

# ARCHITECTURAL STATEMENT

## Cessnock Correctional Centre – 1000 Bed Expansion



Review 6

4/10/2016

## FOREWORD

NBRSArchitecture have been awarded the role of Principal Design Consultant (PDC) for the 600 bed expansion to Cessnock Correctional Centre (CCC). Part of the engagement for the 600 bed expansion requires us to support the Department of Justice in obtaining planning approval for the construction of this project. NBRS have also been asked to support the Department of Justice in obtaining planning approval for the new 400-bed, Rapid Build Prison project, however NBRS are not the PDC (Architect) for the 400-bed facility.

As the PDC for the 600 bed expansion NBRS will design and document this portion of works at CCC including the completion of an architectural statement, however we will only be completing an architectural statement for the 400-bed facility which will help inform the approval process for the 2 projects combined.

The approval process for the proposed works at CCC is via NSW State planning approval under a 'Review of Environmental Factors' (REF). The architectural statement for the 600 and 400-bed projects will be a combined REF for the 1000 bed expansion and will form part of a greater document prepared by JBA Urban Development Services.

## FIGURE LIST

<i>Figure 1-1: Overall Plan 3</i>	
<i>Figure 1-2: Entry to the Existing Medium Security Facility (634Med)</i>	4
<i>Figure 1-3: Entry to the existing 250-bed Maximum Security Centre (250Max)</i>	5
<i>Figure 1-4: 634Med existing fence</i>	5
<i>Figure 1-5: 250Max existing wall</i>	6
<i>Figure 2-1: 600-bed site overview</i>	8
<i>Figure 2-2: 600 bed - site planning</i>	8
<i>Figure 2-3: Existing Medium Security Facility Upgrade</i>	11
<i>Figure 3-1: From North west corner of the site facing south</i>	12
<i>Figure 3-2: Demountable education buildings sitting on site waiting for refurb</i>	12
<i>Figure 3-3: View from south-east corner of site looking west</i>	13
<i>Figure 3-4: View from south-east corner of site looking north-west</i>	13
<i>Figure 3-5: 400-bed Rapid Build Prison – site plan14</i>	
<i>Figure 2-9 400-bed rapid build prison – typical Secure Perimeter cross section</i>	15
<i>Figure 3-7: 400-bed rapid build prison – Gatehouse eastern elevation</i>	15
<i>Figure 3-8: Existing view from Southern Boundary – land for sale.</i>	16
<i>Figure 3-9: Location of prison and proposed tree line to the southern boundary.</i>	17
<i>Figure 3-10: View from southern boundary looking north to the new 400-bed prison – Before tree planting and mound.</i>	17
<i>Figure 3-11: View from southern boundary looking north to the new 400-bed prison with the proposed landscaped screen.</i>	18

## 1.0 INTRODUCTION

The proposed works at Cessnock Correctional Centre (CCC) includes a 600 bed expansion to the existing facilities and a new Rapid Build Prison contain 400-beds. The total additional beds to CCC will be 1000, which is made up of;

- New 320-bed Maximum Security Facility (320Max) adjoining the existing 250-bed maximum security facility (250Max),
- New stand-alone 280-bed Minimum Security beds (280Min),
- Modifications to existing 634-bed medium security facility (634Med), and
- New stand-alone 400-bed maximum security facility known as the Rapid Build Prison (400RBP).

Figure 1-1 identifies where the proposed developments are located.

