APPROVED SCHEMATIC DESIGN REPORT

Lake Cathie Public School

School Masterplan & Expansion

REVISION A

SITE
1240 Ocean Drive, Bonny Hills
NSW Australia 2445

CLIENT
SINSW Schools Infrastructure New South Wales

DATE
25.01.19

PROJECT NO.
3928
This Schematic Design Report has been prepared by SHAC as Head Design Consultant (HDC) on behalf of the client School Infrastructure New South Wales (SINSW) and The Department of Education (DoE).

SHAC has previously prepared the information on behalf of the DoE which has formed part of the business case. This Schematic Design Report is a record of the design evolution which has resulted in the Preferred Option for Lake Cathie Public School.

This report has been prepared in collaboration with the following parties:
- Lake Cathie Public School Project Reference Group (PRG)
- Lake Cathie Public School Technical Stakeholder Group (TSG)
- Crown Project Services (CPS) - Project Managers
- SHAC - Head Design Consultant (Architect)

This report should be read in conjunction with the drawings schedules, specifications and reports as listed in the Project Document Register.
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**List of Abbreviations:**
- AMU - Asset Management Unit
- COLA - Covered Outdoor Learning
- CPS - Crown Project Services
- DoE - Department of Education
- EFSG - Educational Facilities Standards & Guidelines
- FM - Facilities Management
- HDC - Head Design Consultant
- ICT - Information & Communications Technologies
- LCPS - Lake Cathie Public School
- PMHC - Port Macquarie-Hastings Council
- PMO - Project Management Office
- PRG - Project Reference Group
- SDP - Service Delivery Plan
- TSG - Technical Stakeholder Group
- WHS - Work Health & Safety

**QUALITY ASSURANCE**

Summary of Revisions

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We make the built environment a better place, we make the natural environment a balanced place, we make the work environment a creative place, we make property investment a valuable place... and when we come together, when we collaborate... We place make.

At SHAC our Architectural principles are our framework for environmental design of space to facilitate teaching and learning. Just as pedagogy embraces flexible, adaptable and agile techniques to promote individual potential, our architecture also acknowledges these foundation principles as building blocks for future efficient and relevant school facilities.

SHAC has successfully produced numerous educational projects in the Hunter region and along the east coast of Australia including St Bede’s Catholic College Chisholm, St Patrick’s Primary School (Stage 1) Lochinvar and a range of projects for St Philip’s Catholic College.
SCHEMATIC DESIGN REPORT

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The Lake Cathie Public School Masterplan 2018/2019 is a comprehensive guide to the future development of the current Lake Cathie Public School site on Ocean Drive, Bonny Hills NSW. The masterplan includes the school subject site as well as a precinct study of the surrounding context. The purpose of the masterplan is to ensure cohesive campus development responds to the growth of the surrounding community, and balances the changing needs of the school and the community, including current and future learning and teaching pedagogy and environments. The built environment must retain the ability to embody the values and aspirations of the Department by being adaptable through flexibility, affordable through efficiency, and sustainable by design.

The masterplan will assist in the establishment of innovative teaching techniques nurtured by the built environment, as well as the day to day needs of the school. It will also be used as a tool for review, assessment and continual improvement. The masterplan is not intended as a static document, but a live one that informs and is informed by each phase of capital development and growth at regular intervals well into the future.

Executive Summary
The Lake Cathie Public School Design presented in this report is a result of a collaborative process with the School, DoE and various interdisciplinary teams.

Within this design process SHAC has engaged with the school & its educators via:

- Ongoing Project Reference Group (PRG) consultation meetings every third week
- Design Workshops with TSG & technical design consultants
- Design Workshops run by SHAC including external design team peer review processes
- Virtual flythrough tours of working model utilising BIM
- Personal tours of futures focused schools and dialogue with their relative educators
- Precedent Studies

In addition to the aforementioned stakeholder engagements strategies, SHAC has also scheduled weekly internal design review panels throughout the projects lifespan to ensure that a high quality, learner centric project is delivered. This includes the following internal reviews:

- Indoor & outdoor learning space design review
- Interior & exterior facade design review
- Quality Assurance & Safety by design

2018 MASTERPLAN

Collaborative Design Process

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“Education breeds confidence. Confidence breeds hope. Hope breeds peace.”

