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Nepean Creative and Performing Arts High School Proposed Multi-Purpose Hall

Design Verification Statement

*State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 [NSW] (Clause 35(6)(a)) Schedule 4
Schools—design quality principles*

Prepared For:

Department of Education NSW
Schools Infrastructure NSW (SINSW)

Prepared By:

BKA Architecture



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Project Overview

Project Name: Proposed Multi-Purpose Hall

Project Address: Nepean Creative and Performing Arts High School - Address – 115-119 Great Western Highway Emu Plains NSW 2750

Architect's Name: Mark Khoury

Registration No. 9441

I confirm responsibility for designing the proposed development and have applied the SEPP (Educational Establishments and Child Care Facilities) 2017 NSW Design Quality Principles.

Signature of Architect:

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Architect's Name: Mark Khoury

Description of the Project:

A new multi-purpose hall is proposed to be constructed within the school grounds. A project brief provided by SINSW accounted for a multi-purpose hall facility equivalent to stream 9 standards as per the Department of Education's Educational Facilities Standards and Guidelines (EFSG). The new hall will help facilitate Nepean Creative and Performing Arts High School's dual curriculum and is proposed to be used primarily for indoor sports as well as for performances and events. The facility can also be used as a community resource, with shared use opportunities.

The hall will facilitate indoor ball sports including Basketball, Netball, Badminton and Volleyball with large storage requirements to house performing arts apparatus and equipment as well as sporting equipment. The hall will strengthen current relationships with wider community groups and schools by allowing the community to access the facility after school hours.

The hall will enhance the sense of arrival and improve landscape works surrounding the building, particularly at the interface between the buildings and adjoining outdoor spaces. The new facility will have little to no impact on existing car parking numbers.

Design process undertaken:

The initial brief provided by SINSW accounted for a multi-purpose hall facility equivalent to EFSG stream 9 standards which required the preparation of a business case as per NSW Treasury business case requirements. BKA Architecture have been involved in developing a series of master planning options and concept designs for the proposed hall. Initial options were developed using the Education SEPP Design Quality Principles as a starting point, with BKA Architecture commencing concept design to further develop layouts responding to objectives outlined by the school's stakeholders. Regular design meetings were held with SINSW and the end users, which formed an integral part of the design process and the project in turn has been endorsed by the PRG and stakeholders.

Key design considerations:

The design approach is to create a special multi-purpose hall for the students of Nepean Creative and Performing Arts High School and within the local school network. The idea is to create an indoor sports centric building that enhances the 'events precinct' of the school set along the southern side of the campus and connecting directly to the existing carpark facility via walkways.

The objective is to deliver a legible education facility within budget which clearly states its presence whilst being sensitive to nearby facilities.

The design framework will ensure the building;

- Meets the objectives of the school.
- Responds well to functional requirements and site.
- Is aesthetically pleasing and a joy to use.
- Operates in support of school activities and embraces the immediate community.
- Activates external spaces

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This Design Verification Statement has been prepared at the request of our client Schools Infrastructure NSW and is in reference to (Clause 35(6)(a)) Schedule 4 of the State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 [NSW]. Below is an outline of how each design principle outlined in the schedule has been considered in the general design of the proposed multi-purpose hall.

As stated in the State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 [NSW]:

The aim of this Policy is to facilitate the effective delivery of educational establishments and early education and care facilities across the State by:

- (a) improving regulatory certainty and efficiency through a consistent planning regime for educational establishments and early education and care facilities, and*
- (b) simplifying and standardising planning approval pathways for educational establishments and early education and care facilities (including identifying certain development of minimal environmental impact as exempt development), and*
- (c) establishing consistent State-wide assessment requirements and design considerations for educational establishments and early education and care facilities to improve the quality of infrastructure delivered and to minimise impacts on surrounding areas, and*
- (d) allowing for the efficient development, redevelopment or use of surplus government-owned land (including providing for consultation with communities regarding educational establishments in their local area), and*
- (e) providing for consultation with relevant public authorities about certain development during the assessment process or prior to development commencing, and*
- (f) aligning the NSW planning framework with the National Quality Framework that regulates early education and care services, and*
- (g) ensuring that proponents of new developments or modified premises meet the applicable requirements of the National Quality Framework for early education and care services, and of the corresponding regime for State regulated education and care services, as part of the planning approval and development process, and*
- (h) encouraging proponents of new developments or modified premises and consent authorities to facilitate the joint and shared use of the facilities of educational establishments with the community through appropriate design.*

The proposed multi-purpose hall will be located wholly on school campus, with its prime function being to support the school's curriculum by providing an indoor sporting facility that can function in multiple ways and can be shared by students and staff of Nepean Creative and Performing Arts High School as well as the local community.

