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Existing 51 Bromide Street Site – Corner of Blende and Kaolin Streets, Broken Hill.



Proposed Broken Hill Police Station- Artist Impression

PROPOSED BROKEN HILL POLICE STATION 51 BLENDE STREET, BROKEN HILL

ARCHITECTS DESIGN STATEMENT

MAY 2020

ARCHITECTS DESIGN STATEMENT BROKEN HILL POLICE STATION

Background

Gardner Wetherill & Associates and their team of consultants were engaged by BGIS, Project Managers who represent NSW Police, for the design, design development and documentation of the new Broken Hill (P.A.C.) Police Station for the Barrier Police Area Command.

The site, known as 51 Bromide Street, was originally part of a Tramway Reserve then dedicated museum land, was the subject of a recent subdivision of land by the Broken Hill City Council, with NSW Police Force purchasing 6038m2 of the southern portion of the land bound by Bromide, Blende, Kaolin and Beryl Streets, for the relocation of the new Broken Hill Police Station.

The development on the subject site will replace the Penrose Park picnic railway train attraction and train shed and the associated mining relics which will be relocated off-site to a suitable recreation area, yet to be determined. The site contains minimal low level vegetation to the south east and south west boundaries, with the northern portion of the block, (*approx. 6100m2*) beyond the subject site, housing the timber mining rigs of the Kintore Headframe and the Big Ant, being one of two sculptures on site, by Pro Hart, together with other mining museum relics from the past.



The proposed site of the new Broken Hill Police Station, south west of the Kintore Reserve.

The subject site is located approx. 350m from the existing Broken Hill Police Station and Court House on Argent Street, 600m from the Broken Hill Railway Station and in close proximity to the NSWPF District Offices.

The existing 1890 Broken Hill Police Station at 252 Argent Street, is a heritage listed building, and is no longer fit for purpose to accommodate the modern operational procedures and the required crime prevention units of NSW Police. With heritage restrictions not permitting alterations to enlarge and modify the premises, the existing facility cannot meet the requirements of the Command.

The Proposal

The relocation of the new Broken Hill Police Station is intended to incorporate all areas of crime management and Police administration within one new single building, operating a 24 hour, 7 days a week policing facility and establish a more robust rural crime support to the Barrier Police Area Command, within the Western Region of NSW.

The new Police Station facility is approx. 2600m2 in gross floor area and constructed over two floor levels, with undercover secure parking for 21 operation vehicles, 4 trailers, a Post Command vehicle, a Vehicle Examination Bay, Custody Van Dock, Vehicle Wash Bay, motor bikes and bicycle parking, with site drive through access between Blende and Beryl Streets

The planning and design of the Broken Hill Police Station responds to the accommodation schedule and respective design and Police building codes prepared by NSW Police, to house the required specific Police units, user groups and staff that make up this Police Area Command station.

In response to the earlier prepared Urban Design Report, the building footprint was preferred and agreed with NSW Police to be of an 'L-Shape' plan fronting Blende and Kaolin Streets and orientated around a landscaped Courtyard to maximise north and north/western light to the internal façade of the building.

For obvious safety and security reasons, public or visitor parking on-site to secure areas of NSW Police Station sites is not permitted, however, in the case of Broken Hill, public parking is readily available on Blende, Kaolin and Beryl Streets. We also note that parking spaces are available on site, for operational vehicles, authorised Police visitors and one (1) complying accessible parking space.

Design and Form

The concept for the appearance of the proposed Police Station respects the roof form, selected materials and finishes of local Australian vernacular '*outback*' architecture, but reflected in a modern contemporary building with raw materials, textures earthy colours, but still with the ability to be immediately recognisable as a law enforcement public authority to be shared with the community to encourage a positive social attitude towards NSW Police.