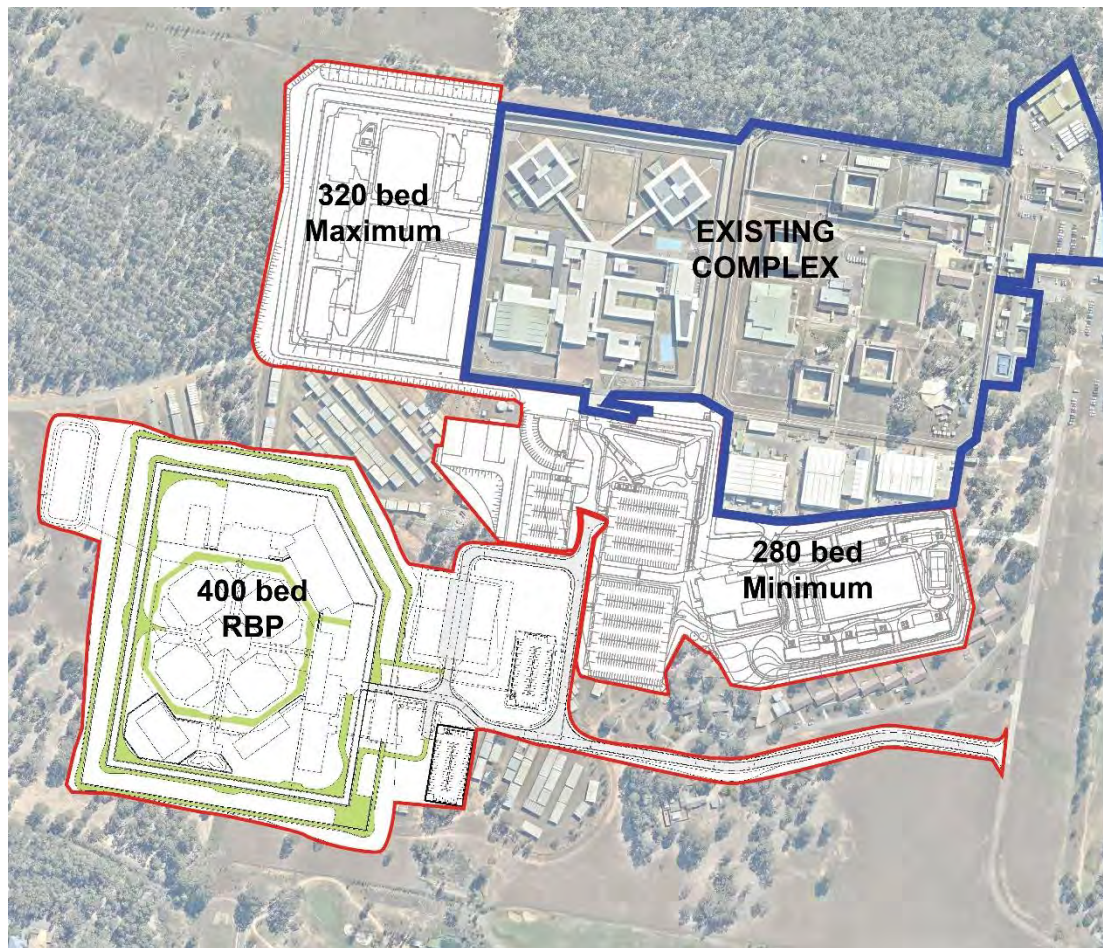


Figure 1-1: Overall Plan

### EXISTING FACILITY

The Cessnock Corrective Centre precinct is accessed via Lindsay Street which runs north-south along the eastern boundary. The precinct is bound by the Oaks Golf Club to the east and south, rural/agricultural properties to the west and rural/residential properties to the north. Further south east and south west of the site are residential properties and the Mount View High School.



The existing facilities are located mainly in the northern and eastern part of the precinct. South of the main facilities there are fourteen (14) single-storey dwellings which are owned and operated by Corrective Services NSW. These existing houses occupy a number of supportive functions for CCC prisoners and other community programs. One (1) of the existing properties are proposed to be demolished under this expansion making way for new perimeter fencing and access roads.

The existing CCC is made up of two secure facilities:

1. 634-bed medium security facility opened in 1972, and
2. 250-bed maximum security facility opened in 2011.

The 634-bed medium security facility (Figure 1-2) is accessed via a Gatehouse from the east and is bound by a 6.1-metre-high steel mesh fence. The 250-bed maximum security facility (Figure 1-3) is accessed via a two-storey Gatehouse from the south and is bound by a 5-metre-high precast concrete wall.



Figure 1-2: Entry to the Existing Medium Security Facility (634Med)



Figure 1-3: Entry to the existing 250-bed Maximum Security Centre (250Max)

The visual impact of both centres differs greatly. The medium security facility (Figure 1-4) is bound by a steel mesh fence which allows visitors to see into the centre and prisoners out offering a softer visual impact as it sits within the existing landscape. The maximum security facility (Figure 1-5) with its concrete wall is a dominate structure with no visual connection from outside the walls to inside the centre.



