_planning

ENVIRONMENTAL IMPACT STATEMENT

St Matthews Catholic School Mudgee – Secondary Campus 48 Broadhead Road, Spring Flat

(SSD 9872)

Alleanza

Submitted to
NSW Department of Planning, Industry & Environment
on behalf of

LEGATO CON AMORE

CATHOLIC DIOCESE OF BATHURST

May 2020

ENVIRONMENTAL IMPACT STATEMENT DECLARATION & CERTIFICATION

This Environmental Impact Statement (EIS) has been prepared for the Trustees of the Roman Catholic Church for the Diocese of Bathurst and assesses the potential environmental impacts which could arise from the development of the St Matthews Catholic School Mudgee – Secondary Campus SSD DA (SSD 9872).

This EIS has been prepared in accordance with clauses 6 and 7 of Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation). It contains all available information that is relevant to the environmental assessment of the development to which the statement relates. The information contained in the statement is neither false nor misleading and provides a true and fair review of the activity / development in relation to its likely impact on the environment.

Version	**Date**
Version 1 – Client 90% Review	29 July 2019
Version 2 – Client 100% Review	23 April 2020
Version 3 – Test of Adequacy	28 April 2020
Version 4 - Final - Lodgement	13 May 2020

_planning Pty Ltd operates under a quality management system. This report has been prepared and reviewed in accordance with that system. If the report is not signed below, it is a preliminary draft.

This report has been prepared and reviewed by:

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WT Partnership

B Architectural Plan Set and Design Report
Alleanza

C Traffic, Parking and Transport Impact Assessment & Green Travel Plan
TTPP

D Building Services Report
(including Integrated Water Management Plan & Infrastructure Management Plan)
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F Salinity and Geotechnical Assessment
Martens Consulting Engineers

G Detailed Site Investigation
Martens Consulting Engineers

H Civil and Stormwater Report and plans
Triaxial Consulting

I Biodiversity Development Assessment Report (BDAR) Waiver
Department of Planning, Industry & Environment / OEH

J Arboricultural Assessment
McArdle and Sons Arboricultural Services

K Aboriginal Cultural Heritage Assessment Report (ACHAR)
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L Section 10.7(2) & 10.7(5) Planning Certificate
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BM+G

Q Access Review
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Australian Government / Australian Business Register

1.0 EXECUTIVE SUMMARY / INTRODUCTION

This Environmental Impact Statement (EIS) is submitted to the NSW Department of Planning, Industry & Environment (DPI&E) in support of a State Significant Development (SSD) Development Application (DA) with respect to the proposed construction of a new secondary campus for the Trustees of the Roman Catholic Church for the Diocese of Bathurst at 48 Broadhead Road, Spring Flat (Mudgee).

The proposed development is for the construction of the new St Matthews Catholic School Mudgee – Secondary Campus for Years 7-12. The development is the initial stage of an overall transfer of the existing St Matthews Catholic School from its existing site at Lewis Street, Mudgee to the Broadhead Road site. The current DA only seeks consent for the development of the new secondary campus. The proposed student population under this DA is up to a maximum of 680 students. Further development and staging for the transfer of the balance of the existing school (Years K-6) is yet to be confirmed by the Trustees of the Roman Catholic Church for the Diocese of Bathurst.

The site is located at Lot 40 DP 756894 – 48 Broadhead Road, Spring Flat some 3km south-east of the centre of Mudgee. Whilst being a greenfield site it adjoins an area of semi-rural / semi-urban development and which has also been earmarked for future urban land release and residential development. Mudgee (and the site) sits within the Mid-Western Regional Council Local Government Area (LGA).

The site has frontages to both Broadhead Road to the west (approximately 415m at the western boundary) and Bruce Road to the south (approximately 300m to the southern boundary). The land has an area of about 12.14ha, and is generally level, undeveloped vacant rural land with a rectangular shape. See **Figure 1**.

Figure 1 – The Site (SIX Maps)

The site is subject to a mapped natural watercourse (Sawpit Gully) which is understood to be a 4th order stream and which traverses the site with a flow to the north through the site's north-western quadrant. Site drainage is affected by an inline dam.

The site forms part of typical cleared lands for grazing at Mudgee's fringe. The few native remnant tree species which occur within the site at its north-western extremity are 'White Box – Rough-barked Apple alluvial woodland' (PCT 274). Notwithstanding, the majority of the land is cleared grazing land predominantly vegetated with exotic grasses and planted trees lining the road frontages.

The development site subject of the DA forms a smaller portion of the overall site. This is to remove development from proximity to Sawpit Gully and its 40m riparian buffer zone and any potential impacts upon any (albeit unlikely) biodiversity values within the gully and the north-western corner of the site. Aboriginal cultural heritage also has the potential to occur in this north-western extremity of the overall site. Accordingly, the location of the development (the development site) is focussed away from these areas and to the southern part of the site.

The SSD DA seeks consent for the construction of a new multi-purpose secondary education facility within the Mudgee Region that meets future demands for the developing region. The new secondary school to be known as St Matthews Catholic School Mudgee – Secondary Campus will cater for 680 secondary school students (4-Stream Year 7-12).

The development will comprise of:

- A cluster of five low-rise school buildings (1-2 storeys) including:
    - Block A - Professional Hub (office and administration);
    - Block B - Spiritual Hub (Chapel);
    - Block C - Community Hub (Multi-purpose hall, Music/Dance Studio and canteen);
    - Block D – STEM Research Hub (teaching spaces); and
    - Block E - Knowledge and Learning Hubs (General Teaching spaces);
- Yarning Circle (Outdoor learning area);
- Outdoor Student Assembly Area and COLA ;
- Student free-play area;
- Staff and student amenities;
- Associated site landscaping and public domain improvements;
- On-site parking and access arrangements off Bruce Road, including:
    - On-grade car park for staff, students and visitors (75 spaces – including 2 accessible spaces);
    - A 12-bay student drop-off and pick-up area;
    - A 3-bay bus drop-off and layover area;
    - Bus turning area and servicing access;
    - Dedicated separate driveway for service vehicles; and
    - Bicycle parking for 36 bicycles;
- Associated earthworks, civil works, perimeter roadworks, fencing, services and utilities connections and augmentation, including:
    - Roadworks to Broadhead Road and Bruce Road to the full extent of the site frontages;
    - Roadworks to the Broadhead Road and Bruce Road intersection to cater for bus movements;
    - Footpath along the site frontage of Broadhead Road and suitable pedestrian crossing to connect to existing footpath;
    - Stormwater infrastructure upgrades adjacent to and within the site, including new culverts and drains, levee, and bioswale;
    - Connection to existing sewer line within the site; and
    - Electrical and water connections into the site.

Eight (8) trees are proposed to be removed as part of this DA. These are all planted trees along the street frontages which are either dead or dying, and/or of low significance or value, and which are not indigenous to the area and are not habitat trees or koala feed trees. A further

nine (9) trees are proposed to be removed and replanted as a result of their location under the existing power lines running down Broadhead Road. A small number of perimeter trees require removal to facilitate the proposed access arrangements along Bruce Road.

A detailed description of the proposed development is set out in Section 4.0 of this EIS, with additional commentary on the design and environmental aspects of the development.

The estimated Capital Investment Value (CIV) of the development is $36.274 million (excluding GST) as per the CIV definition. A Quantity Surveyor Statement accompanies this EIS at **Appendix A**.

In accordance with Schedule 1 (clause 15(1)) of *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP), the development qualifies as SSD as it is a *development for the purpose of a new school (regardless of the capital investment value)*.

Architectural plans of the proposed development are included at **Appendix B**.

We also note that Planning Circular *PS17-004 – Regulating expansion of schools* provides principles for consent authorities to consider in determining whether to place a condition on a consent that will impose and numerical limit on student and staff numbers at school sites. It is the Trustees of the Roman Catholic Church for the Diocese of Bathurst's strong preference that no limits be imposed so that the intent of the available provisions of *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017* is maintained and maximised to ensure appropriate flexibility. This EIS addresses the relevant principles as part of its assessment.

This EIS has been prepared by _planning Pty Ltd on behalf of the Trustees of the Roman Catholic Church for the Diocese of Bathurst, the applicant. This EIS describes the site, its environs, the proposed development, and provides an assessment of the proposed development in terms of the matters for consideration under Section 4.15 of the *Environmental Planning & Assessment Act, 1979* (EP&A Act). This EIS also satisfies the various requirements of clauses 6 and 7 of the EP&A Regulation.

The DA has been prepared with reference to architectural drawings provided by Alleanza as well as other supporting documentation.

2.0 SITE ANALYSIS

2.1 The Site's Context

The 48 Broadhead Road, Spring Flat site is located some 3km south-east of the centre of Mudgee – see **Figure 2**. Recent development in, and expansion of, Mudgee has been to the south and south-east of the town centre, generally between the mountains forming the Avisford Nature Reserve to the western fringe of Mudgee and the Castlereagh Highway which runs in a south-easterly direction from Mudgee towards Lithgow.

The Castlereagh Highway itself joins the Great Western Highway with access to the Blue Mountains and Sydney beyond. Mudgee is about 128km from Lithgow and about 265km from the Sydney CBD. It sits north of Bathurst and Orange, and to the east of Wellington and Dubbo.

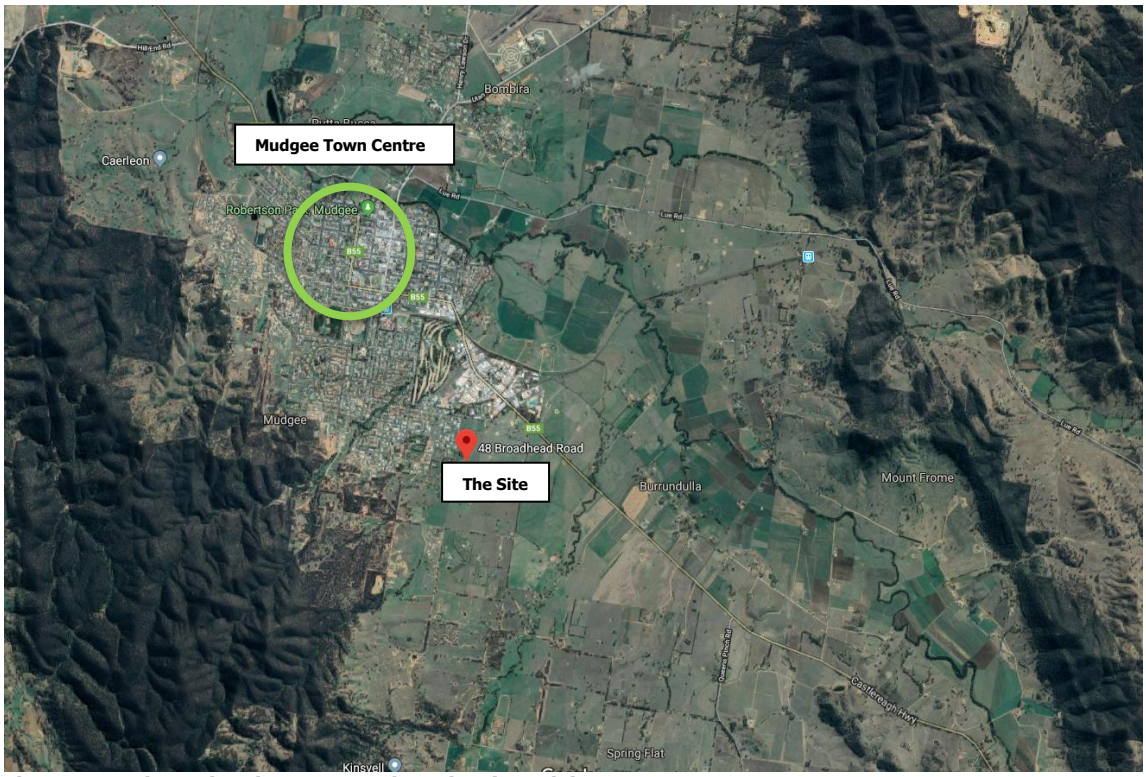

Figure 2 – Sub-Regional Context and Setting (google)

From a localised perspective, the site sits immediately adjacent to a general land release area subject of progressive and incremental residential development in recent years. This progressive urbanisation of greenfield land at Mudgee's fringe is foreshadowed by Council's strategic planning. The Mid-Western Regional Comprehensive Land Use Strategy (CLUS) was prepared in 2010 and provided a basis for identifying options for the region to meet long term urban and rural growth needs. The Mudgee Town Structure Plan further identified opportunities for future land uses towards the south of the town centre and into the site of this development. The 48 Broadhead Road site has been identified for urban purposes and as a future release area in that 2010 strategy.

Whilst the site's current zoning is predominantly RU4 – Primary Production Small Lots under the *Mid-Western Regional Local Environmental Plan 2012* (LEP), adjacent land to the west and north is variously zoned R1 – General Residential; R2 - Low Density Residential; B5 – Business Development; and IN1 – General Industrial. The north-western portion of the site itself is also zoned R1 – General Residential. The corresponding minimum lot size of 600m2 dominates the areas to the site's north and west representing the intended path and type of development

under the LEP. The local and district contexts of the site are shown via aerial photographs at **Figures 3** and **4**.

The relevant strategic and statutory planning regimes are set out in Section 3.0 which follows.

Figure 3 - Aerial photo of the site and its district context (google)

Figure 4 - Aerial photo of the site and its local context (google)

2.2 Property description and ownership

48 Broadhead Road, Spring Flat has the legal description of Lot 40 in DP 756894. The site has frontages to both Broadhead Road (approximately 415m at the western boundary) and Bruce Road (approximately 300m to the southern boundary). The land has an area of about 12.14ha, and is generally level, undeveloped vacant rural land with a rectangular shape. See **Figure 1**.

The land is owned by the Trustees of the Roman Catholic Church for the Diocese of Bathurst.

2.3 Existing Development

The site is presently an undeveloped greenfield site, previously used for grazing. The site features a 4th order stream which is also known as Sawpit Gully. The gully has been subject to previous works to establish a levee or bank to contain infrequent flood waters. This (and the laying of a sewer line within the site by Council) comprises the only prior work carried out on the site. The perimeter trees are planted native specimens from a different bioregion. **Figures 5** – **10** below show the site, its existing features, and prior works to, and within, Sawpit Gully, as understood to have been carried out by Council.

Figure 5 – The site – looking north from Bruce Road

Figure 6 – The development site – looking north from Bruce Road

Figure 7 – The site at the corner of Bruce and Broadhead Roads

Figure 8 – Intersection of Broadhead and Bruce Roads looking north-east into the site

Figure 9 – Sawpit Gully within the site off Broadhead Road

Figure 10 – Existing drainage works within Sawpit Gully and culvert at Broadhead Road

The existing school site is in Lewis Street in the centre of Mudgee. **Figure 11** shows the Lewis Street frontage of the school.

Figure 11 – Existing school site – Lewis Street, Mudgee

Nearby residential development adjacent, and in close proximity, to the development site is shown in **Figures 12** – **14**.

Figure 12 – Residential development opposite the site on Broadhead Road

Figure 13 – Residential development opposite the site on Bruce Road

Figure 14 – Residential development to the north-west of the site on Broadhead Road

2.4 Traffic and Access

There is no existing vehicular access to the site. The site's perimeter is fenced, and a gate to Broadhead Road at the north-western corner of the site allows pedestrian access.

A network of local and state roads surround and service the site.

Broadhead Road is a local two-way road running north-south to the west of the site. It has a variable carriageway pavement width of between 7-8m. It is a sealed road without kerb and gutter, and road shoulder at the site. There are no existing pedestrian footpaths along Broadhead Road in the location of the development site. It has a posted speed limit of 50km/h.

Bruce Road is a local two-way road which forms the southern boundary of the subject site and which generally runs east-west. Bruce Road has a carriageway of approximately 8m width. At the site, it is unsealed between Broadhead Road and Spring Flat Road. There are no existing pedestrian footpaths along Bruce Road. The signposted speed limit is also 50km/h.

Beyond these two roads, access from the site into Mudgee town centre is broadly and variously achieved via Spring Flat Road and the Castlereagh Highway, or via Lions Drive and the highway to the east. The primary access to the town centre however is via Lions Drive and Robertson Road and the ensuing local road network to the west and north. No public transport services the site at present.

Figures 15 – **20** show the existing condition of Broadhead Road and Bruce Road at and near the site.

Figure 15 – Broadhead Road with the site to the east (right)

Figure 16 – Broadhead Road adjacent to the site (left) – facing south

Figure 17 – Broadhead Road adjacent the site (right) – facing north

Figure 18 – Broadhead Road near the site adjacent to recent residential development

Figure 19 – Bruce Road at the site (right) - facing west

Figure 20 – Bruce Road at the site (left) – facing east

A Traffic Assessment has been prepared by TTPP and accompanies this EIS at **Appendix C**.

2.5 Utilities and Services

The site is currently serviced by:

- General mobile telephone coverage, but not an established telecommunications supply;
- A 225mm gravity sewer main (running through the site and generally in line with, and parallel to, Sawpit Gully); and
- A 250mm water main (running along Broadhead Road with the main likely to service the site at the intersection of Broadhead and Bruce Roads).

New services or augmentation will be needed for:

- Electricity connection (the site is not presently serviced by electricity) as well as a new on-site pad-mounted substation. This will be supplemented with roof-top photovoltaic systems on Blocks C and E;
- Telecommunications (including new commercial business fibre, enhanced 4G mobile coverage and NBN coverage);
- Fire services, including booster pump (new services are required);
- Sewer connections within the site (noting existing capacity) and trade waste drainage from kitchens and laboratories;
- Water connections adjacent the site with some augmentation (however without need for tanks for water storage for domestic or fire purposes). Rainwater tanks for grey-water are proposed;
- Trade waste water connections for kitchen and laboratory spaces; and
- Drainage infrastructure, including on-site storage tanks for rainwater and detention.

A proposed services layout plan, as well as an Integrated Water Management Plan and an Infrastructure Management Plan have also been prepared and form part of Calibre's Building Services Report which is found at **Appendix D**.

2.6 Topography

The site is generally flat in the context of its size. It falls from RL 491 at its junction of Broadhead Road and Bruce Road to RL 483 at its north-eastern boundary. With a fall of about 8m over a diagonal length of over 510m, a moderate grade of less than 2% results.

A survey of the site prepared by Barnson accompanies this EIS at **Appendix E**.

2.7 Geology, Groundwater, Salinity, Acid Sulphate Soils and Contamination

Geology

The Mudgee 1:100 000 Geological Sheet 8832, describes the site geology as Quaternary at the eastern portion of site, consisting of alluvial silt, clay and sand, variable humic content, sporadic pebble to cobble-sized unconsolidated conglomeratic lenses and Gunnedah Basin at the western portion of site, consisting of carbonaceous siltstone quartz-lithic sandstone, conglomerate and coal lenses, rare varves.

The NSW OEH eSPADE website identifies the site as having soils of the Craigmore soil landscapes consisting of alluvial terraces at the Cudgegong River, and Eurundury and Wialdra Creeks.

Groundwater

No groundwater was observed or encountered at the site during test drilling or present within the bedrock profile. Ephemeral perched groundwater may be encountered within the soil profile and/or at the soil / rock interface at times of, and following, heavy or extended periods of rainfall.

Salinity

Existing OEH eSpade data and mapping indicates that the site is located within the Craigmore soil landscape and that the site is located in an area of moderate salinity potential. A site visit by Martens (the project's geotechnical and contamination consultant) in May 2019 found no obvious signs of saline conditions across the site. This included observations that:

- Vegetation growth appeared healthy and uninhibited;
- No water marks or salt crystals were observed on the ground surface;
- The site surface drainage appeared generally good; and
- No evidence of concentrated surface erosion was observed.

Lab testing of soil profiles collected at the site generated the following conclusions:

- Sub-surface materials at the site are categorised as non-saline and no specified saline soil management strategies are required;
- In accordance with AS2159 (2009), an exposure classification of 'Non-aggressive' may be adopted for buried concrete and steel piles. In accordance with AS3600 (2018), an exposure classification of 'A1' may be adopted for shallow concrete footings founding in alluvial soil;
- Sub-surface materials at the site generally have a moderate dispersive potential, requiring the inclusion of erosion mitigation measures in design and construction; and
- Sub-surface materials at the site are categorised as non-sodic.

Acid Sulphate Soils
No acid sulphate soils are found at the site. The site is not mapped by Council in its LEP nor described by Council in its section 10.7(2) and (5) Planning Certificate as being affected as such.

A Geotechnical Assessment has been prepared by Martens and accompanies this EIS at **Appendix F**.

Contamination
A Detailed Site Investigation (DSI) was prepared in July 2019 as a follow-up to a 2019 Preliminary Site Investigation. The DSI has been prepared in general accordance with:

- NSW EPA (1995) Sampling Design Guidelines;
- NSW OEH (2011) Contaminated Sites: Guidelines for Consultants Reporting on Contaminated Sites;
- NEPC (2013) National Environmental Protection (Assessment of Site Contamination) Measure. Referred to as ASC NEPM (2013); and
- NSW EPA (2017) 3rd Ed. Contaminated Land Management: Guidelines for the NSW Site Auditor Scheme.

Field observations by Martens in May 2019 included:

- The site was unused and largely covered by grass, with mature trees located at the northwest corner of site;
- A dam is located in the northwest portion of site;
- A power box was located near mature trees in northwest portion of site;
- Stockpiles are located in northwest corner of site; and
- Topsoil consisting of silty clay, with underlying alluvium up to maximum termination depth of 7.0m.

