HEALTH INFRASTRUCTURE

Review of Environmental Factors

World Class End of Life (WCEoL) Project - Orange Health Service

Prepared by _planning Pty Ltd

June 2024

Version Number 02



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Declaration

This Review of Environmental Factors (REF) has been prepared for NSW Health Infrastructure (HI) and assesses the potential environmental impacts which could arise from proposed alterations and additions to existing cold shell space on Level 1 of the main hospital building at Orange Health Service to accommodate the new 3-bed palliative care space as part of the World Class End of Life (WCEoL) Project.

This REF has been prepared in accordance with the relevant provisions of the *Environmental Planning and Assessment Act 1979* (EP&A Act), the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation) and *State Environmental Planning Policy (Transport and Infrastructure) 2021* (TI SEPP).

This REF provides a true and fair review of the activity in relation to its likely impact on the environment and the information it contains is neither false nor misleading. It addresses to the fullest extent possible all the factors listed in Section 3 of the *Guidelines for Division 5.1 Assessments* (DPE June 2022), the *Environmental Planning and Assessment Regulation 2021* and the *Commonwealth Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act)*.

Based upon the information presented in this REF, it is concluded that, subject to adopting the recommended mitigation measures, it is unlikely there would be any significant environmental impacts associated with the activity. Consequently, an *Environmental Impact Statement* (EIS) is not required.

Declaration	
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Appendices

Appendix	Description	Author	Rev/Ref/Date
Α	Planning Certificate	Orange City Council	Dated 1/11/2023 Certificate No. 495/23
В	Architectural Design Statement	BVN	Dated 28/5/2024 Rev 01
С	Landscape Design Statement	Context	Dated 8/5/2024 Rev B
D	ESD Report	Stantec	Dated 16/4/2024 Ref 301351421 Version 1
			General Arrangement – Level 01 - WCP-BVN-DRW-ARC- ORA-11B-0100001 Rev C dated 22/5/2024
E	Architectural Drawings	BVN	General Arrangement – Level 01 - WCP-BVN-DRW-ARC- ORA-12B-0100001 Rev C dated 22/5/2024
			Existing and Proposed North Elevation - WCP-BVN-DRW-ARC-ORA- 12C-NL00001 Rev B dated 22/5/2024
			Landscape Precedents L-004 Rev B dated 8/5/2024
			Landscape Design Statement L-005 Rev B dated 8/5/2024
F	Landscape plans and drawings	Context	Landscape Plan L-006 Rev B dated 8/5/2024
r		Context	Landscape Section L-007 Rev B dated 8/5/2024
			Landscape View L-008 Rev B dated 8/5/2024
			Preliminary Planting Schedule L-009 Rev B dated 8/5/2024
G	Preliminary Construction Management Plan	HI / Capital Insight	Dated May 2024
Н	Notification letters and drawing	HI / BVN	Dated 29 May 2024
	Communications Outline Report	_	March 2024
1	Aboriginal Community Engagement Report	HI	March 2024
J	Traffic and Transport Assessment	SCT	Dated 1/5/2024 Rev 2
K	Noise and Vibration Assessment	Acor	Dated 6/5/2024 Ref: NA230258
L	Limited Indoor and Ambient Air Quality Impact Assessment	EnviroScience Solutions	Dated 13/5/2024 - Revision 2
М	Civil Engineering drawing	Acor	Proposed Drainage Floor Plan - WCP-ACR-DRW-HYD- ORA-12B-0000004 Rev B Dated 29/4/2024
N	AHIMS Search	NSW Government	Dated 11/6/2024
0	Statement of Heritage Impact	Nimbus Architecture + Heritage	Dated 23 May 2024 Revision B.
Р	Preliminary Waste Management Plan	Н	Dated June 2024 Ref: Version 3 Final – 21/6/2024
Q	Hazardous Materials Register and Management	EnviroScience Solutions	Dated 24/4/2024
R	BCA Assessment Report	BM+G	Dated 3/6/2024 Revision 4 Reference: 230298
S	Structural Adequacy Certification	Acor	Letter dated 30/4/2024 Rev 1 reference NA230258
Т	Summary of Mitigation Measures	HI / _planning	28 June 2024

Abbreviations

Abbreviation	Description
AEC	Area of Environmental Concern
AHD	Australian Height Datum
AHIP	Aboriginal Heritage Impact Permit
AHIMS	Aboriginal Heritage Information Management System BC Regulation
AMG	Australian Map Grid
BC Act 2016	Biodiversity Conservation Act 2016
BC Act 2017	Biodiversity Conservation Act 2017
BC Regulation	Biodiversity Conservation Regulation 2017
BAM	Biodiversity Assessment Method
CA	Certifying Authority
CE	Chief Executive
CM Act	Coastal Management Act 2016
СМР	Construction Management Plan
сwс	Connecting with Country
CRA	Conservation Risk Assessment
DPC	Department of Premier and Cabinet
DPE	Department of Planning and Environment
DPHI	Department of Planning, Housing & Infrastructure
EIS	Environmental Impact Statement
ЕМР	Environmental Management Plan
EES	Environment, Energy and Science
EPA	Environment Protection Authority
EP&A Act	Environmental Planning and Assessment Act 1979
EP&A Regulation	Environmental Planning and Assessment Regulation 2021
EPBC Act (Cwth)	Environment Protection and Biodiversity Conservation Act 1999
EPI	Environmental Planning Instrument
EPL	Environment Protection License
FM Act	Fisheries Management Act 1994
На	Hectares
HHIMS	Historic Heritage Information Management System
HI	Health Infrastructure
LEP	Local Environmental Plan
LGA	Local Government Area
MPS	Multipurpose Service

Abbreviation	Description
MNES	Matters of National Environmental Significance
NCC	National Construction Code
NorBE	Neutral or Beneficial Effect on Water Quality Assessment Guideline (2022)
NPW Act	National Parks and Wildlife Act 1974
NPW Regulation	National Parks and Wildlife Regulation 2009
NPWS	National Parks and Wildlife Service (part of EES)
NT Act (Cth)	Commonwealth Native Title Act 1993
OEH	(Former) Office of Environment and Heritage
PCMP	Preliminary Construction Management Plan
Planning Systems SEPP	State Environmental Planning Policy (Planning Systems) 2021
POEO Act	Protection of the Environment Operations Act 1997
Proponent	NSW Health Infrastructure
REF	Review of Environmental Factors
RF Act	Rural Fires Act 1997
RFS	Rural Fire Service
Resilience and Hazards SEPP	State Environmental Planning Policy (Resilience and Hazards) 2021
SEPP	State Environmental Planning Policy
SIS	Species Impact Statement
TI SEPP	State Environmental Planning Policy (Transport and Infrastructure) 2021
WM Act	Water Management Act 2000

Executive Summary

The Proposal

The Orange Health Service WCEoL Project proposes the development of a new 3-bed palliative care space in existing cold shell space on Level 1 within part of the existing main hospital building at the Orange Health Service site. The works are within, and confined to, the general footprint and envelope of existing building.

The proposal involves 3 new bedrooms with ensuites (with an additional 1 FTE staff member) to support the existing 2 bedrooms within the ground floor level of the same building. This will expand the existing provision of palliative care beds at Orange Health Service from two (2) beds to five (5) beds.

The proposal also involves a new external courtyard, a lounge, and a beverage bay within the envelope of Level 1 of the building. Ancillary shared areas such as dirty utility and handwash basin infrastructure adjacent to the palliative space completes the new accommodation. The courtyard will be landscaped via a simple planting strategy and is designed to drain in inclement weather. Minor façade works to the building are proposed to provide larger windows for the bedrooms and to provide openings to the courtyard so that fresh air is able to penetrate the space. The proposal retains the existing built form of the development and brings the palliative care unit closer to other supporting departments within the hospital.

Need for the Proposal

The project forms part of the NSW Health End of Life Palliative Care Framework 2019-2024; Clinical Principles for End of Life and Palliative Care (NSWH, GL2021_016); and the Palliative Care Blueprint (Agency for Clinical Innovation). In the 2022-23 NSW State Budget, the Government announced \$93 million for a WCEoL program, as part of a larger \$743 million commitment to ensuring NSW has the best palliative care services and support in Australia, if not the world. As part of the program, new units have been announced for Westmead Hospital, Nepean Hospital, Wyong Hospital, Orange Health Service and Tamworth Hospital.

There is increasing demand for end of life and palliative care beds. Over the past five years between 2015-16 and 2020-21, palliative-related hospitalisations have increased by 23% to 90,750. The rate of palliative care hospitalisations has grown from 17.5 to 19.5 per 10,000 population, and other end of life hospitalisations have grown from 13.2 to 15.9 per 100,000 population. This indicates that along with natural population growth impacts, the proportion of the population requiring palliative-related hospitalisations is also contributing to demand. Additionally, increased life expectancy through the development of multiple new therapies and novel medications over the decades has led to the need for specialist supportive and palliative care services (SPCS) to better manage complex comorbidities, understand and manage the challenges associated with polypharmacy, and have a focus on maintaining or extending quality of life (without necessarily having a curative intent).

Further, there are inequities in access to dedicated beds. Within the Western NSW Local Health District (WNSWLHD), end of life and palliative care services is centralised at Orange Health Service, with two dedicated palliative care beds. However, if the two beds are unavailable then palliative care patients are admitted into other acute wards within the hospital. Orange Health Service caters for 28% of palliative care separations for Western NSW residents, and remaining end of life and palliative care services is provided across the LHD, as close to home as possible. However, residents of other areas of the LHD with life limiting illnesses who require specialist and/or acute care who are admitted to Orange Health Service may decline and then receive end of life care at the hospital, which is on average requires 89 minutes (120 kilometres) of patient travel. Orange Health Service also notes there is a under-representation of Aboriginal people accessing inpatient end of life and palliative care services at the hospital, which is reflective of the situation across the other Hospitals within the WCEoL Program.

Generally, the project object is to provide dedicated beds for palliative care, rather than rely upon patients being admitted into other acute beds within the hospital due to a shortfall in current provision of palliative care beds.

To address the above, HI proposes to provide a new 3-bed palliative care space at Orange Health Service as part of their delivery of infrastructure solutions and services to support the healthcare needs of the NSW communities consistent with the WCEoL program.

Proposal Objectives

HI's Design Principles applicable to all NSW projects have been applied. These generally set out the objectives of the development along with the specific need to provide additional palliative care spaces in a growing population catchment.

The HI Design Principles are:

- Design for dignity.
- Design for wellbeing.
- Design of efficient and flexible delivery of care.
- Design for longevity and resilience.
- Safety and security.
- · Design with Country.
- Design for the neighbourhood and surrounding environment.
- Design for connection.
- Design for sustainability.

These principles were tailored by BVN (the project's architect) to suit the needs for palliative and supportive care to form the benchmark for the project.

Options Considered

A master plan was developed for the WCEoL program at Orange Health Service. The master plan developed a set of principles which were established as part of a collaborative engagement process with the stakeholder group and responded directly to the shared aspiration to create a people-centred, healing environment. The master plan considered future visions for location and operation of the site. Seven (7) options were studied within the ground floor level and Level 1 of the main hospital building. Option 6 (for the subject works in the Level 1 cold shell space) was selected as the preferred location.

During the concept design, several key aspects were studied. These included site investigations, functional requirement of the space, and alignment with HI design principles. At that stage, two options were presented and reviewed in series of workshops. Ultimately Option 6.1 (subject of this REF) was selected as the preferred option.

Site Details

Orange Health Service sits 4km south of Orange CBD and approximately 55km west of Bathurst and 250km west of Sydney. The main hospital building forms part of what was the Orange Hospital Redevelopment project and which was delivered under a Public Private Partnership (PPP) procurement model on the Bloomfield campus over a decade ago. The Redevelopment project comprised a new 3-storey acute hospital building with further adult acute mental health, mental health rehabilitation services and a medium care forensic unit located adjacent to the main hospital building to its south. The project commenced in February 2008 and was completed in March 2011. The project was completed with cold shell space for future use on Level 1. This cold shell space in part now forms the proposed location for the new palliative care space.

Orange Health Service is located at 1530 Forest Road, Orange 2800. The site is legally described as Lot 10 DP 1174672. The site is located within the Orange City Council local government area and within the WNSWLHD.

The existing main hospital building accommodates a loading dock and support services, staff car parking, pharmacy, pathology and mortuary at the Lower Ground Level. The ground floor has emergency, imaging, intensive care and ambulatory care as well as administration, chemotherapy, blood bank, breast screen and cancer care. Level 1 houses education and training along with in-patient beds, operating theatres and community health. Access to a helipad is provided on the rooftop. There is a single storey Acute Mental Health building to the south which is linked to the main hospital building by an enclosed walkway.

Planning Approval Pathway

Section 4.1 of the EP&A Act states that if an Environmental Planning Instrument (EPI) provides that development may be carried out without the need for development consent, a person may carry the development out, in accordance with

the EPI, on land to which the provision applies. However, the environmental assessment of the development is required under Part 5 of the Act.

State Environmental Planning Policy (Transport and Infrastructure) 2021 (TISEPP) aims, amongst other things, to facilitate the effective delivery of infrastructure across the State. Chapter 2 Division 10 of TISEPP outlines the approval requirements for health service facilities. A "hospital" is defined as a health service facility under this division.

The site is zoned 'SP2 – Hospital' zone under *Orange Local Environmental Plan 2011*. The SP2 zone is a prescribed zone under the TISEPP.

The proposal involves the alterations of, or additions to, a building that is a health services facility, which is classified as development without consent as the proposed activity is consistent with section 2.61(1)(a), as well as section 2.61(2) of TISEPP. Ancillary works are able to be carried out in the same manner through section 2.3(3) of the TISEPP.

Therefore, the proposal is considered an 'activity' for the purposes of Part 5 of the EP&A Act and is subject to an environmental assessment via the REF process.

Consultation and Engagement

The REF scope of works was notified on 29 May 2024 for 21 calendar days concluding on 19 June 2024. A one-day grace period was applied to address the King's Birthday public holiday falling within the notification period. Late submissions were accepted to 20 June 2024. In total, 20 letters were placed in letterboxes of adjoining occupiers of land or otherwise hand delivered.

The following addresses were notified by letterbox drop:

- The Country Club to the south of the hospital.
- Gosling Aged Care village on Forest Road opposite the hospital.
- The Rise Early Learning Centre on Forest Road opposite the hospital.
- Occupants over six (6) levels of the Bloomfield Medical Centre on Forest Road opposite the hospital.
- Remington Hotel on Forest Road opposite the hospital.

No public submissions were received. Orange City Council did not respond to the notification process.

Extensive non-statutory community and stakeholder engagement has occurred with respect to this project since its inception with a range internal and external stakeholders, including Aboriginal community representatives.

Environmental Impacts

The environmental impacts of the works are limited given the modestly-scaled nature of the works. The most significant impacts identified to arise relate to construction noise and vibration, and other general construction impacts.

Construction noise is likely to impact a range of internal hospital uses. Given the location and orientation of the works and the significant distances to external neighbouring land uses, including residential uses, it is highly unlikely any noise or other construction impacts will be discernible outside of the hospital. Management and mitigation will be applied to limit any likely impacts. Construction vibration will be localised to within the subject hospital building and management and mitigation will again need to be applied to reduce adverse impacts upon sensitive activities and patients within the hospital.

Impacts upon vegetation, biodiversity, heritage, Aboriginal cultural heritage, natural systems including stormwater, and traffic and parking have generally been identified as negligible, low, or neutral. No tree removal arises from the works, given the elevated internalised location of the proposal and its works.

Justification and Conclusion.

The proposed alterations and additions to existing cold shell space within part of Level 1 of the main hospital building at Orange Health Service to provide for the WCEoL Project and its 3-bed new palliative care space is subject to assessment under Part 5 of the EP&A Act. The REF has examined and taken into account to the fullest extent possible all matters affecting, or likely to affect, the environment by reason of the proposed activity.

As discussed in detail in this report, the proposal will not result in any significant or long-term impact. The potential impacts identified can be reasonably mitigated and where necessary managed through the adoption of suitable site practices and adherence to accepted industry standards.

As outlined in this REF, the proposed activity can be justified on the following grounds:

- It responds to an existing need within the community;
- It generally complies with, or is consistent with all relevant legislation, plans and policies;
- It has minimal environmental impacts; and
- Adequate mitigation measures have been proposed to address these impacts.

The activity is not likely to significantly affect threatened species, populations, ecological communities or their habitats, and therefore it is not necessary for a Species Impact Statement (SIS) and/or a Biodiversity Development Assessment Report (BDAR) to be prepared. The environmental impacts of the proposal are not likely to be significant and therefore it is not necessary for an EIS to be prepared and approval to be sought for the proposal from the Minister for Planning under Part 5 of the EP&A Act. On this basis, it is recommended that HI determine the proposed activity in accordance with Part 5 of the EP&A Act and subject to the adoption and implementation of mitigation measures identified within this report.

1. Introduction

NSW Health Infrastructure (HI) proposes the development of a new 3-bed palliative care space in existing cold shell space within part of Level 1 of the existing main hospital building (the proposal) at the Orange Health Service site at 1530 Forest Road, Orange (the site) as part of their delivery of infrastructure solutions and services to support the healthcare needs of the NSW communities.

