

7 May 2015

Ms. Carolyn McNally
Secretary Department of Planning and Environment
23-33 Bridge Street, Sydney
NSW 2000

Dear Ms. McNally

**SUBMISSION TO NSW PLANNING AND ENVIRONMENT
BARANGAROO SOUTH - Mod 8 Concept Plan (MP06_0162 MOD 8)**

The Museum of Applied Arts and Sciences (MAAS) encompasses the Powerhouse Museum (Ultimo) Sydney Observatory (Millers Point) The Discovery Centre (Castle Hill).

This letter and attached report is the Museum's formal response to the development application submitted to the department by Lend Lease re Barangaroo South Mod 8 Concept Plan (MP06_0162MOD 8).

MAAS notes the opportunity the redevelopment of Barangaroo offers to increase visitors, workers and residents to the Sydney Observatory and to the wider precinct however heights of buildings and light spill will present challenges to the Observatory's current operations.

The attached report reviews the *UNSW Global report Sydney Observatory Sky View Impact Assessment* which outlines the impact of the revisions to the development proposal on the operations of Sydney Observatory and forms part of the documentation accompanying the Development Application.

Summary impact

This submission addresses a number of the issues highlighted in the Secretary's requirements including **heritage, economic and social impacts** on the Observatory.

MAAS welcomes the Secretary's requirement for the applicant to provide an analysis of the 'sky view loss and resultant impacts on the functioning of the Sydney Observatory telescopes and astronomical sightlines'. The ability to view the night sky is essential to attracting visitors, our business model, and our plans for growth. It is fundamental to preserving our reputation as a public observatory and astronomical museum, situated on an historic UNESCO listed site with a long tradition of significant astronomical activity.

The report prepared by UNSW Global and commissioned by Lend Lease to support the planning application describes the additional impacts generated by Mod 8 on the Observatory as negligible. The report has been reviewed by the Sydney

Observatory and the attached report prepared in response. A number of inaccuracies have been identified in the UNSW Global analysis.

In summary, the review identified:

- The Mod 8 concept plan buildings have significant impact on viewing of the Southern Cross, Alpha-Centauri, the Jewel box, Omega Centauri and other objects both by way of increased light spill and by blocking the view at certain times of the year.
- From 12 to 25% of available viewing days and from 6 to 15% of the available viewing time of these iconic objects will be lost if the Mod 8 buildings are constructed.
- The impact of the modification will impact the Observatory's capacity to generate visitation and related revenue.

In summary, the proposed modification significantly increases the impact on the viewing of important constellations including the Southern Cross and Pointer (including Alpha Centauri), Omega Centauri and the Jewel Box for part of the year and therefore the ability to run night time guided tours and other activities. These celestial objects are some of the most well-known and popular constellations with both local and international visitors.

This change represents an **economic and social impact** on the operation of the Observatory.

There is also a **heritage impact** as much of the significance of the site is linked to the ability to observe the night sky, all year round, from a location that has been used for this purpose for over 155 years. A summary of the sites heritage significance is attached.

Thank you for the opportunity to comment on this application. Please feel free to contact to discuss anything raised in the letter or accompanying report further. We would also be happy facilitate a visit to the Observatory for those involved in assessing the application.

Kind regards



7/5/2015

Elizabeth Stratford
Director of Corporate Resources & Chief Finance Officer

The Sydney Observatory and its heritage significance

Sydney Observatory is recognised by UNESCO as a historically significant site overlooking Sydney Harbour, which today functions as a museum of astronomy and a place for visitors to come and observe the southern sky and stars.

The site

The site of Sydney Observatory, now known as Observatory Hill, was previously known as Windmill Hill, Citadel Hill, Fort Phillip and Flagstaff Hill, describing its functions over time. All of these functions relied on its location as the highest point overlooking Sydney Harbour. For all of these functions, it had to have a clear view to the distance and be clearly visible, so its setting has some of the best views in Sydney.

The heritage significance of the site lies in its dominant location on the hill overlooking the colony and the range of uses this supported which were important to the stages in the development of the colony. These included milling, defence, communications, astronomy, meteorology and time keeping. Most importantly it has been used as an observatory since it was built in 1859 and more recently as a place for the public to come and share in this important history of the site but also enjoy viewing the southern sky and stars in an historic, accessible urban setting. The site is listed as a heritage item pursuant to the Sydney LEP 2012 and is also listed on the National Trust of Australia register.

The buildings

There are 4 buildings on site. The main Observatory was built between 1857 and 1859. Its design combined the practical needs of an observatory and astronomer's residence with the impressive appearance of a public building in an Italianate style. In 1877 a western wing and dome for telescopes was added. This is a two level building which provides public exhibition and viewing areas. In 1997 the building were refurbished and re-launched as a public observatory interpreting astronomy in Australia, past and present. Since then it has welcomed visitors both during the day and evening.

In keeping with the Observatory's time-keeping role, the tower and time ball were given greater prominence than the telescope dome. The telescope in the south dome was installed to observe the 1874 Transit of Venus. It is the oldest working telescope in Australia and is of immense historic importance. The north dome and west office wing were added to the Observatory in 1878. The extension was designed by the government architect James Barnet. The north dome now houses the state-of-the-art computer-controlled 40cm reflecting (mirror) telescope.

Current operations

The Observatory is open daily to visitors and operates three guided astronomy sessions each night. There is also a program of special events which include 'stargazing'. It is the impact on these evening session which is the most significant.