Strong traditional outback roof forms

Contemporary representation of roof forms



Long lineal 'Woolshed' roof form with natural zincalume finish

Practical sun control



Traditional roof forms, but depicted in a contemporary presentation It is noted that the proposed site is located at the southwest fringe of the main commercial/retail area of Blende and Argent Streets and positioned at the transition of the residential area, hence the preference to integrate a more appropriate domestic roof form and pitch, that is more sympathetic with the immediate area, where corrugated roofs, broad eaves protection and expressed roof drainage are common.



Materials and Finishes

In addition to the building form, the selection of traditional materials that are associated with vernacular usage or compatible with the vernacular, and in a sense, represent a sensible modern extension of climatically appropriate design.

Roofing

The use of corrugated steel typifies early Australian vernacular architecture, and is intended to be finished in traditional zincalume, not a pre-coloured Colorbond product, which is more recognisable with suburban and coastal projects.

Similar with guttering and downpipes, it is the intent to provide generous half round gutters and circular downpipes finished in zincalume steel.

Corten Cladding

The inclusion of 'Corten', being a copper chromium alloy steel where its chemical composition promotes the early weathering formation of an adhering protective layer of rust when exposed to the elements, has been introduced in contemporary buildings over recent years, and more appropriate in this local rural miming environment, as seen in the new Broken Hill Community Health Centre, on the corner of Sulphide and Crystal Streets.

Mini Orb Cladding

As a secondary high-level building cladding element, it is proposed to incorporate Lysaght 'Mini Orb' horizontal sheeting, finished in natural zincalume. Again, corrugated steel has been typically used over the past two centuries as external sheet cladding, and again forms a traditional Australian vernacular finish as a robust and durable protective sheeting.

Windows, Doors and Glazing

It is proposed to include natural anodised aluminium window and door frames with green tinted glazing, with appropriate U and SHGC values in accordance with the requirements of the ESD/Section J Consultants.



Blue Glazed Brick Feature Wall

Austral - "Bowral Blue" Facebrick (dark grey mortar joints)

Police Station Feature Wall

Over the past decade, NSW Police Stations have introduced a Statement Feature Wall on arrival, of blue highly glazed brickwork (*equal to Austral Burlesque series' – Smashing Blue*), which immediately identifies for the public, a NSW Police Station. The wall will also include the name 'Broken Hill Police Station'.

Face Brickwork

The low level and ground floor portion of the building is proposed to be constructed and faced in a dark brick, equal to Austral 'Bowral 50 – Bowral Blue Bricks with dark grey mortar joints, forming a heavy base to the two storey building with lighter materials and colours above.

Solar Control

To address solar control penetration to the external glazing, sun shading will be provided in the form of fixed horizontal natural anodised aluminium louvres, secured proud approx. 400mm off the façade of the building to enable cleaning and maintenance.

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Sustainability

Project architects, Gardner Wetherill & Associates, endorses ESD principles and endeavours to provide sustainable solutions which achieve an optimal balance of financial, environmental and social factors.

In all design and construction decision making processes, consideration is given to:

- Minimising water, air and soil pollution
- Minimising consumption of non-renewable resources
- General environment issues
- Use of materials that have health and safety aspects eg. Using water based rather than solvent based paints
- Minimisation of waste
- Reduction in energy consumption
- Appropriate and efficient external sun shading devices
- Reduction in on-going maintenance requirements

Apart from employing ESD principles on projects, the firm has adopted strategies within our office to minimise use of energy and depletion of finite resources.

During the design development and documentation of the projects particular care will be taken in the selection of materials, systems and equipment in order to conserve energy and resources. Items that are considered inclusions will be:

- Orientation of buildings and windows
- Passive sun protection with the integration of generous eave and roof projections.
- Variable voltage, variable frequency (UVVF) Lift drives and motors
- Glass selection, with appropriate U-value & SHGC solar radiation admittance ras per Section J.
- Use of motion activated lights
- Roof mounted Photovoltaic panels for both HWS and direct current for building electricity.
- Water conserving sanitary ware, tap and shower ware
- Photo electric controls on all external lighting
- Low energy use rated whitegoods
- Use of gas fired boilers for condenser water and hot water supply
- Use of heat recovery from substation equipment
- Selection of materials with low embodied energy
- NABERS certification and on going performance reviews

NSW Police Station projects are required to achieve a 4.5 star rating.

