

ITEM 4. CITY CENTRE GEORGE STREET SPINE**FILE NO:** **S124276.005****SUMMARY**

Responding to Sustainable Sydney 2030, and the transformation of the city centre through the implementation of light rail by the State Government, Junya Ishigami's proposal for *Cloud Arch* was endorsed by Council in 2014, as a unique opportunity to highlight Sydney's main boulevard and the important civic precinct of Town Hall and the Queen Victoria Building.

Ishigami's *Cloud Arch* envelopes a space for people at the civic heart of Sydney with an elegant cloud-like arch that tapers and twists as it rises above this important intersection that connects the City north-south and also east-west.

Cloud Arch will further cement Sydney's reputation for creativity and culture in the 21st Century. The reinforcement and visibility of the City's cultural life in our public spaces will contribute to the establishment of Sydney as a cultural and creative city both nationally and internationally.

Cloud Arch's scale and sensitive design for this important heritage precinct will create an iconic tourist destination for Sydney in the same way Anish Kapoor's AUD\$39.2M *Cloud Gate* affectionately dubbed 'the bean' has for Chicago and the *Gateway Arch* has for St Louis (see Attachment C).

Following endorsement of the project by Council in July 2014, Partridge Event Pty Ltd was engaged by the City as the head contractor for the project, with junya ishigami+associates pty ltd engaged as sub consultants.

Concept development and design development has been undertaken to achieve the artwork in line with the program for light rail on George Street.

Due to the complex underground environment, the technical constraints and the program of the Sydney light rail project, the costs as per the original tender are not sufficient to achieve an arch of the scale necessary in this location as proposed by artist Junya Ishigami.

Re-designs of the footing and the arch in response to changing technical constraints have increased the span of the arch and involved more complex footings. The larger span requires additional material and a more complex methodology for the erection in this constrained environment.

The arch has been re-engineered and stiffened, increasing the material cost of the arch and impacting the program through redesign and further testing. The increase in the amount of steel accounts for 39% of the total cost increase. The cost of steel has also significantly increased since 2014.

This report outlines the technical issues and constraints that have arisen and the need for additional funds to be allocated to City Centre Public Art Implementation, increasing the total program budget from \$9.3M endorsed by Council in 2013 by \$5.5M to a total of \$14.8M (outlined in Confidential Attachment E). This will increase the total budget for *Cloud Arch* from the original \$3.5M to \$11.3M, to achieve an arch with the integrity of the original proposal.

This report recommends that Partridge Event Pty Ltd remain as head contractor with junya ishigami+associates pty ltd as sub consultants to build the footings and remain responsible for the design of the arch. The report recommends Council ensure a competitive price for the manufacture and installation of the 58m high arch superstructure is achieved as per Confidential Attachment E.

The City has only recently received confirmation from Sydney Trains and Transport for New South Wales (TfNSW) of structural approval of the northern footing and received in writing from TfNSW on 28 July 2017 site access to construct footings in the first quarter of 2018 (see Attachment D). Upon approval by Council of the recommendations outlined below, implementation of the footings can proceed and a Development Application for the arch superstructure will be lodged.

Cloud Arch is intended to be constructed prior to light rail becoming operational and, given that confirmation to facilitate access was only received on 28 July 2017, this report has been submitted direct to an Extraordinary meeting of Council in order to enable the project to proceed in a timely manner.

Since endorsed by Council in July 2014, the outcomes of the City Centre Public Art open expression of interest and tender, which resulted in over 600 artists submitting, the three public art projects endorsed by Council have progressed. *Cloud Arch*, by junya ishigami is the subject of this report. Tracey Emin's *The Distance of Your Heart*, a series of approximately 60 bronze birds sensitively positioned on Bridge and Grosvenor Streets, are in production and due to be installed in 2018.

Hany Armanious's, *Pavilion* in Belmore Park has been on hold following initial design development, due to the impacts of the Sydney Light Rail project. Since awarding the tender for the artwork *Pavilion*, it has become apparent that Belmore Park needs to evolve to meet the changing needs in this area of the City, given the anticipated impacts of urban renewal in the coming years. The deferral of the construction of this work enables the reallocation of \$2.3M of funds within the City Centre Public Art Implementation program to achieve *Cloud Arch*. The City will work with the artist for *Pavilion* to identify an alternative location for the artwork and report back to Council.

