signage system.  Asset management sign number xxxx	Appropriate staff awareness and training needs to be undertaken to ensure maximum effectiveness of this service.
(ii)	The contact information “For assistance ring 92659333 & quote location number ...” is not written in plain English and would be difficult for some groups to understand. Suggest using a pictogram (information pictogram, or telephone pictogram) would suffice to get the key message across.	Design review has simplified this message using pictograms.	Design manual to reflect updated message design using pictograms.
(iii)	Phone contact facility – for hearing impaired need to ensure SMS option to get directions.	This suggestion is being investigated on	Currently under investigation
<b>2(j)</b>	<b>Logo</b>		
(i)	Delete 2030 logo as this may require updating over time  Recess the City logo to create more a watermark –more subtle presence on sign	Design review has deleted 2030 logo and has included standard City of Sydney logo in a recessed watermark	Design Manual to include updated directions on use of City logo
<b>2(k)</b>	<b>Braille Provision on Pylon Sign</b>		
(i)	Line spacing of Braille should be 6 mm; the current spacing of 8mm is too wide.	Review of braille spacing has been undertaken and adjustments undertaken	Design Manual to include updated directions on Braille provision.

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(ii)	Two lines of tactile text and Braille takes too long to read. This should be simplified to one line only one line only.	Design review has condensed two lines of Braille information to one line, by the use of the international 'information' symbol and the international 'telephone' symbol	Design manual reflects updated design review
(iii)	Tactile information would be beneficial on the side of the signage – to assist locating the Braille text and tactile elements on the front panel.	Braille will be located on a consistent location on the sign panel that additional location information not warranted	No change required
<b>2(l)</b>	<b>Sustainability</b>		
(i)	Signage structure needs the ability to be able to update map / key information on sign to ensure use and relevance of information.	Pylon signs have been developed with removable panels to allow update of map or directional information without the expense of replacing the entire sign	No change required
(ii)	Should incorporate solar panels to allow LED display time, date weather temperature information on pylon sign.	Use of solar panels was investigated and deemed not feasible in terms of assuring adequate solar access to charge battery particularly in the city centre or in heavy canopied streetscapes.	No change required
<b>2(m)</b>	<b>Technology</b>		
(i)	QR tag technology could be redundant in near future so system needs to be adaptable to accommodate newer technology.	Technology to retrieve digital downloads from smartphones is constantly being updated.  The pylon signs has space allocated for QR tags. If technology system changes the panel can be updated.	No change required.
<b>3.0</b>	<b>Finger and Flag Signs</b>		
<b>3(a)</b>	Include walking symbol to denote time indicated is for walking time.	Will be considered for Pilot project.	Test option in Stage 1 Pilot project.
	Require more specific destination name messages – rather than “City Centre” information such as “Town Hall” would be more meaningful.	Proposed sign messages need to be rigorously assessed and tested prior to implementation.	Development of message schedules to undergo testing to confirm relevance and meaning.
	An increase in font size would improve legibility from an increased distance should be considered if it did not increase size of signage.	Font size can be increased without making the signage panels larger.	Design Manual specifies increased font size on signage panel.
	Placement on smartpole could be an issue with other items attached to be pole and banners inhibiting legibility of sign.	Each proposed signage location will need to be individually assessed to ensure relevance and legibility.	Implementation planning and to include site assessment and options for placement. Design Manual to include key principles for signage placement.

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	<b>Issue</b>	<b>Response</b>	<b>Recommended Design Changes</b>
	System should include signage that indicates directions for north and south	Not supported. People respond well to directional information on key locations such as Circular Quay, Town Hall, Darling Harbour etc to get their bearings rather than just limited to a compass orientation.	No change required.
<b>4.0</b>	<b>Overall System Issues</b>		
	<b>Clutter Reduction / Placement Guidelines</b>		
	Commitment to reduce clutter needs to be a key objective for the rollout program. City's asset management system should track sign removals and replacements.	Asset management of both the information content on signs and signage items will be important to maintain relevance and usability of system as well as identify signage for removal.	Implementation and planning to include site audit to identify redundant signage for removal.
	<b>Agency Coordination</b>		
	Co-ordination with other Wayfinding Systems by other Agencies very important to provide consistent messages	Liaison and negotiation has been undertaken with Transport for NSW , Barangaroo Delivery Authority and Sydney Harbour Foreshore Authority has been undertaken to co-ordinate systems and avoid double up of messages/ excessive signage.	Implementation rollout to include ongoing negotiations with relevant agencies on signage placement and messaging to co-ordinate and ensure consistency across the systems.