Confucius

Pre-Project Information

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DoE & LCPS Educational Brief

**NSW DoE General Educational Principles:**

1. First and foremost, focus on the needs of learners and learning.
2. Build community and identity and create a culture of welcome, inclusion and belonging that reflects and respects diversity within the school’s community.
3. Be aesthetically pleasing.
4. Provide contemporary, sustainable learning environments that:
   - Promote learning for students and teachers through collaboration, social interaction and active investigation
   - Encourage learner self-management and self-direction
   - Support a full range of teaching strategies from direct explicit instruction to facilitation of inquiry and authentic project and problem based learning
   - Facilitate learning and connection anywhere, anytime by providing seamless access to ICT and integration of learning resources throughout the learning spaces
   - Be integrated into, and maximise the use of the natural environment
   - Enable aspects of the buildings, building design and outdoor spaces to be learning tools in themselves—for example, learning from the ecologically sustainable features of the design and associated energy management systems
   - Are age and stage appropriate
5. Embed the potential for re-configurability, both in the present for multi-purpose use and over time for changing needs

**LCPS Strategic Aims**

- Address spatial limitations of existing school
- Finalise original school development application conditions, removal of road and ecological rehabilitation corridor
- Capture the sense of place within LCPS and project its uniqueness to the community
- Emphasize school motto of spirit, opportunity & excellence
- Provide a hub for professional learning for all schools in the region, a centre of excellence and a centre for community
- Meet the needs of students in the 21st Century
- Enhance the current and future pedagogical teaching and learning strategies
- Restructure the school as museum for learning, library to be new heart of school centring located in relation to school masterplan
- Use masterplan to provoke communication with students, parents and the wider community

**Project Specific Design Principles**

- Consider staging and futureproofing
- Provide stimulating, creative and agile environments that are flexible and adaptive
- Provide flexible learning spaces that support a full range of teaching strategies from direct instruction to the facilitation of inquiry based learning
- Deliver a narrative bringing the worlds of digital & analogue literature together
- Provide a space for students to embrace their love of literature to escape and immerse themselves
- Provide a range of different settings to accommodate different learning styles
- Make learning visible
- Appropriately scale spaces for age and size of students to optimise comfort
- Respect and strengthen LCPS’s identity and character as an integral part of Lake Cathie/Bonny Hills region
- Increase indoor-outdoor connectivity
- Engage & link student learning within outdoor areas to flora & fauna and ecological rehabilitation
2008 Building the Education Revolution
Back in 2008 the Australian Commonwealth committed funding to ‘Building the Education Revolution’. In the BER period, SHAC took care of the Hunter Catholic Schools rollout, and was one of the most efficient & value for money services in the state. Shortly afterwards, state governments became cognisant of the need to link pedagogy with space. 21st Century learning was ignited.

2015- Future Focused Learning
From 2015 there has been a shift from traditional teacher led teaching to Future Focused Learning which:
- Encourages ingenuity
- Develops independence
- Encourages critical thinking
- And promote students who are tech-ready

Futures Focused Learning grants students the skills of adaption to enrich their life, their career, and their community.

A 2015 survey suggested a typical future generational work-life scenario will include 17 different places of employment in a lifetime. Now and in the future we expect employers will look for teams that work organically in collaborative groups to solve problems.

Future Focused Learning Environments
The traditional learning environments that focus on individual, teacher directed learning were incompatible with the collaborative, problem-solving involved with Future Focused Learning. This has required extensive refurbishment of existing schools to become compatible with the new collaborative, student led pedagogy. These refurbishments are to be guided by international trends, academic research (LEaRN)1 and the recently released Design Guide for Schools (NSW)2.

The aim of Future Focused Learning environments are to be:
- Flexible and provide a variety of spatial settings for different learning modes
- Adaptable
- Technological and future ready
- A learning community
- Connected with the wider community