Laboratory and analytical testing results confirmed the following:

- An elevated concentration of cadmium for at one testing location for a tri-composite sample. Further discrete testing of the contaminant samples that made up the composite indicated concentration of cadmium to be below the Site Assessment Criteria (SAC). The elevated level of cadmium with the composite was noted by the lab as a 'hotspot' with the original sample. Given all subsequent discrete tests have returned non-detect values, the initial composite exceedance does not require further consideration in relation to remediation or management.
- Laboratory analysis of all dam silt samples were all below the SAC.
- No asbestos was found at the site.
- Overall, the site is not considered to generally have a risk of contamination and the site is considered suitable for the proposed land use.
- No further investigations or remediation is considered necessary.
- If any unexpected finds (such as fibro material in fill, odours or staining) are encountered during site construction works, the unexpected find will require assessment by Martens to determine requirements for additional investigation and/or remedial action.
- If any soil material is to be removed from site, a formal waste classification assessment may be required in accordance with NSW EPA Waste Classification Guidelines (2014).

The Detailed Site Investigation has been prepared by Martens and is found at **Appendix G**.

2.8 Drainage and Flooding

The site sits within a large natural stormwater and drainage catchment of about 686 ha in area and about 7km in length that is noted as "Sawpit Gully" and which extends well into Avisford Nature Reserve to the south-west of Mudgee.

At the upper end of the catchment the flow is contained in well-defined channels and creek beds, however when the channel descends into the lower part of the catchment it spreads to become overland sheet flow, especially after the flow crosses Plenty Road, 600m upstream from the subject site. Current work by Triaxial (as included at **Appendix H**) indicates that at the subject site a large 3 cell culvert has been constructed under Broadhead Road, consisting of 3 x 2.4m wide by 0.9m high culvert cells to allow the passage of stormwater. Bruce Road has 2 x 900mm stormwater culverts currently allowing stormwater to cross the western side of the Broadhead Road intersection where it continues to flow towards the new 3-cell culvert under Broadhead Road and into the site before heading north-east towards the Castlereagh Highway. The existing culverts under Bruce Road have capacity to take the minor flows up to the 2-year event, but anything above these flow rates will result in inundation.

The Council-commissioned Spring Flat Drainage Study Report, Mudgee prepared by InSites (dated February 2010) addresses flooding and drainage issues within the Spring Flat catchment, including the subject site.

The subject site sits at a midway point within the study area and is subject to proposed works to mitigate flooding and downstream impacts – see **Figure 21**. The intent of the drainage study was to develop a drainage model, channel design and cost estimates for two options. Option 1 allowed for a channel to convey flows from Sawpit Road in the south to the Castlereagh Highway in the north. Option 2 considered the inclusion of a detention basin south of Sawpit Road (at the southern extremity of the study area) to reduce peak flows and the corresponding size of the channel and the cost of construction.

The proposed drainage channel would be designed to convey stormwater through Spring Flat from the low point in Sawpit Road across Bruce Road and Broadhead Road down to existing culverts across the Castlereagh Highway. For Option 2 a detention basin would be located immediately south of Sawpit Road.

The study concluded that the preliminary design of the Spring Flat drainage corridor in the study had adequate capacity to control the 100-year ARI storm event. A flood study based on the preliminary alignment of the channel and design cross-sections and levels demonstrated that the size of the channel was adequate and the existing culverts under Castlereagh Highway could be retained for the new channel alignment.

It appears the works for either of the options were not commissioned or completed. **Figures 22** - **25** show the existing drainage works on the site aligned to the Sawpit Gully riparian corridor.

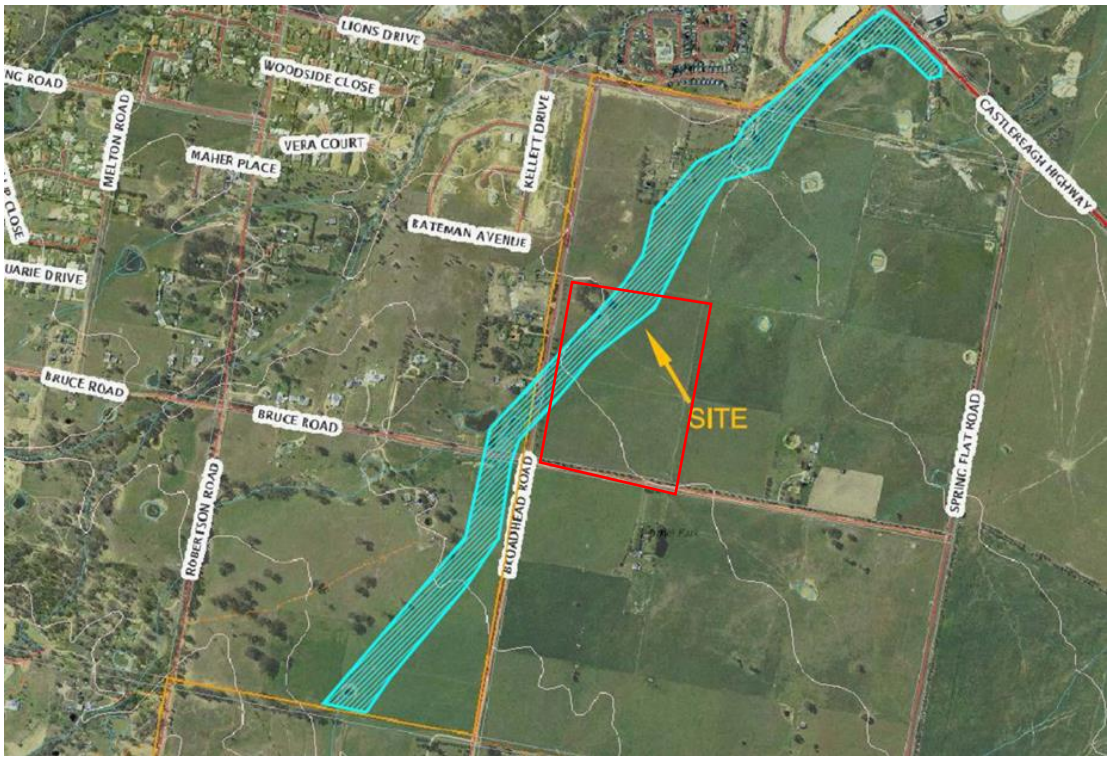

Figure 21 – Spring Flat Drainage Study Area Map (Mid-Western Regional Council / InSites)

Figure 22 – Culvert on the western edge of Broadhead Road opposite the site

Figure 23 – Culvert at Broadhead Road and levee within the site

Figure 24 – Sawpit Gully

Figure 25 – Sawpit Gully midway through the site looking at the in-line dam

2.9 Biodiversity and Arboricultural Matters

As noted, the site is subject to a mapped natural watercourse (Sawpit Gully) which is understood to be a 4th order stream and which traverses the site with a flow to the north through the site's north-western quadrant. Site drainage is affected by an inline dam. For the purposes of this DA, a 40m riparian buffer zone around Sawpit Gully has been established. All works will avoid this area and the north-western portion of the site.

The site forms part of typical cleared lands for grazing at Mudgee's fringe. The few native remnant tree species which occur on the north-western extremity of the site are 'White Box – Rough-barked Apple alluvial woodland' (PCT 274). Notwithstanding, the majority of the land is cleared grazing land predominantly vegetated with exotic grasses and planted trees lining the road frontages.

On the basis of the conclusions reached by Ecoplanning (12 March 2019) in the Biodiversity Development Assessment Report (BDAR) waiver request, the condition of the site from a biodiversity perspective is as follows:

- The vegetation integrity on the subject land is very low and native vegetation across the subject land has been heavily impacted by historic clearing and a long history of grazing;
- The native vegetation occurring within the site does not form part of the critically endangered ecological community listed under the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) as it does not meet the minimum condition thresholds for the community as listed under the EPBC Act;
- No threatened flora species were observed during surveys on the site and, based upon the highly modified nature of the habitat present and the surveys conducted, it is unlikely that any threatened flora species are present within the study area;

- No threatened ecological communities occur within the subject land, with vegetation limited to exotic dominated grasslands as a result of historic clearing and grazing across the subject land;
- The habitat within the subject land is unsuitable for threatened fauna species predicted to occur within the locality;
- The heavily degraded habitat within the subject land (and the region) is unlikely to provide habitat for threatened species and in its current state is unlikely to facilitate the movement of any threatened species across their range;
- No areas of high biodiversity value, as defined by the *Biodiversity Conservation Regulation 2017*, occur within the subject site; and
- No Areas of Outstanding Biodiversity Value listed under Part 3 of the *Biodiversity Conservation Regulation 2017* are present within, or close to, the proposed development.

Note also that the requirement for a BDAR in relation to the development has been jointly waived by DPI&E and OEH on 18 April 2019 and 26 March 2019, respectively. The waiver and the supporting waiver request documentation is included as part of this EIS package at **Appendix I**. The waiver issued reinforces the findings of Ecoplanning as set out above.

Figure 26 sets out the results of Ecoplanning's biodiversity assessment at the time of the BDAR waiver request, showing the location of both the 'White Box – Rough-barked Apple alluvial woodland' (PCT 274) and Sawpit Gully and its 40m buffer. **Figure 27** shows this stand of trees as seen from Broadhead Road.

The site perimeter's planted trees (mapped as trees 1-40 in the arborist's report) are predominantly *Eucalyptus nicholii*, with some *Eucalyptus scoparia* and a number of dead trees (generally former *Eucalyptus nicholii*). The site's perimeter planted trees are generally retained by the proposed development, other than where trees are dead or dying, or required to be removed for site access purposes. Details relating to these trees and proposed protection measures for those to be retained are provided within the Arborist Report appended to this EIS at **Appendix J**.

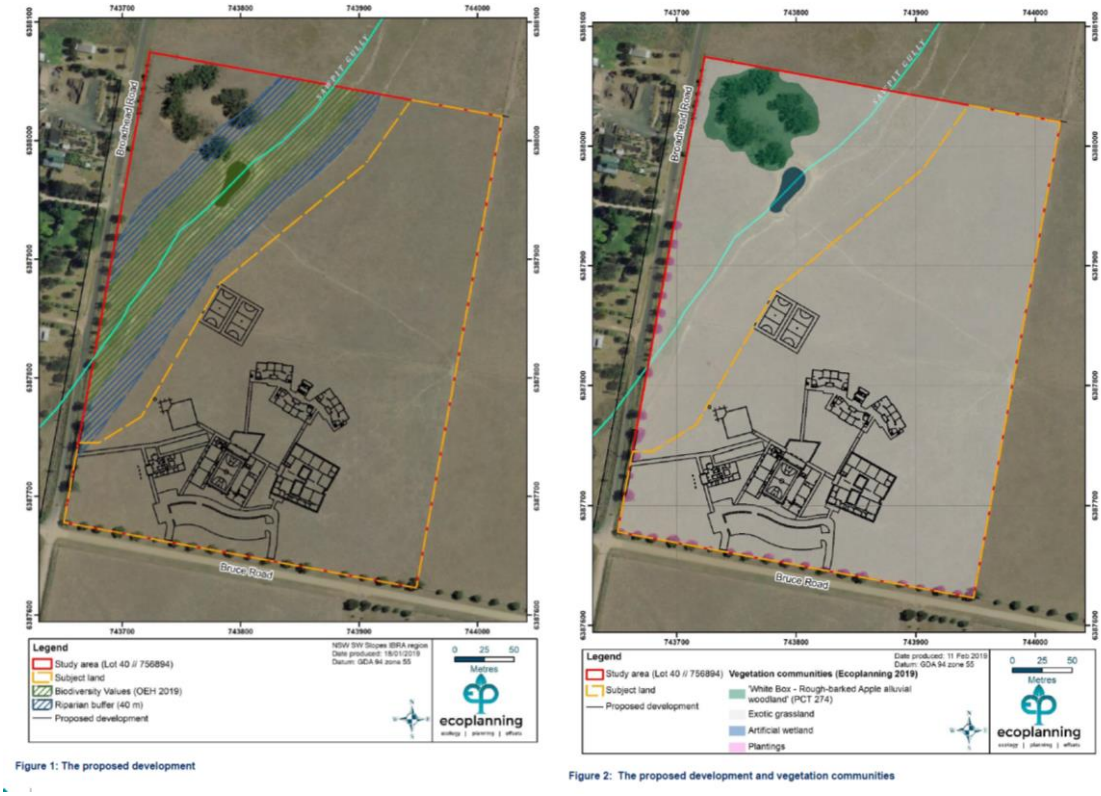

Figure 26 – Biodiversity mapping and 40m buffer to Sawpit Gully (Ecoplanning)

Figure 27 – Stand of 'White Box – Rough-barked Apple alluvial woodland' (PCT 274) on site

2.10 Aboriginal Cultural Heritage

Initial consultation with the Mudgee Local Aboriginal Land Council (MLALC) during project scoping and masterplanning resulted in a preliminary advice from the MLALC in the form of a Clearance Letter dated 19 November 2018.

The letter advised that *following an assessment of the proposed development area by our Cultural Heritage Officer and a review of other Aboriginal Cultural Heritage Assessments conducted in the vicinity we can advise you that whilst there are Aboriginal sites recorded nearby there are none identified as being potentially impacted by your development. However, when earthworks begin MLALC requests that a cultural officer from MLALC be present. As such the Mudgee Local Aboriginal Land Council has no problem with the development proceeding*.

Further consultation with the MLALC and the wider Aboriginal stakeholder community through the development of an Aboriginal Cultural Heritage Assessment Report (ACHAR) has occurred throughout the previous / ensuing period up to completion of this EIS.

An archaeological survey of the site was undertaken on 5 February 2019 with Troy Peterson (Mudgee LALC). The study area was not identified as containing specific cultural values during the survey. Comments were received from Murong Gialinga Aboriginal & Torres Strait Islander Corporation (Murong Gialinga) who identified the site as being close to a culturally sensitive site. Murong Gialinga requested to visit the site with an archaeologist to view a potential hammerstone which was previously identified within the site.

A site inspection was undertaken of the site with representatives of Murong Gialinga and Artefact Heritage on 2 April 2019. The potential hammerstone was relocated and recorded as Broadhead Road Isolated Find 01 (BR IF 01). This is located outside of the area identified for any works under this DA. This is further discussed in the ACHAR and in this EIS.

The ACHAR by Artefact Heritage is attached to this EIS at **Appendix K**.

2.11 Review of Council's section 10.7(2) and (5) Planning Certificate

Based on a review of Council's section 10.7(2) and (5) Planning Certificate and corresponding information from Council's LEP, the following reinforces the lack of key environmental or planning issues with respect to the site's characteristics:

- It is not a listed heritage item nor is it within a Conservation Area.
- It is not subject to any road widening or road re-alignment under current circumstances.
- It is not identified or mapped in a landslip area or a mine subsidence district.
- It does not contain any identified critical habitats.
- It is not within a Flood Risk Precinct as identified by the Mudgee Floodplain Management Study.
- It is not a mapped bushfire prone location.

Using the current NSW Planning Portal eplanning spatial viewer webpage, the site is further not mapped as being subject to:

- Acid Sulfate Soils
- Native Vegetation
- Terrestrial Biodiversity
- Wetlands

The section 10.7(2) and (5) Planning Certificate is found at **Appendix L**.

Council has subsequently advised, as part of the pre-lodgement consultation process, that the site is now mapped in draft as being bushfire affected, albeit so far informally on unpublished mapping.

Council has indicated that the site is identified as 'rural grasslands', which is a fire source. Given the likely managed lands approach arising from the development and its landscaping treatment, coupled with the perimeter roads acting as Asset Protection Zones (APZs), Council advised at the meeting that no bushfire report would be expected, and accordingly the use would not be classified as a 'special fire protection purpose'. This then avoids the need for any section 100B Bush fire safety authority under the *Rural Fires Act 1997*.

2.12 Summary

In summary, based on the above, the site is highly suitable to accommodate the proposed development, subject to appropriate design considerations, and construction and operational management to mitigate any possible impacts. Based on the site's prevailing characteristics, location, and the scale of the development, the likely impacts will be negligible or minor. No significant environmental impacts are likely to arise. Site suitability is further addressed at the conclusion of the Assessment at Section 7.0 of this EIS.

3.0 RELEVANT PLANNING POLICIES, INSTRUMENTS, AND CONTROLS

3.1 Strategic Planning Framework

The site, proposal, and LGA are subject to the following strategic planning policies:

- *NSW Premier's and State Priorities*
- *Central West and Orana Regional Plan 2036*
- *Future Transport Strategy 2056*
- *State Infrastructure Strategy 2018 – 2038 Building the Momentum*
- *Healthy Urban Development Checklist (NSW Health)*
- *Better Placed: An integrated design policy for the built environment of New South Wales (GANSW, 2017)*

The proposal's consistency with these strategies is set out in the subsections that follow.

3.1.1 NSW Premier's and State Priorities

The NSW government has identified a series of 12 Premier's and 18 State priorities, targeting economic growth, infrastructure delivery, protection of the vulnerable, and improvement of both school education and public services across NSW. The NSW State priorities that are applicable to this development are considered and addressed below.

The Premier's priorities are:

- Creating jobs
- Building infrastructure
- Reducing domestic violence
- Improving service levels in hospitals
- Tackling childhood obesity
- Improving education results
- Protecting our kids
- Reducing youth homelessness
- Driving Public Sector diversity
- Keeping our environment clean
- Faster housing approvals
- Improving Government services

The NSW State priorities are:

- Making it easier to start a business
- Encouraging business investment
- Boosting apprenticeships
- Accelerating major project assessment
- Increasing housing supply
- Protecting our credit rating
- Delivering strong budgets
- Improving Aboriginal education outcomes
- Transitioning to the National Disability Insurance Scheme
- Better Government digital services
- Cutting wait times on planned surgeries
- Increasing cultural participation
- Ensuring on-time running of public transport
- Creating sustainable social housing
- Reducing violent crime

- Reducing adult re-offending
- Reducing road fatalities
- Improving road travel reliability

Of these, those relevant to the project are:

- Creating jobs
- Improving education results
- Improving Aboriginal education outcomes

Overall, the development provides an opportunity to enhance the achievement of these priorities.

Premier's Priorities

Creating jobs

The Premier of NSW is targeting jobs growth via an additional 150,000 jobs. Within the immediate short term timeframe the project is likely to only contribute construction-related jobs growth. The envisaged construction jobs for his project is about 104 workers at peak times, with a further estimated 50-59 teaching staff and 22 support staff to the school's maximum capacity to subsequently follow, noting that is would principally be the same existing staff population merely decanted to a new site.

Improving education results

Other priorities of the Premier related to education and improving education results appear to be more directly related to services and provision of education through the government funding of the public school system. Notwithstanding, the provision of new, improved and upgraded regional education facilities will enhance the provision of education services and correspondingly contribute to enhanced results for the school's population.

State Priorities

Improving Aboriginal education outcomes

The school has seen progressive increases in both indigenous student and staff numbers in recent years. In 2017, 4% of students and 2% of staff identified as indigenous. In 2017 the school worked towards the embedding of indigenous culture and the special place of First Peoples through acknowledgement and celebration, including publication of significant dates and events, and the creation of indigenous artwork for display in the Parish and school. Further initiatives included developing and enriching the social justice program within the school.

3.1.2 Central West and Orana Regional Plan 2036

The Central West and Orana Regional Plan 2036 is a 20-year blueprint for the future of the Central West and Orana region.

The DPI&E's vision is *to create a leading diverse regional economy in NSW, with a vibrant network of centres leveraging the opportunities of being at the heart of NSW*. The plan will deliver this vision through four goals and 29 directions:

- Goal 1 - The most diverse regional economy in NSW
    - Direction 1: Protect the region's diverse and productive agricultural land
    - Direction 2: Grow the agribusiness sector and supply chains
    - Direction 3: Develop advanced manufacturing and food processing sectors
    - Direction 4: Promote and diversify regional tourism markets
    - Direction 5: Improve access to health and aged care services
    - Direction 6: Expand education and training opportunities

  - Direction 7: Enhance the economic self-determination of Aboriginal communities
  - Direction 8: Sustainably manage mineral resources
  - Direction 9: Increase renewable energy generation
  - Direction 10: Promote business and industrial activities in employment lands
  - Direction 11: Sustainably manage water resources for economic opportunities
  - Direction 12: Plan for greater land use compatibility

- Goal 2 - A stronger, healthier environment and diverse heritage
  - Direction 13: Protect and manage environmental assets
  - Direction 14: Manage and conserve water resources for the environment
  - Direction 15: Increase resilience to natural hazards and climate change
  - Direction 16: Respect and protect Aboriginal heritage assets
  - Direction 17: Conserve and adaptively re-use heritage assets

- Goal 3 - Quality freight, transport and infrastructure networks
  - Direction 18: Improve freight connections to markets and global gateways
  - Direction 19: Enhance road and rail freight links
  - Direction 20: Enhance access to air travel and public transport
  - Direction 21: Coordinate utility infrastructure investment

- Goal 4 - Dynamic, vibrant and healthy communities
  - Direction 22: Manage growth and change in regional cities and strategic and local centres
  - Direction 23: Build the resilience of towns and villages
  - Direction 24: Collaborate and partner with Aboriginal communities
  - Direction 25: Increase housing diversity and choice
  - Direction 26: Increase housing choice for seniors
  - Direction 27: Deliver a range of accommodation options for seasonal, itinerant and mining workforces
  - Direction 28: Manage rural residential development
  - Direction 29: Deliver healthy built environments and better urban design

The project would support the Vision, Goals, Directions and delivery of the Regional Plan in the following ways.