This Review of Environmental Factors (REF) has been prepared by _planning Pty Ltd on behalf of HI to determine the environmental impacts of the proposed additions and alterations to part of Level 1 of the main hospital building for the new palliative care space at Orange Health Service. For the purposes of these works, HI is the proponent and the determining authority under Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The purpose of this REF is to describe the proposal, to document the likely impacts of the proposal on the environment, and to detail protective measures to be implemented to mitigate impacts.

The description of the proposed works and associated environmental impacts have been undertaken in the context of the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act), the Environmental Planning and Assessment Regulation 2021, and the Guidelines for Division 5.1 Assessments (DPE June 2022).

The assessment contained within the REF has been prepared having regard to:

- Whether the proposed activity is likely to have a significant impact on the environment and therefore the necessity
 for an EIS to be prepared and approval to be sought from the Minister for Planning and Homes under Part 5 of the
 EP&A Act; and
- The potential for the proposal to significantly impact Matters of National Environmental Significance (MNES) on Commonwealth land and the need to make a referral to the Australian Government Department of Environment and Energy for a decision by the Commonwealth Minister for the Environment on whether assessment and approval is required under the EPBC Act.

The REF helps to fulfil the requirements of Section 5.5 of the EP&A Act, which requires that HI examine, and take into account to the fullest extent possible, all matters affecting, or likely to affect, the environment by reason of the proposed activity.

1.1 Proposal need and Alternatives

Need for the Proposal

The project forms part of the NSW Health End of Life Palliative Care Framework 2019-2024; Clinical Principles for End of Life and Palliative Care (NSWH, GL2021_016); and the Palliative Care Blueprint (Agency for Clinical Innovation). In the 2022-23 NSW State Budget, the Government announced \$93 million for a WCEoL program, as part of a larger \$743 million commitment to ensuring NSW has the best palliative care services and support in Australia, if not the world. As part of the program, new units have been announced for Westmead Hospital, Nepean Hospital, Wyong Hospital, Orange Health Service and Tamworth Hospital.

There is increasing demand for end of life and palliative care beds. Over the past five years between 2015-16 and 2020-21, palliative-related hospitalisations have increased by 23% to 90,750. The rate of palliative care hospitalisations has grown from 17.5 to 19.5 per 10,000 population, and other end of life hospitalisations have grown from 13.2 to 15.9 per 100,000 population. This indicates that along with natural population growth impacts, the proportion of the population requiring palliative-related hospitalisations is also contributing to demand. Additionally, increased life expectancy through the development of multiple new therapies and novel medications over the decades has led to the need for specialist supportive and palliative care services (SPCS) to better manage complex comorbidities, understand and manage the challenges associated with polypharmacy, and have a focus on maintaining or extending quality of life (without necessarily having a curative intent).

Further, there are inequities in access to dedicated beds. Within the WNSWLHD, end of life and palliative care services is centralised at Orange Health Service, with two dedicated palliative care beds. However, if the two beds are

unavailable then palliative care patients are admitted into other acute wards within the hospital. Orange Health Service caters for 28% of palliative care separations for Western NSW residents, and remaining end of life and palliative care services is provided across the LHD, as close to home as possible. However, residents of other areas of the LHD with life limiting illnesses who require specialist and/or acute care who are admitted to Orange Health Service may decline and then receive end of life care at the hospital, which is on average requires 89 minutes (120 kilometres) of patient travel. Orange Health Service also notes there is a under-representation of Aboriginal people accessing inpatient end of life and palliative care services at the hospital, which is reflective of the situation across the other Hospitals within the WCEoL Program.

Generally, the project object is to provide dedicated beds for palliative care, rather than rely upon patients being admitted into other acute beds within the hospital due to a shortfall in current provision of palliative care beds.

To address the above, HI proposes to provide a new 3-bed palliative care space at Orange Health Service as part of their delivery of infrastructure solutions and services to support the healthcare needs of the NSW communities consistent with the WCEoL program.

Options Considered

A master plan was developed for the WCEoL program at Orange Health Service. The master plan developed a set of principles which were established as part of a collaborative engagement process with the stakeholder group and responded directly to the shared aspiration to create a people-centred, healing environment. The master plan considered future visions for location and operation of the site. Seven (7) options were studied within the ground floor level and Level 1 of the main hospital building. Option 6 (for the subject works in the Level 1 cold shell space) was selected as the preferred location.

During the concept design, several key aspects were studied. These included site investigations, functional requirement of the space, and alignment with HI design principles. At that stage, two options were presented and reviewed in series of workshops. Ultimately Option 6.1 (subject of this REF) was selected as the preferred option.

2. Site Analysis and Description

2.1 The Site and Locality

Orange Health Service is part of the WNSWLHD and is located at 1530 Forest Road, Orange (within the Orange City Council LGA). Orange Health Service sits 4km south of Orange CBD and approximately 55km west of Bathurst and 250km west of Sydney. The main hospital building forms part of what was the Orange Hospital Redevelopment project which was delivered under a Public Private Partnership (PPP) procurement model on the Bloomfield campus. The Redevelopment project comprised a new 3-storey acute hospital building with further adult acute mental health, mental health rehabilitation services and a medium care forensic unit located adjacent to the main hospital building to its south. The project commenced in February 2008 and was completed in March 2011. This effectively relocated Orange Base Hospital from Dalton Street in Orange to the current Bloomfield site. The Orange Hospital Redevelopment project was completed with cold shell space for future use on Level 1. This cold shell space in part now forms the proposed location for the new palliative care space.

The locality has generally been subject to transformation since the relocation of the Orange Base Hospital to the Bloomfield Campus between 2008 and 2011. This has had the effect of acting as a catalyst for a range of new health-affiliated and other support services on the western side of Forest Road. Accordingly, the hospital forms the fulcrum of a range health and affiliated activities addressing Forest Road in the general locality. Health-related activities near the hospital include the recently completed six (6)-storey Bloomfield Medical Centre with its cluster of associated medical practices, specialists and affiliated uses. The Gosling Aged Care Centre and the Rise Early Learning Centre are also located near the hospital on the opposite side of Forest Road. The Remington Hotel is located nearby offering accommodation in direct proximity of the hospital. The area is generally dominated by the range and cluster of activities focussed on and within the wider hospital campus. The land around the hospital is otherwise pasture land and an expanse of former golf course. The wider Bloomfield Hospital campus is generally typified by sporadic clustering of older (and sometimes vacant) buildings related to its former use as a mental hospital.

The main hospital building is the northern-most of the developed areas of the Orange Health Service site. To its north is the expanse of now vacant land, being the aforementioned former golf course.

The hospital's real property description is Lot 10 DP 1174672 – see **Figure 1**. Lot 10 DP 1174672 is some 5.2 hectares in area and sits within what is known as the wider Bloomfield Campus.

The NSW Health Administration Corporation owns the site, as set out in Council's Planning Certificate.



Figure 1 - Orange Health Service - Lot 10 DP 1174672 (SixMaps)

To the north of the Bloomfield Campus, the recently approved Orange Regional Sporting Facility (ORSF) is presently under construction. It will include the following once completed:

- One rectangular field suitable for the conduct of International Rugby League, Rugby Union and Soccer incorporating
 a 1,500 seat grandstand with disability access, change rooms, amenities, broadcast facilities, staff and storage
 areas and competition lighting for night games. An embankment surrounding the field will provide additional
 spectator capacity of 6,500.
- Class 2 IAAF Athletic Track and Field facilities with grandstand accommodating up to 550 seats.
- 8 multipurpose fields suitable for the conduct of International Rugby League, Rugby Union, Soccer, Softball and Cricket for summer and winter sports competition.
- Associated Amenities, Parking, Public transport bays, Storage, Works shed, circulation tracks, meeting areas, bbq facilities, landscaping etc.

2.1.1 Existing Development

Orange Health Service consists of the 3-storey main hospital building, with an emergency department and inpatient beds, as well as community health services. Also located on the campus are Bloomfield Hospital, the Central West Cancer Care Centre and a Ronald McDonald House.

Based on the WNSWLHD webpage, the hospital provides:

- · 24-hour emergency care
- · Inpatient beds including general medicine, rehabilitation and palliative care
- Medical imaging
- Cancer services
- Surgical services
- · Maternity services, including a special care nursery
- Gynaecology and women's health
- Paediatrics
- Rehabilitation
- Coronary care
- Intensive care
- Stroke care
- Renal dialysis
- Pathology services
- Clinical trials
- Pharmacy services
- Mental health services include inpatient, sub-acute and community
- · Drug and alcohol services
- Ambulatory care and outpatient services
- Dental services
- · Primary and community health services including allied health services and home-based care
- Bloomfield Hospital, a major mental health and drug and alcohol treatment facility, offers both inpatient/residential
 and outpatient treatment.

The existing main hospital building accommodates a loading dock and support services, staff car parking, pharmacy, pathology and mortuary at the Lower Ground Level. The ground floor has emergency, imaging, intensive care and ambulatory care as well as administration, chemotherapy, blood bank, breast screen and cancer care. Level 1 houses education and training along with in-patient beds, operating theatres and community health. Access to a helipad is provided on the rooftop. There is a single storey Acute Mental Health building to the south which is linked to the main hospital building by an enclosed walkway.

The modern hospital sits within the wider former Bloomfield Mental Hospital site, which was established in 1924. The former Bloomfield hospital facilities are largely contained within the buildings in southern section of the wider campus and provide accommodation for current Mental Health and Drug and Alcohol Services at the campus, as well as University of Sydney School of Rural Health. HealthShare NSW linen services are also located in the southern portion of the campus.

Buildings in the northern section of the campus remote from the main hospital building are currently used by the O'Brien Centre. Many original buildings within the campus, including those previously used by the defunct Riverside Centre, are now vacant. The campus also includes a number of important local recreational spaces including a cricket pitch, golf course, bowling greens, and playing fields which are understood to be in the care and control of Orange City Council and leased to the Ex-Servicemen's Club / The Country Club. The campus generally also includes expansive landscaped grounds.

The currently and predominantly occupied portion of the Bloomfield Campus is shown in **Figure 2** below with the subject WCEoL location shown bounded in red. A range of figures follow showing the site and the location of the works.



Figure 2 - Bloomfield Campus Orange with the proposed WCEoL project location bounded in red (WNSWLHD)

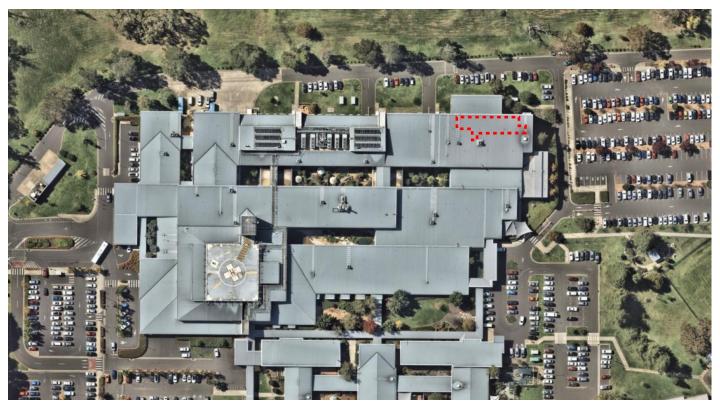


Figure 3 - Aerial view of the main hospital building with the location of the works outlined (BVN)



Figure 4 - View towards the proposed location of the palliative care courtyard as outlined



Figure 5 - View up towards the proposed courtyard location where the windows will be removed and openings enlarged



Figure 6 – Internal view of the existing cold shell space from the top of the ceiling of the isolated adjacent corridor (supplied)



Figure 7 – View along the isolated corridor with the subject cold shell space to the right behind the wall

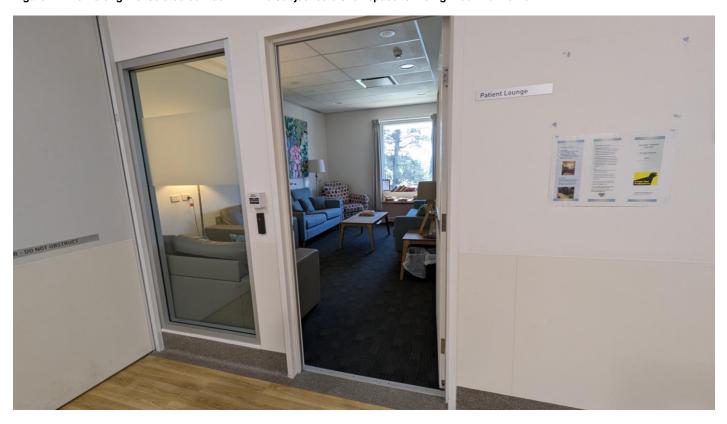


Figure 8 – View into existing palliative care lounge to be retained on the ground level of the main hospital building



Figure 9 - View of an existing palliative care bedroom to be retained on the ground level of the main hospital building

2.1.2 Other Site Elements

Topography

The site's topography is relatively flat at generally RL 900m AHD. The site is generally a modified environment within the built-up and developed parts of the hospital.

Vegetation

As seen from aerial photography, the hospital campus is generally a cluster of new and old buildings on disturbed land. Trees and vegetation occur in pockets of varying densities. Vegetation is generally planted and relates primarily to the development of the newer buildings in 2008 to 2011. The works will not impact any vegetation.

Figure 10 over shows the NSW Government mapping of Biodiversity Values around the site. The hospital itself is devoid of any biodiversity mapping and the areas around which are mapped generally follow distant watercourses.

Access

Orange Hospital is situated to the east of Forest Road, the main collector road for the area. There are two access points to the hospital located along Forest Road. These are both signalised intersections that provide two-way access to the hospital. The northern intersection is the main access point to the hospital and is located closest to the main hospital entrance and emergency department. The southern intersection provides the best access for mental health, drug and alcohol services (Bloomfield Hospital). These access points are connected by an internal road network that also connects to all hospital parking facilities. An additional access point exists from Huntley Road via an unnamed road at the hospital's east.

Traffic/transport

There are more than 750 car parking spaces on site with several carparks located to the east and west of the main hospital building. The location and capacity of the existing hospital parking is marked in **Figure 11**. Both general and dedicated staff parking are provided, and parking is free of charge for all persons. A review of aerial imagery suggests the parking spaces to the west of the hospital are relatively full (aside from the staff dedicated parking), while there is consistently spare capacity on the eastern side of the hospital where the palliative care space is to be located.

There is no on-street parking along Forest Road as no stopping is permitted.



Figure 10 - Biodiversity Values Mapping with the hospital circled (NSW Government)



Figure 11 – Car parking locations and capacities (SCT)

The hospital is also serviced by bus via eight separate routes, with a bus stop located inside the site off Forest Road. The frequency of services from Orange and other areas is generally hourly Mondays to Saturdays, and every 2 hours on Sundays.

Bushfire

The hospital campus is not affected by mapped bush fire prone land – see Figure 12.

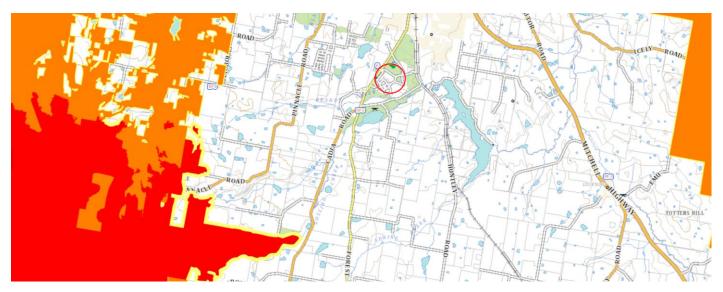


Figure 12 - Bushfire Prone Land Mapping with the hospital circled (NSW Government)

Flooding

Orange City Council has flood mapping provided within the Section 4A of its Development Control Plan 2004. This shows areas affected by flooding (mapped as Flood Planning Area) in relation to Blackman's Swamp Creek and Ploughman's Creek. The hospital land is unaffected and not mapped. The closest area of flooding is within the former golf course to the hospital's north – see **Figure 13**.

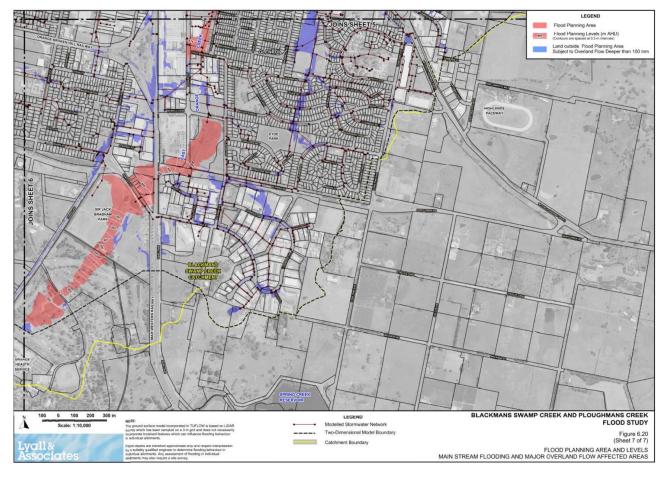


Figure 13 - Council-based flood mapping with the hospital to bottom left outside of the mapped area (Orange City Council)

2.1.3 Site Considerations and Constraints

Section 10.7 Planning Certificate No 495/23 dated 1 November 2023 identifies that the site is located within the 'SP2 - Hospital' zone under *Orange Local Environmental Plan 2011*, and is provided at **Appendix A**.