Figure 1-4: 634Med existing fence



*Figure 1-5: 250Max existing wall*

## 2.0 600-BED EXPANSION

Figure 1-1 details the proposed locations of the new developments. The proposed new 320-bed maximum security facility (320Max) will be an extension to the west of the existing 250Max. The new perimeter wall will match the existing concrete wall as it is extended to the west. Corrective Services NSW (CSNSW) standard fence materials are defined by prisoner cohort. Maximum security facilities are typically bound by a concrete wall, with a sterile zone internally and a 5-metre-high mesh fence with 900mm-diameter drum on top. The proposed standalone 280-bed minimum security facility (280Min) will be bound by a 5.2metre-high steel mesh fence with a 900mm-diameter drum, total fence height 6.1m in line with CSNSW Standards. The visual amenity of this centre will be similar to the existing medium security centre offering visual connection into the proposed 280 bed centre and outside the proposed 280 bed centre. The visual amenity of the combined 600-bed expansion is defined by both Corrective Services design requirements and the quality of the existing facilities.

The existing medium security facility (634Med) will be upgraded to a maximum security facility however the steel 'mesh' fence will be retained. A 900mm-diameter drum will be added to the perimeter fence, improving the security requirements, yet still maintaining the existing transparency of the existing facility to the east.

CSNSW have allowed a deviation from the standards for the 400-bed Rapid build Prison (400 RBP), which will be bound by two (2) 5-metre-high steel mesh fences topped with 900mm-diameter drums. The total fence height will be 6.1 metres. The 2 perimeter fences will be approx. 8m apart with a sterile zone in-between. The visual amenity of this facility will be similar to the 280Min and 634Med with a transparent quality allowing for people to see into the facility and for prisoners to see out.

This REF outlines the works for the new 320-bed Maximum Security, 280-bed Minimum Security, and 400-bed Rapid Build prison projects and will also include the alterations and additions to this existing facility with the intention that the prison will now be operated as a stand-alone remand facility with its own central Control Room and associated security and response systems.

### ADMINISTRATION, PARKING AND ROAD DESIGN

Figure 1-1 details the location of a new administration and parking zone to the south of the existing maximum security facility. The intent of this zone is to create a hub where visitors and staff can access the Centres via new parking spaces, Administration Buildings for the Correctional Centre, Pre-Visitor centres and a stores, maintenance building.

The location of this zone has been driven by the management of the Cessnock Correctional Centre precinct. Precinct planning ensures all visitors, centre access, staff parking, visitor parking and deliveries are co-located. The scale and building typology would generally be single-storey buildings. two-storey buildings would not exceed 10-metres-high.