- The development enhances Mudgee's position in the education sector and network within regional NSW and the Central West and Orana region.
- It contributes to retaining a strong education presence in the region, and indicates the school's strong desire to reinvest in its community.
- Whilst the site is presently and predominantly zoned as 'RU4 Primary Production Small Lots', Council's strategic planning for the site and its environs supports progressive urban growth and expansion to the south and south-east of Mudgee. The site is underutilised former grazing land. Its conversion to educational uses would not be considered as a significant contribution to diluting or reducing the region's diverse and productive agricultural land.
- The development of this site to enhance St Matthews Catholic School's infrastructure and capacity would satisfy Goal 1 / Direction 6 of the Regional Plan by 'expanding education and training opportunities'.
- The School's inclusive enrolment policies enable enhanced opportunities for education for indigenous communities. This in turn facilitates opportunities for greater self-determination.
- ESD principles applied to the design, construction, and operation of the school will support management of water resources, use of renewable energy, and other opportunities to reduce carbon emissions.

- The design principles applied to the development, along with its placement away from any potential biodiversity or Aboriginal cultural heritage results in a scheme protects and manages the few environmental assets that may occur on the site as well as respecting Aboriginal heritage assets and values.
- The school development will enhance Mudgee's resilience and diversity. It will provide for a well-designed addition to the town's education infrastructure in a location earmarked for future and ongoing redevelopment. The school development also supports the growth and renewal of Mudgee as a key centre in central NSW.

Mudgee is identified by the plan as a centre of regional strategic importance, which has grown in recent years, principally through growth in the mining sector. The corresponding growth of, and investment in, education services for Mudgee and the region's community is identified by the plan as a key contributor to social diversity, vibrancy, resilience, and services to match new demand.

Education services (including TAFE and universities) is within the top five industry sectors contributing to the Gross Region Product of the Central West and Orana Region.

A key action of the plan is to *facilitate the development of multipurpose, flexible and adaptable health and education infrastructure*. The subject DA provides for shared use of facilities within Mudgee to enhance efficient use of land, flexibility, and adaptability. This will be most visible in the intended shared use of both its hall and open spaces at the school.

3.1.3 Future Transport Strategy 2056

The Future Transport Strategy 2056 is an update of the 2012 Long Term Transport Master Plan for NSW. It is a 40-year strategy, supported by plans for regional NSW and for Greater Sydney. The Future Transport Strategy 2056 provides a framework for delivery of integrated and modern transport systems. The plan acknowledges the vital role transport plays in the land use, tourism, and economic development of towns and cities. It includes issue-specific and place-based supporting plans that shift the focus away from individual modes of transport, toward integrated solutions. The Future Transport Strategy 2056 is the first plan to identify how rapid advancements in technology and innovation can be harnessed to transform the customer experience and boost economic performance across NSW.

The Strategy provides a range of six State-wide outcomes to guide investment, policy and reform and service provision. The "six State-wide transport outcomes" identified by the Future Transport Strategy 2056 are:

- Customer focused;
- Successful places;
- A strong economy;
- Safety and performance;
- Accessible services; and
- Sustainable.

Whilst the Strategy is focussed on Sydney's metropolitan area and its transport challenges, a section is devoted to meeting the challenge of effectively servicing regional NSW. The graphic over is derived from the strategy (Figure 15 of the strategy) and sets out the Regional NSW transport customer outcomes.

Future Transport Statewide outcomes	Regional NSW transport customer outcomes
Customer Focused 	**Convenient and responsive to customer needs** 1. Flexible services are an integral part of the transport system helping to deliver reliability 2. A transport system that adapts to and embraces new technology
Successful Places 	**Sustaining and enhancing the liveability of our places** 3. The appropriate movement and place balance is established enabling people and goods to move efficiently through the network whilst ensuring local access and vibrant places 4. Supporting centres with appropriate transport services and infrastructure
A Strong Economy 	**Connecting people and places in the growing city** 5. Changes in land use, population and demand, including seasonal changes, are served by the transport system 6. Economic development is enabled by regional transport services and infrastructure
Safety and Performance 	**Safely, efficiently and reliably moving people and goods** 7. A safe transport system for every customer with zero deaths or serious injuries on the network by 2056 8. A transport system that is resilient to significant weather events including floods, fog and bush fires
Accessible Services 	**Accessible for all customers** 9. Accessibility to employment and services such as health, education, retail and cultural activities within Regional Cities and Centres
Sustainability 	**Makes the best use of available resources and assets** 10. Customers enjoy improved connectivity, integrated services and better use of capacity

Figure 15: Future Transport 2056 regional NSW transport customer outcomes

To that end, given the overall modest scale of the development in the context of the strategy's desired outcomes, as well as the place Mudgee holds in the regional transport hierarchy and network, the key outcomes in achieving consistency with the Strategy are likely to be:

- Connecting Mudgee to the school, and the K-6 and the 7-12 schools (A Strong Economy and Accessible Services);
- Bus services – confirming and securing services with existing providers (Accessible Services); and
- A mix of reliable transport options including walking and cycling (Sustainability).

Based on the above the proposal is considered to be consistent with the Future Transport Strategy 2056.

From the perspective of delivering specific works, initiatives for potential transports improvements over the next 10-20 years in regional NSW include investigation for upgrades to the Castlereagh Highway between Lithgow and Mudgee. The improvements are non-specific and details on locations are not available. Works may not be in the vicinity of, or between, Mudgee town centre or the site.

3.1.4 State Infrastructure Strategy 2018 – 2038 Building the Momentum

The NSW State Infrastructure Strategy (SIS) 2018–2038 builds on the NSW Government's major long-term infrastructure plans over the last seven years. The strategy sets out the government's priorities for the next 20 years, and combined with the Future Transport Strategy 2056, the Greater Sydney Region Plan and the Regional Development Framework, brings together infrastructure investment and land-use planning for NSW's cities and regions.

The strategy assesses infrastructure problems and solutions, and provides recommendations to best grow the State's economy, enhance productivity and improve living standards for our NSW community. It is updated every five years. As may be anticipated it is focussed upon Greater Sydney and Newcastle but does address regional NSW's challenges and how to support key industry sectors with upgraded and new infrastructure.

The 2018 update to the SIS, Building Momentum State Infrastructure Strategy 2018-2038 looks beyond the current projects and identifies policies and strategies needed to provide the infrastructure that meets the needs of a growing population and a growing economy.

For Regional NSW, the Government has set a new vision for the 'hub and spoke' model, designed to provide equitable, better and more efficient services to communities across the state through a connected network of regional centres. Over the next 20 years the trend of internal migration to larger, growing regional centres will continue and is likely to accelerate.

The Government has identified 37 key economic regions that typically have a large town at their centre (a hub) and several interconnected smaller centres (spokes). All rely on their connections to markets and suppliers through key freight and service exchange routes. 78 per cent of these regions have experienced population growth and this will continue if appropriate investments are made to reinforce strategic economic growth. Mudgee is broadly identified as a 'spoke' to the nearby hubs of Bathurst or Dubbo.

The key infrastructure responses to be made by the NSW Government are:

- Improve transport connections to key markets, especially east-west.
- Improve access to international gateways and manage them for future growth.
- Provide connections to and from proposed Inland Rail.
- Facilitate private sector investment in secure, reliable, affordable energy.

- Improve access to digital connectivity.
- Ensure water supply and wastewater treatment to enable growth.
- Upgrade hospitals and other social infrastructure in regional hubs, including social housing.
- Provide additional and improved cultural infrastructure and attractions.
- Support regional hubs to act as effective centres serving their surrounding regional populations.

The development itself is likely to benefit from, rather than hinder or act to undermine any of these investments in infrastructure.

3.1.5 Healthy Urban Development Checklist (NSW Health)

The 2010 Healthy Urban Development (HUD) Checklist was prepared by NSW Health to help build the capacity of NSW Health to provide valuable feedback to local councils, and other relevant organisations, on health issues in relation to urban development plans and proposals. The intended use of the Guideline is to facilitate strengthened partnerships and collaboration between NSW Health and urban planners and developers as part of NSW Health's initiatives to promote healthy communities in NSW.

The HUD is structured into ten chapters, each one focused on a characteristic that is important for healthy urban development. Each characteristic has up to five key considerations, formulated as questions. The checklist is principally about helping to answer the questions:

- What are the health effects of the urban development policy, plan or proposal? and
- How can it be improved to provide better health outcomes?

The types of plans and proposals that this checklist is intended for include:

- Master Plans (may also be called concept plans);
- Town Centre Plans; and
- Development applications for projects like large housing developments, shopping centres, and community and health care facilities.

Key themes under the checklist are:

- Healthy Food
- Physical Activity
- Housing
- Transport and Physical Connectivity
- Quality Employment
- Community Safety and Security
- Public Open Space
- Social Infrastructure
- Social Cohesion and Social Connectivity
- Environment and Health

In relation to this DA, the following are relevant considerations and comments:

- Existing levels of active transport will be maintained and further encouraged. This will be reinforced through a Green Travel Plan (see **Appendix C**);
- Existing high levels of public transport use and connectivity will be maintained and enhanced (again, see the proposed Green Travel Plan at **Appendix C**);
- The design satisfies and enhances a sense of community safety and security;
- The location of the school does not diminish the availability of open space to the wider community, in fact it will enhance the provision of open space to a part of Mudgee that is growing;

- The school's design and location reinforces a strong sense of local identity and a sense of place, but also creates a new visual identity built upon the principles of design excellence;
- The school maintains existing high levels of social interaction and connection among people of all ages, and reinforces this through the increased capacity of the school arising from population growth; and
- Provides for an environmentally responsible response to water, energy, and non-renewable resources use.

With regard to the above, the proposal is consistent with the relevant provision of the HUD checklist.

3.1.6 Better Placed – An integrated design policy for the built environment of NSW (2017)

Better Placed was released in May 2017 by Government Architect NSW and is intended to set a policy direction for the State's collective aspirations, needs and expectation for well-designed places, spaces and building, and thereby creating better cities, towns and suburbs.

Seven objectives define the key considerations in the design of the built environment being as follows. Consideration of these as derived from the project's Architectural Design Statement includes – see also **Appendix B**.

Better fit: contextual, local and of its place
Site planning considered the axial relationships of this property to Mount Frome and the existing school in Mudgee. The design language of the building hubs is founded upon the concept of "nest" - the aboriginal derivative for Mudgee, a "nest in the hills" - with building forms borrowing on the typology of country homesteads.

Better performance: sustainable, adaptable and durable
The building design reflects best principles for passive design – correct orientation, good cross ventilation, ample natural daylight, etc. In addition, latest sustainable initiatives incorporating stormwater harvesting and solar electrical generation will be built in. Building materials will be durable requiring low maintenance. The building design will be easily adaptable to modification to be able to adjust to future changing educational needs.

Better for community: inclusive, connected and diverse
The facilities at the school are designed for use by both the school and wider community. The inclusiveness will enable community use of a diverse range of performing arts, visual arts, specialist technology facilities and assembly hall.

Better for people: safe, comfortable and liveable
The safety of school students has been of paramount consideration in the design process. There is separation of students and visitors during school hours. All buildings are easily able to be locked down if required. The nature of the outdoor spaces will allow high degree of easy supervision during recess. Out of hours use of school facilities by community groups will not compromise safety or security in unused sections of the school during those times.

Better working: functional, efficient and fit for purpose
The building design has emanated from a series of 5 workshops with all client and other stakeholders plus two meetings with the Mid-Western Regional Council. It satisfies all the objectives which were examined for the provision of new school facilities that synthesised all the requirements of Site / Brief / Budget relating to this project.

Better value: creating and adding value
The new school will not only provide a valuable addition to the educational, community and social infrastructure in Mudgee but is welcomed by the Local Authority for the relief of the impact of the existing school on the existing CBD of Mudgee.

Better look and feel: engaging, inviting and attractive
It is submitted that the siting, spacing, and arrangement is appropriate for this large site. The school is a strong place-based design that reinforces the project's physical and contextual philosophy of a 'nest' within the 'nest of the surrounding hills' – Mudgee in the local aboriginal language. Careful consideration has been given to the mass, balance and proportion of the built composition. The visual reference of the building forms for the individual buildings appropriately borrow on the typology of country homesteads. Within the same suite of GANSW documents is Greener Places and the GANSW Design Guide for Schools.

Greener Places
Greener Places is a draft policy to guide the design, planning, design and delivery of Green Infrastructure in urban areas across NSW. Green Infrastructure is the network of green spaces, natural systems and semi-natural systems including parks, rivers, bushland and private gardens that are strategically planned, designed and managed to support good quality of life in the urban environment.

The aim of the policy is to create a healthier, more liveable, more resilient and sustainable urban environment by improving community access to recreation and exercise, walking and cycling connections.

Design Guide for Schools
The GANSW Design Guide for Schools is a design guide for new school development and upgrades in NSW and accompanies the *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017* (Education SEPP). The Education SEPP requires that a consent authority take into consideration the design quality of a proposed school development when evaluated in accordance with seven design quality principles before determining a development application (DA).

The design quality principles are outlined in Schedule 4 of the Education SEPP. The Design Guide for Schools provides practical guidance on how school projects can be designed to best address the design quality principles in the Education SEPP.

The Design Guide for Schools is more formally addressed via a response to the requirements of Schedule 4 of the Education SEPP, as set out further in the Architectural Design Statement (at **Appendix B**), the Landscape Design Statement (see **Appendix M**), and in the following subsection of this EIS.

3.2 Statutory Planning Framework

The key and relevant statutory planning legislation and instruments applicable to the site and proposed development include:

- *Environmental Planning and Assessment Act 1979*
- *Biodiversity Conservation Act 2016*
- *State Environmental Planning Policy (State and Regional Development) 2011*
- *State Environmental Planning Policy (Infrastructure) 2007*
- *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017*
- *State Environmental Planning Policy No.64 – Advertising & Signage*

- *State Environmental Planning Policy No.55 – Remediation of Land and draft State Environmental Planning Policy (Remediation of Land) 2017*
- *State Environmental Planning Policy (Rural Lands) 2008*
- *Draft State Environmental Planning Policy (Environment)*
- *Mid-Western Regional Local Environmental Plan 2012*

It is noted that the recently commenced *State Environmental Planning Policy (Koala Habitat Protection) 2019* also now applies to the general Mudgee area including the subject site. This is addressed below.

Council's Mid-Western Regional Contributions Plan 2019 also applies to the proposal. This is addressed further within this EIS at Section 7.2.

Further discussion on compliance and relevant assessment with each of the above is set below and in Section 7.0.

3.2.1 Environmental Planning and Assessment Act 1979

The objects of the Act are:

> *(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,*
> *(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,*
> *(c) to promote the orderly and economic use and development of land,*
> *(d) to promote the delivery and maintenance of affordable housing,*
> *(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,*
> *(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),*
> *(g) to promote good design and amenity of the built environment,*
> *(h) to promote 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,*
> *(j) to provide increased opportunity for community participation in environmental planning and assessment.*

The proposed development satisfies these objects as detailed in the sections that follow.

The proposed development and the documentation and assessment under this EIS also satisfy the relevant provisions of the Act and Regulation as set out elsewhere and throughout this EIS.

3.2.2 Biodiversity Conservation Act 2016

The *Biodiversity Conservation Act 2016* applies to the State with the purpose of maintaining a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development. In particular, amongst other things, it aims to:

- conserve biodiversity at bioregional and State scales, and
- maintain the diversity and quality of ecosystems and enhance their capacity to adapt to change and provide for the needs of future generations, and

- improve, share and use knowledge, including local and traditional Aboriginal ecological knowledge, about biodiversity conservation, and
- support biodiversity conservation in the context of a changing climate, and
- assess the extinction risk of species and ecological communities, and identify key threatening processes, through an independent and rigorous scientific process, and
- regulate human interactions with wildlife by applying a risk-based approach, and
- support conservation and threat abatement action to slow the rate of biodiversity loss and conserve threatened species and ecological communities in nature.

In accordance with section 7.9(1) the *Biodiversity Conservation Act 2016*, any SSD DA must be accompanied by a biodiversity development assessment report (BDAR) unless the Planning Agency Head and the Environment Agency Head determine that the proposed development is not likely to have any significant impact on biodiversity values.

Where it is believed that a BDAR is not required, a waiver should be requested from the DPI&E prior to the lodgement of the SSD DA. DPI&E will liaise with the NSW Office of Environment & Heritage (OEH) to determine if a waiver is to be granted. Any waiver request is required to provide sufficient evidence to determine whether the proposed development is likely to have a significant impact on biodiversity values including a specific assessment against the relevant Biodiversity Values contained at Section 1.5 of the *Biodiversity Conservation Act 2016* and Clause 1.4 of the *Biodiversity Conservation Regulation 2017*.

A BDAR waiver was lodged for this project on 13 March 2019 with supporting information and assessment by Ecoplanning. A BDAR Waiver was granted by the Planning Agency Head on 18 April 2019 and the Environment Agency Head on 26 March 2019.

Accordingly, this EIS is not accompanied by any further detailed biodiversity assessment. The BDAR Waiver documentation and BDAR Waiver granted are each found at **Appendix I** to this EIS.

3.2.3 State Environmental Planning Policy (State and Regional Development) 2011

State Environmental Planning Policy (State and Regional Development) 2011 identifies development that is State Significant Development (SSD). Clause 15(1) of Schedule 1 of the SEPP specifies certain development for the purpose of *development for the purpose of a new school (regardless of the capital investment value).*

The project qualifies as a State Significant Development (SSD) by virtue of its status as a new school.

Further, clause 11 of this SEPP excludes the application of development control plans from SSD DAs. Notwithstanding, DPI&E's SEARs have required consideration of Council's DCP. This is addressed further below within this section of the EIS and in relevant appendices.

3.2.4 State Environmental Planning Policy (Infrastructure) 2007

State Environmental Planning Policy (Infrastructure) 2007 is generally not applicable to the development given the applicant is not a public authority for the purposes of this SEPP and the nature and type of the development is not covered by its various provisions or is otherwise excluded from operation due to the SSD status of the development.

However, Schedule 3 of the SEPP specifies development that qualifies as traffic generating development and that must be referred to the Roads and Maritime Services (RMS). Schedule 3 applies to *car parks (whether or not ancillary to development)* as well as *any other purpose* that is not a listed development type. In each instance the referral trigger is:

- 200 or more car parking spaces where the site access is to a (non-Classified) road; or

- 200 or more motor vehicles per hour where the site access is to a (non-Classified) road, respectively.

Note, both Broadhead and Bruce Roads are not Classified Roads. For the same reason clause 101 of the Infrastructure SEPP is also not applicable.

As the proposed number of parking spaces is 75, but the maximum number of vehicles per hour generated by the development is 376 maximum (in the PM peak), the DA does require notification to the RMS under this SEPP on this basis alone.

Before determining a development application, DPI&E must give written notice of the application to RMS within 7 days after the application is made and take into consideration any submission that RMS provides in response to that notice within 21 days after the notice was given.

In any case, similar provisions relating to school developments have been transferred to the more recently commenced *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017.* This is addressed immediately below.

3.2.5 State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017

State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 (Education SEPP) commenced in early September 2017. It seeks to improve regulatory certainty and efficiency through a consistent planning regime for educational establishments that includes schools.

Part 4 – Schools – specific development controls, in particular, seeks to simplify planning approval pathways for schools (including identification of certain development of minimal environmental impact as exempt development and complying development).

The SEPP has limited provisions applying to this school development given the nature and scale of the proposed works, particularly as it is not an 'existing school'. The SSD approval pathway in this case is unlikely to be altered by the SEPP. Further consideration of the SEPP is unnecessary, other than for the following.

The SEPP does however assist in defining *educational establishment* for the purposes of determining SSD under the SRD SEPP – as noted earlier. Clause 5 of the Education SEPP states an ***educational establishment*** *means a building or place used for education (including teaching), being:*

> *(a) a school, or*
> *(b) a tertiary institution, including a university or a TAFE establishment, that provides formal education and is constituted by or under an Act.*

In the event the development is not permissible under the Mid-Western Regional LEP 2012, clauses 33 and 35 of the SEPP serve to confirm that the development is permitted with consent in the RU4 Primary Production Small Lots zone within which the proposed development sits. The RU4 Primary Production Small Lots zone forms part of the definition of a prescribed zone under clause 33 for the purposes of defining development permitted with consent under clause 35(1).

Similar to the traffic-generating development provisions of Schedule 3 and clause 104 of the ISEPP, clause 57 of the Education SEPP sets out referral requirements to the RMS, as well as matters for consideration.

In this instance referral is required as the school will satisfy the following as set out (and bolded) below:

> *This clause* ***applies to development for the purpose of an educational establishment****:*
> *(a)* ***that will result in the educational establishment being able to accommodate 50 or more additional students****, and*
> *(b)* ***that involves****:*
> *(i) an enlargement or extension of existing premises, or*
> *(ii)* ***new premises****,*
> ***on a site that has direct vehicular or pedestrian access to any road****.*

In addition to the consideration of RMS comments, the DPI&E will need to consider

- *the accessibility of the site concerned, including:*
  - *the efficiency of movement of people and freight to and from the site and the extent of multi-purpose trips, and*
  - *the potential to minimise the need for travel by car, and*
- *any potential traffic safety, road congestion or parking implications of the development.*

Lastly, Schedule 4 of the SEPP sets out seven design quality principles to be addressed in the design of the development. These seven design quality principles are:

- Principle 1—context, built form and landscape
- Principle 2—sustainable, efficient and durable
- Principle 3—accessible and inclusive
- Principle 4—health and safety
- Principle 5—amenity
- Principle 6—whole of life, flexible and adaptive
- Principle 7—aesthetics

The architectural design statement by Alleanza has addressed these directly. See **Appendix B** attached. The Landscape Design Statement (at **Appendix M**) has similarly addressed those of relevance to that discipline.