CPTED Crime Prevention Through Environmental Design

Security and surveillance of NSW Police Stations is a paramount requirement for control and safety of these facilities and all personnel using them.

Building security by means of Closed Circuit Television (CCTV) is a requirement of the NSW Police Force and is provided to cover the external perimeter areas of each Police Station, including selected areas within the building to monitor both Custodial and limited Operational areas. Security control of the 'immediate pedestrian streets' (Blende, Kaolin and Beryl Street), will also be monitored daily, for inappropriate activity within the station's surrounds.

NSW Police Staff are protected by restricting access to nominated areas of the station and alarms systems to ensure this is controlled. Prisoners handling areas are secure and monitored by custodial staff with audio and visual systems.

'Secure' on-site parking has been provided but restricted to NSW Police operational vehicles and appointed officers, with convenient public parking on Blende, Kaolin and Beryl Streets, as it's a policy of the NSW Police Force to restrict unauthorised and public vehicles accessing the Station.

Where visibility is limited, such as the public arrival, entry, lobby areas and vehicle entry and ramps, CCTV and convex mirrors are installed to ensure clear visibility and safety.

With regards to external areas for security reasons, the NSW Police Force stipulates that landscaping is to be limited, and planting is not to grow to a height greater than 1.0m, or be located so as it can be used by the public as a 'hiding point'. Trees, either existing or proposed are to be pruned or located so as their canopy and branches are well clear of the building face and roof, to eliminate any possible access point.

Other elements such as specific safety glass, anti-graffiti paint, external lighting, balustrading, handrails, wayfinding signage, tactile indicators are all requirements of the NSW Police Force, to again ensure safety and security is incorporated into Police developments.

Landscape

Together with the architecture, the appropriate local and rural landscaping to the site is equally important to reiterate the Broken Hill *'outback'* environment, with the incorporation of local and natural planting and colourful ground cover.

The proposed central Courtyard that the Police Station's footprint is focused around, is a key element in the planning concept, to not only introduce natural northern light into the building, but enhance the visual experience as one moves within the buildings circulation corridor.

The Courtyard also includes at the northern end, a proposed feature wall of local indigenous art, where the concept of this was recently introduced at the Tweed Heads Police Station by way of an open competition for local artists to submit their ideas and concepts, and a winner was selected from five finalists, and the end result was extremely successful in the recognition of the works as a local identity.

It is also proposed to introduce a couple of local mining relics as sculptures, to enforce the theme of the previous sites use, and the local mining history.



Accessibility

The requirements of AS 1428.1 – 2000 Design for Access and Mobility and also addressing the requirements of the DDA, have been incorporated into the design. The project has engaged the services of an Access Consultant (Morris Goding Accessibility Consultants to review and advised on all relevant design issues to date and monitor issues as the project develops.

It is noted that with regards to prisoner release from the Custodial Area, NSW Police will adopt a management procedure, whereby, if and when disabled and wheelchair detainees are admitted to the Charge Room, they will be accompanied and escorted by an office to the accessible amenities and assisted through the charge process and prisoner release procedure.

Summary

The proposal has been designed and developed in conjunction with representatives from NSW Police Force to meet the current, future operational and functional needs of this emergency authority for the Barrier Police Area Command (Western Region), with the ability to house the scheduled staff numbers (including future expansion) and operational units with improved facilities.

The proposed Broken Hill P.A.C. Police Station site on the corner of Blende and Kaolin Streets Broken Hill, will greatly improve and increase the operational performance with additional Police units by replacing the existing Police Station facility at 252 Argent Street, Broken Hill.

Most importantly, we should not lose sight that the proposed new development at will greatly assist with the improved ability to respond, serve and protect the Broken Hill and Regional community.

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Lindsay Henry - Project Team Leader, Gardner Wetherill & Associates for NSW Police



Existing Argent Street Police Station



Propposed New Broken Hill Police Station