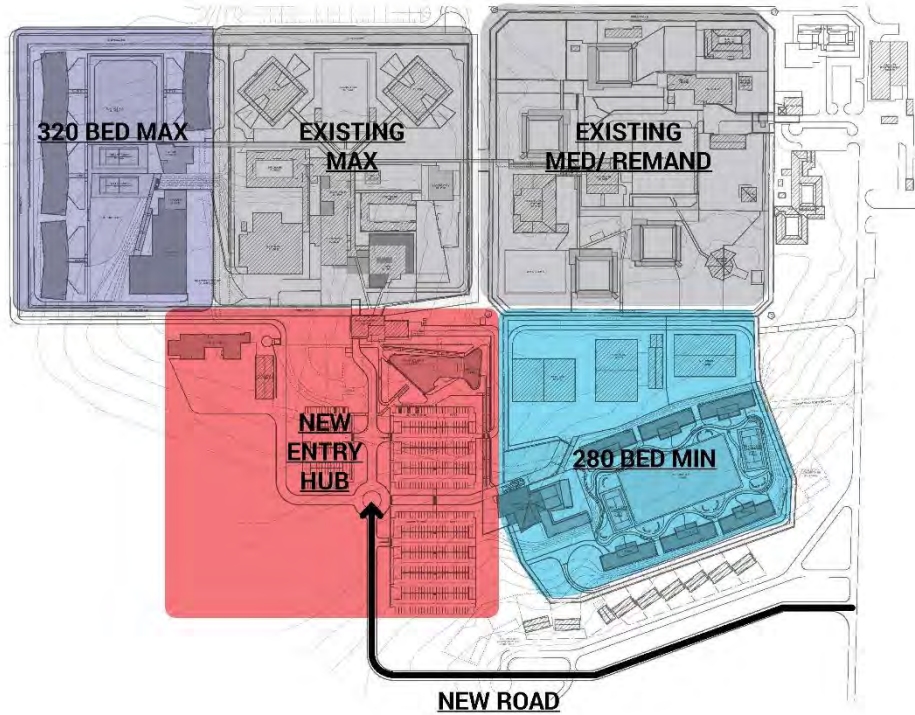


Figure 2-1: 600-bed site overview

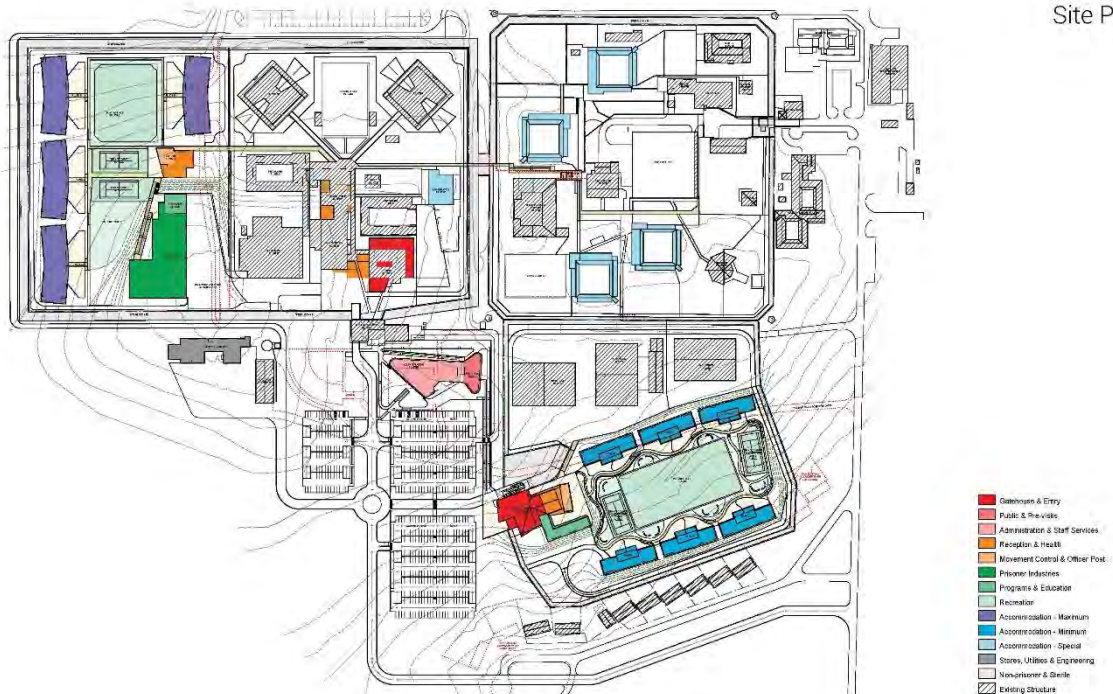


Figure 2-2: 600 bed - site planning

Site Plan 4



### **280MIN DESIGN**

The entrance of the 280Min is via a combined Staff entry / Visits centre. This building is a single-storey building however reads as a two-storey building to match the height of the adjacent perimeter fencing. The building is approximately 6.5-metres-high. The entry building is designed to be recognisable and welcoming for the public.

Within the 280Min secure perimeter, prisoners are housed in six (6) two-storey accommodation units which have a residential, scale, look and feel. The accommodation units are orientated to face the internal oval and associated tennis courts to form a campus-style environment.

Minimum security prisoners will utilise the existing industrial buildings to the north on a daily basis. The industry buildings operate as metal work, wood works and food handling services. Prisoners within the 280Min will access the existing industry spaces within the prison walls and will not leave the secure facility for program or industry activities.

### **320MAX DESIGN**

The entrance to the 320Max is via the existing 250Max Gatehouse. The existing Gatehouse is a two-storey building with visitor and staff access on the ground floor and the CCC Central Control Room on the first floor. Prisoners within the 320Max are housed within two-storey maximum security accommodation units. The accommodation units are constructed from steel and are clad in a pre-finished Zinalume sheet. Each accommodation unit has its own secure yard with walking track and shelter.