RECOMMENDATION

It is resolved that:

- (A) Council endorse the reallocation of funds from the Public Domain Capital Asset Enhancement program to provide \$5.5M of funds to City Centre Public Art Implementation, as outlined in confidential Attachment E to the subject report;
- (B) authority be delegated to the Chief Executive Officer to negotiate, execute and administer the necessary changes to the contract with Partridge Event Pty Limited, as per the terms outlined in confidential Attachment E;

- (C) Council endorse the deferral of the installation of the public artwork *Pavilion* until another suitable site is found (by the City working with the artist to identify an alternative location for the artwork) and reported back to Council, allowing the reallocation of \$2.3M of funds within the City Centre Public Art Implementation to achieve *Cloud Arch*; and
- (D) Council endorse the confidential contractual implications, contained in Attachment E, for the arch footings, fabrication and installation.

ATTACHMENTS

Attachment A: Images of *Cloud Arch*

Attachment B: Plan of original and revised footing locations and arch spans and section through tunnels showing northern footing

Attachment C: Comparable public art case studies

Attachment D: Letter from Transport for NSW regarding access to the site for construction

Attachment E: Financial and Contractual Implications (Confidential)

(As Attachment E is confidential, it will be circulated separately from the agenda paper and to Councillors and relevant senior staff only.)

BACKGROUND

1. As part of the extensive consultation undertaken for Sustainable Sydney 2030, the City heard that people wanted more public art in their city. In response to these calls, the directions for a 'Cultural and Creative City' and a 'Lively and engaging City Centre' were articulated through Sustainable Sydney 2030.
2. In 2011, the City Art Public Art Strategy and associated public art policies were endorsed by Council following their development in direct response to these calls from the community to deliver on these goals. The Strategy outlines the City's commitment to the delivery of public art in the City's public spaces as an integrated part of the public domain planning for the City.
3. Jan Gehl's study for Sydney, Public Space and Public Life, endorsed by Council in 2007, made key recommendations for the improvement of Sydney through the provision of more space for people in our City.
4. Along with the introduction of light rail, increased pedestrian amenity through the closure of 1km of George Street to traffic, and other public domain improvements, the City Art Public Art Strategy is integral to achieving the vision of the city centre outlined in Sustainable Sydney 2030.
5. Building on this important work, the City Centre Public Art Plan was endorsed in June 2013 and the George Street Concept Design was adopted by Council in September 2013. The City Centre Public Art Plan outlined the City's commitment to a significant public art program as a core element of the transformation of the city centre.
6. Following her engagement by Council in December 2012, City Centre Curatorial Advisor Barbara Flynn has been working with City staff to develop and implement priority projects outlined in the City Centre Public Art Plan and associated Implementation Plan with indicative budgets and timeframes adopted by Council in June 2013.
7. The projects for public art to address the George Street Spine and the East-West Connecting Streets were advertised as two open expressions of interest as part of a local, national and international campaign, commensurate with the scale and significance of the City Centre Transformation project, to attract a wide and competitive pool of appropriate artists with the capacity to make a lasting contribution to the city.
8. The response to this open call was overwhelmingly successful, with the City receiving 365 submissions from artists for the George Street Spine and 322 submissions from artists to address the East-West Connecting Streets.
9. Five artists were then shortlisted for each project, with each of the artists participating in a rigorous short-listing process conducted via a Select Tender.
10. The City engaged a Quantity Surveyor to provide advice on the cost of each of the shortlisted artists' proposals.

