

19 December 2024

Mr Michael Want
Project Director – Kogarah Public School Upgrade
RP Infrastructure
20 Bond Street
SYDNEY NSW 2000

References:

- A. Airports Act 1996
- B. Airports (Protection of Airspace) Regulations 1996
- C. Civil Aviation (Buildings Control) Regulations 1988
- D. Bayside Local Environmental Plan 20214 Clause 6.7 – Airspace Operations
- E. National Airports Safeguarding Framework (NASF) Guideline H: Protecting Strategically Important Helicopter Landing Sites
- F. NSW Health Policy GL2020_014 Guidelines for NSW Hospital HLS dated 1 Jul 2020
- G. ICAO Annex 14 Volume II: Heliports, 5th Edition 2020 (AL 9)
- H. ICAO Heliport Manual Doc 9261-AN/903 5th Edition 2021
- I. Advisory Circular (AC) 139.R-01 v2.1 Guidelines for heliports - design and operation
- J. NASF Guideline E: Managing the risk of distractions to pilots from lighting in the vicinity of airports

Dear Michael,

In relation to the Review of Environmental Factors (REF) compliance with aviation requirements for the proposed works at Kogarah Public School, you requested that AviPro provide advice in relation to airport safeguarding requirements for Sydney (Kingsford-Smith) Airport and the Helicopter Landing Site at St George Hospital. In conducting my assessment I have referred to References A to J.

References A and B partially supersede Reference C and allow developments in the Kogarah area up to RL 51 or 51m AHD. Reference C retains some reporting requirements not otherwise included in Reference B in relation to seeking approval for developments and structures which are below RL 51 but more than 25 ft, 50ft or 150ft above ground level (AGL), depending on the location in proximity to the relevant airport. For the Kogarah area, the designated reporting height of developments and structures is 50ft AGL. Sydney Airport Corporation Limited (SACL) advise that any development or structure between 50ft AGL and 51 AHD may expect approval under Reference C.

The ground level elevation of the Kogarah Public School upgrade site is approximately 20.4m AHD. The lower limit of the Obstacle Limitation Surface for the Sydney Airport, above the Kogarah Public School upgrade is 51m AHD. There is, therefore, approximately 30m of airspace above the site for construction activities to utilise without impacting aviation operations to and from Sydney Airport.

As the buildings are proposed to be approximately 13 metres maximum building height, there is therefore approximately 18m of airspace above rooftop level for the erection of cranes and other plant (concrete pump booms, piling rigs, scaffolding etc). It would be most unusual for the entirety of this elevation to be used.

No crane methodology has been provided however it is assumed that with the approximate 13-metre maximum building height, tower cranes will not be installed. It is assumed that mobile cranes will support the preferred construction methodology. Mobile cranes are normally unlit as they typically only operate during daylight hours. If operating at night, in poor light, or in low visibility (rain, fog, duststorms, smoke haze etc) mobile cranes should be lit if they are deemed as potentially hazardous to aviation operations. Provided all construction cranes and plant do not exceed 51m AHD in elevation, they will not impact safe aviation operations to and from Sydney Airport. The crane methodology and assumptions need to be confirmed at the construction stage and if there is a likelihood of exceeding RL 51, formal airspace application would need to be initiated.

I have reviewed the most probable crane methodology and likely construction plan in the context of maintaining safe aviation operations to and from the St George Hospital HLS during the Kogarah Public School upgrade. Any proposed crane and construction activities are sufficiently remote from the HLS (approximately 640m), will be well below HLS elevation of 67.8 m AHD, and will not adversely impact safe aviation operations to and from the St George Hospital HLS during the Kogarah Public School upgrade. The crane lighting standards outlined at Section 3.12.7 of Reference C will not be required.

Bright lighting may affect pilots attempting to land or take off at an aerodrome at night. Reference G is the applicable guidance for limiting the negative impacts of bright lighting in proximity to aerodromes. The Kogarah Public School upgrade will not meet the minimum threshold of bright lighting to require further assessment. The site is not considered to be within the vicinity of the Sydney Airport for the purposes of the application of Reference G. and thus discounts the need for the Civil Aviation Safety Authority to assess the lighting.

Wetlands are incompatible with airports as they attract bird life. Expansion of wetlands leads to increased aviation risk. It is noted that the proposed Kogarah Public School upgrade does not propose the creation of any permanent wetlands or waterbird habitats.

In my capacity as a suitably qualified and experienced aviation professional, particularly in relation to the design, commissioning, operation, maintenance and audit of Helicopter Landing Sites (HLS) within the jurisdiction of NSW; and with regard to statutory requirements at References A to D and relevant State, National and International guidelines at References E to J, I hereby attest that the proposed Kogarah Public School upgrade construction arrangements will not adversely impact safe aviation operations to and from the St George Hospital HLS or Sydney Airport provided cranes and other construction equipment do not exceed RL 51. In the event that cranes and/or other construction equipment are likely to exceed RL 51, measures must be taken to seek formal assessment of the exceedances by the Civil Aviation Safety Authority (CASA) and Airservices Australia via SACL.

Initial advice with respect to Reference C reporting requirements should be undertaken via SACL at airspaceprotection@syd.com.au. Whilst not mandatory, I recommend that the Kogarah Public School upgrade site construction manager maintains ongoing occasional communications via email (airspaceprotection@syd.com.au) with Sydney (Kingsford-Smith) Airport staff during construction to continually assure airport management that cranes and other plant have not exceeded the permissible elevation (51m AHD). Such communication will promote confidence in airport management, and eliminate the need for Sydney Airport staff to continually make enquiries of the construction management team as to crane and plant elevations.

Should you wish to discuss this matter, please contact me in accordance with the details below.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Stark".

Jeff Stark
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