Similar to the 280Min, this facility has been designed as a campus-style environment. All prisoner accommodation units are orientated to face the tennis courts and oval at the centre of the site. A new Industry building houses various functions used as prisoner programs and services. These include Laundry, Retherm kitchen, Bakery, Centre Hygiene and Sandwich making facilities with some programs and classroom spaces for prisoners.

Both the 320 and 280 bed expansions will have a similar fence design to what is currently built. Whilst the prison footprint is expanding the material makeup for the 280 bed and 320-bed perimeter fence will mimic what is already built.

### **634MED UPGRADES**

The existing 634-bed medium security facility was constructed in the late 1960's and early 1970's and has been operated with multiple cohorts residing in the Centre since it was first commissioned. The existing facility is surrounded by welded steel mesh security fences in one or two layers. Outer fences are topped with 900mm diameter anti-climb drums or razor-wire rolled segments.

The welded steel fence allows prisoners and visitors to see out of the Centre and into the Centre softening the visual impact of the prison within the correctional precinct. The Centre is dominated by four (4) three-storey brick accommodation units which are scattered within the confines of the secure perimeter and are only visible from the western and northern boundaries. The predominately face-brick buildings throughout centre reflects the style 1970's Australian architecture. Access to the centre is by way of a secure sally port which is operated by the adjacent gatehouse located outside the secure perimeter on the eastern boundary.

Other buildings within the secure perimeter include;

- A single-storey, face-brick reception building which is used to process incoming prisoners and dispatch outgoing prisoners,
- A single-storey, face-brick health building which is used to treat prisoners with sub-acute conditions,
- A single-storey, face-brick recreation building which houses a gym, pool tables, basketball court library, general teaching space and other programs spaces such as painting. The recreation building is located to the western side of the centre with easy access from any of the 4 accommodation units,
- A single-storey, face-brick visits building located in the south-east corner which operates numerous times a week and is accessed by both custodial staff, professional visitors, prisoners, and visitors which may be friends or family,
- A single-storey, face-brick chapel is located on the eastern boundary,

- A single-storey, double-height, face-brick kitchen adjacent to the central playing court. The function of the kitchen is no longer in use and the building currently operates as a pottery space and additional programs space,
- An industries compound with 3 industrial buildings is located to the southern boundary and were added to the original prison. The industries buildings are run by correctional staff and operated by prisoners. The 3 industries sheds offer different function spaces which include;
  - Re-therm kitchen,
  - Metalwork,
  - Woodwork,
  - Laundry; and
  - The refurbishment of demountable school buildings which are stored on the adjacent prison property.

Refurbishment and alterations to the 634Med are outlined below. . Please refer to corresponding diagram on the next page.

1. Gatehouse building to be upgraded:
  - New visitor entry processing zone,
  - Additional lockers,
  - Potential new CCR.
2. Visits Centre to be upgraded:
  - Relocate existing maximum, security Visits building to Visits 'Hub',
  - Box Visits to be added,
  - New prisoner entry and Visitor entry required,
  - Internal fitout and 'modernisation' of building.
3. Reception building to be upgraded:
  - Upgrade required to the 4 AVL suites,
  - Option 1 repurpose the bulk storage area into four new Segregation Cells and yards,
  - Option 2 Install modular block of four Segregation Cells to east end of Building.
4. Health building to be upgraded:
  - Install a secure holding yard on the south side intersecting the secure raceway,
  - NBRS to develop a design for a duel raceway,
  - 4 BVL suites to be installed,
  - Area to be developed in secure bulk Storage.
5. Accommodation A Wing:
  - Enclose exercise yard,
  - Two-out cells,
  - Professional Suites on the GF,
  - Install exercise yard to Western wall.
6. Accommodation B Wing:
  - Enclose exercise yard,
  - Two-out cells,
  - Professional Suites on the GF,
  - Build enclosed exercise yard to the North wall.
7. Accommodation C Wing:
  - Enclose exercise yard,
  - Professional Suites on the GF,
  - Install secure yard in grassed northern area.
8. Accommodation E Wing:
  - Relocate staff office,
  - Install professional suites.
9. Programs building to be upgraded:
  - Install a secure fence to the front of the building – East façade,
  - Install secure interview rooms along the Eastern wall. These should be similar to Box visits.