Table 1: Section 10.7 Planning Certificate

Affectation	Yes	No
Critical habitat		✓
Conservation area		✓
Item of environmental heritage	✓	
	(State and Local items)	
Affected by coastal hazards		✓
Proclaimed to be in a mine subsidence district		✓
Affected by a road widening or road realignment		✓
Affected by a planning agreement		✓
Affected by a policy that restricts development of land due to the likelihood of landslip		✓
Affected by bushfire, tidal inundation, subsidence, acid sulfate or any other risk		✓
Affected by any acquisition of land provision		✓
Biodiversity certified land or subject to any biobanking agreement or property vegetation plan		✓
Significantly contaminated		✓
		(not stated)
Subject to flood related development controls	·	✓

2.2 Surrounding Development

As noted, the hospital forms the fulcrum of a range health and affiliated activities addressing Forest Road in the general locality. Health-related activities near the hospital include the recently completed six (6)-storey Bloomfield Medical Centre with its cluster of associated medical practices, specialists and affiliated uses. The Gosling Aged Care Centre and the Rise Early Learning Centre are also located near the hospital on the opposite side of Forest Road. The Remington Hotel is located nearby offering accommodation in direct proximity of the hospital. A near completed shopping centre also sits to the west of Forest Road opposite the hospital and to the north of Bloomfield Medical Centre. The area generally is dominated by the range and cluster of activities focussed on and within the wider hospital campus. The land around the hospital is otherwise pasture land and an expanse of former golf course.

Photographs of a selection of adjacent uses are shown in Figure 14 over.

2.3 Concurrent Projects

There are no known current or concurrent projects on or off the hospital site. The adjacent unfinished shopping centre is near-complete with the next phase of works likely to involve 'finishing trades'. The scope and scale of the subject works are relatively minor and any concurrent works in or near the hospital are unlikely to cause a clash or generate cumulative impacts of any note.

The recently approved Orange Regional Sporting Facility (ORSF) presently under construction is over 500m from the hospital and the focus of its construction traffic and transport-related activities are likely to be from its north, rather than via Forest Road from the south past the hospital.

There are no current approved or submitted SSD DAs, Regionally Significant Development DAs or local DAs on or within 500m of the Orange Health Service site that are subject to contemporary works.









Figure 14 – Selected adjacent land uses - clockwise from top left: Bloomfield Medical Centre, the incomplete Bloomfield Shopping Centre; the Country Club; and the Remington Hotel

3. Proposed Activity

3.1 Proposal Overview

The Orange Health Service WCEoL Project proposes the development of a new 3-bed palliative care space in existing cold shell space on Level 1 within part of the existing main hospital building at the Orange Health Service site. The works are within the general footprint and envelope of existing building.

The proposal involves 3 new bedrooms with ensuites (with an additional 1 FTE staff member) to support the existing 2 bedrooms within the ground floor level of the same building. This will expand the existing provision of palliative care beds at Orange Health Service from two (2) beds to five (5) beds.

The proposal also involves a new external courtyard, a lounge, and a beverage bay within the envelope of Level 1 of the building. Ancillary shared areas such as dirty utility and handwash basin infrastructure adjacent to the palliative space completes the new accommodation. The courtyard will be landscaped via a simple planting strategy and is designed to drain in inclement weather. Minor façade works to the building are proposed to provide larger windows for the bedrooms and to provide openings to the courtyard so that fresh air is able to penetrate the space. The proposal retains the existing built form of the development and brings the palliative care unit closer to other supporting departments within the hospital.

3.1.1 Design Approach

Placemaking and Design

An Architectural Design Statement has been prepared by BVN to articulate the project and design objectives, the key design principles adopted throughout the design process, and the basis for these principles.

In summary, BVN advises as follows with respect to the design outcomes achieved:

The WCEoLP Orange comprises an additional 3 new palliative care beds located within the existing shell of level 01 Orange Hospital, adjacent Medical B. These beds are additional to the 2 existing palliative care bedrooms currently located on the ground floor of Medical A.

The location was selected given it

- · Provides the functional design briefed area
- · Supports the endorsed model of care
- · Provides safe and high-quality care
- · Provides culturally sensitive care
- · Provides access to a covered courtyard dedicated to palliative care

Modifications to the existing facade are required to realise this covered balcony area by

- · Removing two existing windows
- · Widen the openings to enable fresh air to penetrate the space
- · Provide drainage to this covered courtyard

Other modifications to the facade are required to suit the internal planning

- · Increase the bedroom windows to increase daylight factor into the room given palliative bedroom sizes are larger than the existing standard hospital bedrooms.
- · Infill a window location given ensuite location relative to facade window locations.

The modification to the existing envelope are minor within the context of the existing overall hospital development. The proposed palette of materials is to match existing for the ensuite infill and the balcony balustrading is proposed to be glass at lower level, with a mesh infill at upper level to enable fresh air to permeate this covered courtyard.

BVN has applied the principles of the Design Guide for Health: Spaces, Places & Precincts (GANSW, April 2023), as well as the other GANSW documents Better Placed, Greener Places and Connecting with Country Framework (2023). CPTED Principles have also been considered as far as this can be applied to an existing built envelope and the use proposed within the building.

The fundamental design objectives consistent with the above have been to provide for:

- Design for dignity.
- · Design for wellbeing.
- Design of efficient and flexible delivery of care.
- Design for longevity and resilience.
- · Design with Country.
- Design for the neighbourhood and surrounding environment.
- Design for connection.
- · Design for sustainability.

The Architectural Design Statement prepared by BVN is included at **Appendix B**.

Additionally, a Landscape Design Statement by Context has been provided (see **Appendix C**) which sets out the landscape design rationale. This has also generally incorporated the above principles. As Context states:

The landscape approach to the palliative care unit upgrade at Orange Hospital was developed with the main purpose of bringing the sense of lush green landscape into the building.

The spatial arrangement facilitates a variety of landscape settings so that the space can be shared by various small groups, in intimate settings.

The planted green wall provides a backdrop for all users and an enveloped sense of green.

The landscape is embedded with the principles of biophilia, allowing views and proximity to green to be maximised.

The communal living spaces and kitchen look out onto the garden outside, while natural light penetrates the internal spaces from outside.

Plants have been chosen for their ease of maintenance and vigor, ensuring the space will always feel full, lush, and green.

Comfort for users has been considered, with a collection of small landscape spaces that serve the different needs of the users. These spaces include private contemplation spaces for families to gather.

With respect to CPTED, the following principles have been considered during the design and ongoing into operation of the new unit:

- Surveillance
- Territorial reinforcement
- Activity and Space Management
- Access control

As the new palliative care space is within the controlled environment of the hospital on Level 1 of the building, appropriate levels of access control will be directly and automatically enforced. Daytime access to the palliative care space is proposed to be from the car park to the east through the ambulant entry and up to Level 1 via the public lifts. Out of hours access is available from the car park to the west (given increased activity/lighting) up to Level 1 via the public lifts. 24/7 access is provided on Level 1 through Medical B ward to the new palliative care area.

Typical levels of surveillance within this part of the hospital will apply with CCTV also employed to further augment passive surveillance with electronic surveillance.

Territorial reinforcement of ownership, care, use and management of space and property will result for the same reasons through changed and enhanced usage of the building and its environs.

Similarly, activity will result over longer periods for the course of the year and space management will be refined to suit the new levels of activity.

As with any hospital function within a hospital campus, access is limited and demarcated to prevent free access and passage to any, or all, parts of a hospital campus. Secure and limited access is proposed to areas requiring this through electronic means (locks and the like) and through the design which will discourage free access where it should not be desired. This includes physical measures like fencing, and less direct measures such as landscaping features to direct or limit access.

The landscape design has adopted best practiced CPTED principles with the planting design and species being curated to allow for vertical and horizontal sight lines to the programmed landscape zone and veranda spaces to allow the hospital staff to monitor patients in the outdoor spaces.

Connecting with Country/Engagement

The site sits within the area covered by the Orange Aboriginal Local Land Council (OLALC). Consistent with HI's *Implementing the Connecting with Country Framework – A Guideline for Health Infrastructure Project Teams and Partners* dedicated workshops were held with key Aboriginal Elders and community representatives with HI and BVN to hear about the key challenges faced when using Palliative Care.

The design has incorporated culturally appropriate spaces for patients and their families. The design provides spaces within the palliative and supportive care unit for large indigenous groups to gather. These outdoor spaces connect to surrounding green space, where a ground level is available or alternatively an outdoor balcony space on a rooftop setting. The outdoor space supports cultural rituals and ceremonies and where required enable smoking ceremonies in bedrooms. The design maximises opportunities to connect to landscape and outlook providing connection and shelter. See these principles as set out in **Figure 15**.

With respect to landscaping, a Design with Country process has been undertaken, with consultations with indigenous user groups. A spiritual space has been designed into the landscape programming that will be further developed in the detail design which will have consultations with indigenous and First Nation user groups.



Figure 15 - Designing with Country (BVN)

Sustainability and Climate Resilience

The project's design has incorporated sustainability principles consistent with the requirements of DGN 58 and HI's Sustainability Strategy. An ESD Report has been prepared to support the development – see **Appendix D**.

According to the principles outlined within the NSW HI Engineering Service Guidelines (DGN 058), the project is to demonstrate the following outcomes:

- A minimum of 60 points (+5 point buffer) * to be achieved by the design in accordance with HI's ESD Evaluation Tool: and
- A mandatory requirement of demonstrating a 10% improvement in energy performance on NCC Section J.

*As the facility is a refurbishment which has inherent limitations on spatial and scope aspects, the facility is currently targeting 49 points under HI's ESD Evaluation Tool. Credits which investigate aspects such as transport have been deemed not applicable to this development as there is no current scope of works or modification to the existing transport infrastructure/accessibility to the site. This pathway, as shown in Appendix A of the ESD Report, has been approved and coordinated with HI. During the following design stages, achievable points will be investigated further to ensure the project achieves the ESD intent through all applicable aspects.

The project will implement several sustainable design principles which include initiatives designed to mitigate the development's environmental impact across the following areas:

- The development is currently targeting 49 points in accordance with HI's ESD Evaluation Tool and the concession made with respect to the nature and scope of work in part of Block C.
- The development will demonstrate a 10% improvement in energy performance on NCC Section J.
- Building Management including reviews of commissioning and tuning, building information and other operational processes.
- Indoor Environment Quality including high air quality, acoustic/lighting comfort and reduction of indoor pollutants.
- Energy & Carbon including improved energy efficiency of the building operations through design and technology and consideration to Embodied Carbon.
- Water Efficiency reduce potable water demand and utilising the use of rainwater.
- Materiality & Waste Considering the whole of life of materials and their selection to minimise harm to the
 environment, including efficiency and construction while minimising resources sent to landfill from construction and
 demolition works.

Additionally, the EP&A Regulation lists four principles of ESD required to be considered in assessing a project:

- The Precautionary Principle
- Intergenerational equity
- · Conservation of biological biodiversity and ecological integrity
- Improved valuation and pricing of environmental resources

The precautionary principle is utilised when uncertainty exists about potential environmental impacts. It provides that if there are threats of serious or irreversible environmental damage, lack of scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. The precautionary principle requires careful consideration and evaluation of potential environmental impacts in order to avoid, wherever practicable, serious or irreversible damage to the environment.

This REF has not identified any serious threat or irreversible damage to the environment and therefore the precautionary principle is not relevant in this case.

Intergenerational equity is concerned with ensuring the health, diversity and productivity of the environment can be maintained or enhanced for the benefit of future generations. The proposal satisfies this by providing a means to providing enhanced and much needed health services for generations to come.

The principle of biological diversity upholds that the conservation of biological diversity and ecological integrity should be a fundamental consideration for any development. The proposal will have no detrimental effect upon this, given the general lack of biodiversity values present on the site and the largely internalised nature of the works themselves.

The principles of improved valuation and pricing of environmental resources requires consideration of all environmental resources that may be affected by a proposal, including air, water, land and living things. Mitigation measures are included in this REF for avoiding waste and ensuring where possible reuse, recycling and managing waste occurs, as relevant to this relatively minor scope of works.

3.1.2 Proposed Activity

Built Form

The proposed built form of the development is unchanged from that of the constructed and operational main hospital building. The building's bulk and scale is unaltered. The building's façade at the uppermost level will however be altered by expanding existing openings that are retained to create larger windows to increase ambient light into the bedrooms and by removing glazing and widening other openings to capture fresh air to the new courtyard space. Some existing windows will be deleted where they coincide with planned ensuites

The works do not otherwise alter the build's existing height, footprint or envelope. **Figure 16** below shows the location of the externally visible works and the proposed elevation arising from the project.

Architectural Plans are included at Appendix E.

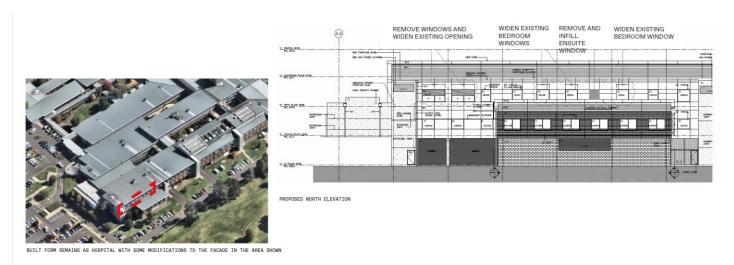


Figure 16 - Location of the works and proposed elevation (BVN)

Demolition

The demolition works will be extremely minor given the cold shell state of the proposed palliative care area. Minor additions and alterations to existing operational spaces will occur to support the delivery of the substantive element of the project.

New works

The proposed works primarily provide for the 3 new palliative care bedrooms, each with an accompanying ensuite. All rooms are set to the north of the building to provide for the highest possible amenity from a solar access perspective and outlook towards the former golf course and beyond given this elevated position. The rooms are shown in pale blue in **Figure 17** over. Clinical and support spaces are also provided along with internal communal spaces for family and visitors of the patients within the facility. These communal spaces are shown in the darker blue. Ancillary and staff-related spaces are shown in the buff colouring. The new courtyard is shown in green.

No new car parking is proposed. See discussion around this further below.

Associated upgrades to the electrical and utilities systems is proposed in a limited sense as tied to these works within the built form. As the courtyard is open to the elements from the north through the new openings it is proposed that this area will be drained with a drainage system linking to existing stormwater drainage via downpipes to at-grade level.

Figure 18 shows the proposed layout of the space whilst Figure 19 shows a render of the proposed courtyard.



Figure 17 - General Arrangement Level 1 (BVN)



Figure 18 – Proposed layout of the space (BVN)



Figure 19 - Render of proposed courtyard area (Context)

Roadworks and Parking

No roadworks are triggered by the modest scope of internal works. Similarly, the works have no physical impact upon any car parking due to the elevation position of the proposed palliative care space.

The proposed facility is adjacent to 15 parking spaces, which may be impacted by the works site and loading/unloading zones. Consideration will need to be given during the construction planning process to the impact of the construction siting.

Tree Removal and Landscaping

No tree removal is required as a result of the works.

Landscaping is proposed within the new courtyard. It will generally be a highly simplified design to cater for the modest space and its functional needs. To that end the key features of the landscaping are raised planted beds, a green wall, suspended planters and potted plants. A mix of shrubs and groundcovers are proposed in the planning palette. Integrated seating will be supplemented with the provision of a table with seating.

Landscape Plans are included at Appendix F. See also Figure 20 over.

Utilities

Acor has advised that it is of the understanding that the existing hospital campus water supply provision comes from the authority watermain located in Forest Road via a 150mm connection, backflow prevention valve and water meter. Acor has not performed any overall reviews on the capacities for the site as the project is seeking to connect to the existing systems within the proposed refurbished building. The site-wide sewer system also connects to an authority point located adjacent the water connection point in Forest Road.

The power supply is proposed to connect to existing distribution boards which are to be upgraded to current codes and standards.

There will be no augmentation, relocation, extension or capping of any services supplies. There is no additional demand on the various systems and the proposed project should not exceed any existing capacities given there are no additional fixtures, appliances, and the like proposed. In general the utilities works require only a reorientation of areas within the refurbished spaces.

Generally there will be no authority approvals required for the refurbishment. However, the plumbing and electrical contractors as part of their licensing arrangement with NSW Fair Trading, will require to book inspections during the course of the installation.

There are no anticipated new infrastructure upgrades for site water, sewer drainage or power supplies based on Acor's advice.