11. Following this extensive process and the calibre of the responses received by the City, the Evaluation Panel recommended that three out of the 10 shortlisted artists' proposals be accepted following the Select Tender, rather than the two originally envisaged, with *Cloud Arch* being the sole artwork selected to address the George Street Spine.
12. Junya Ishigami's *Cloud Arch* is a painted steel arch that will rest on two concrete footings located below ground. The northern footing is located adjacent to the Queen Victoria Building in George Street under the light rail track slab. The southern footing is located diagonally opposite in the roadway in Park Street close to the corner of George Street. The arch will rise from these footings traversing the intersection diagonally, twisting and tapering as it rises.
13. The artist has developed an elegant and refined arch form that responds to the sensitive heritage context of its location in the civic heart of the City, rising to 58m approximately and tapering from approximately 1.2 x 2.4 metres at its base to 450mm x 900mm at its uppermost extent (see attachment A).
14. A number of technical challenges have been overcome in locating and detailing the footings. These included the constraints of rail and retail tunnels, the Cross City Tunnel and existing major underground services. In addition to these, further constraints have been imposed by the introduction of light rail that will run through the intersection north-south requiring the installation of the track slab and additional underground services. These impacts have resulted in a wider span and more complex footing design. Attachment B to this report details the original and revised locations of the footings and arch in plan.
15. In August 2016, the City received development approval for the footing designed as a pad footing. This design was approved with conditions by Sydney Trains, Roads and Maritime Services (RMS) and Transport for New South Wales (TfNSW).
16. The City continued working to satisfy all the conditions of consent to achieve a construction certificate for the northern footing. However, TfNSW did not grant the City access to the works site to construct the approved footing in early 2017. The track slab has since been laid between Druitt and Market Streets where the northern footing is to be located. The City has now developed a modified footing design with TfNSW to allow for construction under the light rail slab in early 2018 (see Attachment D). This has required a redesign of the footing. The modified design has structural approval from Sydney Trains.
17. Cost increases have arisen in design development because of these technical complexities and issues in relation to the interface of existing and future infrastructure as outlined below.
18. At the time of the competitive process to select the artworks, the City understood that extensive further work would be needed on the information of the below ground environment. The negotiation of this complex environment significantly increased subsurface explorations and increased the size of the footings. This resulted in further impacts to the program and scope for the project and more costly footings.

19. The new arch has been developed in response to the relocation of both footings to accommodate stakeholder concerns and existing infrastructure, and is designed as a double cantilever approximately 58m high with 167m of length, now 140 tonnes, an increase in material of 82 tonnes from the 58 tonnes required for the original arch proposed at the Select Tender stage. World steel prices have also increased 43% since December 2015. Erection costs have increased as a direct result of the increased span, the complexities of access to the site during construction, risks during establishment, the need to avoid or protect complex underground infrastructure during the installation and the amount of construction occurring in Sydney now, compared to 2014 when the tender was submitted.
20. *Cloud Arch* will stand on George Street at the centre of the city where it will define our city's major transport interchange and civic heart, allowing trams and people to pass under it. The large swell made by the loop of the arch will frame Town Hall, the Queen Victoria Building, and complement important monuments and buildings at the heart of the city.

Program

21. ALTRAC's light rail program was unknown at the time of the competitive process to procure the artwork. While assumptions were made at the time of tender, the announcement of the light rail program in May 2015 impacted on the program for *Cloud Arch* – putting the footings on a critical path to align with the works for light rail in the corridor. The impact of the revised staging for the *Cloud Arch* project (necessary to align with the light rail program) and the need for compression of the program to meet critical path deadlines incurred additional costs.
22. The significant amount of underground investigation required to gain approval for the footings from Sydney Trains and the numerous design iterations for the footings detailed below, required to gain TfNSW approval to allow access to the site compound for construction, have prolonged the program for the artwork by 12 months.

Footings

23. The concept design for the footings was based on a precedent set by the construction of the QVB retail arcade in 1986. It was assumed that this proven design of a pad footing on piers would be acceptable, given the greater tolerances in the design for the footings for *Cloud Arch* than existed in the QVB design, in the same complex underground environment. However, this approach, though achievable from an engineering point of view, failed to gain the approval of Sydney Trains and the northern footing needed to be re-designed as a pad footing without piers, causing considerable delay to the program and additional cost.
24. Extended negotiations with Sydney Trains resulted in additional costs to the City through significant underground exploration necessary to gain in-principle approval to lodge a development application for the footings. The resulting impact of this work on the scope and program, through additional design development, has increased the cost of the footings.
25. The southern footing for the artwork required redesign and relocation to accommodate future closure of only one lane of Park Street during construction, after advice from the RMS Traffic Management Committee (TMC), resulting in increased costs.

26. The current design for the northern footing is for a pad footing extending under the built track slab. The footing has been redesigned with the necessary greater structural complexity requiring an increased construction period. This solution has been developed with TfNSW. A commitment to grant access to the site has been issued and final approvals necessary to construct the footing have been granted (see Attachment D).