10. Re-Develop old Kitchen space:
  - o Re-purpose the southern side of the Staff Post / Compound Office,
  - o Relocate the Chapel to the North – West Corner.
11. Upgrade security around the sports field.
12. Existing Chapel to be repurposed.
13. Fencing and perimeter security strategy to be redesigned:
  - o Upgrade of fencing and perimeter security.
  - o No proposed links to the existing maximum security facility,
  - o Remove existing links to industries compound,



Figure 2-3: Existing Medium Security Facility Upgrade



### 3.0 400-BED RAPID BUILD PRISON

#### EXISTING SITE

The proposed location of the 400-bed Rapid Build Prison (400RBP) is to the south of the existing maximum security prison and to the north of the existing residential properties and Golf course. The site falls from north to the south and is currently used as storage space for demountable education buildings requiring refurbishment. The refurbishment of the demountable buildings is carried out by prisoners as part of their industries program.



Figure 3-1: From North west corner of the site facing south



Figure 3-2: Demountable education buildings sitting on site waiting for refurb



Figure 3-3: View from south-east corner of site looking west



Figure 3-4: View from south-east corner of site looking north-west

The demountable education buildings will be relocated to make way for the new 400RBP. The storage of demountable buildings will continue to be located on the Cessnock Correctional Centre precinct and is subject to approval under this REF approval process.

### PROPOSED DESIGN

The proposed new road to the south of Alunga Avenue which is being used to access the new 320Max and 280Min will also be the point of access for the 400RBP. The new access road leads to additional parking for the 400RBP which is split between visitors and staff parking. A 'tank farm' is located to the east of the 400RBP and an external stores building is proposed which is used to house prison goods. The stores building is a large shed which has a two-storey mass and a compound fence which is constructed of a 5-metre-high anti-climb fence.

The prison is rectangular in shape to reduce the overall footprint of the site, improve site lines for security through visual amenity and to improve electronic security and perimeter detection. The rectangular shape allows the accommodation units to face internally around a central movement control point. Ancillary buildings then wrap around the accommodation units enclosing the accommodation space within the secure perimeter.