3.2.6 State Environmental Planning Policy No.64 – Advertising & Signage

State Environmental Planning Policy No 64-Advertising and Signage seeks to ensure that signage (including advertising) is compatible with the desired character of an area, provides effective communication in suitable locations, and is of high-quality design and finish. SEPP 64 does not regulate the content of signage.

Two (2) identical digital signage boards are proposed at the school frontages – one to Broadhead Road, and the other to Bruce Road, at the school's respective entrances in those locations. The digital signage boards are of a typical size and type as seen throughout NSW, and will sit on posts about 1m in height and be about 1m x 2m in area with the school's name and a LED display panel to present school-related messages. This is shown in the architectural plan set at **Appendix B**.

The provisions of SEPP 64 are considered in Section 7 of this EIS in relation to type, location, and size of the signs.

3.2.7 State Environmental Planning Policy No.55 – Remediation of Land and

draft State Environmental Planning Policy (Remediation of Land) 2017

State Environmental Planning Policy No. 55 – Remediation of Land provides for a State-wide planning approach to the remediation of contaminated land. A consent authority must consider

whether the land subject of a proposal is contaminated and, if the land is contaminated, be satisfied that the land is suitable in its contaminated state for the use proposed. If the land requires remediation to be made suitable for the proposed purpose, the determining authority must be further satisfied that the land will be so remediated before the land is used for that purpose.

Subclause 7(4) of the SEPP specifies land in relation to which the consent authority must consider the findings of a preliminary investigation of the land carried out in accordance with the contaminated land planning guidelines before determining a development application for change of use.

> *(4) The land concerned is:*
>
> *(a) land that is within an investigation area,*
>
> *(b) land on which development for a purpose referred to in Table 1 to the contaminated land planning guidelines is being, or is known to have been, carried out,*
>
> *(c) to the extent to which it is proposed to carry out development on it for residential, educational, recreational or child care purposes, or for the purposes of a hospital—land:*
>
> *(i) in relation to which there is no knowledge (or incomplete knowledge) as to whether development for a purpose referred to in Table 1 to the contaminated land planning guidelines has been carried out, and*
>
> *(ii) on which it would have been lawful to carry out such development during any period in respect of which there is no knowledge (or incomplete knowledge).*

The recently exhibited draft Remediation of Land SEPP (an update to SEPP 55) will not substantially alter the fundamental requirements of the legislation. At present a DA is required for any Category 1 remediation works, that is works which amongst other things are Designated Development (with a volumetric threshold of 30,000m3 of contaminated earth).

Under the new exhibited, but yet to commence, draft Remediation of Land SEPP, Category 1 remediation works are at this stage proposed to be reduced to a volumetric threshold of 3,000m3, amongst a range of other criteria.

As noted in Section 2.7 of this EIS, the site is not contaminated and requires no further investigation. It has been deemed to be suitable for the proposed use.

3.2.8 State Environmental Planning Policy (Rural Lands) 2008

The Rural Lands SEPP (now repealed) previously applied to the Mid-Western Regional Council LGA and the site and aimed to:

> *(a) facilitate the orderly and economic use and development of rural lands for rural and related purposes,*
> *(b) identify the Rural Planning Principles and the Rural Subdivision Principles so as to assist in the proper management, development and protection of rural lands for the purpose of promoting the social, economic and environmental welfare of the State,*
> *(c) implement measures designed to reduce land use conflicts,*
> *(d) identify State significant agricultural land for the purpose of ensuring the ongoing viability of agriculture on that land, having regard to social, economic and environmental considerations,*
> *(e) amend provisions of other environmental planning instruments relating to concessional lots in rural subdivisions.*

Broadly, the provisions of the SEPP sought to limit or manage the potential loss of agricultural land, its conversion to another land use, possible loss of large-lot residential opportunity, and possible land use conflicts arising from development. As noted previously, the proposed use is permitted with consent and Council's strategic planning objectives for the site and adjoining lands is for its conversion to urban purposes. The site is former grazing land now on the urban fringe of Mudgee.

The repealed Rural Lands SEPP has recently been replaced by *State Environmental Planning Policy (Primary Production and Rural Development) 2019* – The Primary Production and Rural Development SEPP.

The aims of this Policy are (similarly) to:

> *(a) facilitate the orderly economic use and development of lands for primary production,*
> *(b) reduce land use conflict and sterilisation of rural land by balancing primary production, residential development and the protection of native vegetation, biodiversity and water resources,*
> *(c) identify State significant agricultural land for the purpose of ensuring the ongoing viability of agriculture on that land, having regard to social, economic and environmental considerations,*
> *(d) simplify the regulatory process for smaller-scale low risk artificial waterbodies, and routine maintenance of artificial water supply or drainage, in irrigation areas and districts, and for routine and emergency work in irrigation areas and districts,*
> *(e) encourage sustainable agriculture, including sustainable aquaculture,*
> *(f) require consideration of the effects of all proposed development in the State on oyster aquaculture, and*
> *(g) identify aquaculture that is to be treated as designated development using a well-defined and concise development assessment regime based on environment risks associated with site and operational factors.*

The SEPP sets out State significant agricultural land (under Schedule 1). The development site is not mapped or defined as State significant agricultural land. No other provisions of the SEPP apply to either the site or the development.

3.2.9 State Environmental Planning Policy (Koala Habitat Protection) 2019

This recently commenced SEPP replaces SEPP 44 – Koala Habitat Protection, and aims to encourage the conservation and management of areas of natural vegetation that provide habitat for koalas to support a permanent free-living population over their present range and reverse the current trend of koala population decline.

The SEPP generally applies state-wide, including the Mid Western Regional LGA, Mudgee, and the Koala Management Area 'Northwest Slopes' in relation to the feed tree species types listed under Schedule 2 of the SEPP. The SEPP provides detailed provisions for sites that are subject to a development assessment process and where no approved koala plan of management applies for the land, as is the case for the subject development site. The relevant provisions are set out below and distinguish between mapped and unmapped areas:

> ***9 Development assessment process—no approved koala plan of management for land***
> *(1) This clause applies to land to which this Policy applies if the land—*
> *(a)* ***is identified*** *on the* ***Koala Development Application Map****, and*
> *(b) has an area of at least 1 hectare (including adjoining land within the same ownership), and*
> *(c) does not have an approved koala plan of management applying to the land.*

(2) Before a council may grant consent to a development application for consent to carry out development on the land, the council must take into account—
(a) the requirements of the Guideline, or
(b) information, prepared by a suitably qualified and experienced person in accordance with the Guideline, provided by the applicant to the council demonstrating that—
(i) the land does not include any trees belonging to the feed tree species listed in Schedule 2 for the relevant koala management area, or
(ii) the land is not core koala habitat.

10 Development assessment process—other land
A council is not prevented from granting consent to a development application for consent to carry out development on land if—
(a) the land—
*(i) **is not identified** on the **Koala Development Application Map**, or*
(ii) does not have an approved koala plan of management applying to the land, or
(b) the council is satisfied that the land is not core koala habitat.

Mapping for the site in relation to the Koala Development Application Map is set out below at **Figure 28**. This map identifies areas that have highly suitable koala habitat and that are likely to be occupied by koalas. Landholdings captured by the map (whether the whole lot or only a portion is covered) need to consider the impact of their development on koalas or need to undertake a survey if they believe the map has been incorrectly applied to their land. The Koala Development Application Map applies where there is no approved Koala Plan of Management for the land and identifies which areas trigger the development assessment requirements for core koala habitat.

Figure 28 – Koala Development Application Map (site-specific extract)

Whilst the area of remnant vegetation in the north-western portion of the site is mapped, the development site, including planted trees along the perimeter of the site (but for one on Broadhead Road) are excluded from consideration. This therefore excludes clause 10 cited above from consideration.

Under clause 9 of the SEPP the land subject of the DA is mapped only to the extent of a single planted tree fronting Broadhead Road. Notwithstanding, the whole landholding must be considered, including that mapped to the north-west of the same lot. The total site area is 12.14 ha and the site is not subject to an approved koala plan of management. On this basis, the draft Koala Habitat Protection Guideline is to be consulted to determine what direct or indirect impacts there may be to koalas or koala habitat, and whether development is Tier 1 or Tier 2 development in this regard.

The Guideline sets out the following with respect to Tier 1 Development

> ***Tier 1 - Low or no direct impact development***
> *The Tier 1 process is for development which can be demonstrated to have low or no direct impact on koalas or koala habitat as follows:*
> *1. indirect impacts that will not result in clearing of native vegetation within koala habitat*
> *2. the development is below the Biodiversity Offsets Scheme threshold under the BC Act*
> *3. there is no native vegetation removal*
> *4. the development footprint will not impede movement between koala habitat*
> *5. adequate mitigation measures such as those listed in Table 1 below are implemented as necessary*
>
> *If the development cannot meet all criteria above, then it exceeds a low level of impact on koalas and/or koala habitat and the Tier 2 process is triggered.*

The Table 1 Mitigation Measures address koala-related impacts such as:

- Dog attack
- Vehicle Strike
- Drowning in swimming pools
- Bushfire
- Introduction or spread of disease
- Disturbance
- Impediments to movement

The project arborist has identified all perimeter planted trees are either *Eucalyptus nicholii* (the vast majority) or *Eucalyptus scoparia.* Note also that four perimeter trees are dead.

The mapped tree at **Figure 28** is Tree No 25 in the arborist's report and is identified as a *Eucalyptus nicholii* which is a mature specimen of about 7m in height, of medium retention value due to areas of fungal attack and dead wood, as well as it being heavily pruned due to overhead power lines. Nonetheless, the tree is proposed for retention with some remedial pruning of dead wood proposed.

This tree species is also not listed under Schedule 2 of the SEPP, in relation to being a koala feed tree endemic to the Northwest Slopes, and only occurs once in Schedule 2 in relation to the Northern Tablelands. Accordingly, the mapped and isolated tree within the development site is not a koala feed tree for the purposes of the SEPP and is unlikely to support koalas given its general location and condition.

The trees in the north-western corner of the overall site outside of the development site are listed in Schedule 2. This stand of trees is predominantly *eucalyptus microcarpa*, which is listed under Schedule 2. The BDAR Waiver documentation has identified these trees as predominantly *Eucalyptus albens x moluccana*. Again, these are listed under Schedule 2. Further, as cited earlier, a BDAR Waiver has been granted on the basis of the information set out in Section 2.9 of this EIS. None of the vegetation on the site is likely to support endangered or threatened species. Notably, within the Ecoplanning BDAR Waiver request report, there have been only 9 confirmed sightings of any koalas within a 10km radius of the site, the closest of which was 2.7km from the site, as last seen on 30 June 2006. Again, this identifies the unlikely and rare occurrence of koalas at the site.

Assessment against these draft Guidelines is set out in section 7 of this EIS.

3.2.10 Draft State Environmental Planning Policy (Environment)

The NSW government has been working towards developing a new State Environmental Planning Policy for the protection and management of the natural environment (the Environment SEPP). Changes proposed include consolidating and updating the following seven existing SEPPs:

- State Environmental Planning Policy No. 19 – Bushland in Urban Areas
- State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011
- State Environmental Planning Policy No. 50 – Canal Estate Development
- Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment
- Sydney Regional Environmental Plan No. 20 – Hawkesbury-Nepean River (No.2-1997)
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005
- Willandra Lakes Regional Environmental Plan No. 1 – World Heritage Property.

The Environment SEPP was on exhibition from 31 October 2017 until the 31 January 2018 but has so far not further progressed towards gazettal and implementation. None of the above listed SEPPs being replaced apply to the site or the proposed development.

Of the drafted provisions of the Environment SEPP itself, it is intended to set out provisions under four parts being:

- Catchments
- Waterways
- Bushland
- Protected areas

Again, the specific provisions do not relate to Mid-Western Regional Council, the site or the development as the focus of the currently drafted provisions apply to Sydney Harbour, the Sydney Harbour Catchment, Sydney's Drinking Water Catchment, the Hawkesbury-Nepean Catchment, the Georges River Catchment, Canal Estate Developments, the Willandra Lakes in far western-NSW, and urban bushland areas.

3.2.11 Mid-Western Regional Local Environmental Plan 2012

The subject land lies within the Mid-Western Regional Local Government Area and is subject to the *Mid-Western Regional Local Environmental Plan 2012* (LEP). The relevant clauses of the LEP are addressed in the subsections that follow.

Part 2 - Permitted or Prohibited Development

Under Part 2 Permitted or Prohibited Development of the LEP, the land is part zoned R1 – General Residential and part RU4 – Primary Production Small Lots. The predominant zoning over the site is the RU4 zone. The development site itself sits wholly within the RU4 zone.

Development for the purpose of *educational establishments* is permitted with consent in the RU4 zone as it is not a prohibited land use under the LEP. See **Figure 29** below. The site is also not included under Schedule 1 of the LEP as having additional permitted uses.

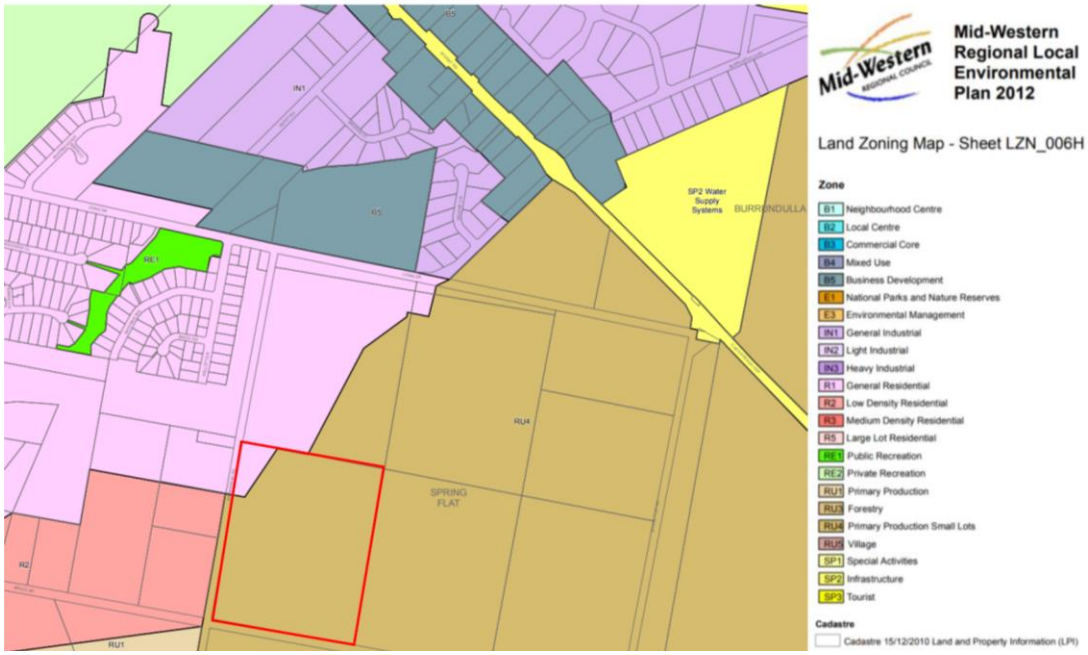

Figure 29 - LEP 2012 Land use zone map (Sheet LZN_006H)

The RU4 zone objectives are:

- *To enable sustainable primary industry and other compatible land uses.*
- *To encourage and promote diversity and employment opportunities in relation to primary industry enterprises, particularly those that require smaller lots or that are more intensive in nature.*
- *To minimise conflict between land uses within this zone and land uses within adjoining zones.*
- *To ensure that land is available for intensive plant agriculture.*
- *To encourage diversity and promote employment opportunities related to primary industry enterprises, particularly those that require smaller holdings or are more intensive in nature.*

Whilst the proposed development is not directly related to primary industry, it is not incompatible with the achievement of these broader objectives. The land is not presently being used for agricultural or primary industry purposes. The land also abuts (and is partly zoned) R1 – General Residential, signifying a general shift of this part of Mudgee towards urbanisation and conversion to residential and associated land uses. Strategic planning for urban expansion of Mudgee identifies the site as suitable for non-rural purposes.

Part 4 - Principal development standards

The LGA, and therefore the site, has no floor space ratio controls whilst a building height control of 8.5m applies only in the R1 – General Residential zoned land. The balance and vast majority of the site (under the RU4 zone) has no height control.

Remaining principal development standards – namely, minimum subdivision lot size and rural subdivision, and dwelling houses on RU4 zoned land– are not relevant to this proposal.

Part 5 - Miscellaneous provisions

The only relevant consideration under Part 5 of the LEP relates to heritage conservation. The site is not mapped or listed under Schedule 5 of LEP as a heritage item or as being within a heritage conservation area. The nearest heritage items are some 800-1,000m from the boundaries of the site.

Part 6 - Additional Local Provisions

The relevant additional local provisions required to be considered by this EIS include:

- Clause 6.1 – Salinity; and
- Clause 6.4 – Groundwater vulnerability, with the mapping the whole of the site as being subject to consideration of this provision.

As noted in the preceding Section 2.7 of this EIS, the testing at the site did not observe or discover any soil salinity or groundwater.

Under the LEP's mapping, the LEP **does not** map the site as being subject to:

- Land Reservation Acquisition.
- Flood Planning Area controls.
- Active Street Frontage controls.
- Visually Sensitive Land controls.
- Any local heritage (whether built or landscape) items or a Heritage Conservation Area.
- Sensitive Biodiversity.

A review of the LEP revealed no other relevant matters that require further consideration in this instance.

The compliance of the proposed works with the relevant LEP provisions is set out under Section 7 of this EIS.

3.2.12 Mid-Western Regional Council Development Control Plan 2013.

As set out in clause 11(a) of the SRD SEPP, Development Control Plans (DCPs) do not apply to SSD DAs. Notwithstanding, as required by this project's SEARs, the following is a summary of the relevant provisions applicable to the site and the proposed development.

DCP 2013 (Amendment No.3) applies throughout the LGA. The DCP is broken into various parts addressing various development types, development in specific areas, and other generic development controls.

The most relevant to the subject DA are found in Part 5 of the DCP:

- 5.1 Car Parking
- 5.3 Stormwater Management
- 5.4 Environmental Constraints

Car Parking controls are as follows:

- 1 space per staff member, plus adequate pickup space, plus
- 1 space per 10 senior students (Year 11 and up), plus
- Provision for at least three (3) parking spaces for buses.

Stormwater management performance targets sets by the DCP relate to:

- Quality Management During Construction by satisfying 'The Blue Book' (Landcom 2006)
- Quality Management During Operation by satisfying the following:
    - Total Suspended Solids (TSS) – 85% reduction of the typical annual load
    - Total Phosphorus (TP) - 65% reduction of the typical annual load
    - Total Nitrogen (TN) - 45% reduction of the typical annual load

    - 90% of gross pollutant loads (litter and heavy sediments), oil and grease are retained on site
    - This can be achieved through either the use of a bioretention basin or raingarden (which can also be used to increase public amenity) configured to also promote infiltration where permitted or via the use of a buried infiltration trench.
- Water conservation through reduction in consumption of potable water by 40% benchmarked against a development which uses only potable water and which has no water conserving fixtures or fittings.
- Salinity prevention only where applicable such as in areas with high ground salinity or in areas where an elevated saline groundwater table exists, infiltration of runoff shall not be permitted. Otherwise, in areas which are affected by high ground salinity and which have an elevated saline groundwater table, permeable paving may be used provided that no additional areas drain onto the pavement, i.e. only the paved area drains through the pavement.

Environmental Constraints set out by the DCP are otherwise already addressed by the SEARs and this EIS. This includes:

- Protection of Aboriginal archaeological items
- Riparian and drainage line environments
- Pollution and waste management
- Threatened species and vegetation management
- Building in saline environments

These are all addressed in the following assessment at Section 7, as far as relevant.

4.0 THE PROPOSAL

4.1 Project Need, Justification and Options explored

The original St Matthews school was built in 1912 at Lewis Street in the centre of Mudgee. In subsequent decades the school was progressively expanded and now continues as a Kindergarten to Year 12 (K-12) Catholic school. Increased enrolments and the physical constraints of the current school site have led to overcrowding and expansion into nearby commercial spaces. With no further room to expand, the decision has been made to move forward with the construction of a new secondary campus of St Matthews Catholic School at 48 Broadhead Road, Spring Flat.

The Broadhead Road site is proposed to initially accommodate up to a maximum of 680 secondary school students with an ultimate comprehensive relocation to the new site as a K-12 school (accommodating a total of up to 1,230 students). The Years K-6 students will join the school in further stages of development outside of the scope of this DA. This DA is exclusively for the development of the new St Matthews Catholic School Mudgee – Secondary Campus.

St Matthew's will continue as a K-12 school across two campuses, with the K-6 campus retained on the current school site in Lewis Street, in the short term. The timing for Stage 2 is yet to be determined.