Arch

27. The span of the arch almost doubled from the 28.5m originally proposed, as the possible zone to land the arch was pushed north in response to constraints in locating the northern footing near the QVB (given the locations of the existing rail and retail tunnels, the requirement from TfNSW to increase the distance between the arch and the light rail, and to allow for all necessary light rail utility services).
28. Five different options for the ratio of solid steel to ribs were investigated to achieve an optimum design balancing the rigidity of construction with the need to minimise onsite welding.
29. The head contractor Partridge Event Pty Ltd and their sub-consultants, junya ishigami + associates pty ltd, contacted approximately 100 steel fabricators (a number of possible contractors have been identified) in an effort to achieve value for money.
30. In addition to the above, world steel prices have increased 43% since December 2015.

KEY IMPLICATIONS

Strategic Alignment

31. Sustainable Sydney 2030 is a vision for the sustainable development of the City to 2030 and beyond. It includes 10 strategic directions to guide the future of the City, as well as 10 targets against which to measure progress. *Cloud Arch* is aligned with the following strategic directions and objectives:
 - (a) Direction 1 – A Globally Competitive and Innovative City – *Cloud Arch* will be an icon for people in the civic heart of the City. The delivery of this artwork as part of the transformation of the city centre will assist in building Sydney's reputation as a globally competitive and innovative city and will be a major attraction for tourism boosting the City's economy.
 - (b) Direction 4 – A City for Walking and Cycling – *Cloud Arch* will claim a space for people in the heart of the city, and assist with wayfinding, making the city more enjoyable and easier to navigate on foot or by bike. Gehl Architect's 2007 study revealed that most visitors to our city walk south from the harbour; the study identified the need for visitors to have more landmarks and public spaces as they progressed south down the City's main street away from the harbour and into the heart of the city. *Cloud Arch* fulfils this function assisting with the improved amenity and legibility of the city.

- (c) Direction 5 – A Lively and Engaging City – the addition of *Cloud Arch* to this important civic precinct in the heart of the city, adjacent to the Town Hall, the Queen Victoria Building and close to St Andrew’s Cathedral, addressing the future Town Hall Square and reinforcing Jan Gehl’s recommendation for three linked squares on George Street, will contribute to a lively and engaging City Centre, both day and night, through its elegant and iconic contribution as a work of public art.
- (d) Direction 6 – Vibrant Local Communities and Economies – Located at a major transport interchange in close proximity to Town Hall, the Queen Victoria Building and the future Town Hall Square, *Cloud Arch* will become a marker for this important precinct and attract the attention of Syneysiders and visitors alike. The artwork will become an attraction in its own right and contribute to the local community and economy in ways that artworks of a similar scale and ambition have in other global cities around the world (refer to Attachment C to this report).
- (e) Direction 7 – A Cultural and Creative City - As a major work of public art designed in response to Sydney, its people and the sensitive heritage context in which it sits, *Cloud Arch* will become a symbol for the public life of Sydney, both in Australia and around the world. This work of art builds on our existing icons.
- (f) *Cloud Arch* delivers directly on the City of Sydney’s: City Art Public Art Strategy and associated Public Art Policy; The George Street Concept Design; and the City Centre Public Art Plan all of which contribute to the development of a Cultural and Creative City.
- (g) Direction 10 – Implementation through effective Governance and Partnerships – The delivery of *Cloud Arch* requires the cooperation of a multitude of stakeholders and could include the support of the private sector. Through the implementation of this major public artwork, the City is leading by example and demonstrating what can be done in collaboration with others in our city.

Risks

- 32. Given the critical path for the design and implementation of the George Street light rail project, a risk exists to the City if TfNSW does not enable access for the timely construction of the footings and access to facilitate the installation of the arch to ensure the project can be achieved. The intent is to build the arch prior to operation of the light rail, targeted for March 2019.
- 33. Under the Development Agreement:

Public Art 6.6

- (a) *TfNSW and the City will work together to facilitate the provision of public art between Circular Quay and Central Station by the City within a timeframe that is compatible with the Project’s program and which does not cause delay to the Project;*

- (f) *TfNSW will, at the request of the City and at the City's cost:*
- (ii) *install footings and connections to lighting, power and communication lines for public art to be installed within the Works Site as agreed between the City and TfNSW, at agreed locations within the Works Site, provided that such works do not adversely impact on the Project or on Safety.*
34. Extensive underground testing to manage and mitigate risk, including geotechnical investigations and location of existing services, has been carried out to locate these assets and determine how they have been constructed to ensure the construction methodology and final design of the footings below ground do not adversely impact these assets. Engineering peer reviews of all iterations of the footing designs have also been completed.
35. A risk assessment has been carried out. Vibration monitoring equipment has been installed in the rail tunnels to ensure the ongoing monitoring of existing assets during construction and for an agreed period beyond construction.
36. A Safety Interface Agreement is also necessary to access the site and will be finalised prior to installation.