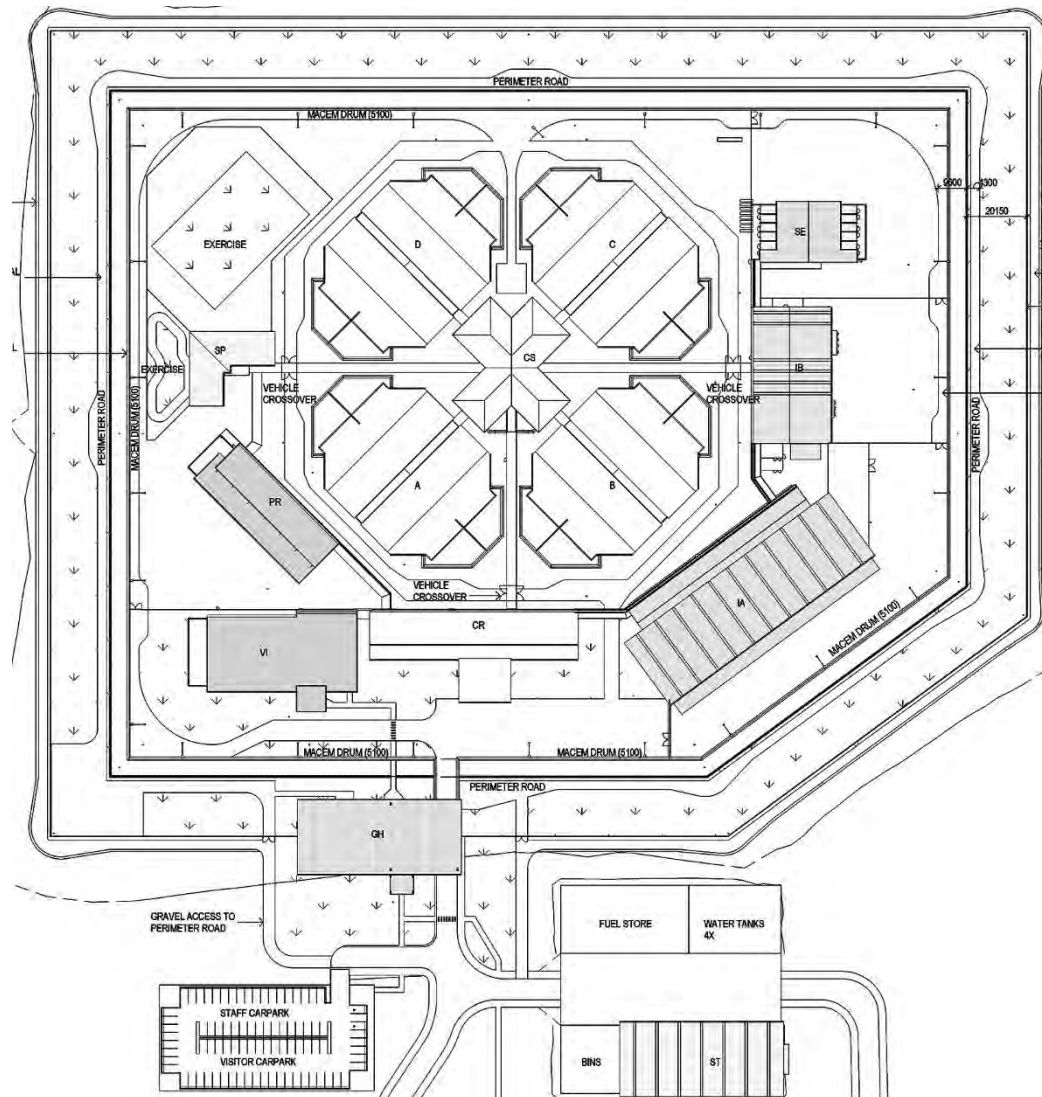


Figure 3-5: 400-bed Rapid Build Prison – site plan

A gatehouse entry building is located against the perimeter fence. This building reads as a two-storey building which predominately houses administration, visitor processing and staff facilities. The building is orientated along the perimeter fence. A double height sally-port is located to the north of the gatehouse building and is the single point of vehicle access to the prison. The sally-port is also the control point for prisoners entering and existing the prison.

The 5-metre-high perimeter fence is made from welded steel mesh. The steel mesh has perforations which allow people to see through into the prison and out of the prison. The mesh softens the visual impact of the prison where as a concrete wall may read as a hard element within the existing site. The mesh fence allows the prison to sit within the existing topography of the Cessnock Correctional Centre Precinct. Beyond the secure perimeter a 3.6-metre-high chain wire fence provides an additional sterile zone for the 400RBP.





Figure 3-6: 400-bed rapid build prison – typical Secure Perimeter cross section

In-between the chain wire fence and the Secure Perimeter fence a service access road is provided for emergency vehicles and patrols. Lighting of the Secure Perimeter and the access road is by light poles which are approximately 14-metre-high. The light poles are located within the secure perimeter and face out of the prison secure perimeter.



Figure 3-7: 400-bed rapid build prison – Gatehouse eastern elevation

The accommodation units are located in the centre of the prison which offers privacy, both visually and acoustically to the neighbouring properties. The accommodation units are two-storey building volumes but only function as single-storey dorm accommodation units. The buildings, like the Gatehouse are constructed in concrete and have a corrugated metal face to soften the look and feel of the building.

Housed within the secure perimeter a number of other building with varying functions exist including:

- Visits building
- Industries building
- Reception building
- Stores building
- Programs
- Segregation building

The materiality of these buildings is similar to the Gatehouse and Accommodation units with concrete walls, clad in corrugated metal cladding. The size of the buildings is generally single-storey but read as two-storey building volumes and are accessed via secure raceways managing prisoner movements.

To the north of the 400RBP is the existing Cessnock Maximum security facility dominates the precinct. The east and west is predominantly undeveloped bushland, open paddocks and a dam. Most of the open paddock space is used to house the modular teaching buildings which forms part of prison industries program.

To the southern boundary, the Cessnock Correctional Centre precinct is lined with residential properties and a golf course. The residential properties range from single to two-storey buildings. A large portion of the properties to the southern boundary are proposed developments sites with a number of homes currently being constructed. From the southern boundary the 400RBP will be visible from a large portion of properties proposed and constructed.