A Master Plan / Concept Design was prepared by Alleanza to guide this initial stage of development and the overall development. The Master Plan / Concept Design seeks to provide the most efficient use of the site to provide facilities and services for the spatial arrangement and floor space allocation for the maximum 680-student secondary campus element of the overall development.

The decision to relocate the senior school to new accommodation at the Spring Flat site has essentially been driven by regional population growth; expected and growing demand for student places at the school; managing growth and school community expectations; and providing the requisite capacity.

The Trustees of the Roman Catholic Church for the Diocese of Bathurst and school considered a range of options including 'do nothing' or 'as is'; a master plan for limited expansion within the existing school campus; ongoing acquisition of adjacent sites within Mudgee town centre; or pursuing a new green field option (the subject DA). The cost-benefit profile of the greenfield option was seen as the superior / optimal service delivery option for the school as it provides for a significant increase in capacity for the school, allowing for enhanced management of growth.

4.2 Development Objectives and Design Principles

The objectives and architectural design principles adopted for the proposed development of the land can be summarised as follows:

- Christ-centred both spiritually & physically.
- Consideration to the historic & cultural associations of the School within the Mudgee community.
- School facilities to be available to the broader community.
- School planning to reflect year-based learning within Inquiry Hubs, supported by specialist facilities.
- Focus on other identifying elements of the School such as:
    - Continuous pre-post learning
    - Performing Arts
    - Hospitality

- Science & Technology (University link)

Based on the local Wiradjuri language, 'Mudgee' means a Nest in the Hills. One of the design principles was to create a shelter to hold the young. A place or environment which fosters rapid growth or development. Effectively a nest within the Mudgee nest.

A series of design / masterplanning options were tested on the site. The focus was to cluster development towards the south of the site, away from Sawpit Gully and existing trees to the north-west of the site.

The southern location gives a suitable address and arrival point to the site and an anchor. To reinforce a Nest in the Hills concept important views to the east and west (particularly to Mount Frome) were retained. The spatial arrangement of the cluster of buildings was established through functional connectivity and the sharing of open and landscaped spaces as extensions to the internal learning spaces.

Four different masterplan options were tested with the resultant preferred option under this DA deemed to best provide:

- Access and an address;
- View corridors and sightlines to important physical features within Mudgee's environs;
- A nest of enclosure to facilitate appropriate learning and teaching outcomes;
- Orientation to maximise solar access, passive and active ESD outcomes;
- Spatial planning to facilitate later addition of Years K-6 and expansion of the school in a coherent and efficient manner;
- Functional, security, and operational efficiencies.

The preferred masterplan has evolved into the plans included in this DA. The design has been further informed by input from Government Architect NSW (GANSW) as part of the consultation process pre-lodgement, as well as other consultation with Council, the local bus operator (Ogdens) and the Mudgee Local Aboriginal Land Council. The results of this consultation are set out in Section 6.0 of this EIS.

The landscape design principles for the development similarly relate to the Nest in the Hills concept and are based on:

- Site context, views and vistas, and landscape placemaking;
- A heart of the school which symbolises reconciliation between Aboriginal and European people;
- Celebrating 'The Connection Of People And Place';
- The design approach emphasises the importance of place making, by responding to existing character and culture.

4.3 Description of Development

Alleanza has provided the following description of the development.

> The SSD DA seeks consent for the construction of a new 4-stream, Years 7-12 Campus of the St Matthews Catholic School at Mudgee, NSW. The school can accommodate a maximum population of 680 students plus associated staff.
>
> The design proposes five buildings to be constructed around a central space to reflect the meaning of Mudgee as Nest in the Hills in the local Wiradjuri language, with the physical forms borrowing on the typology of Country Homesteads.
>
> The five buildings comprise:
>
> - Building A - Professional Hub for Administration & staff facilities
> - Building B - Spiritual Hub - Chapel

- Building C - Community Hub incorporating Music, Dance, Drama, Assembly, Performance, PE, Hospitality, Food Technology, Student Food Services (canteen) and COLA
- Building D - Research/ Technology Hub for Science, STEM, Art, Materials and Technology
- Building E - Resource Centre & Inquiry Hub for collaborative Learning Settings for Years 7–12.

Facilities are supported by:

- Onsite carpark for 75 cars with a separate 12 car drop-off/ pick up for students; and
- Road layover bus-bay for 3 buses with on-site bus turning area.

After-hours access for outside community groups will be available with facilities in the Spiritual Hub B, Community Hub C and Research/Technology Hub D, being able to be very conveniently used by groups outside of school hours without diminishing the Security of the School.

The planned GFA for school facilities is 6,556m2 (including enclosed circulation and building services).

As noted in Section 1.0 – Introduction, development consent is sought for the following:

- A cluster of five low-rise school buildings (1-2 storeys) including:
  - Block A - Professional Hub (office and administration);
  - Block B - Spiritual Hub (Chapel);
  - Block C - Community Hub (Multi-purpose hall, Music/Dance Studio and canteen);
  - Block D – STEM Research Hub (teaching spaces); and
  - Block E - Knowledge and Learning Hubs (General Teaching spaces);
- Yarning Circle (Outdoor learning area);
- Outdoor Student Assembly Area and COLA ;
- Student free-play area;
- Staff and student amenities;
- Associated site landscaping and public domain improvements;
- On-site parking and access arrangements off Bruce Road, including:
  - On-grade car park for staff, students and visitors (75 spaces – including 2 accessible spaces);
  - A 12-bay student drop-off and pick-up area;
  - A 3-bay bus drop-off and layover area;
  - Bus turning area and servicing access;
  - Dedicated separate driveway for service vehicles; and
  - Bicycle parking for 36 bicycles;
- Associated earthworks, civil works, perimeter roadworks, fencing, services and utilities connections and augmentation, including:
  - Roadworks to Broadhead Road and Bruce Road to the full extent of the site frontages;
  - Roadworks to the Broadhead Road and Bruce Road intersection to cater for bus movements;
  - Footpath along the site frontage of Broadhead Road and suitable pedestrian crossing to connect to existing footpath;
  - Stormwater infrastructure upgrades adjacent to and within the site, including new culverts and drains, levee, and bioswale;
  - Connection to existing sewer line within the site; and
  - Electrical and water connections into the site.

Eight (8) trees are proposed to be removed as part of this DA. These are all planted trees along the street frontages which are either dead or dying, and/or of low significance or value, and which are not indigenous to the area and are not habitat trees or koala feed trees. A further nine (9) are proposed to be removed and replanted as a result of their location under the existing power lines running down Broadhead Road. A small number of trees require removal to facilitate the proposed access arrangements along Bruce Road.

As noted, the land subject of this DA is a smaller portion of the overall site. The development site avoids the Sawpit Gully riparian corridor / buffer and north-western corner of the site where the 'White Box – Rough-barked Apple alluvial woodland' (PCT 274) is located and where possible Aboriginal cultural heritage artefacts may occur.

The development subject of this DA will be constructed in a single stage. The anticipated commencement of works is June 2021 with a 17 month construction program to October 2022. The school is anticipated to be open for Day 1 Term 1 2023.

Two (2) identical digital signage boards are proposed at the school frontages – one to Broadhead Road, and the other to Bruce Road, at the school's respective entrances in those locations. The digital signage boards are of a typical size and type as seen throughout NSW, and will sit on posts about 1m in height and be about 1m x 2m in area with the school's name and a LED display panel to present school-related messages. This is shown in the architectural plan set at **Appendix B**.

We also note that Planning Circular *PS17-004 – Regulating expansion of schools* provides principles for consent authorities to consider in determining whether to place a condition on a consent that will impose and numerical limit on student and staff numbers at school sites. It is the Trustees of the Roman Catholic Church for the Diocese of Bathurst's strong preference that no limits be imposed so that the intent of the available provisions of *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017* is maintained and maximised to ensure appropriate flexibility. This EIS addresses the relevant principles as part of its assessment.

Details of the scale and location of the proposed works are detailed in the architectural drawings and landscape plans prepared by Alleanza at **Appendix B** as well as landscape drawings prepared by TaylorBrammer at **Appendix M**. A selection of these is provided below at **Figures 30**-**33**.

Figure 30 – Proposed layout of the development (Alleanza)

Figure 31 – Broadhead Road elevation / rendering looking across Sawpit Gully (Alleanza)

Figure 32 – Bruce Road elevation / rendering looking to the north-west (Alleanza)

Figure 33 - Render of proposed school - internally looking north (Alleanza)

Operational Aspects of the Development

As noted, the maximum student population will be up to 680 secondary (Years 7-12) students. The related secondary teaching staff numbers will be in the order of 50-59 full time equivalent (FTE) staff with a further 22 support staff (FTE). The exact number will be dependent upon operational management matters arising from the temporary two-campus model and other externalities, such as government funding and inputs.

The school operating hours will be as follows (noting this is generally consistent with existing hours of operation at the current school site.

- Office Open 08:00 – 16:00
- Secondary Classes 08:35 – 15:05

There are no immediate plans for any before or after school care on this site.

School-related activities which would be conducted outside of normal school hours, whether regularly and occasionally, may include:

- School sports;
- School club activities;
- After school tuition groups;
- School concerts;

Community use of the new school after hours and on weekends could involve the following, between 15:00 to 22:00 Monday to Friday and from 08:00 to 22:00 Saturdays and Sundays:

- Music lessons
- Drama clubs
- Dance classes and competitions
- Performing arts evenings
- Musical performances and concerts
- Formal dinner functions
- Sporting groups utilising the (future) fields and indoor facility
- Possible hire for small-scale conferences and events

A canteen will be operated at the school during core school hours.

Parking on the site will service school, visitor and after-hours activities.

Servicing of the school canteen will be twice per week via a small to medium rigid vehicle, with materials / consumables deliveries via the same vehicle type but approximately 4 times per year. General maintenance will be on an as needs basis. The preliminary Operations Plan for the school is included at **Appendix T**.

A simple Waste Management Plan has been prepared for the proposed development. This is included as part of **Appendix R**. This covers both construction and operational aspects. From the operational perspective of this new premises for the existing school, current practices will be retained.

The school will manage waste on a daily basis, separating materials into recyclable, re-usable, waste, and garden organics into bins that are then decanted into larger waster storage bins in the waste storage and collection area, where private or Council waste collection services will remove the relevant waste every couple of days (or as per arrangements). The waste will either be taken to a materials recover facility, landfill facility, or a composting facility.

The likely weekly waste to be generated by type is set out below.

- General Recyclables (plastic, papers, bottles, and cans) 2,560 litres
- General Waste (milk cartons, food scraps) 5,120 litres
- Organics (pruning, grass clippings) 960 litres

4.4 Materials and Finishes

The proposed materials and finishes include:

- Face brick;
- Steel panels;
- Fibre cement panels; and
- Roof and fascia steel panels.

Face brick is utilised to create a hard-wearing, maintenance-free base at ground level above which is insulated, light-weight steel construction with pre-finished coloured panel cladding. Materials and construction techniques are largely selected for their efficiency, longevity,

environmental performance and aesthetics. The scale of the buildings is appropriately suited to the setting and is designed to marry into the landscaping.

Colours chosen are natural tones of earth, stone and steel within a generally consistent colour palette. Stronger, deeper hues to match the fabric chosen identify the base of buildings and grade or taper upwards to lighter hues. Darker tones at the rooftop provide a cap. Accordingly, the buildings are provided with a discernible base, middle, and top, with each floor distinguished.

The materials board is provided as part of the Architectural Design Statement at **Appendix B** to this EIS and is replicated below.

Figure 34 - Materials board (Alleanza)

4.5 Landscaping and Lighting

Landscaping

The landscaping proposed responds to the site and the school use by providing both landscape buffer planting around the edge of the school site and flanking the car park and buildings, as well as providing for landscape outcomes for the school's functional needs, whether this is for recreation, play, learning and gathering.

The planting and landscape strategy is inspired by the broader rural context and setting of Mudgee and its surrounds. The immediate vicinity of rural pasture provides a suitable open landscape character for the proposed building complex.

A landscape strategy of native and cultural planting are interwoven through the school grounds, creating a series of memorable and functional spaces generating a suitable amenity and character for the educational requirements of the school.

The landscape design retains all but 8 trees at the development site's perimeter which provides for and maintains the clear edge at the site and delineation of the ownership and access points with a break in the canopy. The car park incorporates WSUD principles with supplementary tree planting and shrubs to enhance moisture infiltration and retention.

The functional landscaped spaces are generally located between buildings and encircle or frame the heart of the school. To the centre of the site and to pedestrian entries, the use of deciduous trees as connectors to spaces provides seasonal interest, assists in the legibility of the site, allowing for solar access in the winter and much needed shade in summer. These planting patterns recognises the cultural landscape patterns of Mudgee and its surrounds and responds to the extremes of climate experienced in inland areas of Australia.

Internally and centrally to school building layout is located a generous artificial turf space for a range of school activities. These designed spaces allow for students to access the external environment set within a framework of trees that frame views to Mount Knowles and Mount Frome, important hills that define the broader landscape setting to the school.

Between the proposed school hubs, students free play/ outdoor classroom area with trees planting and seating are provided. These spaces consist of breakout areas that integrate nature through the use of natural materials into the design. This project approach is designed to enhance school programs inviting teachers and students to engage in environments that are close to nature.

The gathering / learning spaces also includes a Yarning Circle as incorporated following direct liaison with the Mudgee Local Aboriginal Land Council. This represents a meaningful integration of local indigenous cultural reference points into the contemporary school setting. This will include locally quarried sandstone or other rock for seating and delineation.

Vegetation will include a mix of trees, scrubs, and groundcovers. Details are articulated in the landscape package at **Appendix M**.

Lighting

The landscape plans also indicate the lighting strategy to be employed. Three types of lighting will be provided at the site:

- Street lighting (generally at the site entrances at Broadhead and Bruce Roads and within the car park at the corner of these roads and at the bus turning bay);
- Garden bollard lighting (generally within the school grounds proper and within landscaped areas to provide wayfinding); and
- Lighting on the underside of covered walkways within the school.

The lighting is generally able to meet AS 4282–1997, *Control of the obtrusive effects of outdoor lighting.* It is unlikely any adverse lightspill will arise to adjacent residential properties that will affect amenity, noting the lighting will also serve a safety and security purpose to enhance the CPTED credentials of the development.

The location of these different lighting types is shown on the Landscape Plans at **Appendix M**.

4.6 Access and Parking

As articulated above, the proposal includes the following key transport and traffic features and upgrades:

Access points

All on-site car parking, bus and non-bus drop-off areas, and site servicing will be accessed via Bruce Road only.

Parking

The development includes an on-site car park containing 75 car parking spaces for use by staff, senior students and visitors. Parking bays for staff and visitors would be marked as such.

The car park would include a student pick-up/drop off zone comprising 12 marked bays to be used before and after school. Vehicles would be permitted to stand for 1-minute when dropping-off or picking up students.

Circulation

Vehicle access to the on-site car park would be provided via Bruce Road via a single two-way driveway and with two-way aisles within the car park.

Pick-up and drop-off will be subject to a separate one-way driveway circulating in a clockwise direction. The one-way circulation would facilitate vehicle flow from the car park entrance towards the pick-up/drop-off zone onwards towards the car park exit.

Bicycles and end of trip

Bicycle racks will be provided on-site as Class 3 facilities in accordance with AS2890.3 which permits bicycles to be locked to a support rail. There would be provision of 36 bicycle spaces located near key pedestrian walkways to achieve passive surveillance.

Bus stops and bus access

A bus bay is to be provided on-site as an indent off Bruce Road to accommodate three buses at any one time. The bus bay separates bus traffic from parking and drop-off and pick-up traffic. These bus parking and access arrangements have been designed with input and commentary principally from the local bus operator Ogdens, as well as with Council.

Bus services would utilise the bus bay from the west and then use the bus turning bay within the school site to again leave in a westerly direction and use Broadhead Road to head towards more central areas of Mudgee. The proposed bus bay would accommodate three buses at one time and is in line with TfNSW's Bus Infrastructure guidelines and the Mid-Western Regional Council DCP 2013.

Service and emergency vehicle access

Access for service vehicles and emergency vehicles would be via an arm of the bus turning area off Bruce Road.

Services and deliveries would be undertaken using vehicles up to 8.8m in length, namely, medium rigid vehicles. Like much similar size developments in Mudgee, waste collection for the school would be undertaken using a medium rigid vehicle that is 7.9m long.

Services and deliveries would be scheduled twice per week and during teaching periods, that is, between 9.00am-2.30pm which occur outside of peak school periods.

Road upgrades and footpath upgrades

As noted in the description of the proposed development road and intersection upgrades are also proposed at the perimeter of the school. These include:

- Roadworks to Broadhead Road and Bruce Road to the full extent of the site frontages;
- Roadworks to the Broadhead Road and Bruce Road intersection to cater for bus movements; and
- Footpath along the site frontage of Broadhead Road and suitable pedestrian crossing to connect to existing footpath.

The roadworks are consistent with the rural setting of the school and maintain the use of table drains in lieu of kerb and guttering on either side of both roads.

These works are shown and described in the Triaxial documentation at **Appendix H** (refer Appendix A – Triaxial Plan TX13843.00-C3.0) and in **Figure 35** below. A Transport Assessment prepared by TTPP also accompanies this EIS at **Appendix C**.

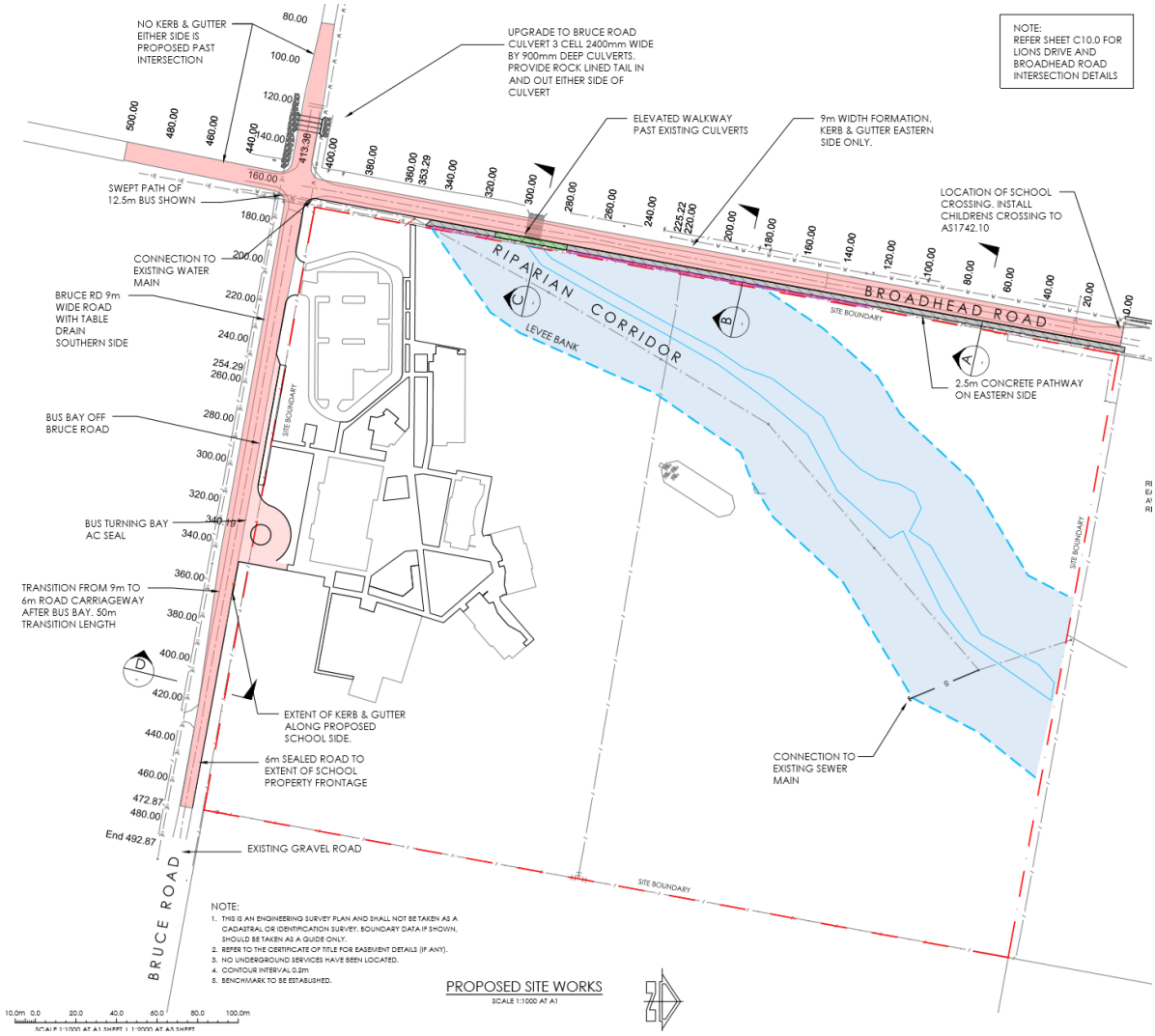

Figure 35 – Proposed site works

4.7 Ecologically Sustainable Development

As detailed in the ESD report prepared by Cundall, the proposed development incorporates a number of Environmentally Sustainable Development (ESD) initiatives and strategies to reduce energy and water usage, enhance indoor environmental quality, reduce emissions and waste, enhance public and active transport usage and the like. These are embodied within the design and the operation of the development.