State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 [NSW] is therefore applicable to the application. Design principles listed under Schedule 4 of the SEPP have been considered in the assessment and general design of the multi-purpose hall. The following summarises how each design principle has been met.

(Clause 35(6)(a)) Schedule 4 Schools—design quality principles

Principle 1—context, built form and landscape

Schools should be designed to respond to and enhance the positive qualities of their setting, landscape and heritage, including Aboriginal cultural heritage. The design and spatial organisation of buildings and the spaces between them should be informed by site conditions such as topography, orientation and climate.

Landscape should be integrated into the design of school developments to enhance on-site amenity, contribute to the streetscape and mitigate negative impacts on neighbouring sites.

School buildings and their grounds on land that is identified in or under a local environmental plan as a scenic protection area should be designed to recognise and protect the special visual qualities and natural environment of the area and located and designed to minimise the development's visual impact on those qualities and that natural environment.

The design approach is to create a building that enhances and adds to the events precinct of the school which is set along the southern side of the campus. Soft landscaping between pathways with some battering along the edges of paths and building is proposed to connect the building to the landscape.

The foyer space acts as a gathering space before entering the main court. Alternative entry / exit points along the northern end of the court leading to external areas. Change rooms are positioned at the southern and western end.

A new courtyard is created which is similar in size and proportion to the existing courtyard between existing Hall and Nepean Arts Centre. Access to the oval is maintained. The proposed building is located in close proximity to the existing hall and Nepean Arts Centre which enhances the school's events precinct.

The hall is oriented towards the north, with the northern edge of the building aligned with adjacent buildings.

Principle 2—sustainable, efficient and durable

Good design combines positive environmental, social and economic outcomes. Schools and school buildings should be designed to minimise the consumption of energy, water and natural resources and reduce waste and encourage recycling.

Schools should be designed to be durable, resilient and adaptable, enabling them to evolve over time to meet future requirements.

Passive design measures have been incorporated into the design to provide mixed-mode design outcomes with cooling and heating functions incorporated. Environmental factors such as natural light, ventilation, partial shading, full shading, material selection, orientation, water re-use along with energy use have been considered.

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Robust, high-impact materials at low level for protection against wear and tear from pedestrian traffic have been incorporated.

The facility is able to be used in 2 'modes' i.e Sport Mode and Performance mode

When in Sports Mode the hall can accommodate the following sport court configurations:

- Netball 30.5 × 15.25m
- Basketball 28 × 15m
- Badminton 13.4 × 6.1m
- Volleyball 16 × 8m

The EFSG has a requirement for a 2000mm minimum margin free of obstructions from side lines.

When in Performance Mode the hall can accommodate loose seating of up to 572 seats

Principle 3—accessible and inclusive

School buildings and their grounds should provide good wayfinding and be welcoming, accessible and inclusive to people with differing needs and capabilities.

Note—

Wayfinding refers to information systems that guide people through a physical environment and enhance their understanding and experience of the space.

Schools should actively seek opportunities for their facilities to be shared with the community and cater for activities outside of school hours.

The building is positioned adjacent to existing halls, with accessibility achieved by providing a new 1:14 ramp. A safe pedestrian movement strategy is proposed between existing school buildings and the proposed hall via a crossing over the existing vehicle aisle to ensure risk to students is minimised.

The proposed hall forms part of the school's events precinct and is proposed to be available for use from 7am to 10pm, seven days per week (including use on the weekends).

Principle 4—health and safety

Good school development optimises health, safety and security within its boundaries and the surrounding public domain, and balances this with the need to create a welcoming and accessible environment.

As well as being a facility which supports the health and wellbeing of its students by promoting healthy activity, the hall is also located well within the school campus and away from front boundaries and surrounding public domain. The proposed school hall connects to the spine of the events precinct. Further security measures include security cameras and swipe card access to doors.

Principle 5—amenity

Schools should provide pleasant and engaging spaces that are accessible for a wide range of educational, informal and community activities, while also considering the amenity of adjacent development and the local neighbourhood.