Social / Cultural / Community

37. The implementation of *Cloud Arch*, one of a number of public artworks proposed as part of the transformation of the city centre, will significantly contribute to the social and cultural wellbeing of the city, in particular its resident, worker and visitor communities that frequent the city centre. The contribution of high quality public artworks to the public domain are an intrinsic part of what great cities do – creating cultural assets to be enjoyed by all people in public spaces created for everyone.

Environmental

38. Given the artwork's location in the pedestrianised section of George Street, it will increase walking in the City encouraging people to explore the civic centre of the City on foot. Acting as a way finding landmark, it will draw pedestrians to George Street from all points of the compass, encouraging people to walk instead of using other modes of transport.
39. Environmental impacts will be minimised through choice of materials, finishes and construction methodology.

Economic

40. Investment in this work of art will be repaid through the many economic benefits its installation will provide by boosting the visitor economy locally, nationally and internationally in the same way iconic artworks around the world contribute to the economy of their host cities. The City of Sydney is continually raising the cultural profile of Sydney through its City Art program and the high profile artworks it delivers and supports. *Cloud Arch* builds on this leadership and will be an attractor for all tourism in the same way artworks like Anish Kapoor's *Cloud Gate*, 2006, US\$23M (AUD\$39.2M in 2016), in Chicago and the Gateway Arch in St Louis by Eero Saarinen, 1965, US\$13.4M (AUD\$24M in 1965) have become internationally renowned. These works attract tourism and stimulate the local economy (see Attachment C to this report).

41. Public art is increasingly becoming an essential part of all urban renewal and infrastructure projects to increase the liveability of our cities. This is evidenced in projects such as Barangaroo, where the NSW State Government has allocated \$40M for public art as part of this urban renewal project, and the Victorian Government's investment of \$5.5M in their East Link infrastructure project.

BUDGET IMPLICATIONS

42. Funding to cover increased scope and additional costs is sought from the transfer of funds from future years Public Domain Capital Asset Enhancement program to provide \$5.5M of funds to City Centre Public Art Implementation as outlined in confidential Attachment 'E' to this report. This will reduce this ten year program from \$80.4M to \$74.9M.
43. The City has achieved public domain up-grade works through third party developer agreements in the City Centre, allowing for these costs to be offset by private development.
44. In addition, \$2.3M is proposed to be transferred from the budget for the artwork *Pavilion* to the budget for *Cloud Arch* within the City Centre Public Art Implementation program. This will postpone the construction of *Pavilion* until a new location has been identified (by the City working with the artist) and reported back to Council.

RELEVANT LEGISLATION

45. The Local Government Act 1993. Attachment E contains confidential commercial information which, if disclosed, would confer a commercial advantage on a person with whom Council is conducting (or proposes to conduct) business; and prejudice the commercial position of the person who supplied it. Discussion of the matter in an open meeting would, on balance, be contrary to the public interest because it would compromise Council's ability to negotiate fairly and commercially to achieve the best outcome for its ratepayers.
46. The delivery on any works under the current contract and any future contracts will be in accordance with the Local Government Act 1993, the Local Government (General) Regulation 2005 and the City's Contracts Policy.

CRITICAL DATES / TIME FRAMES

47. The construction of both footings is programmed from January 2018.
48. Subject to Council approval (of the additional costs), the development application for the arch will be lodged in September 2017, allowing the installation of the arch to proceed prior to light rail being operational in the George Street corridor in early 2019 according to the current program for the light rail project.

PUBLIC CONSULTATION

49. The City hosted an online public discussion on the Sydney Your Say website in July 2014.
50. The City has undertaken significant consultation with TfNSW, Sydney Trains and RMS.

51. The City has briefed the Minister for Transport and has formerly presented the proposal to the Heritage Council of NSW.
52. The City's Public Art Advisory Panel has also been consulted and has endorsed the project.
53. The development application will be lodged as per the City's standard processes and information on the artwork is publicly available on the City Art Public Art website and via the City's other channels.
54. The sensitive heritage context in which the artwork is located has been considered in the design development of the artwork. The City has engaged independent consultants to provide advice and develop a Heritage Impact Statement and a Visual Impact Analysis to accompany the development application.

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