These have also been considered in tandem with the:

- The School's mission and values;
- One Planet Living Principles;
- United Nations' Sustainable Development Goals; and
- Green Star

The SEARs have called for a minimum 4-star Green Star rating for the development (Best Practice). This rating tool evaluates 9 impact categories and include:

- Management
- Indoor Environment Quality
- Energy
- Transport
- Water
- Materials
- Land use and Ecology
- Emissions
- Innovation.

The development will be constructed to a standard equivalent to a 4-star Green Star Design & As Built v1.3 rating - Industry Best Practice, but the actual GBCA full certification will not be sought. At this stage, the development is able to achieve a minimum of 45 credit points (the required target for 4-star Green Star) and potentially up to 50 credit points based on Cundall's review. A detailed review of the checklist is included in Cundall's ESD report which accompanies this EIS at **Appendix N**.

Further, the Building Services Report by Calibre (at **Appendix D**) includes such measures as:

- It is proposed to install roof-top photovoltaic systems on Blocks C and E on the site.
- In terms of domestic water supply test results indicate that the proposed development can be serviced without the requirement for on-site booster pumps or water storage.
- The hot water system shall be designed to the most economical energy efficient for its use and peak demand requirements, complying with AS/NZS 3500.1 & 4 and local authority requirements.
- It is proposed that above ground rainwater tanks shall be installed adjacent to the toilet areas of the relevant buildings, to harvest rainwater from the roof catchment, and re-use it for toilet flushing. The rainwater tanks shall be sized based on the available roof catchment area, and calculated rainwater collection versus the usage within the building.
- The rainwater re-use shall have a mains water by-pass system that will switch to mains potable water supply in the event of the rainwater tanks being empty.
- Water efficient fixtures and fittings are to be selected using the Water Efficiency Labelling and Standards (WELS) scheme.

To address the CSIRO projected impacts of climate change, the design of the development responds based on the following anticipated changes in forthcoming decades:

NSW Climate Projections Map for 2060-2079 indicates for the Mudgee and surrounding areas:

- By 2030 maximum temperatures are projected to rise by 0.7°C and continue to rise by 2.1° by 2070;
- Rainfall is projected to increase by 5-10% during Autumn and decline in Spring;
- Severe fire weather is projected to increase during Spring and Summer;
- By 2030 an average of 9 more days is are expected above 35°C per year and continue to rise to 27 days per year by 2070; and
- By 2030 an average of 8 fewer nights are expected below 2°C per year and continue to decrease by 23 nights per year by 2070.

The project design's general philosophy has been founded on the consideration of site contextual and climatic concerns. These include solar orientation and access, overshadowing, prevailing seasonal winds patterns and temperatures. The building aggregation, floor planning, window orientation, shading and operation, cross ventilation strategies, and insulation levels respond to those considerations.

The proposed design allows capacity for climate control systems to be expanded, with materials selections including light weight options and flexible construction allowing for possible further adaptation strategies if required.

The landscaping proposal responds to the local conditions, with preference for endemic local species, and drought tolerate plants.

The proposed design is alert to possible further climatic mitigation requirements and proposes a light touch with open ends which can best respond or adapt to future changes.

In relation to specific climate considerations, the future development has adapted as follows:

Hotter days and more frequency heatwave events

- Heating and cooling systems are proposed to accommodate a margin of external temperature change throughout their lifecycle. Efficiencies in the built form, architectural design, building construction and 2019 building code energy efficiency requirements also contribute to higher performing, more efficient heating and cooling systems which reduce energy consumption and the system's ability to respond to periodic changes in outlying conditions.
- All plant spaces are external to the building and capable of expansion in size should higher system capacities be required upon replacement to accommodate current climate projects at the time. Similarly, the building construction and decentralised nature of the site provides adequate access to install additional services to accommodate sudden changes in internal or external environmental and operational conditions as may be needed due to climate change
- Monitoring systems are proposed to record the some facets of building use to enable data driven decisions on future replacements to meet climate adaption needs. This will also include recording of site temperature with capacity to integrate additional environmental monitoring devices in the future which can facilitate comparisons between climate and building system demands
- Energy supply systems have spare capacity factored in to accommodate future increase in electrical load
- As noted, rooftop photovoltaic systems will assist to decreased energy demand during peak solar irradiation periods of the day with capacity for expansion in future to meet any other increased to load, whether driven by climate change response/adaption or operational reasons
- All building services equipment and devices will be selected to accommodate appropriate expected operating temperature ranges throughout their lifecycle.

Extended drought periods and extreme rainfall events

- The proposed site has been designed with above ground rainwater tanks to collect water from the majority of available roof area. The tanks are positioned externally and capable of expansion as needed to adapt to increasing intensity of rainfall events and duration between events. Overflow is provided to central in-ground tank which is planned for irrigation purposes, therefore prioritising the servicing of the building needs to conserve critical water resources.
- Rainwater re-use is paired with the targeted 5-6 star WELS fixtures and fittings increases the water efficiency which reduces the demand on town water supply in drought periods.
- The buildings are sited to mitigate the impact of flooding and damage in extreme rainfall events
- The proposed site also has enough area to integrate future potable water storage, filtration and pumping systems should future township climate adaptions plans recommended increased public infrastructure resilience in the future

Gustier wind conditions

- The buildings have been sited and orientated to mitigate the impact of prevailing winds and aggregated in a nesting fashion to create protected spaces to provide shelter or protection from these winds.

See the Cundall report at **Appendix N** for additional details.

4.8 Utilities and Services

The site is currently serviced by:

- General mobile telephone coverage, but not an established telecommunications supply;
- A 225mm gravity sewer main (running through the site and generally in line with, and parallel to, Sawpit Gully); and
- A 250mm water main (running along Broadhead Road with the main likely to service the site at the intersection of Broadhead and Bruce Roads).

New services or augmentation will be needed for:

- Electricity connection (the site is not presently serviced by electricity) as well as a new on-site pad-mounted substation. This will be supplemented with roof-top photovoltaic systems on Blocks C and E;
- Telecommunications (including new commercial business fibre, enhanced 4G mobile coverage and NBN coverage);
- Fire services, including booster pump (new services are required);
- Sewer connections within the site (noting existing capacity) and trade waste drainage from kitchens and laboratories;
- Water connections adjacent the site with some augmentation (however without need for tanks for water storage for domestic or fire purposes). Rainwater tanks for grey-water are proposed;
- Trade waste water connections for kitchen and laboratory spaces; and
- Drainage infrastructure, including on-site storage tanks for rainwater and detention.

An Integrated Water Management Plan and an Infrastructure Management Plan have also been prepared and form part of Calibre's Building Services Report which is found at **Appendix D**. Appendix B of Calibre's report graphically sets out the location of the required and proposed services and their connection to existing services and utilities, as relevant.

4.9 Stormwater Management

Triaxial has devised a stormwater management plan / flood mitigation works to address the movement of water through the Sawpit Gully catchment.

Proposed works to mitigate the effects of the large catchment draining through the site includes:

- Upgrade to the existing culverts under Bruce Road to have sufficient capacity to allow flood waters under Bruce Road and Broadhead Road to pass through and around the site. Currently the flood waters are constricted by the existing culverts under Bruce Road. Upgrading these culverts will allow the passage of stormwater through the Bruce Road and Broadhead Road intersection along the north-western side of the school site.
- Construction of a levee bank running along the perimeter of the riparian zone to protect the school site from the stormwater flowing through the Broadhead Road culverts.
- Increase in the level of Broadhead road around the intersection with Bruce Road.

These upgrades to existing stormwater infrastructure are shown on Triaxial plans along with the extent of the existing and future flooding. Refer drawings at **Appendix H**.

In order to determine the effectiveness of the proposed levee bank and culvert upgrades on

the school site, a HECRAS model was developed by Triaxial. **Figure 36** below shows the terrain model as run with the levee bank included through the proposed school site and the culvert upgrades on Broadhead and Bruce Roads. Cross sections were developed from the terrain model and the flood extent at each cross section is indicated by the thick blue line.

In order to determine the required levels of the levee bank the water surface level was obtained from the HECRAS model and used to set the height of the levee bank. A 500mm freeboard was applied to the water surface level in line with Mid Western Regional Council requirements.

Internal stormwater management within the site has been assessed using Mid Western Council's DCP and with the use of both a DRAINS model and a MUSIC model, to address water quantity and water quality, respectively. The model data and the models themselves are included as part of **Appendix H**.

Sediment and erosion controls will be implemented during works.

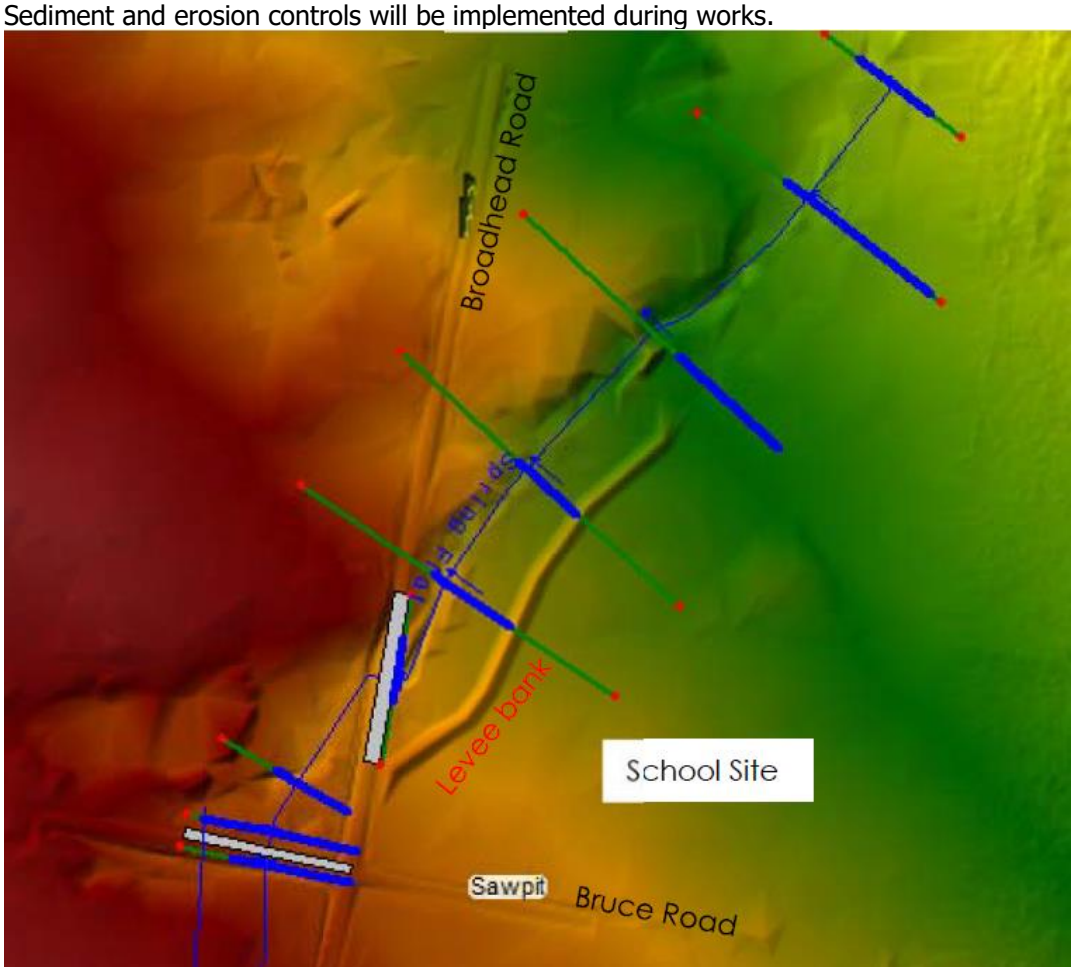

Figure 36 – HECRAS model cross sections and extent of water flow at each cross section in the model (Triaxial)

5.0 SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS

This section assists DPI&E and other reviewers identify the location of responses and documentation in relation to the individual requirements of the SEARs (see issued SEARs at **Appendix O**). The table below indicates the location in the EIS and the relevant Appendix or Appendices. The introduction of the individual Appendix will also generally set out the response to the SEARs relevant to that document / discipline.

SEARs REQUIREMENT	LOCATION IN EIS / EIS PACKAGE
General Requirements	
The Environmental Impact Statement (EIS) must be prepared in accordance with, and meet the minimum requirements of, clauses 6 and 7 of Schedule 2 of the Environmental Planning and Assessment Regulation 2000 (the Regulation). For completeness the requirements of clauses 6 and 7 are set out below. *The minimum requirements for the EIS in relation to the form and content of an EIS are:*	This EIS in its entirety. See also further below.
Clause 6 *An environmental impact statement must contain the following information:* *a. the name, address and professional qualifications of the person by whom the statement is prepared,* *b. the name and address of the responsible person,* *c. the address of the land:* *i. in respect of which the development application is to be made, or* *ii. on which the activity or infrastructure to which the statement relates is to be carried out,* *d. a description of the development, activity or infrastructure to which the statement relates,* *e. an assessment by the person by whom the statement is prepared of the environmental impact of the development, activity or infrastructure to which the statement relates, dealing with the matters referred to in this Schedule,* *f. a declaration by the person by whom the statement is prepared to the effect that:* *i. the statement has been prepared in accordance with this Schedule, and* *ii. the statement contains all available information that is relevant to the environmental assessment of the development, activity or infrastructure to which the statement relates, and* *iii. that the information contained in the statement is neither false nor misleading.*	Variously, as part of the EIS Declaration and Certification and Section 4.0
Clause 7 *An environmental impact statement must also include each of the following:* *a) a summary of the environmental impact statement,* *b) a statement of the objectives of the development, activity or infrastructure,* *c) an analysis of any feasible alternatives to the carrying out of the development, activity or infrastructure, having regard to its objectives, including the consequences of not carrying out the development, activity or infrastructure,* *d) an analysis of the development, activity or infrastructure, including:* *i. a full description of the development, activity or infrastructure, and* *ii. a general description of the environment likely to be affected by the development, activity or infrastructure, together with a detailed description of those aspects of the environment that are likely to be significantly affected, and* *iii. the likely impact on the environment of the development, activity or infrastructure, and* *iv. a full description of the measures proposed to mitigate any adverse effects of the development, activity or infrastructure on the environment, and* *v. a list of any approvals that must be obtained under any other Act or law before the development, activity or infrastructure may lawfully be carried out,* *e) a compilation (in a single section of the environmental impact statement) of the measures referred to in item (d) (iv),* *f) the reasons justifying the carrying out of the development, activity or infrastructure in the manner proposed, having regard to biophysical, economic and social considerations, including the principles of ecologically sustainable development set out in subclause (4).*	a) Section 1.0 b) Section 4.2 c) Section 7.0 d) Sections 4.0 7.0, and 8.0 e) Section 8.0 f) Section 7.0

Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development.	Section 8.0
Where relevant, the assessment of key issues below, and any other significant issues identified in the risk assessment, must include: • adequate baseline data • consideration of the potential cumulative impacts due to other developments in the vicinity (completed, underway or proposed); and • measures to avoid, minimise and if necessary, offset predicted impacts, including detailed contingency plans for managing any significant risks to the environment.	Sections 8.0, 8.1 & 8.2.
The EIS must also be accompanied by a report from a qualified quantity surveyor providing: • a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the Regulation) of the proposal, including details of all assumptions and components from which the CIV calculation is derived. The report shall be prepared on company letterhead and indicate applicable GST component of the CIV; • an estimate of jobs that will be created during the construction and operational phases of the proposed development; and • certification that the information provided is accurate at the date of preparation.	Appendix A See also Section 3.1.1.
Key Issues 1 – Statutory and Strategic Context	
Address the statutory provisions contained in all relevant environmental planning instruments, including: • Biodiversity Conservation Act 2016 • State Environmental Planning Policy (State & Regional Development) 2011; • State Environmental Planning Policy (Infrastructure) 2007; • State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017; • State Environmental Planning Policy No. 64 – Advertising and Signage; • State Environmental Planning Policy No.55 – Remediation of Land; • State Environmental Planning Policy (Rural Lands) 2008 • Draft State Environmental Planning Policy (Remediation of Land); • Draft State Environmental Planning Policy (Environment); and • Mid-Western Regional Local Environmental Plan 2012. **Permissibility** Detail the nature and extent of any prohibitions that apply to the development. **Development Standards** Identify compliance with the development standards applying to the site and provide justification for any contravention of the development standards.	Section 3.2. Section 7.1 See also Appendices C and G.
Key Issues 2- Policies	
Address the relevant planning provisions, goals and strategic planning objectives in the following: • NSW State Priorities • Central West and Orana Regional Plan 2036 • Future Transport Strategy 2056 • State Infrastructure Strategy 2018 – 2038 Building the Momentum • Crime Prevention Through Environmental Design (CPTED) Principles • Healthy Urban Development Checklist (NSW Health) • Better Placed: An integrated design policy for the built environment of New South Wales (GANSW, 2017) • Mid-Western Development Control Plan 2013.	Section 3.1 Section 7.3
Key Issues 3 – Operation	
• Provide details of the existing and proposed school operations, including staff and student numbers, school hours of operation, and operational details of any proposed before/after school care services and/or community use of school facilities.	Section 4.3 and Appendix T

• Provide a detailed justification of suitability of the site to accommodate the proposal. • Provide details of how the school will continue to operate during construction activities of the new primary and secondary school, including proposed mitigation measures.	Section 2.12 and Section 7.6 Section 4
Key Issues 4 – Built Form and Urban Design	
• Address the height, density, bulk and scale, setbacks and interface of the proposal in relation to the surrounding development, topography, streetscape and any public open spaces. • Address design quality and built form, with specific consideration of the overall site layout, streetscape, open spaces, façade, rooftop, massing, setbacks, building articulation, materials, colours and colours. • Provide details of any digital signage boards, including size, location and finishes. • Clearly demonstrate how design quality will be achieved in accordance with Schedule 4 Schools – Design Quality Principles of State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 and the GANSW Design Guide for Schools. • Detail how services, including but not limited to waste management, loading zones, and mechanical plant are integrated into the design of the development. • Provide detailed site and context analysis to justify the proposed site planning and design approach including massing options and preferred strategy for future development. • Provide a detailed site-wide landscape strategy, including consideration of equity and amenity of outdoor play spaces, and integration with built form, security, shade, topography and existing vegetation. • Provide a visual impact assessment that identifies any potential impacts on the surrounding built environment and landscape including views to and from the site and any adjoining heritage items. • Address CPTED Principles. • Demonstrate good environmental amenity including access to natural daylight and ventilation, acoustic separation, access to landscape and outdoor spaces and future flexibility.	Architectural Design Statement and Section 7 Architectural Design Statement and Section 7 Section 4 and Appendix B Architectural Design Statement, Landscape Design Statement and Section 7 Section 4 Architectural Design Statement and Section 7 Landscape Plans and Design Statement Architectural Plan set / Appendix B Architectural Design Statement and Section 7.3 Architectural Design Statement, Landscape Design Statement and Section 7.
Key Issues 5 – Environmental Amenity	
• Assess amenity impacts on the surrounding locality, including solar access, visual privacy, visual amenity, overshadowing and acoustic impacts. • Conduct a view analysis to the site from key vantage points and streetscape locations (photomontages or perspectives should be provided showing the building envelope and likely future development). • Include a lighting strategy and measures to reduce spill into the surrounding sensitive receivers. • Identify any proposed use of the school outside of school hours (including weekends) and assess any resultant amenity impacts on the immediate locality and proposed mitigation measures. • Detailed outline of the nature and extent of the intensification of use associated with the increased floor space, particularly in relation to the proposed increase in staff and student numbers. • Detail amenity impacts including solar access, acoustic impacts, visual privacy, view loss, overshadowing and wind impacts. A high level of environmental amenity for any surrounding residential land uses must be demonstrated.	Section 7 Architectural Plans and Design Statement Landscape plans and Section 4.5 Appendix T and Section 4
Key Issues 6 – Staging	
Provide details regarding the staging of the proposed development (if any).	Section 4

Key Issues 7 – Transport & Accessibility	

Include a transport and accessibility assessment, which details, but is not limited to, the following:
• accurate details of the current daily and peak hour vehicle, existing and future public transport networks and pedestrian and cycle movement provided on the road network located adjacent to the proposed development
• details of estimated total daily and peak hour trips generated by the proposal, including vehicle, public transport, pedestrian and bicycle trips based on surveys of the existing and similar schools within the local area
• the adequacy of existing public transport or any future public transport infrastructure within the vicinity of the site, pedestrian and bicycle networks and associated infrastructure to meet the likely future demand of the proposed development
• measures to integrate the development with the existing/future public transport network
• the impact of trips generated by the development on nearby intersections (including but not limited to Castlereagh Highway with Lions Drive and Flat Road), with consideration of the cumulative impacts from other approved developments in the vicinity, and the need/associated funding for, and details of, upgrades or road improvement works, if required (Traffic modelling is to be undertaken using SIDRA network modelling for current and future years i.e. 10 years)
• the identification of infrastructure required to ameliorate any impacts on traffic efficiency and road safety impacts associated with the proposed development, including details on improvements required to affected intersections, additional school bus routes along bus capable roads (i.e. minimum 3.5 m wide travel lanes), additional bus stops or bus bays
• details of travel demand management measures to minimise the impact on general traffic and bus operations, including details of a location-specific sustainable travel plan (Green Travel Plan and specific Workplace travel plan) and the provision of facilities to increase the non-car mode share for travel to and from the site
• the proposed walking and cycling access arrangements and connections to public transport services
• the proposed access arrangements, including car and bus pick-up/drop-off facilities, and measures to mitigate any associated traffic impacts and impacts on public transport, pedestrian and bicycle networks, including pedestrian crossings and refuges and speed control devices and zones
• proposed bicycle parking provision, including end of trip facilities, in secure, convenient, accessible areas close to main entries incorporating lighting and passive surveillance
• proposed number of on-site car parking spaces for teaching staff and visitors and corresponding compliance with existing parking codes and justification for the level of car parking provided on-site
• an assessment of the cumulative on-street parking impacts of cars and bus pick-up/drop-off, staff parking and any other parking demands associated with the development
• an assessment of road and pedestrian safety adjacent to the proposed development and the details of required road safety measures and personal safety in line with CPTED
• emergency vehicle access, service vehicle access, delivery and loading arrangements and estimated service vehicle movements (including vehicle type and the likely arrival and departure times)
• the preparation of a preliminary Construction Traffic and Pedestrian Management Plan to demonstrate the proposed management of the impact in relation to construction traffic addressing the following:
  ○ assessment of cumulative impacts associated with other construction activities (if any)
  ○ an assessment of road safety at key intersection and locations subject to heavy vehicle construction traffic movements and high pedestrian activity
  ○ details of construction program detailing the anticipated construction duration and highlighting significant and milestone stages and events during the construction process
  ○ details of anticipated peak hour and daily construction vehicle movements to and from the site
	Appendix C
	Sections 7.4