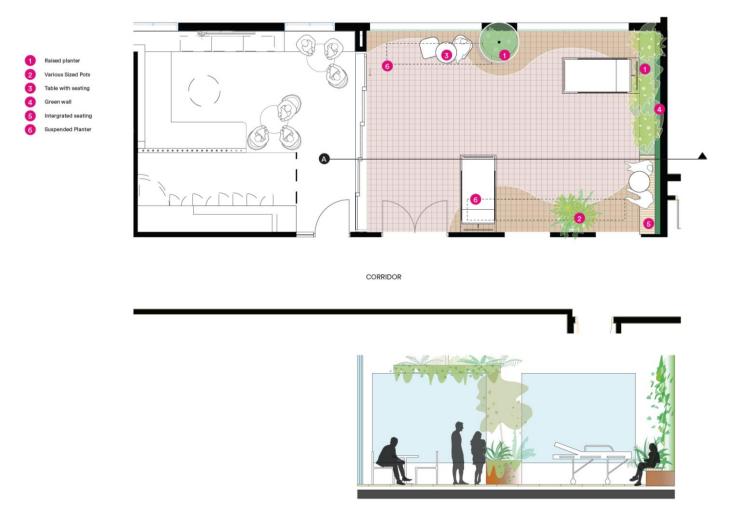


Figure 20 - Proposed landscape plan and section (Context)

3.2 Proposal Need, Options and Alternatives

3.2.1 Strategic Justification

The project forms part of the NSW Health End of Life Palliative Care Framework 2019-2024; Clinical Principles for End of Life and Palliative Care (NSWH, GL2021_016); and the Palliative Care Blueprint (Agency for Clinical Innovation). In the 2022-23 NSW State Budget, the Government announced \$93 million for a WCEoL program, as part of a larger \$743 million commitment to ensuring NSW has the best palliative care services and support in Australia, if not the world. As part of the program, new units have been announced for Westmead Hospital, Nepean Hospital, Wyong Hospital, Orange Health Service and Tamworth Hospital.

There is increasing demand for end of life and palliative care beds. Over the past five years between 2015-16 and 2020-21, palliative-related hospitalisations have increased by 23% to 90,750. The rate of palliative care hospitalisations has grown from 17.5 to 19.5 per 10,000 population, and other end of life hospitalisations have grown from 13.2 to 15.9 per 100,000 population. This indicates that along with natural population growth impacts, the proportion of the population requiring palliative-related hospitalisations is also contributing to demand. Additionally, increased life expectancy through the development of multiple new therapies and novel medications over the decades has led to the need for specialist supportive and palliative care services (SPCS) to better manage complex co-

morbidities, understand and manage the challenges associated with polypharmacy, and have a focus on maintaining or extending quality of life (without necessarily having a curative intent).

Further, there are inequities in access to dedicated beds. Within the Western NSW Local Health District (WNSWLHD), end of life and palliative care services is centralised at Orange Health Service, with two dedicated palliative care beds. However, if the two beds are unavailable then palliative care patients are admitted into other acute wards within the hospital. Orange Health Service caters for 28% of palliative care separations for Western NSW residents, and remaining end of life and palliative care services is provided across the LHD, as close to home as possible. However, residents of other areas of the LHD with life limiting illnesses who require specialist and/or acute care who are admitted to Orange Health Service may decline and then receive end of life care at the hospital, which is on average requires 89 minutes (120 kilometres) of patient travel. Orange Health Service also notes there is a under-representation of Aboriginal people accessing inpatient end of life and palliative care services at the hospital, which is reflective of the situation across the other Hospitals within the WCEoL Program.

Generally, the project object is to provide dedicated beds for palliative care, rather than rely upon patients being admitted into other acute beds within the hospital due to a shortfall in current provision of palliative care beds.

To address the above, HI proposes to provide a new 3-bed palliative care space at Orange Health Service as part of their delivery of infrastructure solutions and services to support the healthcare needs of the NSW communities consistent with the WCEoL program.

3.2.2 Alternatives and Options

A master plan was developed for the WCEoL program at Orange Health Service. The master plan developed a set of principles which were established as part of a collaborative engagement process with the stakeholder group and responded directly to the shared aspiration to create a people-centred, healing environment. The master plan considered future visions for location and operation of the site. Six (6) locations with seven (7) options were studied within the ground floor level and Level 1 of the main hospital building. Option 6 (for the subject works in the Level 1 cold shell space) was selected as the preferred location.

These seven (7) options were:

Ground level

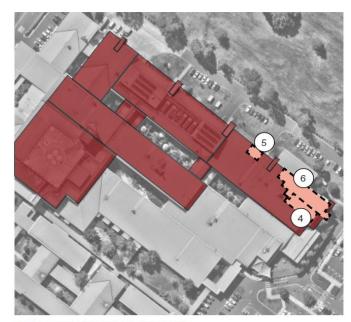
- Option 1, 1A & 2 propose various ways to provide the 3 designated beds adjacent existing palliative care beds
- Option 3 in ambulatory care

Level 1

- Option 4 fitting out shell space to provide 5 palliative beds and clinical support spaces
- Option 5 converting medical B beds into palliative beds
- Option 6 fitting out shell space to provide 3 palliative beds, a handwash and a dirty utility sub.

See these option locations set out in Figure 21 over.





ORANGE OPTION LOCATIONS ON GROUND FLOOR

ORANGE OPTION LOCATIONS ON FIRST FLOOR

Figure 21 - Options Locations (BVN)

These options were reviewed in two separate Master Planning workshops with the WNSWLHD and the project team. Workshop 2 rated the six options against a set of Threshold Questions:

- · The option provides the planned capacity
- · The option supports the endorsed model of care
- · The option provides safe and high-quality care
- · The option provides culturally sensitive care
- Complies with the campus' endorsed master plan
- The option supports sustainability initiatives, maximising green spaces, and the NSW Health Sustainability program (net-zero target)
- Affordable within the available budget (noting that some sites are highly constrained)

An overview of the alternatives, and an identification of the preferred alternative, for the Proposal are provided within Table 2.

Table 2: Alternatives considered for the proposal

Alternative description	Result of workshop review	Preferred alternative
Options 1, 1A, 2 and 3	Did not meet model of care, safe and high-quality care nor compliance with the campus' endorsed master plan.	Х
Option 4	Did not meet model of care nor affordability criteria.	X
Option 5	Did not meet model of care, safe and high-quality care, culturally sensitive care, nor compliance with the campus' endorsed master plan.	Х
Option 6	Was the only option which passed the threshold questions so was taken forward and scored against a set of Qualitative Criteria.	✓

The Qualitative Criteria Option 6 was assessed against were:

- The option supports equitable local access to palliative and end of life care
- The option facilitates a positive and calming patient and carer experience
 - ability to access outdoor spaces
 - opportunities for outlook to green spaces
- The option continually supports contemporary models of care (incl. single bed rooms? home-like environment?)
- The option supports efficient functional adjacencies and workflow
 - proximity to parking for family, patients and ambulance
 - proximity to logistics kitchen and others
 - proximity to mortuary
 - proximity to other acute services
 - suitable connection back to other acute services
- The option supports positive staff experience and professional development.
- The option represents a low risk to budget, timeframes and deliverablility
- Value for money

Option 6 rated 'green' on all qualitative criteria, except for an 'amber' rating for low risk to budget, timeframes and deliverability. Option 6 was agreed the preferred option for further consideration during Concept Design.

During the concept design, several key aspects were studied. These included site investigations, functional requirement of the space, and alignment with HI design principles. At that stage, two options were presented and reviewed in series of workshops. Ultimately Option 6.1 (subject of this REF) was selected as the preferred option.

3.3 Construction Activities

The works are long term (12 months). The works are however modest in scale and relatively isolated from any key and critical clinical functions that may be disrupted within the wider hospital campus given the space is a cold shell environment to the greater part and so no to very few direct conflicts are likely to arise, or otherwise periodic disruption notices issued.

See the project's Preliminary Construction Management Plan at Appendix G.

Table 3: Project Timeframes and Construction Activities

Construction activity	Description		
Commencement Date	December 2024 to December 2025		
Work Duration/Methodology	One stage of works over 12 months		
Work Hours and Duration/Construction	The following hours of operation are proposed for the Works (maximum):		
	•	Monday to Friday	7.00AM to 6.00PM
	•	Saturdays	8:00AM to 1:00PM
	•	Sundays and Public Holi	days No Work
	No work will occur outside of the hours nominated unless approval has been given by Orange Hospital.		
	Deliveries of heavy machinery may be required out of the proposed hours of operation to confirm to the overriding requirements of Transport for NSW.		
Workforce/Employment	Approximately seven workers per day, this number will be confirmed by the contractor in the CMP prior to commence works.		

Construction activity	Description		
Ancillary Facilities	Consideration will be given during the construction planning process to the impact of the construction siting. The delivery of the new facilities will have approximately one to two construction trucks per week and a demand for seven parking spaces for the workers per day. This is an indicative number only and would depend on the construction methodology and timeframes determined by the selected Contractor. The workers are likely to find parking within the hospital car parks, surrounding parking facilities, or on-street in the surrounding road network.		
Plant Equipment	During construction, the following equipment may be used:		
	articulated and fixed trucks;		
	mobile cranes;		
	concrete delivery trucks;		
	concrete pumps;		
	man and material hoists;		
	scissor and boom lifts, and		
	fork lifts		
Earthworks	No earthworks are required. N/A.		
Source and Quantity of Materials	This is not able to confirmed at this stage but it is likely the building materials will be sourced locally and from locations within the eastern seaboard of NSW and adjacent states.		
Traffic Management and Access	As part of the Construction Management Plan (CMP), the Head Contractor is required to submit a Construction Traffic Management Plan (CTMP) for approval prior to commencement of the Orange Palliative Care Works. The CTMP will detail site access, pedestrian protection measures and all associated vehicle movements which will be restricted to the permitted working hours of the site.		
	Works will be planned so that access to the public car park areas will be maintained to the maximum capacity, as much as is feasible during the works. Public access to the Hospital facilities will be maintained and signed as appropriate in consultation with the Orange Hospital.		
	Vehicular access/egress gates will be erected internally as required. These gates will be manned by qualified traffic supervisors at the times of vehicular access and egress to the Site.		
	Preliminary Site Access diagrams have been drafted to depict how the development site may be contained, serviced and accessed, including designated parking for construction staff so that Orange Hospital and visitors are not unduly inconvenienced. The site plan will be further developed in consideration of the appointed Head Contractor's methodologies prior to commencement on site.		

3.4 Operational Activities

Use

The proposed use at this part of Level 1 of the main hospital building converts long-standing cold shell space into a hospital use for palliative care purposes. All existing and proposed uses are however still a part of typical hospital-related functions. In essence no change in use is proposed to occur.

Operation Hours

The proposed use will be 24 hours per and 7 days per week. The proposed use is consistent with other hospital activities and the existing palliative care activities carried out elsewhere within the hospital presently.

Staff/Patients

The proposal involves 3 new beds (with an additional 1 FTE staff), noting however that existing palliative care arrangements exist at Orange Health Service at the ground level of the same building.

Traffic and Parking

The proposed works do not affect car parking supply at the hospital. See discussion in Section 6 with respect to the modest changes in demand relative to existing supply of spaces within the campus.

4. Statutory Framework

4.1 Planning Approval Pathway

Section 4.1 of the EP&A Act states that if an EPI provides that development may be carried out without the need for development consent, a person may carry the development out, in accordance with the EPI, on land to which the provision applies. However, the environmental assessment of the development is required under Part 5 of the Act.

State Environmental Planning Policy (Transport and Infrastructure) 2021 (TI SEPP) aims to facilitate the effective delivery of infrastructure across the State. Division 10 of the TI SEPP outlines the approval requirements for health service facilities. A hospital is defined as a health service facility under this division.

The site is zoned 'SP2 – Hospital' under the *Orange Local Environmental Plan 2011*. The SP2 zone is a prescribed zone under the TI SEPP – see **Figure 22**.



Figure 22 - Land use zoning under Orange LEP 2011 (eplanning Spatial viewer)

Therefore, the proposal is considered an 'activity' for the purposes of Part 5 of the EP&A Act and is subject to an environmental assessment (REF). The proposal is considered an 'activity' in accordance with Section 5.1 of the EP&A Act because it involves the carrying out of a work, the demolition of a building or a work, and the use of land, that is not Exempt Development or prohibited under an environmental planning instrument.

TI SEPP consultation is discussed within Section 6 of this REF.

Table 4: Description of proposed activities

Division and Section within TI SEPP	Description of Works
Section 2.61(1)(a)	Alterations and additions to the cold shell space within part of Level 1 of the main hospital building to construct the new 3-bed palliative care space within the same building footprint and envelope less than 15m in height and more than 5m from any property boundary.
Section 2.3(3)	Civil engineering works and services relocation and other works ancillary works to the construction works.

4.2 Environmental Protection and Biodiversity Conservation Act 1999

The provisions of the EPBC Act do not affect the proposal as it is not development that takes place on or affects Commonwealth land or waters. Further, it is not development carried out by a Commonwealth agency or development on Commonwealth land, nor does the proposed development affect any matters of national significance. An assessment against the EPBC Act checklist is provided at Table 5.

Table 5: EPBC Checklist

Consideration	Yes/No
Will the activity have, or likely to have, a significant impact on a declared World Heritage Property?	No
Will the activity have, or likely to have, a significant impact on a National Heritage place?	No
Will the activity have, or likely to have, a significant impact on a declared Ramsar wetland?	No
Will the activity have, or likely to have, a significant impact on Commonwealth listed threatened species or endangered community?	No
Will the activity have, or likely to have, a significant impact on listed migratory species?	No
Will the activity involve any nuclear actions?	No
Will the activity have, or likely to have, a significant impact on Commonwealth marine areas?	No
Will the activity have any significant impact on Commonwealth land?	No
Would the activity affect a water resource, with respect to a coal seam gas development or large coal mining development?	No

4.3 Environmental Planning and Assessment Act 1979

The proposed activity is consistent with the objectives of the EP&A Act as outlined in the table below.

Table 6: Consideration of the Objects of the EP&A Act

Object	Comment
(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,	The works support the efficient and effective operation of Orange Health Service with new and enhanced facilities. This in turn supports and promotes the general welfare of the community.
(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,	The development's ESD credentials have been considered as part of the design and ongoing operation of the development. See further detailed ESD considerations within this REF.
(c) to promote the orderly and economic use and development of land,	The new palliative care space promotes an orderly and economic use of the site by converting long-standing cold shell space into a much-needed health service use, and thereby using area built and reserved for future use (such as this).
(d) to promote the delivery and maintenance of affordable housing,	N/A
(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,	The development / activity does not affect the environment, including threatened and other species of native animals and plants, ecological communities and their habitats in any way.
(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),	N/A – the hospital does not contain any Aboriginal cultural heritage that may be affected by internal works within an elevated part of the building. The works are within an existing building footprint where assessment of such impacts has previously been carried and found acceptable. Conversion of existing built form for new use will not impact any of the local and State heritage items on the site.
(g) to promote good design and amenity of the built environment,	The design of the palliative care space is one limited by the scope of the project. In essence the proposed works operate to maintain the existing bulk and scale of the building but promotes good and contemporary design internally and at its interfaces externally.

Object	Comment
(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,	The project is in itself concerned with the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants.
(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,	N/A.
(j) to provide increased opportunity for community participation in environmental planning and assessment.	The proposal has been notified, garnering no commentary / submissions from either Council or neighbours of the hospital, as set out in Section 5 of this REF.
	Aboriginal community representative engagement was also carried out in late February 2024 which generated high levels of interest and engagement with the project and garnered valuable insights into community aspirations for the palliative care space.
	By any measure, ample opportunity for community participation in environmental planning and assessment process has occurred.

Duty to Consider Environmental Impact

Part 5 of the EP&A Act applies to activities that are permissible without consent and are generally carried out by a public authority. Activities under Part 5 of the EP&A Act are assessed and determined by a public authority, referred to as the determining authority. Health Infrastructure is a public authority and is the proponent and determining authority for the proposed works.

For the purpose of satisfying the objects of the EP&A Act relating to the protection and enhancement of the environment, a determining authority, in its consideration of an activity shall, notwithstanding any other provisions of the Act or the provisions of any other Act or of any instrument made under the EP&A Act or any other Act, examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of that activity (refer to Subsection 1 of Section 5.5 of the EP&A Act).

Section 171 of the EP&A Regulation defines the factors which must be considered when assessing the likely impact of an activity on the environment under Part 5 of the EP&A Act. Section 6 of this REF specifically responds to the factors for consideration for the activity.

Table 7 below demonstrates the effect of the proposed development activity on the matters listed for consideration in Subsection 3 of Section 5.5 of the EP&A Act.

Table 7: Matters for consideration under Subsection 3, Section 5.5 of the EP&A Act

Matter for Consideration	Impacts of Activity
Subsection 3: Without limiting subsection 1, a determining authority shall consider the effect of any activity on any wilderness area (within the meaning of the Wilderness Act 1987) in the locality in which the activity is intended to be carried on.	No effect, as there is no wilderness area (within the meaning of the Wilderness Act 1987) in the locality in which the activity is intended to be carried out on.

determining authority is not required to consider the impact of the activity on biodiversity values.

4.4 Environmental Planning and Assessment Regulation 2021

Section 171(1) of the Environmental Planning and Assessment Regulation (2021) notes that when considering the likely impact of an activity on the environment, the determining authority must take into account the environmental factors specified in the guidelines that apply to the activity.

The *Guidelines for Division 5.1 Assessments* (DPE June 2022) provides a list of environmental factors that must be taken into account for an environmental assessment of the activity under Part 5 of the EP&A Act. These factors are considered at Section 6 of this REF.

In addition, Section 171A of the Environmental Planning and Assessment Regulation (2021) requires the consideration of the impact an activity in a defined catchment. This is considered further below under Section 4.5 of this REF.

4.5 Other NSW Legislation

The following table lists any additional legislation that is required to be considered if it is applicable to the proposed activity.