Schools located near busy roads or near rail corridors should incorporate appropriate noise mitigation measures to ensure a high level of amenity for occupants.

Schools should include appropriate, efficient, stage and age appropriate indoor and outdoor learning and play spaces, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage and service areas.

The school fronts Great Western Highway with one primary vehicular entry. The entry point is adjacent to traffic lights and leads to a carparking area primarily used by staff members. The school is located south of Emu Plains Train Station.

The school buildings are oriented perpendicular to the Street Frontage (short side facing the street). A covered walkway dissecting two of the rows of buildings creates a defining link for students to use. The relationship between building forms creates courtyard areas of varying spatial qualities.

Soft landscaping around the building is proposed with limited openings along the southern façade towards neighbouring properties to minimise noise impact.

Principle 6—whole of life, flexible and adaptive

School design should consider future needs and take a whole-of-life-cycle approach underpinned by site wide strategic and spatial planning. Good design for schools should deliver high environmental performance, ease of adaptation and maximise multi-use facilities.

Steel frame construction is proposed which can assist in relocation and re-use of the main structure in future. The siting of the building preserves potential growth of the school towards the northern end of the campus. The facility can be used for multiple purposes by the school and by community users, providing a public benefit.

The proposed hall location is not located within the 1% AEP flood extents but is within the PMF flood extents. A Flood Planning Level of RL26.50m AHD has been adopted, with level differences between building levels and external areas made accessible via ramps and suitable landscaping.

The facility aims to build community and identity and create a culture of inclusion and belonging that reflects and respects diversity within the school's community.

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The design includes cross ventilation with high-level openings complying with Section J of the National Construction Code. Shading is provided along external walkways which have large overhangs. Colours for the external facades have been chosen from mid to light tones to help the building thermally.

Large structural spans allow for flexible use and multiple activities. The building has adaptable configurations consisting of sports mode and performance mode. The hall includes multiple entries from the main foyer as well as a covered walkway to accommodate various group sizes, from smaller groups up to the full capacity of the hall.

Principle 7— aesthetics

School buildings and their landscape setting should be aesthetically pleasing by achieving a built form that has good proportions and a balanced composition of elements. Schools should respond to positive elements from the site and surrounding neighbourhood and have a positive impact on the quality and character of a neighbourhood.

The built form should respond to the existing or desired future context, particularly, positive elements from the site and surrounding neighbourhood, and have a positive impact on the quality and sense of identity of the neighbourhood

The design approach is to create a special multi-purpose hall for both the students of Nepean Creative and Performing Arts High School and for other students from the local school network. The building enhances the events precinct of the school which is located along the southern side of the campus. The building is linked to the other buildings in the precinct via walkways.

The objective of the design is to deliver a building which is identifiable as an education facility, which clearly states its presence, whilst being sensitive to nearby facilities.

The creation of a landscaped courtyard space between this building and the adjacent hall allows for students and other users to enjoy an additional shaded external space. This courtyard has similar proportions to the existing courtyard further east between the Nepean Arts Centre and the existing school hall further linking this building with the precinct. The building's proportions are directly related to its function as well as being of a similar proportion to the other buildings in the precinct. A sense of identity is achieved through the combination of contrasting the scale of the building's elements, through material selection as well as building alignment.

The main court space requires a clear height of 7metres to comply with the national standards for indoor basketball courts. This generates a minimum springing point for the main roof and opens up towards the north east with highlight windows. All other ancillary spaces have lower-level roof elements to create a contrast in height and direction with that of the main roof as well as being of a more human scale along its walkways.

The building placement and building design is sensitive to nearby neighbouring dwellings, with the building entrance positioned along the north as well as being set back from the neighbouring properties to the south.

Conclusion

It is considered the proposal demonstrates compliance with the design principles of both State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 [NSW] (Clause 35(6)(a)) as well as and the Department of Education's Educational Facilities Standards and Guidelines (EFSG). It is an appropriate response to its context and will make a quality aesthetic contribution to the school's built environment.

I verify, as a Registered Architect - NSW Architects Registration Board (Registration No. 9441), I have directed / supervised the design. I certify that the design has been developed in accordance with the design quality principles outlined above.

In conclusion, I believe the proposal satisfies the matters under the State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 [NSW] with particular reference to (Clause 35(6)(a)) Schedule 4 Schools—design quality principles.

Yours sincerely,

Mark Khoury
Director