Figure 3-8: Existing view from Southern Boundary – land for sale.

### MITIGATION STRATEGY

Conscious of the impact the prison will have on the visual amenity along the southern boundary a number of mitigation strategies have been put in place to soften the visual impact of the prison for properties and the golf course along the southern boundary.

The strategy to soften the visual impact of the prison, to the south includes;

- Construct a 2-to-3- metre-high earth mound, 10-metres-wide. The earth mound would extend from the existing earth-mound along the southern boundary / elevation and run approximately 450 metres eastwards (along the fence line between bordering the golf course).
- On top of the earth mound trees will be planted with 2-to-3 row tree lines at 7-metre-centres. It is estimated approximately 250 trees will be planted. the tree's on top of the earth mound will get the additional height required.
- The Trees would be 3-to-5 metres in height at planting stage and indigenous to the area. The trees are expected to grow at one (1) metre per year.



The proposed mitigation strategy will not completely conceal the proposed development but will aim to soften the impact of the prison within the existing Cessnock Correctional Centre precinct.

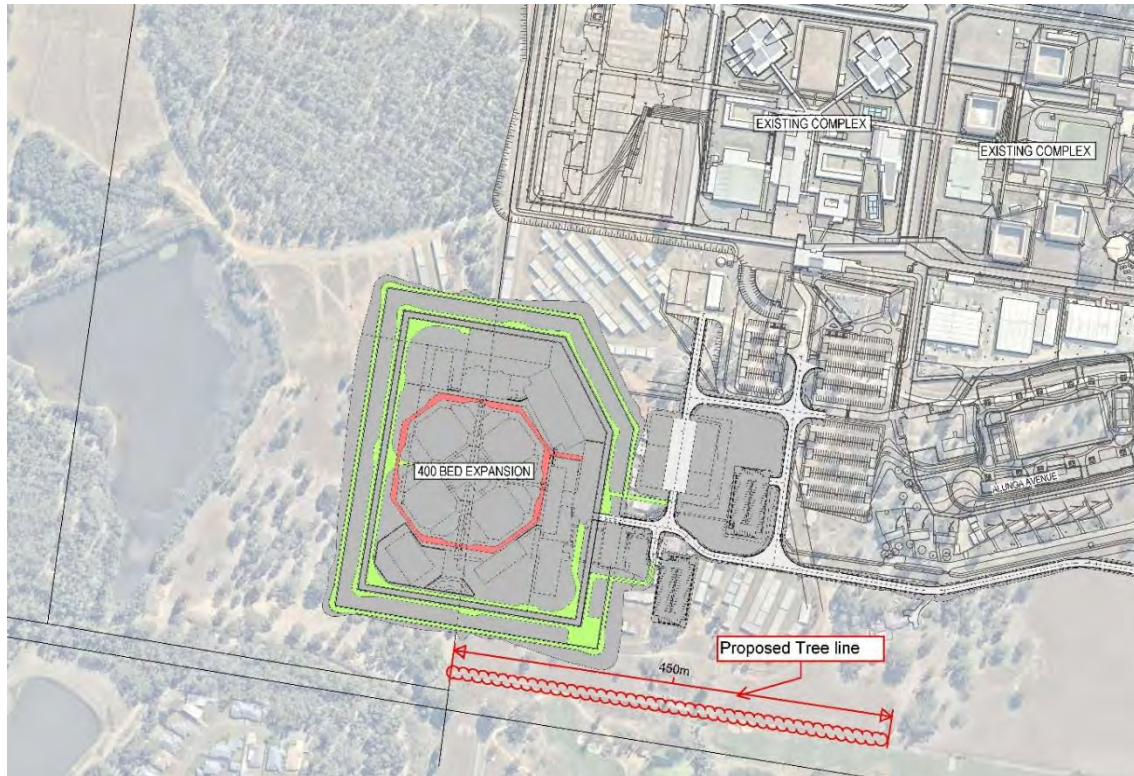


Figure 3-9: Location of prison and proposed tree line to the southern boundary.



Figure 3-10: View from southern boundary looking north to the new 400-bed prison – Before tree planting and mound.





*Figure 3-11: View from southern boundary looking north to the new 400-bed prison with the proposed landscaped screen.*