Table 8: Other Possible Legislative Requirements

Legislation	Comment	Relevant? Yes/No
State Legislation		•
Rural Fires Act 1997	The site is not Bushfire Prone Land.	No.
Biodiversity Conservation Act 2016	The area subject of the works does not contain any critical habitat, threatened species or ecological population or community.	No
Water Management Act 2000	The works are not within 40 metres of a mapped watercourse.	No.
Contaminated Land Management Act 1997	The site is not listed on the register of contaminated sites noting also the elevated nature of the site of the proposed works within the existing building.	No.
Heritage Act 1977	The works will have no direct impact upon State heritage. Based on the mapped extent of the State listing under the State Heritage Register (not Council's LEP mapping), s60 Standard Exemptions under this Act apply for works within the new building remote from the relevant and key heritage items comprising the listing. There are no impacts on National heritage	Yes.
Roads Act 1993	No works are proposed to a public road, nor the pumping of water onto a public road, nor the connection of a road to a classified road	No.
Local Government Act 1993	Whether any water or sewer supply head works that require contribution payment as per Section 64 of the Act apply will need to be determined. This however appears highly unlikely. At the Master Plan and Schematic Design stages it was identified that the existing infrastructure has adequate capacity for sewage and potable water within the site	No.
National Parks and Wildlife Act 1974	An Aboriginal Cultural Heritage Assessment Report (ACHAR), in support of an Aboriginal Heritage Impact Permit (AHIP), is not required due to the existing highly disturbed nature of the site and the modest and internalised nature of the scope of works.	No.
Crown Land Management Act 2016	Not relevant to this REF.	No.
Protection of the Environment Operations Act 1997	An environment protection licence is unlikely to be triggered or required due to the relatively minor scope and duration of the works.	No.
NSW Reconstruction Authority Act 2022	The works respond to the broad requirements of the State Disaster Mitigation Plan (SDMP) under section 38 of the NSW Reconstruction Authority Act, in that the development is designed in response to any disaster event that may occur at the site including flooding, earthquake and the like, noting that the subject building is not on or near bushfire prone land and is unlikely to be flooded.	No.
Section 171A of the Environmental Planning and Assessment Regulation 2021	There are no direct impacts to any catchments, as defined for consideration under Section 171A of the EP&A Regulation.	No.
State Legislation Planning Policies		
State Environmental Planning Policy (Sustainable Buildings) 2022	This SEPP, and Chapter 3 in particular, does not apply to Part 5 / REF assessments.	No.
State Environmental Planning Policy (Resilience and Hazards) 2021	This hospital is not mapped as 'Coastal Use Area' nor 'Coastal Environment Area' under Chapter 2 of this SEPP. The campus is also not mapped as a Coastal Wetlands or Littoral Rainforest.	No.

Legislation	Comment	Relevant? Yes/No
State Environmental Planning Policy (Transport and Infrastructure) 2021	In the event the development relies upon permissibility, Chapter 2 of this SEPP (section 2.60(1) and section 2.59) operates to confirm the development as permissible within the SP2 zone in the event Orange LEP does not permit the works with consent.	
	The SEPP otherwise provides for alternative planning approval pathways to a DA under Division 10 in relation to Health Services Facilities.	
	Traffic-generating development requires referral to TfNSW. The modest scale of this development does not relate to the traffic-generating development thresholds.	
Orange Local Environmental Plan 2	011	
Zone	SP2 – Infrastructure (Hospital)	Yes.
	The proposed land uses (health services facility and hospital) are permissible within the zone.	
Height of Buildings	N/A	No.
Floor Space Ratio	N/A	No.
Heritage	A State heritage item (Item I21- Bloomfield Hospital "Nymagee Lodge", including landscape features, entry gateway, Elm avenue and grounds, 1502 Forest Road Lot 230, DP 720596) on land predominantly surrounding the lot comprising the Orange Health Service parcel. The road access handle of the Orange Health Service to Forest Road is however part of the mapped area comprising the heritage item under the LEP alone. The main hospital building is remote from this mapped location, and the vast majority of Lot 10 DP 1174672 is not a heritage item.	Yes.
	See Figure 23.	
Flood Planning	N/A	No.
Coastal Planning	N/A	No.

4.6 Strategic Plans

The following table lists any strategic plan that is required to be considered if it is applicable to the proposed activity.

Table 9: Consideration of the Objects of the EP&A Act

Strategic Plan	Assessment
NSW State and Premier's Priorities	 The Minns Labor Government has not adopted the former Government's NSW State and Premier's Priorities format.
	 In any case, the project would not be at odds, or inconsistent with, any policies in relation to improving health services within NSW or within the region, noting also the WCEoL program has committed State funding.
Future Transport Strategy	 The proposed development is modest in scale and is not a type to be inconsistent with any of the objectives and actions associated with the Future Transport Strategy.
Movement & Place	 Movement and Place is a cross-government framework for planning and managing roads and streets across NSW. The framework delivers on NSW policy and strategy directions to create successful streets and roads by balancing the movement of people and goods with the amenity and quality of places.
	 The development does not affect or impact upon the Movement & Place framework given the internalised location and modest scale of the development within the Orange Health Service and Bloomfield campus.

Strategic Plan

Assessment

Central West and Orana Regional Plan 2041

- The Central West and Orana Regional Plan 2041 aims to facilitate the population growth in the region from 290,000 people to 325,000 people in a sustainable way by adapting to future challenges posed by changes in climate, housing markets and the economy.
- The Plan includes 23 Objectives and range of supporting Strategies and Collaboration Activities based on a series of themes.
- The most relevant of these, and which cite Orange and/or Bloomfield Campus are set out below.
- Orange developing the Orange Health and Innovation Precinct (Orange Hospital, Bloomfield Medical Centre and private hospital, the GATE facility and surrounding lands, the School of Rural Health (University of Sydney), Bloomfield Park and the historic Bloomfield Hospital) and integrating with the surrounding road network, the sports precinct at Sir Jack Brabham Park, and residential and employment areas.
- Objective 21 Implement a precinct-based approach to planning for higher education and health facilities, and Strategy 21.1 in supporting mixed use precincts through strategic planning and local plans.
- Whilst modest in its scale and nature, and in being an ancillary function to the overall operation of the hospital, the proposal is not at odds or inconsistent with the relevant Objectives and its range of supporting Strategies and Collaboration Activities under the Plan.

Orange Local Strategic Planning Statement 2020

- The Local Strategic Planning Statement 2020 (LSPS) sets out a 20-year land use planning vision. It came into effect in 2020 and outlines how growth and change will be managed to maintain the high levels of environmental amenity, liveability and landscape quality that characterises Orange. It identifies the special characteristics that contribute to Orange's local identity and recognises the shared community values to be maintained and enhanced. This Statement identifies 19 Planning Priorities to achieve the Council's vision for Orange, along with actions and the means for monitoring and reporting on the delivery of the actions. This statement is consistent with the NSW Government's strategies and plans for land use planning in the Central West The Central West and Orana Regional Plan and is aligned with Orange City Council Community Strategic Plan 2018 2028.
- The relevant Planning Priority to this project is Planning Priority 8 Support the growing healthcare sector and related industries in the health precinct at Bloomfield around Orange Health Service.

Its Actions are:

- 1. Review the Orange Local Environmental Plan to ensure that there are opportunities for healthcare and allied professions in appropriate locations and zones.
- 2. Review the parking requirements for heathcare and allied professions.
- 3. Review other design requirements to ensure that protection of residential amenity is retained while also allowing flexibility to provide for the sometimes specific needs of different health care facilities.
- 4. Advocate for additional facilities in the health precinct to deliver a wider range of health and related services.
- 5. Support and advocate for the establishment and growth or a rural medical school in conjunction with tertiary education providers and the health service facilities

Again, whilst modest in its scale and nature, and in being an ancillary function to the overall operation of the hospital, the proposal is not at odds or inconsistent with the relevant Planning Priorities and Actions of this Plan.



Figure 23 - Heritage mapping under Orange LEP 2011 and State Heritage Inventory (eplanning Spatial viewer)

5. Consultation

5.1 Statutory Consultation

The REF scope of works was notified for 21 calendar days to Orange City Council (by email) and occupiers of adjoining land (via a letterbox drop), as required by section 2.62 of the TISEPP – see Table 10.

The notification commenced on 29 May 2024 and concluded on 19 June 2024. A one-day grace period was applied to address the King's Birthday public holiday falling within the notification period. Late submissions were accepted to 20 June 2024. In total, 20 letters were placed in letterboxes of adjoining occupiers of land or otherwise hand delivered.

The following addresses were notified by letterbox drop – as per Figure 24:

- The Country Club to the south of the hospital.
- · Gosling Aged Care village on Forest Road opposite the hospital.
- The Rise Early Learning Centre on Forest Road opposite the hospital.
- Occupants over six (6) levels of the Bloomfield Medical Centre on Forest Road opposite the hospital.
- Remington Hotel on Forest Road opposite the hospital.

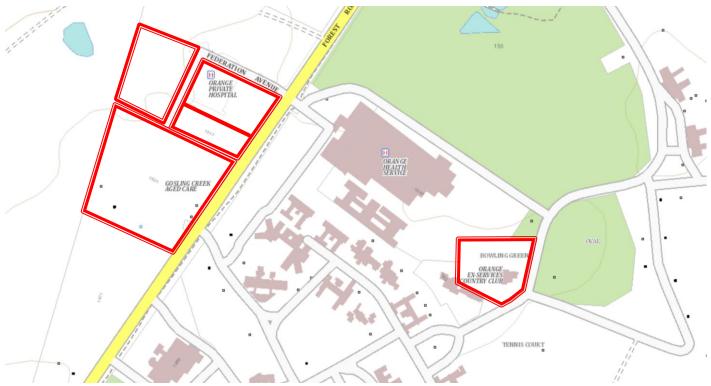


Figure 24 – Extent of notification to adjoining occupiers of land (SixMaps)

No further notification requirements arose with respect to the site conditions or the scope of works.

Table 10: Stakeholders required to be notified

Stakeholder	Relevant Section
Orange City Council	Section 2.62
Occupiers of adjoining land	Section 2.62

Copies of the notification letters and drawing issued are found at **Appendix H**.

No public submissions were received. Orange City Council did not respond to the notification process.

Rural Fire Services

No notification or consultation is triggered with the Rural Fire Service in this instance. The entirety of the Orange Health Service site is not mapped as bush fire prone land under section 10.3 of the *EP&A Act*.

5.2 Community and Stakeholder Engagement

Non-statutory community and stakeholder engagement has occurred with respect to this project since its inception with a range internal and external stakeholders. Some engagement remains as part of the detailed design and implementation process. Details of the WCEoL project's Orange Health Service-specific Communications and Engagement Strategy as well as Aboriginal community representative engagement is set out below and found at **Appendix I**.

An overview of the comments received are outlined and responded to in the table below.

Table 11: Other consultation (non-statutory)

List of community engagement activities	Date	Feedback	Project response
Aboriginal Community members and Elders	All 27 February 2024	Review of case studies with following	The project has sought to
Orange Aboriginal Local Land Council Orange Aboriginal Medical Service	·	discussion on four key areas of design:	adopt these as far as is possible through the project's design principles where a high degree of alignment already exists.
		Miscellaneous matters A summary of key points discussed within each these four design areas was provided. This predominantly resulted in commentary around high levels of amenity, a home-like atmosphere, and home comforts being adopted. Room sizes, accessibility, and comfort.	The relevant health desig standards too must be applied and some aspects of bringing the home into what nonetheless remains a clinical environment will moderate some outcomes

6. Environmental Impact Assessment

6.1 Environmental Planning and Assessment Regulation 2021 – Assessment Considerations

Section 171(1) of the *Environmental Planning and Assessment Regulation 2021* notes that when considering the likely impact of an activity on the environment, the determining authority must take into account the environmental factors specified in the environmental factors guidelines that apply to the activity.

The *Guidelines for Division 5.1 Assessments (June 2022)* apply to the activity. The relevant assessment considerations under Section 3 of these Guidelines are provided below:

Table 12: Summary of Environmental Factors Reviewed in Relation to the Activity

Kel	evant Consideration	Response/Assessment		
(a)	Any environmental impact on a community	provided by the hospital for the community of Orange and the broader Mid-West NSW Region and WNSWLHD's catchment. From an environmental standpoint the project enables the completion of part of Level 1 of the main hospital building as envisaged by the original DA by converting the existing and long-standing cold shell space into hospital accommodation and functional space. It therefore promotes best and efficient use of the hospital campus' capacity to provide enhanced services without significant and longer-term or extensive impacts upon neighbours through construction of new buildings. During construction a minor increase in trucks and construction operations may have a noise impact, however, this will be managed and mitigated through	-ve	Short term traffic and noise impacts during construction noting the relative isolation of the works from external receivers.
		appropriate measures during works.	Nil	
			+ve	Long term once operational
(b)	Any transformation of a locality	As the works will sit within the footprint and envelope of the existing main hospital	-ve	
	building there will not be a change to the nature of the locality. The hospital's scale, function, and appearance will generally remain the same.	· · · · · · · · · · · · · · · · · · ·	Nil	Х
			+ve	
(c)	Any environmental impact on the	The proposal will not result in the loss of any trees. The works have no	-ve	
	ecosystems of the locality environmental impact on the ecosystems of the locality.	environmental impact on the ecosystems of the locality.	Nil	Х
			+ve	
(d)	Any reduction of the aesthetic,	ational, scientific or other environmental quality or value of a locality. The works are confined to existing onmental quality or value of a developed and disturbed areas of the hospital campus and in areas set back from	-ve	
	environmental quality or value of a		Nil	X
	locality	other adjoining land uses.	+ve	
(e)	Any effect on locality, place or	The proposal will not have any adverse effect on locality, place or building having	-ve	
	building having aesthetic, anthropological, archaeological,	ogical, archaeological, scientific, or social significance or other special value for present or future generations. or social significance or cial value for present or future generations.	Nil	Х
	architectural, cultural, historical, scientific or social significance or other special value for present or future generations		+ve	
(f)	Any impact on the habitat of	animals (within the will be impacted by the proposal given the urban and disturbed context of the of the Biodiversity hospital campus and the nature of the works, particularly being elevated within	-ve	
	protected animals (within the meaning of the <i>Biodiversity</i>		Nil	Х
	Conservation Act 2016)		+ve	

Rel	evant Consideration	Response/Assessment		
(g)	Any endangering of any species of	The proposal will not endanger any species or animal or plant as no works occur	-ve	
	animal, plant or other form of life, whether living on land, in water or in the air	outside of the developed areas of the campus or that of the envelope of the main hospital building.	Nil	Х
	in the air		+ve	
(h)	Any long-term effects on the	There will be no long-term or permanent adverse or negative impact on the	-ve	
	environment	ent natural or man-made environment as a result of the construction or operation of the development.	Nil	X
			+ve	
(i)	Any degradation of the quality of the environment	The proposal will not reduce the quality of the natural environment, noting no vegetation or trees are impacted or lost.	-ve	
			Nil	X
			+ve	
(j)	Any risk to the safety of the environment	There will be no risk to the safety of the environment as a result of the proposal.	-ve	
			Nil	X
			+ve	
(k)	Any reduction in the range of beneficial uses of the environment	There will be no reduction in the range of beneficial uses of the environment as a result of the proposal.	-ve	
			Nil	Х
			+ve	
(I)	Any pollution of the environment	Indirectly, under the DGN 058, the works will in part improve the campus' existing ESD credentials and result in (a near) Green Star equivalent development and	-ve	
		which also improves upon the BCA's Section J ESD requirements by at least 10% and any concomitant pollution-generating activities related to energy production and usage, transportation, and other production of building materials.	+ve	Х
(m)	Any environmental problems	The works generally result in demolition-related waste (of which only a small to	-ve	
	associated with the disposal of waste	negligible portion is standard hazardous or contaminated materials for which routine waste classification and removal and disposal methods is expected to be employed).	Nil	Х
		Ongoing clinical and hospital waste will be addressed through currently employed contemporary waste handling methods.	+ve	
(n)	Any increased demands on resources (natural or otherwise)	The proposal will not result in increased demand on resources (natural or otherwise) that are, or are likely to become, in short supply, noting that under	-ve	
	that are, or are likely to become, in short supply	DGN 058 the works to convert the old shell space will in part improve the campus' existing ESD credentials and result in a (near) Green Star equivalent development which also improves upon the BCA's Section J ESD requirements by at least	Nil +ve	X
		10%.		
(o)	Any cumulative environmental effects with other existing or likely	See further detailed discussion below. Only modest forms of development have been approved (and are largely completed) in the immediate vicinity of the	-ve	
	future activities	hospital with the timing and scale of development unlikely to impact the environment should these works be carried out concurrently.	Nil	Х
			+ve	
(p)	Any impact on coastal processes and coastal hazards, including	·	-ve Nil	
	those under projected climate change conditions			Х
			+ve	
(q)	Applicable local strategic planning statement, regional strategic plan	egional strategic plan ategic plan made an 3.1 of the Act The Central West and Orana Regional Plan 2041 aims to facilitate the population growth in the region from 290,000 people to 325,000 people in a sustainable way by adapting to future challenges posed by changes in climate,	-ve	
	or district strategic plan made under Division 3.1 of the Act		Nil +ve	X
		housing markets and the economy.		