○ details of on-site car parking and access arrangements of construction vehicles, construction workers to and from the site, emergency vehicles and service vehicle ○ details of temporary cycling and pedestrian access during construction. Relevant Policies and Guidelines: • Guide to Traffic Generating Developments (Roads and Maritime Services) • EIS Guidelines – Road and Related Facilities (DoPI) • Cycling Aspects of Austroads Guides • NSW Planning Guidelines for Walking and Cycling • Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development • Standards Australia AS2890.3 (Bicycle Parking Facilities)	
Key Issues 8 – ESD	
• Detail how ESD principles (as defined in clause 7(4) of Schedule 2 of the Regulation) will be incorporated in the design and ongoing operation phases of the development. • Include a framework for how the future development will be designed to consider and reflect national best practice sustainable building principles to improve environmental performance and reduce ecological impact. This should be based on a materiality assessment and include waste reduction design measures, future proofing, use of sustainable and low-carbon materials, energy and water efficient design (including water sensitive urban design) and technology and use of renewable energy. • Include preliminary consideration of building performance and mitigation of climate change, including consideration of Green Star Performance. • Include details of the initiatives that would enable the future development to achieve a minimum of 4-Green Star rating in accordance with the rating system of the Green Building Council Australia. • Provide a statement regarding how the design of the future development is responsive to the CSIRO projected impacts of climate change, specifically: ○ hotter days and more frequent heatwave events ○ extended drought periods ○ more extreme rainfall events ○ gustier wind conditions ○ how these will inform landscape design, material selection and social equity aspects (respite/shelter areas). Relevant Policies and Guidelines: • NSW and ACT Government Regional Climate Modelling (NARCliM) climate change projections.	Appendix N Sections 4.7 and 7.5
Key Issues 9 – Social Impacts	
Include an assessment of the social consequences of the schools' relative location and decanting activities if proposed.	Section 7.15
Key Issues 10 – Aboriginal Heritage	
• Identify and describe the Aboriginal cultural heritage values that exist across the site and document these in an Aboriginal Cultural Heritage Assessment Report (ACHAR). This may include the need for surface survey and test excavation. • Identify and address the Aboriginal cultural heritage values in accordance with the Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (OEH, 2011) and Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW (OEH, 2010). • Undertake consultation with Aboriginal people and document in accordance with Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW). The significance of cultural heritage values of Aboriginal people who have a cultural association with the land are to be documented in the ACHAR. • Identify, assess and document all impacts on the Aboriginal cultural heritage values in the ACHAR. • The EIS and the supporting ACHAR must demonstrate attempts to avoid any impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the ACHAR and EIS must outline measures	Appendix K Sections 2.10 and 7.13

proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH.	
Key Issues 11 – Noise and Vibration	
• Identify and provide a quantitative assessment of the main noise and vibration generating sources during demolition, site preparation, bulk excavation, construction. Outline measures to minimise and mitigate the potential noise impacts on surrounding occupiers of land. • Identify and assess operational noise, including consideration of any public-address system, school bell, mechanical services (e.g. air conditioning plant), use of any school hall for concerts etc. (both during and outside school hours) and any out of hours community use of school facilities, and outline measures to minimise and mitigate the potential noise impacts on surrounding occupiers of land. Relevant Policies and Guidelines: • NSW Noise Policy for Industry 2017 (EPA) • Interim Construction Noise Guideline (DECC) • Assessing Vibration: A Technical Guideline 2006 • Development Near Rail Corridors and Busy Roads – Interim Guideline (Department of Planning 2008).	Appendix S Section 7.12
Key Issues 12 – Contamination	
• Assess and quantify any soil and groundwater contamination and demonstrate that the site is suitable for the proposed use in accordance with SEPP 55. • Undertake a hazardous materials survey of all existing structures and infrastructure prior to any demolition or site preparation works. Relevant Policies and Guidelines: • Managing Land Contamination: Planning Guidelines - SEPP 55 Remediation of Land (DUAP).	Appendix G Sections 2.7 and 7.7.1
Key Issues 13 – Utilities	
• Prepare an Infrastructure Management Plan in consultation with relevant agencies, detailing information on the existing capacity and any augmentation and easement requirements of the development for the provision of utilities including staging of infrastructure. • Prepare an Integrated Water Management Plan detailing any proposed alternative water supplies, proposed end uses of potable and non-potable water, and water sensitive urban design.	Appendix D Sections 2.5 and 4.8
Key Issues 14 – Contributions	
Address Council's 'Contributions Plan' and/or details of any Voluntary Planning Agreement, which may be required to be amended because of the proposed development.	Section 7.2
Key Issues 15 – Drainage	
• Detail measures to minimise operational water quality impacts on surface waters and groundwater. • Stormwater plans detailing the proposed methods of drainage without impacting on the downstream properties. Relevant Policies and Guidelines: • Guidelines for development adjoining land and water managed by DECCW (OEH, 2013).	Appendix H Sections 2.8, 4.9 and 7.8
Key Issues 16 – Biodiversity Assessment	
• Biodiversity impacts related to the proposed development (SSD 9872) are to be assessed in accordance with the Biodiversity Assessment Method and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the Biodiversity Conservation Act 2016 (s6.12), Biodiversity Conservation Regulation 2017 (s6.8) and Biodiversity Assessment Method. • The BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the Biodiversity Assessment Method.	Appendix I Sections 2.9, 3.2.2, and 7.10

• The BDAR must include details of the measures proposed to address the offset obligation as follows:
  ○ the total number and classes of biodiversity credits required to be retired for the development/project
  ○ the number and classes of like-for-like biodiversity credits proposed to be retired
  ○ the number and classes of biodiversity credits proposed to be retired in accordance with the variation rules
  ○ any proposal to fund a biodiversity conservation action
  ○ any proposal to make a payment to the Biodiversity Conservation Fund.
• If seeking approval to use the variation rules, the BDAR must contain details of the reasonable steps that have been taken to obtain requisite like-for-like biodiversity credits.
• The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method Order 2017 under s6.10 of the Biodiversity Conservation Act 2016.
• Where a Biodiversity Assessment Report is not required, engage a suitably qualified person to assess and document the flora and fauna impacts related to the proposal.
 	
Note: Notwithstanding these requirements, the Biodiversity Conservation Act 2016 requires that State Significant Development Applications be accompanied by a Biodiversity Development Assessment Report unless otherwise specified under the Act.	

Key Issues 17 – Sediment, Erosion and Dust Controls	
Detail measures and procedures to minimise and manage the generation and off-site transmission of sediment, dust and fine particles. Relevant Policies and Guidelines: • Managing Urban Stormwater – Soils & Construction Volume 1 2004 (Landcom) • Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA) • Guidelines for development adjoining land and water managed by DECCW (OEH, 2013).	Appendix H Sections 7.8 and 7.9
Key Issues 18 – Salinity	
Include a salinity report in accordance with the Site Investigation for Urban Salinity Booklet (EPA).	Sections 2.7, 3.2.11, and 7.1.4.
Key Issues 19 – Waste	
Identify, quantify and classify the likely waste streams to be generated during construction and operation and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste. Identify appropriate servicing arrangements (including but not limited to, waste management, loading zones, mechanical plant) for the site.	Appendix R and Section 8
Key Issues 20 – Construction Hours	
Identify proposed construction hours and provide details of the instances where it is expected that works will be required to be carried out outside the standard construction hours.	Appendix R and Section 8
Plans and Documents	

The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Environmental Planning and Assessment Regulation 2000.
 	
In addition, the EIS must include the following:
• A Section 10.7(2) and (5) planning certificate (previously Section 149(2) planning certificate)
• Architectural drawings showing key dimensions, RLs, scale bar and north point, including:
  ○ plans, sections and elevation of the proposal at no less than 1:200 showing indicative furniture layouts and program
  ○ illustrated materials schedule including physical or digital samples board with correct proportional representation of materials, nominated colours and finishes
	Collectively, Appendices B, E, F, H, J, L, M and Q Section 6

- details of proposed signage, including size, location and finishes - detailed annotated wall sections at 1:20 scale that demonstrate typical cladding, window and floor details, including materials and general construction quality - site plans and operations statement demonstrating the after hours and community use strategy • Site Survey Plan, showing existing levels, location and height of existing and adjacent structures/buildings and site boundaries • Site Analysis Plan including: - site and context plans that demonstrate principles for future development and expansion, built form character and open space network - active transport linkages with existing, proposed and potential footpaths and bicycle paths and public transport links - site and context plans that demonstrate principles for future network, active transport linkages with existing, proposed and potential footpaths and bicycle paths and public transport links • Sediment and Erosion Control Plan • Shadow Diagrams • View analysis, photomontages and architectural renders, including from those from public vantage points • Landscape architectural drawings showing key dimensions, RLs, scale bar and north point, including: - integrated landscape plans at appropriate scale, with detail of new and retained planting, shade structures, materials and finishes proposed including articulation of playground spaces - plan identifying significant trees, trees to be removed and trees to be retained or transplanted • Design report to demonstrate how design quality will be achieved in accordance with the above Key Issues including: - architectural design statement - diagrams, structure plan, illustrations and drawings to clarify the design intent of the proposal - detailed site and context analysis - analysis of options considered including building envelope study to justify the proposed site planning and design approach - visual impact assessment identifying potential impacts on the surrounding built environment and adjoining heritage items - summary of feedback provided by GANSW and NSW State Design Review Panel (SDRP) and responses to this advice - summary report of consultation with the community and response to any feedback provided • Geotechnical and Structural Report • Accessibility Report • Arborist Report • Salinity Investigation Report • Acid Sulphate Soils Management Plan and • Schedule of materials and finishes.	
Consultation	
During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups, special interest groups including local Aboriginal land councils and registered Aboriginal stakeholders and affected landowners. In particular you must consult with: • Mid-Western Regional Council • Government Architect NSW (through the NSW SDRP process) • Transport for NSW and • Roads and Maritime Services. Consultation with Mid-Western Regional Council, TfNSW, Government Architect NSW, RFS and RMS should commence as soon as practicable to agree the scope of investigation. The EIS must describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.	Section 6

6.0 CONSULTATION

During the preparation of this EIS, direct consultation has occurred with a range of key parties / stakeholders. This has included:

- Mid-Western Regional Council;
- Government Architect NSW (GANSW) - as part of the NSW State Design Review Panel process;
- Transport for NSW (TfNSW) and RMS (through direct liaison by TTPP in the development of the Traffic Impact Assessment and the Green Travel Plan;
- Mudgee Local Aboriginal Land Council (MLALC); and
- Essential Energy (in relation to a Design Information Pack – DIP)

A summary of the type of consultation carried out and issues or results of that consultation is set out below.

Mid-Western Regional Council

The Trustees of the Roman Catholic Church for the Diocese of Bathurst has initially directly consulted with Council on separate occasions in a general sense, articulating the proposed scope of development, justification for the move to the new location, as well as presentation of the overall masterplan.

On 15 May 2019, a meeting was held between the project team and senior Council staff to address a range of planning, design, engineering, and traffic-related matters. The main matters raised at the meeting included:

- Presentation of the design;
- Drainage and water management / civil works;
- Traffic generation and management, access arrangements, and road infrastructure;
- Contributions and in-kind works;
- Services and servicing of the site; and
- Update on the BDAR waiver resolution and status of the preparation of the ACHAR.

Council's key comments in relation to the development were:

- Ensuring the site is able to manage water flows and drainage without impacting upon adjacent private land. The EIS needs to demonstrate the 'before' and after' effect of the proposed engineering solution. The preliminary approach to the civil engineering concepts was generally supported at this point.
- General upgrades to the roads at the perimeter of the site to contemporary standards:
    - road width
    - road surface
    - footpaths / cycle access
    - drainage
- Reporting upon traffic generation, catchments, flows, and management.
- Measuring and reporting on impacts of the development upon RMS roads and corresponding intersections (eg each of the Lions Drive and Spring Flat Road intersections with the Castlereagh Highway).
- The site is newly identified as having bushfire risk on draft and so far unpublished mapping. Council is comfortable with the design and location being able to be managed lands with the roads as APZs. Council did not expect a bushfire report to be prepared.
- Council is of the view that contributions will be required under sections 94 and 94A (now 7.11 and 7.12 of the EP&A Act) as well as section 64 and Section 306 water utilities and stormwater services levies under the *Local Government Act 1993* and *Water Management Act 2000*, respectively. Council requested a precis on the applicant's interpretation and position on this contributions regime. This was subsequently provided on 4 July 2019.

These matters have been addressed by the project team, principally in documentation by Triaxial in **Appendix H** in relation to drainage, civils works and roadworks and by TTPP in **Appendix C** in relation to traffic and transport matters. Bushfire and Contributions is addressed within the EIS in the relevant sections.

A further meeting was held with senior Council officers on 16 July 2019 to further discuss Council's newly commenced development contributions plan, the project team's interpretation of the contributions regime (as provided on 4 July 2019) and possible works in kind and the like. The outcomes of this meeting and the project team's position is as further set out in Section 7.2 of this EIS.

A third, and most recent, meeting with Council was held on 21 January 2020 to further address the design development of the project. Specifically, this involved discussion around:

- Changes to the development site plan and concept since the last meeting;
- Traffic-related matters, principally:
    - The project team's liaison with the local bus operator (Ogden's) in refining the traffic and access arrangements at the site to better cater for school bus traffic and remove access conflicts;
    - The results of a school traffic survey to determine traffic demand arising from the school;
    - Trip calculation predictions and estimating the demand for any intersection upgrades (with or without other development in the same locality);
    - The objective of enhancing increased active and public transport use;
    - The nature of any intersection upgrades to cater for bus movements / swept paths (eg Lions Drive at Broadhead Road); and
    - The nature and (acceptable) scope of any further road upgrades further from the school where any direct nexus begins to diminish.
- Civil engineering and infrastructure matters, including:
    - Nature and scope of perimeter roadworks to both Broadhead and Bruce Roads for the full length of the site's boundaries; and
    - The type or nature of any water and/or sewer infrastructure upgrades needed to cater for the school's development and operation.

A revised site works plan involving civil works, roadworks, servicing and the like was issued to Council for comment. Council advised that it had no further comment to make arising from the meeting on planning matters. It is however noted that Triaxial has continued its liaison with Council throughout to resolve discrete matters within its discipline.

Government Architect NSW

Consultation with GANSW has occurred on a number of occasions in the preparation of the DA and the architectural plans for the site – as set out below.

An initial informal discussion with key officers of GANSW was undertaken in December 2018 to set out the project's context, objectives, and design philosophy. The meeting also considered the GANSW required processes and it was resolved that the formal State Design Review Panel process was able to be waived with an alternate informal review to occur instead.

A meeting / briefing comprising the agreed informal State Design Review process was held on 20 March 2019 with GANSW. At that meeting GANSW was briefed on the site, its context, the development proposal, and its design evolution.

Key comments made included:

- The exploration of options based on the site's context and the development objectives works well. The master plan siting is based on appropriately sound principles. The

development sits as a family of buildings in an identifiable cluster with usable spaces between.
- The siting, spacing, and arrangement is generally appropriate for what is a very large site. The scale works well and the orientation, axes, and geometry set an appropriate grid for the development.
- GANSW's key consideration as part of the State Design Review process is to consider public impacts and whether a development is supportable and what recommendations should be made to enhance its qualities and limit potential impacts.
- GANSW concluded that the development will have a low impact and that a low number of objections would be likely given its social infrastructure nature and its urban fringe location.

Matters agreed for further consideration and enhancement of the design included:
- The design could be enhanced by providing a landscape / indigenous / Aboriginal cultural heritage response to part of the site to recognise and reinterpret the site's location and past uses.
- In providing a strong place-based design that further reinforces the project's physical and contextual philosophy of a 'nest within a nest', this could also provide a further cultural reference point.
- The design provides for 'rooms' of landscaping and spaces attached to buildings. These provide positive flexible and adaptable learning and play spaces. This is supported however, these could be further enhanced with additional landscaping, potentially unique to each cluster of spaces.
- The design could be marginally refined to provide for a more unified internalised outdoor central space around which buildings and other secondary spaces are clustered. This may mean a slight readjustment of the master plan / concept.
- The COLA roof-form is dominant and has a significant scale and clearance compared to other roofs. Subject to the intended use of space under the COLA, a refined roof design to meet the amenity and functional objectives should be considered.

Emailed commentary from the GANSW provided the following:
- Siting of buildings is logical and responsive to topography, access, neighbours and key views from and into the site
- Creation of a forum type space within a village or cluster arrangement of buildings is supported
- COLA space to north of hall/gym may need resolution and warrants a careful analysis of height and exposure to weather
- Explore arrangements to double storey learning clusters until optimum orientation, bulk and circulation performance is achieved – presentation scheme appeared overly busy in plan
- The team is strongly encouraged to consult with local indigenous groups regarding incorporation of indigenous stories into the landscape design and an integrated art strategy for the project
- We encourage the team to return for an internal GANSW review during the EIS Response to Submissions stage.
- Documents to reference: Better Placed, Greener Places, GANSW Design Guide for Schools

A follow-up meeting with key GANSW staff was requested on 27 March 2020 to address the above. A detailed letter of response was furnished to GANSW staff to confirm progress with the design based on the comments from the 20 March 2019 meeting. This included an updated Architectural Design Statement and selection of the current plans as well as a current Landscape Concept Plan. To date no further response has been received from GANSW.

Transport for NSW / RMS

The project's traffic and transport consultants, TTPP, have consulted with each of TfNSW and RMS in the preparation of its Traffic Impact Assessment and Green Travel Plan.

In general, matters raised by TfNSW / RMS included:

- The Castlereagh Highway and Lions Road intersection's levels of service and existing design;
- Ensuring at least a 10-year forecast analysis of intersection performance of classified roads within the school's catchment and strategies for any required upgrades to any such intersections or other related roadworks associated with the school's potential growth;
- Connectivity within the school's catchment of the school with active and public transport options and initiatives;
- Consideration of referral mechanisms under the Infrastructure SEPP in relation to classified roads;
- Traffic impact assessment of both construction and operational phases of the development;
- General commentary of a range of capacity, design, and circulation matters within the proposed school car park and drop-off / pick-up areas;
- End of trip facilities (lockers and secure bicycle storage) for students and staff;
- Access and manoeuvrability to and within the school's servicing area;
- Consideration of inclusion of shelters at the bus bays / bus stop;
- Any need for a school pedestrian crossing or refuge at Broadhead Road; and
- The current review of speed zones on both Broadhead and Bruce Roads.

These are variously addressed within the Traffic Impact Assessment, the Green Travel Plan, the EIS, and in other relevant plans or documentation appended to this EIS.

Mudgee Local Aboriginal Land Council

Early consultation was made with the Mudgee Local Aboriginal Land Council during project scoping and masterplanning. Principal to this consultation was developing an understanding and appreciation of any prior use or occupation of, or cultural connection with, the site.

Preliminary advice from the MLALC in the form of a Clearance Letter from 19 November 2018 was that *following an assessment of the proposed development area by our Cultural Heritage Officer and a review of other Aboriginal Cultural Heritage Assessments conducted in the vicinity we can advise you that whilst there are Aboriginal sites recorded nearby there are none identified as being potentially impacted by your development. However, when earthworks begin MLALC requests that a cultural officer from MLALC be present. As such the Mudgee Local Aboriginal Land Council has no problem with the development proceeding.*

Notwithstanding, formal consultation has continued during the ACHAR process. Under the ACHAR's consultation regime as set out in Section 3.0 of the ACHAR – see **Appendix K**, correspondence was sent on 9 January 2019 to relevant Aboriginal cultural heritage-related organisations requesting details of Aboriginal people who may hold cultural knowledge relevant to determining the Aboriginal significance of Aboriginal objects and/or places within the Mid-Western Regional Council LGA. Follow-up letters and/or emails were then sent on 22 January 2019 to all Aboriginal persons and organisations identified through responses from the agencies contacted. The letters provided details on the location and nature of the proposal, as well as an invitation to register as an Aboriginal stakeholder.

Additionally, an advertisement was placed in the Koori Mail and the Mudgee Guardian on 18 January 2019 and 30 January 2019, respectively, to similarly invite all Aboriginal persons and organisations who hold cultural knowledge relevant to determining the significance of Aboriginal objects and places in the study area to register their interest.