Relevant Consideration

Response/Assessment

- The Plan includes 23 Objectives and range of supporting Strategies and Collaboration Activities based on a series of themes.
- The most relevant of these, and which cite Orange and/or Bloomfield Campus are set out below.
- Orange developing the Orange Health and Innovation Precinct (Orange Hospital, Bloomfield Medical Centre and private hospital, the GATE facility and surrounding lands, the School of Rural Health (University of Sydney), Bloomfield Park and the historic Bloomfield Hospital) and integrating with the surrounding road network, the sports precinct at Sir Jack Brabham Park, and residential and employment areas.
- Objective 21 Implement a precinct-based approach to planning for higher education and health facilities, and Strategy 21.1 in supporting mixed use precincts through strategic planning and local plans.
- Whilst modest in its scale and nature, and in being an ancillary function to the overall operation of the hospital, the proposal is not at odds or inconsistent with the relevant Objectives and its range of supporting Strategies and Collaboration Activities under the Plan.

Local Strategic Planning Statement 2020 (LSPS)

- The Local Strategic Planning Statement 2020 (LSPS) sets out a 20-year land use planning vision. It came into effect in 2020 and outlines how growth and change will be managed to maintain the high levels of environmental amenity, liveability and landscape quality that characterises Orange. It identifies the special characteristics that contribute to Orange's local identity and recognises the shared community values to be maintained and enhanced. This Statement identifies 19 Planning Priorities to achieve the Council's vision for Orange, along with actions and the means for monitoring and reporting on the delivery of the actions. This statement is consistent with the NSW Government's strategies and plans for land use planning in the Central West The Central West and Orana Regional Plan and is aligned with Orange City Council Community Strategic Plan 2018 2028.
- The relevant Planning Priority to this project is Planning Priority 8 Support the growing healthcare sector and related industries in the health precinct at Bloomfield around Orange Health Service.

Its Actions are:

- 1. Review the Orange Local Environmental Plan to ensure that there are opportunities for healthcare and allied professions in appropriate locations and zones.
- $2. \ Review \ the \ parking \ requirements \ for \ heathcare \ and \ allied \ professions.$
- 3. Review other design requirements to ensure that protection of residential amenity is retained while also allowing flexibility to provide for the sometimes specific needs of different health care facilities.
- 4. Advocate for additional facilities in the health precinct to deliver a wider range of health and related services.
- 5. Support and advocate for the establishment and growth or a rural medical school in conjunction with tertiary education providers and the health service facilities
- Again, whilst modest in its scale and nature, and in being an ancillary function to the overall operation of the hospital, the proposal is not at odds or inconsistent with the relevant Planning Priorities and Actions of this Plan.

(r)	Any other relevant environmental factors	None identified.	-ve	
	Tactors		Nil	Χ
			+ve	

6.2 Identification of Issues

6.2.1 Traffic, Access and Parking

Questions to consider	Yes	No
Will the works affect traffic or access on any local or regional roads?		Х
Will the works disrupt access to private properties?		Χ
Are there likely to be any difficulties associated with site access?		Х
Are the works located in an area that may be highly sensitive to movement of vehicles or machinery to and from the work site (i.e. schools, quiet streets)?		Х
Will full or partial road closures be required?		Х
Will the proposal result in a change to onsite car parking?	Х	
	Temporarily only	
Is there onsite parking for construction workers?		
	Public spaces	

SCT has undertaken a traffic impact assessment of the proposed works, particularly in relation to parking supply and demand, as well as construction-related matters – see **Appendix J**.

Parking

As noted, the hospital presently has two (2) palliative care beds located within the ground level of the existing main hospital building. The new 3-bed unit will increase the number of beds at the hospital to a total of 5 beds. The net gain is 3 beds.

The increase in beds, and new palliative care unit, involves one (1) additional full time equivalent (FTE) staff member. Three (3) additional patients would be admitted, with what is understood to be a typical length of stay of about 5 days. Family members and carers are encouraged to visit regularly and visiting hours are unrestricted. A family member is permitted to stay overnight within each patient's bedroom. Visitors are assumed to drive to and from the hospital. The net increase in parking demand would be 4 spaces based on the additional staff member and the visitation related to the 3 additional beds.

The existing parking supply at the hospital is in excess of 750 spaces in various locations around the campus. The additional demand would have a negligible impact upon the available supply of spaces, particularly to the eastern side of the main hospital towards the location of the new palliative care unit and access to it.

Construction Traffic

SCT advises that based on information provided by HI on other health facility construction activities, the delivery of the new facilities will have approximately one to two construction trucks per week and a demand for seven parking spaces for the workers per day. This is an indicative number only and would depend on the construction methodology and timeframes determined by the selected Contractor. The workers are likely to find parking within the hospital car parks, surrounding parking facilities, or on-street in the surrounding road network.

The proposed facility is adjacent to 15 parking spaces, which may be impacted by the works site and loading/unloading zones. Consideration will need to be given during the construction planning process to the impact of the construction siting.

A Construction Traffic Management Plan (CTMP) would be developed by the Contractor prior to the start of construction and updated throughout the project as required. The CTMP would be prepared in consultation with Transport for NSW and Orange City Council and would seek to minimise traffic, transport and parking impacts during the construction stages of the project, especially while the health service remains operational. The CTMP would address aspects such as type of construction vehicles, construction transport routes, dilapidation surveys, traffic control plans, including detours and signage, noise and vibration impacts, and details of measures to minimise

conflicts with other road users or users of the site.

Mitigation measures related to the development of a detailed Construction Traffic Management Plan as part of the detailed Construction Management Plan. See the Mitigation Measures arising from the assessment of this project at **Appendix T**.

6.2.2 Noise and Vibration

Questions to consider	Yes	No
Are there residential properties or other sensitive land uses or areas that may be affected by noise from the proposal during construction (i.e. schools, nursing homes, residential areas or native fauna populations)? Hospital and distant residences.		
Will any receivers be affected by noise for greater than three weeks?	X	
Are there sensitive land uses or areas that may be affected by noise from the proposal during operation?		Х
		Hospital only
Will the works be undertaken outside of standard working hours? That is:		Χ
Monday - Friday: 7am to 6pm;		
Saturday: 8am to 1pm;		
Sunday and public holidays: no work.		
Will the works result in vibration being experienced by any surrounding properties or infrastructure?		Х
Are there any impacts to the operation of helipads on the activity site?		Х

Acor has prepared a Noise and Vibration Impact Assessment – see **Appendix K**. The objectives of this assessment were to broadly:

- Identify noise sensitive receivers that will potentially be affected by the construction activities associated with the
 project.
- Determine existing ambient and background noise levels at the nearest noise sensitive receivers in the vicinity of the project.
- Establish the appropriate noise assessment criteria in accordance with the relevant standards and guidelines.
- Carry out an assessment to determine whether the relevant criteria can be achieved based on the proposed construction activities.
- Where applicable, provide recommendations are made for reasonable and feasible measures to be incorporated into the project in order to ensure compliance with the assessment criteria.

Acor determined that the nearest noise sensitive receivers to the activity (both construction works and operation) would be both the hospital itself and residential receivers primarily to the east of the hospital and mixed commercial and residential uses within the wider Bloomfield Campus to the south.

Acor undertook surveys of the existing noise environment at and around the hospital through attended monitoring only, noting the residential receivers are located in a rural environment and thus was considered that unattended noise logging would not be appropriate due to weather and animal activities. It was determined that attended measurements were a suitable alternative. These results informed the project's Rating Background Noise Levels and the consequential Noise Management Levels (NML) in relation to construction works. A summary of Acor's findings and assessment is set out below.

Construction Noise and Vibration

Proposed base construction hours are as follows, which are consistent with the ICNG Standard Construction Hours:

- Monday to Friday 7:00am to 6:00pm.
- Saturday 8:00am to 1:00pm.

Sunday and Public Holidays – No works.

Based on the likely types of plant and equipment to be used during construction and its associated activities, Acor has predicted the following based on a quantitative assessment:

- It is understood that the majority of works will be enclosed by the project site and thus impacts to external receivers
 will be minimum. However, the construction activity might risk causing elevated internal noise levels within adjacent
 functional areas of the building.
- All construction activity is expected to occur during recommended standard hours therefore sleep disturbance impacts at the neighbouring residential receivers are not expected.
- The increase in vehicle movements would be limited to the period of construction. Noise level increases due to construction traffic would not be significant when compared with the existing vehicle numbers in the study area.

It is recommended that the following mitigation measures should be adopted.

- Construction should be undertaken within an enclosed area.
- Construction should be adopted during daytime period in consultation with the client.
- Recommend use of flexible noise barriers with internal absorptive finishes (i.e Echo Barrier H10, Flexshield)
- Minimise voices and reduce the radio/music noise.

Notwithstanding, and additionally, to address the range of construction noise matters arising, Acor has recommended a range of general control elements as noise mitigation measures or strategies, which include Management Control, Source Control, and Path Control measures, as set out from page 28 of the Acor report:

- Site inductions.
- Behavioural practices.
- Attended vibration measurements.
- Construction hours and scheduling.
- Construction respite period during normal hours and out-of-hours work.
- Equipment selection.
- Plan worksites and activities to minimise noise and vibration.
- Reduced equipment power.
- Non-tonal and ambient sensitive reversing alarms.
- Minimise disturbance arising from delivery of goods to construction sites.
- Shield sensitive receivers from noisy activities.

Vibration

Based on the likely types of plant and equipment to be used during construction and its associated activities, it is not expected that these will generate vibration levels exceeding relevant criteria at any external receiver. Ground borne noise from the likely construction activities is not anticipated to be audible above airborne noise inside residential receivers, and will not require specific controls.

In areas adjacent to the existing hospital, structure-borne noise will have the greatest impact from sources such as hammer drills, jackhammers and saws where there is contact with the structure. It is not possible to confirm the extent of impact without detailed assessment understanding of the structure (construction joints etc) and / or pilot testing.

It will be critical to consult with users and stakeholders to practically schedule noisy and vibration intensive works around nearby areas (including concrete saws and jackhammers). Vibration usually has the greatest impact on medical imaging areas and/or operating theatres and the like.

To address possible vibration impacts, Acor has recommended the following mitigation measures:

- During construction activities, the recommended vibration levels should be complied at all times with DIN 4150 and NSW DEC Assessing Vibration: A Technical Guideline (2006).
- If there is any risk of vibration exceedance, a vibration monitoring system should be installed, to warn the Head contractor and the Operators (via flashing light, audible alarm, SMS, etc) when vibration levels are approaching to the criteria.

To address these impacts and implement the recommended management tools beyond the planning stage it is proposed (through the Mitigation Measures at **Appendix T**) to require a Construction Noise and Vibration Management Plan (CNVMP) to be prepared by the contractor. Implementation of all reasonable and feasible mitigation measures for all works will ensure that any adverse noise impacts to surrounding residential and hospital receivers are minimised.

Operational Noise

Mechanical plant and equipment associated with the operation of the development is not yet known, notwithstanding, to achieve appropriate acoustic outcomes, mechanical plant and equipment is to be controlled to ensure external noise emissions are not intrusive and do not impact on the amenity of neighbouring receivers in accordance with the relevant criteria.

Recommendations are provided for noise controls to key plant. During the detailed design stage, the acoustic consultant shall provide detailed design advice to the architect and mechanical engineer to ensure that noise emissions from mechanical plant are effectively controlled to meet the relevant criteria of NSW EPA Noise Policy for Industry 2017 at the nearest receiver boundaries.

The project's Mitigation Measures at **Appendix T** have incorporated the Acor recommendations to ensure appropriate treatment of the noise and vibration environment at and around the hospital results during both construction and operation.

See the Mitigation Measures arising from the assessment of this project at Appendix T.

6.2.3 Air Quality and Energy

Questions to consider	Yes	No
Could the works result in dust generation?	Х	
	(minor and predominantly internally)	
Could the works generate odours (during construction or operation)?	X (Minor)	
Will the works involve the use of fuel-driven heavy machinery or equipment?	(WIIIIOI)	X (unlikely)
Are the works located in an area or adjacent to land uses (e.g. schools, nursing homes) that may be highly sensitive to dust, odours or emissions?	X (Hospital only)	X (Other sensitive receivers)

A Limited Indoor and Ambient Air Quality Impact Assessment has been prepared by EnviroScience Solutions to address the internal air quality of the space(s). It concluded that the indoor and ambient air sampled suggests that the locations are safe for human occupancy - see **Appendix L**.

Air quality impacts related to the works themselves were not addressed by EnviroScience Solutions. Instead, the precedent report prepared for the WCEoL Wyong project provides so suitable methodologies and mitigation for the subject circumstance.

That report addressed the potential for air impacts to arise during the works, particularly in relation to dust and odours generated by the activities tied to construction. Potential sources of air and odour emissions were identified as principally associated with movement of plant/vehicles and construction materials and the use of fuels (for equipment/plant etc.).

Accordingly, a qualitative assessment of potential health and nuisance impacts associated with emissions to air, specifically dust, and odours was performed in accordance with relevant NSW Environment Protection Authority (EPA) guidelines and also industry best practice guidance. Those potential sources of air emissions were assessed to be adequately managed via implementation of appropriate controls and monitoring of air quality impacts (if any) for the duration of the refurbishment works program. The same can be applied with respect to the WCEoL Orange project.

These management measures (as included in Section 6 of the Air Quality Impact Assessment for the WCEoL Wyong project) include:

- Development of an Air Quality Management Strategy, including the matters numbered 01-36 as set out in Table 6.1
 of that assessment.
- · Diesel Particulate Matter Exposure Monitoring.
- · Real Time Respirable Particulate (Dust) Monitoring.
- Visual Monitoring.
- Dust Management.
- · Odour Management (as may be required).

See the Mitigation Measures arising from the assessment at **Appendix T**.

6.2.4 Soils and Geology

Questions to consider	Yes	No
Will the works require land disturbance?		Х
Are the works within a landslip area?		Х
Are the works within an area of high erosion potential?		Х
Could the works disturb any natural cliff features, rock outcrops or rock shelves?		Х
Will the works result in permanent changes to surface slope or topography?		Х
Are there acid sulfate soils within or immediately adjacent to the boundaries of the work area? And could the works result in the disturbance of acid sulfate soils?		Х
Are the works within an area affected by salinity?		Х
Is there potential for the works to encounter any contaminated material?		Х

The works are wholly internal and do not affect any soils or geology. No stormwater run-off impacts are likely to arise. The handling and storage of building materials at-grade outside of the works on Level 1 of the main hospital building will be subject to a construction management plan, noting that this will potentially be upon sealed surfaces of existing car parking spaces.

Contamination is addressed further below in Section 6.2.13 of this REF.

No additional mitigation measures beyond the need to complete a final construction management plan are proposed.

Coastal risks

Questions to consider	Yes	No
Are the works affected by any coastal risk/hazard provisions?		Χ
Is any coastal engineering advice required, proportionate to the proposed activity?		Х

6.2.5 Hydrology, Flooding and Water Quality

Questions to consider	Yes	No
Are the works located near a natural watercourse?		Χ
Are the works within a Sydney Drinking Water Catchment?		Х
Are the works located within or near a floodplain?		Х
Will the works intercept groundwater?		Х
Will a licence under the Water Act 1912 or the Water Management Act 2000 be required?		Х
Has stormwater management been adequately addressed?		N/A

Water Management

The only likely stormwater management matter likely to arise is the ability to drain the open and exposed areas of the courtyard once operational. To address this Acor (the project's civil engineer) has designed grated drain inside the building. The grated drain's purpose is to capture wind driven rain that may enter the space and drain through the building via piping system and connecting to the existing ground level stormwater drainage system. Acor understands that there would be minimal rainfall entering the space as it faces north, there is a roof overhang of 900mm, and the majority of major weather events come from the south-east to south-west. The Acor drawing is included at **Appendix M**.

Flooding

As the works are within the existing main hospital building at Level 1 no Flood Impact Assessment has been prepared to address any flooding arising from a 1:100 year event and a Probable Maximum Flood (PMF) scenario. The location of the works are self-evidently suitably remote from any such risk, noting also the lack of any direct flooding risk near the subject building as set out earlier in this REF.

Notwithstanding, it is relevant to note that the State Emergency Service of New South Wales (SES) is responsible for providing flood updates and issuing Flood Evacuation Warnings and Flood Evacuation Orders. Flood information issued by the SES may be received by local radio and television news, SMS messaging, Facebook, and doorknocking in effected communities. The timing for evacuation of persons is to be established in consultation with the SES. As the site appears to be located outside any PMF floodwater extents and the development will not impact the flood characteristics on site, an evacuation plan is not considered necessary for the proposed palliative care works. The existing evacuation plan should nonetheless be updated to ensure the new works and additional population of the hospital is catered for in such circumstances that evacuation may be required. This is included as a Mitigation Measure at **Appendix T**.

6.2.6 Visual Amenity

Questions to consider	Yes	No
Are the works visible from residential properties or other land uses that may be sensitive to visual impacts?		Х
Will the works be visible from the public domain?		Х
Are the works located in areas of high scenic value?		Х
Will the works involve night work requiring lighting?		Х

The proposed works effectively provide for alterations and additions to the existing upper level of the main hospital building. This includes minor external / façade works to provide for larger windows, removal of windows, and the creation of the opening to the proposed courtyard. Generally, the works would be barely discernible for areas outside of the hospital, and even from within most parts of the hospital. No change to the existing building's built form or envelope arises from these works. See further below with respect to cultural heritage considerations and assessment.

The visual impacts are negligible at worst.

No mitigation measures are considered relevant or necessary in this regard.

6.2.7 Aboriginal Heritage

Questions to consider	Yes	No
Will the activity disturb the ground surface or any culturally modified trees?		X
Are there any known items of Aboriginal heritage located in the works area or in the vicinity of the works area (e.g. previous studies or reports from related projects)?		Х
Are there any other sources of information that indicate Aboriginal objects are likely to be present in the area (e.g. previous studies or reports from related projects)?		Х
Will the works occur in the location of one or more of these landscape features and is on land not previously disturbed?		Х
Within 200m of waters;		
Located within a sand dune system;		
Located on a ridge top, ridge line or headland;		
 Located within 200m below or above a cliff face; 		
Within 20m of, or in a cave, rock shelter or a cave mouth.		
If Aboriginal objects or landscape features are present, can impacts be avoided?	X (elevated position of works)	N/A
If the above steps indicate that there remains a risk of harm or disturbance, has a desktop assessment and visual inspection been undertaken?		N/A
Is the activity likely to affect wild resources or access to these resources, which are used or valued by the Aboriginal community?		Х
Is the activity likely to affect the cultural value or significance of the site?		Х

Given the elevated and isolated position of the works within the existing main hospital building, an Aboriginal Heritage Due Diligence assessment to assess the likelihood of Aboriginal heritage impacts has not been prepared. A basic AHIMS search is included at **Appendix N**. This basic AHIMS search indicates that no Aboriginal sites are recorded in or near the hospital campus, and that no Aboriginal places have been declared in or near the hospital campus.

Despite the lack of an assessment, it is clear that the proposed works will not harm, or have the likelihood of harming, Aboriginal objects. Accordingly, an Aboriginal Heritage Impact Permit (AHIP), will not be needed to support the works.

An Aboriginal Cultural Heritage Assessment Report (ACHAR) is also not required in the circumstances.

Based on the above, the following conclusion can be made, and appropriate standard Mitigation Measures be applied:

- The area of the works does not contain and is not likely to contain any Aboriginal objects. No further Aboriginal heritage assessment or investigation is required, and the proposed works can proceed with caution.
- If Aboriginal objects are discovered during the proposed works, works must stop immediately and an assessment must be undertaken in accordance with Part 6 of the *National Parks and Wildlife Act 1974*. If the activity cannot avoid harm to Aboriginal objects, works cannot proceed until an Aboriginal Heritage Impact Permit has been issued.

The Mitigation Measures include the typical and accepted Unexpected Finds Protocol – see Appendix T.

An ACHAR and an AHIP is not required based on the nature, location, and scope of the works.

6.2.8 Non-Aboriginal Heritage

Questions to consider	Yes	No
Are there any heritage items listed on the following registers within or in the vicinity of the work area?		X
NSW heritage database (includes Section 170 and local items);		
Commonwealth EPBC heritage list.		
Will works occur in areas that may have archaeological remains?		Х

Questions to consider	Yes	No
Is the demolition of any heritage occurring?		X

Nimbus Architecture + Heritage has prepared a Statement of Heritage Impact in relation to the project - see **Appendix O**.

The site which includes the Bloomfield Hospital is a State Heritage listed item under NSW *Heritage Act 1977* and is listed on the State Heritage Register. Within the curtilage of the subject site, there are several items listed in the Health NSW s.170 register and the Orange Local Environmental Plan (LEP) 2011. The item does not fall inside a Heritage Conservation Area. See Figure 25 below which shows the State and Local mapping related to those listings, as it relates to the location of the works.

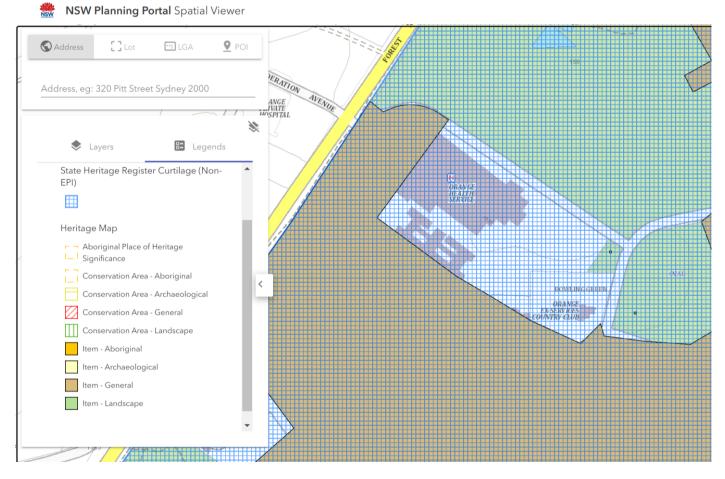


Figure 25 - Heritage mapping of the site (NSW Planning Portal Spatial Viewer)

The works, whilst within a modern building of no heritage significance on the wider campus, are within the curtilage of the State and locally-listed items and have some limited external changes to the appearance of the building in its setting. Accordingly, the Nimbus assessment measures the potential impacts both physical and visual that may occur as a result of the proposed works.

Based on its assessment against relevant guidelines and requirements Nimbus concludes as follows:

- The proposed scope of works will have no visual or physical impacts on the heritage setting to State Heritage Listed Bloomfield Hospital.
- The proposed scope of works will have no visual or physical impacts on the heritage aspects of locally listed Bloomfield Hospital and Grounds (including Nymagee Lodge).
- The proposed scope of works will have no visual or physical impacts to Bloomfield Hospital, listed under the s.170 listing of Health Infrastructure NSW.

- A Conservation Management Plan (CMP) has already been created for the subject site by the Public Works
 Advisory Department of Regional NSW and Matt Devine & Co. The CMP was consulted with during the planning
 and assessment of the proposed works, resulting in the proposed scope of works having no visual or physical
 impacts on the state or locally listed heritage setting/site curtilage.
- This report, prepared by Nimbus Architecture and Heritage Pty Ltd, has assessed the visual and physical impacts that may have result to the subject heritage listed site, and has been created in consultation with the architects BVN and Capital Insight representative, ensuring what is significant is protection, retained, and integrated into the design, allowing End of Life (EOL) patients to enjoy the setting as intend from its original inception.
- The proposed scope of works, will result in no physical or visual impacts to the significance and values to the heritage listed place and its setting, and is considered acceptable from a heritage perspective.

The recommendations of the assessment largely relate to future developments at the campus, and in this instance it is considered no additional mitigation measures are relevant to this scope of works. Notwithstanding, the Mitigation Measures include the typical and accepted Unexpected Finds Protocol – see **Appendix T.**

6.2.9 Ecology

Questions to consider	Yes	No
Could the works affect any <i>Environmental Protection and Biodiversity Conservation Act 1999 (Cth)</i> listed threatened species, ecological community or migratory species?		Х
Is it likely that the activity will have a significant impact in accordance with the <i>Biodiversity Conservation Act</i> 2016 (BC Act)? In order to determine if there is a significant impact, the REF report must address the relevant requirements of Section 7.2 of the BC Act:		Х
 Section 7.2(a) – Test for significant impact in accordance with Section 7.3 of the BC Act; 		
 Section 7.2(c) – It is carried out in a declared area of outstanding biodiversity value. 		
Could the works affect a National Park or reserve administered by EES?		X
Is there any important vegetation or habitat (i.e. Biodiversity and Conservation SEPP) within or adjacent to the work area?		X
Could the works impact on any aquatic flora or habitat (i.e. seagrasses, mangroves)?		Х
Are there any noxious or environmental weeds present within the work area?		Х
Will clearing of native vegetation be required?		Х

Given the elevated and isolated location of the works within part of Level 1 of the main hospital building no ecological advice has been sought with respect to the proposed works. Vegetation located near the façade of the building is planted native vegetation arising from the original works to construct and use the building. This vegetation will be protected via Mitigation Measures should any external works arise. It is assumed the vast majority of the works will be undertaken internally within the building.

As noted earlier in this REF (see **Figure 10**) no part of the hospital campus is subject to mapped Biodiversity Values. Given the location, nature and scope of the works and lack of ecological communities present on the site, a Species Impact Statement (SIS) and/or a Biodiversity Assessment Development Report (BDAR) are each not relevant or required and are not likely to trigger to entry into the Biodiversity Offsets Scheme identified in section 7.4 of the *Biodiversity Conservation Act 2016*.

Further it is highly unlikely that there will be any significant effect on any endangered ecological community, endangered population, threatened species or their habitats, as per the listings in the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act 1999) (Commonwealth legislation). The provisions of the EPBC Act 1999 do not apply to this proposal and it does not require referral to the Commonwealth.

Other than protection of the existing planted native vegetation adjacent to the façade of this part of the main hospital building, no mitigation measures are considered relevant in this instance.

6.2.10 Bushfire

Questions to consider	Yes	No
Are the works located on bushfire prone land?		X
Do the works include bushfire hazard reduction work?		X
Is the work consistent with a bush fire risk management plan within the meaning of the <i>Rural Fires Act 1997</i> (RF Act) that applies to the area or locality in which the activity is proposed to be carried out?		N/A

As noted in **Figure 12** of this REF, the hospital is remote from any mapped bush fire prone land and accordingly no bush fire-related advice has been sought with respect to the proposed works. No bushfire-related mitigation measures are considered relevant in this instance. As with the unlikely instance of flooding at the site, the existing hospital evacuation plan should nonetheless be updated to ensure the new works and additional population of the hospital is catered for in such circumstances that evacuation may be required. This is included as a Mitigation Measure at **Appendix T**.

6.2.11 Land Uses and Services

Questions to consider	Yes	No	
Will the works result in a loss of or permanent disruption of an existing land use?		X	
Will the works involve the installation of structures or services that may be perceived as objectionable or nuisance?			
Will the works impact on or be in the vicinity of other services?			

6.2.12 Waste Generation

Questions to consider	Yes	No
Will the works result in the generation of non-hazardous waste?	X	
Will the works result in the generation of hazardous waste?	Х	
Will the works result in the generation of wastewater requiring off-site disposal?		Х
Will the works require augmentation to existing operational waste management measures?		Х

A preliminary Waste Management Plan has been prepared for the purposes of the REF – see **Appendix P**. The purpose of this report is to provide an estimate, and details, of waste generated throughout the construction and provide a preliminary description of measures to be implemented to handle waste during facility operation, noting details of the amounts, handling methods and destinations of waste generated during construction will be provided by the construction contractor appointed to the project.

The project applies relevant State legislation and State and Local Government policies related to waste and its handing including reducing and avoiding waste, reducing waste to landfill, and diverting waste from landfill. This includes, where possible reuse and recycling or resources to avoid these being classified as waste materials.

The Waste Management Plan sets out anticipated waste streams, of which the vast majority are expected to be recycled. Only general waste and spoil has the potential to go to landfill under the plan.

See below with respect a Hazardous Materials Assessment and hazardous waste likely to be generated.

Operational waste generated by the palliative care unit will apply the pre-existing hospital's general operational waste management plan(s). Further, the WNSWLHD has set waste reduction targets, which include:

- Increase accuracy in waste segregation.
- Increase waste diversion from landfills to 75%.
- · Minimise the risk of clinical waste contamination in other waste stream.

This will be measured and monitored consistent with the plan.

See the Mitigation Measures arising from the assessment of this project at Appendix T.

6.2.13 Hazardous Materials and Contamination

Questions to consider	Yes	No
Is there potential for the works to encounter any contaminated material?		X
		In-ground and in building
Is there potential for the works to disturb or require removal of asbestos?		X
Is the work site located on land that is known to be or is potentially contaminated?		X
Will the works require a Hazardous Materials Assessment?		X
Is a Remediation Action Plan (RAP) required to establish the proposed activity?		X
If the project includes ancillary remediation works, has the ancillary remediation been considered in accordance with the Resilience and Hazards SEPP?		N/A

HAZMAT

EnviroScience Solutions has prepared a Hazardous Materials Register and Management Plan in relation to the cold shell space within part of Level 1 of the main hospital building that is proposed for conversion to the new palliative care space – see **Appendix Q**. It has considered if Asbestos, Lead-Based Paints, Synthetic Mineral Fibres (SMFs), Polychlorinated Biphenyls (PCBs) or Phenols are present and require removal or management as part of the works.

The investigation has revealed that no visible asbestos was detectable and no further action is required. No lead paint was visible and no action is required. Synthetic Mineral Fibres were observed during the inspection in the ductwork insulation which was encapsulated. This was in good condition and no further action is required. No PCBs were found as LED lights have been used throughout. No phenols were observed, and again no further action is required.

Notwithstanding, the following recommendations have been made by EnviroScience Solutions, with these replicated within the Mitigation Measures at **Appendix T**. These will assist the asset owner and building occupants to meet the requirements of the *NSW Work Health and Safety Act* and *NSW Work Health and Safety Regulation 2017* in the case of unexpected find of hazardous building material/s.

- If an unexpected asbestos find eventuates, depending on the type and quantity of the material, it should be scheduled to be removed under controlled conditions utilising a licensed asbestos removal contractor (Class B Bonded removalist) or (Class A Friable removalist). It is recommended that a Scope of Works be drawn up prior to engaging an asbestos removalist to ensure that the appropriate legislative requirements are adhered to, these legislative and guidance requirements are detailed below.
- Legislation also recommends that it is good occupational hygiene practice to undertake airborne asbestos air
 monitoring, using a competent laboratory during the asbestos removal and that an independent Occupational
 Hygienist undertake a visual clearance inspection, coupled with air monitoring and site contamination assessment at
 the end of the removal process. For guidance on exposure standards and recommended procedures please refer to
 some of the codes of practice and standards, listed in the References section of the EnviroScience Solutions report.
- It is recommended that the licensed contractor prepare a safe method of work statement including wet removal
 methods for the asbestos removal works, utilising Type P1 or P2 half face particulate respirators, appropriate
 personnel decontamination procedures and appropriate disposal methods, refer to some of the legislative codes of
 practice and standards listed in the References section of the EnviroScience Solutions report.
- If the material is to remain in situ, and unlikely to be disturbed it should be noted on the premises' asbestos register. If the asbestos material is removed the register should be updated to reflect this change in the management plan. All the asbestos materials should be managed according to the asbestos management plan.
- If additional asbestos based products are identified on-site the asbestos register should be updated to include these products. If products are disturbed airborne asbestos air monitoring coupled with an independent assessment should be undertaken to assess the risk.
- The materials identified in this report were mostly in good condition and can be managed effectively according to the Asbestos Management Plan. Provided they remain in this condition and are not disturbed they pose minimal risk if

left in situ. If renovation or demolition works are to occur the asbestos based materials which are likely to be disturbed should be removed prior to works commencing.

If asbestos based products are disturbed, the area should be isolated and an independent assessment by an
Occupational Hygienist should be undertaken coupled with airborne asbestos air monitoring.

Contamination

Given the elevated location of the works within an existing operational building at the site, and lack of any earthworks, no in-ground contamination assessment was commissioned. No change occurs to the land use at the site and existing information about the remediated conditions at the site would prevail.

The site will continue to remain suitable for the proposed development without the need for remediation, subject to the development and implementation of a suitable unexpected finds procedure during construction, as is standard, however unlikely the circumstances in this case.

The Mitigation Measures at **Appendix T** have adopted these recommendations.

6.2.14 Sustainability and Climate Resilience

Questions to consider	Yes	No
Does the activity ensure the effective and efficient use of resources (natural or other)?	Χ	
Does the activity use any sustainable design measures?	Х	
Are climate resilient design measures to be incorporated in the activity?	Х	

As noted in Section 3 of this REF, the project's design has incorporated sustainability principles consistent with the requirements of DGN 58 and HI's Sustainability Strategy. An ESD Report has been prepared to support the development – see **Appendix D**.

According to the principles outlined within the NSW HI Engineering Service Guidelines (DGN 058), the project is to demonstrate the following outcomes:

- A minimum of 60 points (+5 point buffer) * to be achieved by the design in accordance with HI's ESD Evaluation Tool: and
- A mandatory requirement of demonstrating a 10% improvement in energy performance on NCC Section J.

*As the facility is a refurbishment which has inherent limitations on spatial and scope aspects, the facility is currently targeting 49 points under HI's ESD Evaluation Tool. Credits which investigate aspects such as transport have been deemed not applicable to this development as there is no current scope of works or modification to the existing transport infrastructure/accessibility to the site. This pathway, as shown in Appendix A of the ESD Report, has been approved and coordinated with HI. During the following design stages, achievable points will be investigated further to ensure the project achieves the ESD intent through all applicable aspects.

The project will implement several sustainable design principles which include initiatives designed to mitigate the development's environmental impact across the following areas:

- The development is currently targeting 49 points in accordance with HI's ESD Evaluation Tool and the concession made with respect to the nature and scope of work in part of Block C.
- The development will demonstrate a 10% improvement in energy performance on NCC Section J.
- Building Management including reviews of commissioning and tuning, building information and other operational processes.
- Indoor Environment Quality including high air quality, acoustic/lighting comfort and reduction of indoor pollutants.
- Energy & Carbon including improved energy efficiency of the building operations through design and technology and consideration to Embodied Carbon.
- Water Efficiency reduce potable water demand and utilising the use of rainwater.

Materiality & Waste – Considering the whole of life of materials and their selection to minimise harm to the
environment, including efficiency and construction while minimising resources sent to landfill from construction and
demolition works.

Additionally, the EP&A Regulation lists four principles of ESD required to be considered in assessing a project:

- The Precautionary Principle
- Intergenerational equity
- Conservation of biological biodiversity and ecological integrity
- Improved valuation and pricing of environmental resources

The precautionary principle is utilised when uncertainty exists about potential environmental impacts. It provides that if there are threats of serious or irreversible environmental damage, lack of scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. The precautionary principle requires careful consideration and evaluation of potential environmental impacts in order to avoid, wherever practicable, serious or irreversible damage to the environment.

This REF has not identified any serious threat or irreversible damage to the environment and therefore the precautionary principle is not relevant in this case.

Intergenerational equity is concerned with ensuring the health, diversity and productivity of the environment can be maintained or enhanced for the benefit of future generations. The proposal satisfies this by providing a means to providing enhanced and much needed health services for generations to come.

The principle of biological diversity upholds that the conservation of biological diversity and ecological integrity should be a fundamental consideration for any development. The proposal will have no detrimental effect upon this, given the general lack of biodiversity values present on the site and the internalised nature of the works themselves.

The principles of improved valuation and pricing of environmental resources requires consideration of all environmental resources that may be affected by a proposal, including air, water, land and living things. Mitigation measures are included in this REF for avoiding waste and ensuring where possible reuse, recycling and managing waste occurs, as relevant to this relatively minor scope of works.

See the Mitigation Measures arising from the assessment of this project at Appendix T.

6.2.15 Community Impact/Social Impact

Questions to consider	Yes	No
Is the activity likely to affect community services or infrastructure?		X
Does the activity affect sites of importance to local or the broader community for their recreational or other values or access to these sites?		Х
Is the activity likely to affect economic factors, including employment numbers or industry value?		Х
Is the activity likely to have an impact on the safety of the community?		Х
Will the activity affect the visual or scenic landscape?		Х
Is the activity likely to cause noise, pollution, visual impact, loss of privacy, glare or overshadowing to members of the community, particularly adjoining landowners?		X Only modest construction impacts upon the immediate hospital environs.

Whilst a Social Impact Statement has not been prepared in support of this REF, the obvious and palpable social benefits arising from the proposed works are as expressed in the vision, objectives and scope of the project in supporting the Clinical Services Plan for the hospital, and WCEoL Program more generally.

There are not likely to be any adverse impacts of the works from a social impacts perspective given the general location of the works and its scale. The intensity of the overall use of the hospital use will largely be the same, albeit in contemporary accommodation as would be expected with Government investment in improved health services. Construction-related impacts are otherwise addressed elsewhere within this section of the REF.

The visual impacts of the redevelopment are as described above, and where discernible, are considered to the suitable in the context of the modest scope of works to provide appropriate accommodation and levels of care.

Notwithstanding, predicted social impacts of the works and operation of the palliative care unit, and relevant mitigation measures are generally considered below.

Social impacts may be classified as follows, based on the Department of Planning and Environment's 'Social Impact Assessment Guideline' (2021):

- Way of life: how people live, get around, work, play and interact with one another on a day-to-day basis
- Community: its composition, cohesion, character, how it functions, and sense of place
- Accessibility: how people access and use infrastructure, services and facilities
- **Culture**: people's shared beliefs, customs, values and stories, and connections to Country, land, water, places and buildings
- · Health and wellbeing: people's physical, mental, social and spiritual wellbeing
- **Surroundings**: access to and use of natural and built environment, including ecosystem services, public safety and security, as well as aesthetic value and amenity
- Livelihoods: including impacts on employment or business, experience of personal breach or disadvantage, and the distributive equity of impacts and benefits
- **Decision-making systems**: the extent to which people are able to participate in decisions that affect their lives, procedural fairness, and the resources provided for this purpose.

Each of these is addressed in turn further below.

The **affected communities** with respect to social impacts are likely to be:

- Hospital communities (staff, volunteers, suppliers etc).
- Patients attending the health facilities within the hospital precinct, their carers and visitors.
- · Neighbouring residents, including aged care living residents.
- · Neighbouring businesses.
- Neighbouring preschool parents and students.
- Local area workers.
- · Visitors to other institutions and businesses within walking distance of the area.

The **magnitude and likelihood of impacts** to arise are fundamental to determining individual and aggregated impacts over time. This includes impacts during construction and those arising from the operational phase of the development.

A Social Impacts significance matrix is applied to assist in determining impacts – see below as derived from the Department's guideline's Technical Supplement (Table 7).

		Magnitude le	vel			
		1	2	3	4	5
Likel	ihood level	Minimal	Minor	Moderate	Major	Transformational
Α	Almost certain	Low	Medium	High	Very High	Very High
В	Likely	Low	Medium	High	High	Very High
С	Possible	Low	Medium	Medium	High	High
D	Unlikely	Low	Low	Medium	Medium	High
E	Very unlikely	Low	Low	Low	Medium	Medium

Way of life: how people live, get around, work, play and interact with one another on a day-to-day basis

Construction

Disruptions to the way of life related to the construction works are likely to be focussed on amenity impacts, whether noise, air quality, accessibility and the like. The works are temporary and so the impacts themselves are not life-changing or transformational.

Impacts are almost certain in the context and are moderate in magnitude due to the short timeframes and the ability to mitigate and manage impacts. The adverse impacts may accordingly be considered **High**. The impacts are however extremely localised to within the hospital, noting no sensitive receivers are located in close proximity to the works or the hospital.

Operation

The impacts of the operation of the new palliative care unit upon the way of life are likely to be positive and profound based on the project's objectives and need. These impacts are likely to be long-standing commensurate with the future-proofing embedded within the hospital's CSP and the WCEoL Program.

Impacts are almost certain and moderate in nature given the modest scale of the works. These positive impacts may accordingly be considered **High**.

Community: its composition, cohesion, character, how it functions, and sense of place

Construction

The impacts of construction upon 'community' can be considered unlikely and minor, given this a rating of **Low**. Construction works across 12 months of 2024-25 are unlikely to be adversely impactful in this regard. In fact there is the potential for the construction works to contribute localised economic multipliers within this part of Orange (and Orange itself) within the services industries through additional construction workers in the area, and their day-to-day needs.

Operation

As above, once operational, the new palliative care unit's impacts are almost certain to be moderate in nature given the modest scale of the works. These positive impacts may accordingly be considered **High** in the context.

Accessibility: how people access and use infrastructure, services and facilities

Construction

During construction, accessibility (including parking) within the hospital is likely to be affected. Notwithstanding, this will be able to be managed within the site and at its interface with the Forest Road and other access points into the hospital. The impacts in this regard are likely but minor to moderate. The impacts upon accessibility during construction would be **Medium-High**.

Operation

Following construction, accessibility and car parking will be returned (after having been used as a potential construction compound).

The likelihood of improved accessibility within and to the hospital and its services is almost certain and of a moderate magnitude, making the project's impact upon accessibility positively **High**.

Culture: people's shared beliefs, customs, values and stories, and connections to Country, land, water, places and buildings

Construction

Generally, the project's construction will have no impact upon culture, other than the overall process of inclusion under the Connecting with Country Framework in the design and execution of the project. An Unexpected Finds Protocol will be in place for any cultural heritage finds (Aboriginal or otherwise), however unlikely the potential impacts. The impacts of this may be considered possible with a magnitude of moderate, making this impact **Medium** in the context.

Operation

As above, the project's design has sought to employ and embody the Connecting with Country Framework. This will be ongoing into the detailed design and execution of the project. The design measures with respect to Connecting with Country will be available to the community at large. In this respect the operational impacts may be considered to be likely and moderate in nature, presenting as a positive impact rated as **High**.

Health and wellbeing: people's physical, mental, social and spiritual wellbeing

Construction

The construction impacts related to health and wellbeing are likely to mirror those of 'way of life', particularly in how the community may react to impacts from noise, dust, traffic and like during the works. To that end, impacts are almost certain in the context and are moderate in magnitude due to the short timeframes and ability to mitigate and manage impacts. The adverse impacts may accordingly be considered **High**.

Operation

Again, as per 'way of life', the impacts of the operation of the new palliative care unit upon the health and wellbeing of the community are likely to be positive and profound based on the project's objectives and need. These impacts are likely to be long-standing commensurate with the future-proofing embedded within the hospital's CSP and the WCEoL Program itself.

Impacts are almost certain and moderate in nature given the modest scale of the works. These positive impacts may accordingly be considered **High**.

Surroundings: access to and use of natural and built environment, including ecosystem services, public safety and security, as well as aesthetic value and amenity

Construction

The construction of the project involves no removal of trees. The project has been able to be delivered without any new impacts upon biodiversity. Construction will temporarily change the face of the hospital at this interface. The impacts are almost certain but minimal in magnitude, leading to a **Low** impact.

Operation

Once operational, improved safety and security and legibility and ownership arises within this part of the campus along with concurrent improvements to aesthetics and amenity. Impacts in relation to the operation of the development and its surroundings is almost certain with a major magnitude over time. Accordingly, a positive impact of **Very High** is likely to arise.

Livelihoods: including impacts on employment or business, experience of personal breach or disadvantage, and the distributive equity of impacts and benefits

Construction

It is unlikely adjacent businesses will be significantly adversely affected by the works. In fact, nearby cafés, allied health functions (and other similar businesses within the area) may benefit from additional patronage and income for the duration of the works due to additional construction workers from outside of the area, and potentially beyond in a modest way.

Accordingly, the positive economic multipliers are possible or likely to arise and have a moderate magnitude, realising a positively **Medium to High** social impact.

Operation

Once construction is complete, the growth in palliative care beds (and modest growth in beds more generally within the hospital) and staff will likely mean a net neutral social impact from livelihoods perspective. Accordingly, it is unlikely

any significant adverse or positive impacts arise and the magnitude is minimal. The social impact arising may be considered to be **Low**.

Decision-making systems: the extent to which people are able to participate in decisions that affect their lives, procedural fairness, and the resources provided for this purpose.

Construction / Operation

Decision-making around the project need, its design, and in part its execution has involved primarily internal and some external stakeholders to the hospital (see the Communications and Engagement Report for the breadth of this including Connecting with Country actions). This engagement has resulted in a development meeting a range of community expectations.

Statutory engagement in the decision-making process of this REF has sought wider neighbour inputs, generally from those perceived to be directly impacted by aspects of the construction and the operation. No submissions were received from those parties. Council, as a general custodian on behalf of the wider community, also did not make a submission.

In this sense the inclusivity of the decision-making process has been 'major' and with an 'almost certain' likelihood, to generate a positive social impact of **Very High**.

Summary

In summary, construction activities are more likely to have adverse social impacts than operational impacts. These impacts range from low to high, dependent upon the type of impact. These are temporary in nature and are generally manageable and can be classed as expected outcomes from the construction process. The greatest likely impacts will be from noise and air quality (dust / odour), however mitigation measures embedded within supporting reports under the REF, and as replicated in **Appendix T**, seek to reduce those impacts to appropriate levels.

Operational impacts conversely (due to the obvious positive nature of the project compared to the 'Do-Nothing' option), are more likely to arise in positive social impacts. These are likely to be longer-term, profound, and to a minor degree transformative to limited sections of the community. To the wider community they are collectively a range of positive impacts of varying degrees, that above all improve the community's health and wellbeing, way of life, and livelihoods. The works also have the positive impact of improvement to the Orange Health Service through investment in improved facilities.

To seek to avoid the manageable temporary construction impacts would be to forego the opportunity to provide myriad positive social impacts arising from the operational development.

See Appendix T for the suite of mitigation measures to address, principally, construction-related impacts.

6.2.16 Cumulative Impact

Questions to consider	Yes	No
Has there been any other development approved within 500m of the site?		Χ
Is there any transformation planned within 500m of the site?		Х
Will there be significant impacts (for example, including but not limited to, construction traffic impacts) from other development approved or currently under construction within 500m of the site?		Х
Is the activity likely to result in further significant impacts together with other development planned, approved or under construction within 500m of the site?		Х
Has a cumulative impact statement, proportionate to the activity, been included in REF documentation? If no – why	1	N/A
not?		See below

To address any possible cumulative impacts arising from the subject works being carried out concurrently with other construction works, a review has been undertaken of recent or well-progressed DAs using each of the following:

- Department of Planning and Environment major project register;
- Sydney and Regional Planning Panels Development and Planning Register;

- Relevant LGA Council development application (DA) register; and
- Relevant LGA Council Land Use Planning Frameworks.

Of relevance, note that the recently approved Orange Regional Sporting Facility (ORSF) presently under construction is over 500m from the hospital and the focus of its construction traffic and transport-related activities are likely to be from its north, rather than via Forest Road from the south past the hospital.

There are no current approved or submitted SSD DAs on or within 500m of the Orange Health Service site that are subject to contemporary works.

There are no current approved or submitted Regionally Significant Development DAs on or within 500m of the Orange Health Service site that are subject to contemporary works.

The area to the west of Forest Road near the hospital has previously been subject of a number of applications for development and construction activity. This pocket of development has generally been completed, with only finishing trades working on the completion of the Bloomfield Shopping Centre. A review of Council's DA tracker reveals no development of any significance within 500m of the hospital campus.

BCA and Structural-related considerations

BM+G has undertaken a BCA / Access-related assessment of the project. The aim of its report is to:

- Undertake an assessment of the proposed Schematic Architectural Documentation for the REF Submission development against the deemed-to-satisfy provisions of the BCA.
- Identify matters that require plan amendments in order to achieve compliance with the BCA.
- Identify matters that are to be required to be addressed by Performance Solutions.
- Enable the Public Authority to satisfy its statutory obligations under Section 6.28 of the *Environmental Planning and Assessment Act.* 1979.
- Identify matters relating to the existing building that are required to be addressed as an upgrade strategy to accommodate the new works and / or to deal with significant fire safety issues within the building.

At present a range of matters need further clarification, however, broadly, compliance will be sought to achieved as the Schematic Design progresses through Detailed Design.

Acor has provided a Structural Adequacy Certificate which has calculated the increase in loadings onto the existing structure.

Acor advises that the new works will consist of the refurbishment of part of the Level 1 slab on existing Orange Hospital Building. The works include the demolition of non-load bearing partition walls, new service penetrations through the existing slab, and alterations to the existing façade. The increased loads onto the existing foundation strata, footings and vertical load bearing elements from the new works will be within accepted limits.

Acor accordingly certifies that the existing structure has been inspected and is capable of supporting the extra loads due to the proposed alterations and additions indicated on the drawings.

It should be noted that as some parts of the existing building will have varying load intensities following the completed works, there may be a risk of differential settlement. There is a possibility that the additional loads may cause some opening of existing cracks and perhaps the formation of new cracks. In our opinion, they will be minor, not structural and within accepted limits stated in relevant Australian standards and would treated by patching and/or painting.

The BCA and Access assessment is found at **Appendix R**, whilst a Structural Adequacy Certificate is found at **Appendix S**.

7. Summary of Mitigation Measures

Mitigation measures are to be implemented for the proposal to reduce impacts on the environment. The mitigation measures are provided at **Appendix T**.

7.1 Summary of Impacts

Based on the identification of potential issues, and an assessment of the nature and extent of the impacts of the proposed development, it is determined that:

- The extent and nature of potential impacts are considered to be low to moderate, and will not have significant
 adverse effects on the locality, community and the environment;
- Potential impacts can be appropriately mitigated or managed to ensure that there is minimal effect on the locality, community; and
- Given the above, it is determined that an EIS is not required for the proposed development activity.

8. Justification and Conclusion

The proposed alterations and additions to existing cold shell space in part of Level 1 of the main hospital building at Orange Health Service to provide for the WCEoL Project and its 3-bed new palliative care space is subject to assessment under Part 5 of the EP&A Act. The REF has examined and taken into account to the fullest extent possible all matters affecting, or likely to affect, the environment by reason of the proposed activity.

As discussed in detail in this report, the proposal will not result in any significant or long-term impact. The potential impacts identified can be reasonably mitigated and where necessary managed through the adoption of suitable site practices and adherence to accepted industry standards.

As outlined in this REF, the proposed activity can be justified on the following grounds:

- It responds to an existing need within the community;
- It generally complies with, or is consistent with all relevant legislation, plans and policies;
- It has minimal environmental impacts; and
- Adequate mitigation measures have been proposed to address these impacts.

The activity is not likely to significantly affect threatened species, populations, ecological communities or their habitats, and therefore it is not necessary for a Species Impact Statement (SIS) and/or a Biodiversity Development Assessment Report (BDAR) to be prepared. The environmental impacts of the proposal are not likely to be significant and therefore it is not necessary for an EIS to be prepared and approval to be sought for the proposal from the Minister for Planning under Part 5 of the EP&A Act. On this basis, it is recommended that HI determine the proposed activity in accordance with Part 5 of the EP&A Act and subject to the adoption and implementation of mitigation measures identified within this report.