Following the completion of these steps, the following six Aboriginal stakeholders registered an interest in the project:

- Shaun Carroll — Merrigarn Indigenous Corporation
- Phil Khan — Kamilaroi Yankuntjatjara Working Group
- Debbie Foley — Murong Gialinga Aboriginal & Torres Strait Islander Corporation (Murong Gialinga)
- Lillie Carroll and Paul Boyd — Didge Ngunawal Clan
- Lance Syme — Warrabinga Native Title Claimants Aboriginal Corporation
- Maria Marsh

Mudgee LALC did not register their interest in the project directly but was included in stakeholder consultation as the study area is within its boundaries.

An archaeological survey of the site was undertaken on the 5 February 2019 with Troy Peterson (Mudgee LALC). The study area was not identified as containing specific cultural values during the survey.

Comments were received from Murong Gialinga who identified the site as being close to a culturally sensitive site. Murong Gialinga recommended a monitoring program be implemented during earth works due to the site's proximity to an area of cultural sensitivity. In addition, they requested to visit the site with an archaeologist to view a potential hammerstone which was previously identified within the site.

A site inspection was undertaken of the site with representatives of Murong Gialinga and Artefact Heritage on 2 April 2019. The potential hammerstone was relocated and recorded as Broadhead Road Isolated Find 01 (BR IF 01). This is located outside of the area subject to works under this DA. This is further discussed in the ACHAR and in this EIS.

Further follow-up meetings and project updates have also been provided to the key stakeholders under the ACHAR process.

The landscape design has also considered any relevant Aboriginal cultural reference points and consultation to this effect has also occurred on 16 July 2019. The landscape design has been refined and updated to provide for a yarning circle and commitment to utilise Country colours and art style reflective of the region as a response to discussion at the meeting held on 16 July 2019. No further correspondence has since been received from the Mudgee Local Aboriginal Land Council.

Community Engagement

Urbis has also been engaged to undertake a broader range of community consultation with respect to the project and proposed development. This has included targeted and indirect consultation with community, businesses, and affected residents.

Engagement has been with the following:

- Council staff, Mayor and Councillors;
- Federal Member for Calare;
- State Member for Dubbo;
- NSW Minister for Education;
- NSW Shadow Minister for Education;
- Parent, students, and teachers of the school;
- Direct near neighbours of the proposed school site; and
- General community members and stakeholders.

The method of engagement has been extensive and has included fact sheets and flyers, newsletters, emails, surveys, workshops and information sessions (prior to the current COVID-

19 circumstances), door-knock and letterbox drops, information stands in Mudgee town centre, dedicated project website, local media, and the like. It is proposed that engagement continue throughout the DA process.

7.0 ASSESSMENT

7.1 Compliance with Environmental Planning Instruments

Further to details already set out in Section 3.0 of this EIS, this subsection addresses the relevant provisions of the relevantly applicable Environmental Planning Instruments.

As noted earlier *State Environmental Planning Policy (State and Regional Development) 2011* identifies development that is State Significant Development (SSD). Clause 15(1) of Schedule 1 of the SEPP specifies certain development for the purpose of *development for the purpose of a new school (regardless of the capital investment value).* The project qualifies as a State Significant Development (SSD) by virtue of its status as a new school.

The Infrastructure SEPP is not further applicable, with the Education SEPP addressing or supplanting the otherwise relevant consideration of the development as Traffic Generating Development with lower thresholds – see below.

SEPP 55 is not applicable to the extent that a Detailed Site Investigation (see Section 2.7 and **Appendix G**) has found that the site is not contaminated and requires no further investigation. It has been deemed to be suitable for the proposed use.

The Rural Lands SEPP is not applicable as the development site is not State significant agricultural land. No other provisions of the SEPP apply to either the site or the development.

7.1.1 State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017

Aside from confirming that the development is permitted with consent via clause 35(1), and that *development consent may be granted for development for the purpose of a school that is State significant development even though the development would contravene a development standard imposed by this or any other environmental planning instrument under which the consent is granted* (under clause 42), no relevant planning controls or development standards apply to the site.

Clause 35(6) however requires the consent authority to take Schedule 4 of the SEPP into consideration as well as whether the development enables the use of school facilities (including recreational facilities) to be shared with the community. The Schedule 4 - Schools – Design Quality Principles are otherwise already addressed by this EIS in the Architectural Design Statement at **Appendix B** and in the Landscape Design Statement at **Appendix M**. The proposed development supports, and is consistent with, these design principles. Additionally, the school once constructed will cater for its facilities (including recreational facilities) to be shared with the community.

Clause 57 requires referral of the DA to the RMS for its consideration as the development involves a new premises with direct vehicular or pedestrian access to any road and will cater for more than 50 additional students at that site.

7.1.2 State Environmental Planning Policy No. 64 – Advertising & Signage

As noted previously, two (2) identical digital signage boards are proposed at the school frontages – one to Broadhead Road, and the other to Bruce Road, at the school's respective entrances in those locations. The digital signage boards are of a typical size and type as seen throughout NSW, and will sit on posts about 1m in height and be about 1m x 2m in area with the school's name and a LED display panel to present school-related messages. This is shown in the architectural plan set at **Appendix B**.

The SEPP only applies to signage that is not Exempt Development under any environmental planning instrument. The signage is considered to be Exempt Development under Schedule 1 of the Infrastructure SEPP as it is *Identification, directional, community information or safety signs but not including roof-top signs or commercial advertising or signs associated with the use of road infrastructure (including signs associated with level crossings).* The signs serve as community information to the general and school communities.

The development threshold criteria include the signs required to be no greater than 3.5m2 in surface area (which they are at 2m2 each) and are wholly located within the property boundary. They will also be able to meet the requirements of AS 4282–1997 *Control of the obtrusive effects of outdoor lighting*. There is no requirement controlling consideration of the LED display panel in this regard.

The signs are also not advertising as defined by SEPP 64.

Notwithstanding, consideration of clauses 8(a) and 8(b) has been undertaken. It should be noted that the signs are only a very minor and modest aspect to the overall development of the school, and assessment against SEPP 64 in isolation renders this a disproportionately significant component of the overall development.

Clause 8(a) requires that the signage is consistent with the objectives of the SEPP as set out in clause 3 (1) (a), and clause 8(b) requires that the signage satisfies the assessment criteria specified in Schedule 1.

Each are addressed in turn below.

Clause 3(1)(a) states:

(a) to ensure that signage (including advertising):
(i) is compatible with the desired amenity and visual character of an area, and
(ii) provides effective communication in suitable locations, and
(iii) is of high quality design and finish, …

The signage is modest (amplified by it being Exempt Development under the Infrastructure SEPP) and is compatible with the desired amenity and visual character of the area as it relates directly and solely to the operation of the proposed school, which is a permitted land use at the site.

The signs, whilst modest in scale and character, will provide effective communication of school-related news or information. The signs will complement and enhance the appreciation of the site as a school by being suitably located at site entries and at appropriately prominent locations which provide both an identity and address to the site.

The signs are typical of all other school community information signs across Sydney and NSW which are assumed to therefore be of an appropriately high quality design and finish. The signs will be sourced from a specialist school-related sign manufacturer.

Schedule 1 assessment is set out in the following table.

Provision	**Compliance / Commentary**
Schedule 1	
1 Character of the area • Is the proposal compatible with the existing or desired future character of the area or locality in which it is proposed to be located? • Is the proposal consistent with a particular theme for outdoor advertising in the area or locality?	As set out above, the proposal is compatible with the existing or desired future character of the area or locality in which it is proposed to be located.

	The proposal does not involve outdoor advertising and is for school identification and messages only.
2 Special areas • Does the proposal detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways, rural landscapes or residential areas?	The proposal is not in a special area and does not detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways, or rural landscapes. The area that the signage is to be located in is not a special area and the signage is consistent with its existing or desired future character as set out above.
3 Views and vistas • Does the proposal obscure or compromise important views? • Does the proposal dominate the skyline and reduce the quality of vistas? • Does the proposal respect the viewing rights of other advertisers?	The signage is modest in scale and shape. It is 2m2 in area and sits within the property boundary within a landscaped area addressing the street. The signage does not affect views or vistas, including any significant views or vistas. The signage does not affect views of skylines and is not in itself a sign to affect a skyline. The sign does not affect advertisers in the area.
4 Streetscape, setting or landscape • Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape? • Does the proposal contribute to the visual interest of the streetscape, setting or landscape? • Does the proposal reduce clutter by rationalising and simplifying existing advertising? • Does the proposal screen unsightliness? • Does the proposal protrude above buildings, structures or tree canopies in the area or locality? • Does the proposal require ongoing vegetation management?	The scale, proportion and form of the proposal is appropriate for the streetscape, setting and its landscaping. The sign contributes to the streets in principally distinguishing and identifying the school from other uses and providing an address and way finding for visitors and servicing of the site. It is in a standardised and contemporary design, and is of the type, colours and materials that sit compatibly with the use and context. The landscaping around the sign will be regularly managed.
5 Site and building • Is the proposal compatible with the scale, proportion and other characteristics of the site or building, or both, on which the proposed signage is to be located? • Does the proposal respect important features of the site or building, or both? • Does the proposal show innovation and imagination in its relationship to the site or building, or both?	As above, the sign is compatible with the proposed development, the site, and its use. It is appropriately scaled and provides a proportionate relationship between the street and the scale of the development.
6 Associated devices and logos with advertisements and advertising structures • Have any safety devices, platforms, lighting devices or logos been designed as an integral part of the signage or structure on which it is to be displayed?	The school logo and colouring is appropriately incorporated into the overall design of the sign. There is no advertising associated with the sign.
7 Illumination • Would illumination result in unacceptable glare? • Would illumination affect safety for pedestrians, vehicles or aircraft? • Would illumination detract from the amenity of any residence or other form of accommodation?	The sign is not illuminated and is of scale that would not affect traffic, pedestrians, or aircraft. The sign would be incidental in view and would not dominate.

• Can the intensity of the illumination be adjusted, if necessary? • Is the illumination subject to a curfew?	
8 Safety • Would the proposal reduce the safety for any public road? • Would the proposal reduce the safety for pedestrians or bicyclists? • Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas?	The sign is located away from key sightlines within the road reservation and is within the property boundary. The sign would not reduce any aspect of public safety.

7.1.3 State Environmental Planning Policy (Koala Habitat Protection) 2019

As set out in Section 3.2.9 of this EIS, the site is subject to clause 9 of the Koala Habitat Protection SEPP and an assessment against the draft Koala Habitat Protection Guideline is warranted to demonstrate that no impacts to koalas or koala habitat will arise as a result of the proposed development. The relevant assessment is set out below.

To recap, the mapped tree at **Figure 28** is Tree No 25 in the arborist's report and is identified as a *Eucalyptus nicholii* which is a mature specimen of about 7m in height, of medium retention value due to areas of fungal attack and dead wood, as well as it being heavily pruned due to overhead power lines. Nonetheless, the tree is proposed for retention with some remedial pruning of dead wood proposed.

This tree species is also not listed under Schedule 2 of the SEPP, in relation to being a koala feed tree endemic to the Northwest Slopes, and only occurs once in Schedule 2 in relation to the Northern Tablelands. Accordingly, the mapped and isolated tree within the development site is not a koala feed tree for the purposes of the SEPP and is unlikely to support koalas given its general location and condition.

The trees in the north-western corner of the overall site outside of the development site are listed in Schedule 2. This stand of trees is predominantly *eucalyptus microcarpa*, which is listed under Schedule 2. The BDAR Waiver documentation has identified these trees as predominantly *Eucalyptus albens x moluccana*. Again, these are listed under Schedule 2. Further, as cited earlier, a BDAR Waiver has been granted on the basis of the information set out in Section 2.9 of this EIS.

None of the vegetation on the site is likely to support endangered or threatened species, including koalas. Notably, within the Ecoplanning BDAR Waiver request report, there have been only 9 confirmed sightings of any koalas within a 10km radius of the site, the closest of which was 2.7km from the site, as last seen on 30 June 2006.

Again, this identifies the unlikely and rare occurrence of koalas at the site.

Tier 1 - Low or no direct impact development The Tier 1 process is for development which can be demonstrated to have low or no direct impact on koalas or koala habitat as follows:	
1. indirect impacts that will not result in clearing of native vegetation within koala habitat	No native vegetation is to be cleared that is identified or mapped as of relevance to protection of koala habitat.
2. the development is below the Biodiversity Offsets Scheme threshold under the BC Act	Yes, as per the BDAR assessment and waiver granted.
3. there is no native vegetation removal	The native vegetation to be removed under this DA is limited removal of 8 planted non-koala feed trees from this bioregion. The single mapped tree is retained under this DA. No works are proposed

	to the stand of trees in the north-western extremity of the site.
4. the development footprint will not impede movement between koala habitat	The site is not presently used by koalas given its cleared nature and is generally and variously described by the project ecologist as 'degraded' and 'disturbed' and incapable of providing any suitable habitat for threatened species. The development footprint therefore will not impede movement of koalas, which have also not been sighted near the site and also not within the last 14 years in that nearest location. The likelihood of any local community of koalas traversing the site would be remote given the lack of vegetation within, and further to the east of, the site.
5. adequate mitigation measures such as those listed in Table 1 below are implemented as necessary	See further table below.

List of suggested management measures to address key indirect impacts	
Impact Management measures	**Comment / Response**
Dog attack	
• Restrictions on the movement of dogs, including use of dog and koala proof fencing that effectively contains dogs and excludes koalas, with the provision of koala furniture that allows koalas to escape yards should they gain entry. • Signage and education. • Dogs excluded from koala habitat areas and only allowed off leash in areas established as not being habitat.	N/A to the proposed development. Given the school use, no new or additional dogs are likely to arise in the locality due to the development.
Vehicle strike	
• Traffic speed limited as far as possible. • Traffic calming measures and roadside lighting. • Use of koala proof exclusion fencing, with the provision of escape mechanisms should koalas gain access to the road. • Inclusion of koala land bridges and/or underpasses where appropriate and in combination with koala proof exclusion fencing.	The existing traffic speeds in the locality are generally low – as signposted as 50km/h. The speeds are likely to be reduced as a result of the school use and development at the site rather than increased. Road side lighting is proposed as set out in the Landscape Plans at Appendix M. Given the unlikely circumstances of koalas at the site, as set out above, koala land bridges and/or underpasses would be unnecessary.
Drowning in pools	
• Incorporation of features and koala furniture that allow koalas to escape from pools and the fenced area, such as a shallow ramp or thick, taut rope. • Use of pool fencing that effectively excludes koalas. • No structures near pool fences that allow koala to gain access over fencing.	N/A to the subject development. No swimming pools are proposed.
Bushfire	
• Development and implementation of a bushfire management plan with measures that specifically address risks to koala habitat.	The site is not subject to bushfire, with Broadhead and Bruce Roads accepted by

• Core koala habitat should not form part of the Asset Protection Zone (APZ). The APZ should occur beyond any koala habitat. • Develop an emergency response plan that identities key contacts in RFS, local wildlife carers and vets, and list of appropriate Government resources.	Council as suitable APZs for the school purpose. No new APZs are created by the development and so don't affect core koala habitat where they may occur. In the circumstances, an emergency response plan is not warranted.
Introduction or spread of disease	
• Use of biosecurity and hygiene procedures in instances where vegetation pathogens known to affect koala trees might be spread or introduced. For example, strict enforcement of vehicle wash-down points.	As above, given the proposed land use, its location, and the unlikely propensity for koalas in the locality and on the site, measures to limit or prevent the introduction or spread of disease appear superfluous.
Disturbance	
• Establishment of tree protection zones around any retained koala trees within the site area and preclusion of any development activities within the tree protection zones. • Habitat restoration and strategic plantings to improve connectivity of retained habitat and trees. • Where there may be indirect impacts on koala habitat, use of a suitably qualified koala spotter to inspect habitat prior to any development taking place. • Where koalas are identified, temporary suspension of works that might disturb the koala and/or prevent it from moving to adjacent undisturbed habitat of its own volition. • Koalas should be protected from disturbance and indirect impacts via appropriate exclusion fencing from urban areas and roads. • Fencing of urban areas should still allow for koalas to disperse through the koala habitat in the landscape and to connect with other koalas and koala colonies.	No development activities are proposed in the north-western portion of the site now or into the future. There is no habitat restoration opportunity at the site given the existing disturbed and degraded nature of the site. The Ecoplanning BDAR waiver documentation has already identified the site is being incapable of accommodating a range of threatened or vulnerable species. This included koalas, with specific comment having been made about the lack of koalas at the site and no recent sightings of koalas near the site. No works will affect koalas or koala habitat.
Impediments to movement	
• Retention of koala habitat corridors with the principle of minimising adverse impacts and retaining existing corridors. • Infrastructure or development to be designed in a way that is reliably known to not impede safe koala movement. For instance, overpasses or underpasses as part of road design. • Infrastructure or development to be designed in a way that facilitates koala • movement by incorporating retention and planting of koala trees, where it is safe to do so. For example, retaining and planting paddock trees, trees along • fencelines and remnant patches of bushland on properties. • In some instances, there may be a need to reduce koala movement into development areas where they are more at risk (e.g. through the use of exclusion fencing).	No koala habitat corridors occur at the site. Notwithstanding the design of the development would not impede any movement of koalas given its location to the south and street edges addressing the Broadhead and Bruce Roads intersection.

As the development can satisfy all requirements of Tier 1 Development, it is identified as being of no or low impact to koalas.

7.1.4 Mid-Western Regional Local Environmental Plan 2012

The development site is zoned RU4 Primary Production Small Lots and development for the purpose of an *educational establishment* is permitted with consent in the zone via its status as an innominate use. The proposed development, therefore, is permissible under the LEP.

No principal development standards apply to the RU4 zone and this site, or type of development, under the LEP. Only additional local provisions related to salinity or groundwater protection are of relevance. The geotechnical investigations and detailed site investigations of Martens (see **Appendices F** and **G**) indicate that the site is unlikely to contain groundwater or be affected by soil salinity.

In sum, the proposal complies with all relevant provisions of the LEP.

7.2 Contributions

General

Section 94 and section 94A Contributions (now known as section 7.11 and section 7.12 contributions, respectively) apply to the development, unless exempted or excluded by the *Mid-Western Regional Contributions Plan 2019*. Alternatively, a works in kind agreement entered into between the developer and the Council will also serve to offset the need for a monetary contribution.

This newly adopted Plan has replaced and repealed Council's prior Section 94 Plan 2005-2021 and Section 94A Plan 2005-2021.

Section 64 and Section 306 water utilities and stormwater services levies also apply, unless exempted or excluded by either or both of the Council's Development Servicing Plans for Water Supply and for Sewerage, respectively.

Mid-Western Regional Contributions Plan 2019

Council's current Contributions Plan 2019 was adopted in mid-2019 and provides for an updated contributions regime arising from the need to review the prior section 94 and section 94A plans. The Plan applies to both residential and non-residential development throughout the Local Government Area (LGA).

Section 2.7 of the Plan sets out exemptions from the payment of contributions under the Plan. Unlike the prior section 94 or section 94A plans, no discretion to waive or exclude contributions exists. Educational Establishments (despite their social infrastructure dimensions) are exclusively included as a development type under Council's contributions regime required to pay contributions. The only relevant exemption applicable is for a public authority. The applicant is not a public authority for the purposes of Part 4 of the EP&A Act. Further, no Section 7.17 Minister for Planning Direction exists in relation to exempting or excluding (private) school projects from contributions.

It is also noted that no exemption applies for registered charities or not-for-profit organisations, such as the Trustees of the Roman Catholic Church for the Diocese of Bathurst, as may ordinarily be the case across many other localities within NSW.

Under the Plan, the school would be levied a fixed contribution of 1% of its development cost where this exceeds $200,000. Effectively, this would be a contribution of about $362,000

without consideration of the project's contribution to the community and other physical works carried out that would support the community beyond only those with a direct nexus to the school.

The Plan is founded on expected population growth, particularly in relation to new dwellings and housing demand. This is expected to require augmentation of, or provision of new, social and civic services.

Non-residential development growth is identified by the Plan as contributing to the demand for improved civic amenity and parking facilities in the town centres, in particular, as well as other traffic and drainage infrastructure.

Broadly, the Plan states that contributions are required for the provision of local infrastructure in Mudgee, including:

- Transport works such as sealed rural and urban roads, pedestrian access facilities and a footbridge;
- Recreation and open space facilities, including Glen Willow Regional Sports Complex Stage 2, walkways, park field lighting, a water park, pool cover, adventure playground, other playground work, public toilets and lane lighting;
- Community facilities including a regional art gallery, showground facilities, public artwork, preschool and library resources; and
- New drainage works.

The proposed development involves only an enlargement, expansion or intensification of a current land use and its school population, albeit in a new location. Whilst being a new school, the new burden it generates upon Council's services and infrastructure is one of a modest net gain that is also only realised progressively over an extended period of time as Mudgee's population itself grows. The current DA is principally generated by a lack of current space at the existing school site. The net growth in the school is directly reflected in (and serves as a function of) other net growth in Mudgee and the region otherwise already captured by development contributions for new (residential) development.

That is, any contribution (should one be deemed appropriate or relevant) should be reflective of the new demand for services and infrastructure that it creates, as opposed to a blanket 1% contribution, that by some measure duplicates contributions already realised by other development.

Council has previously indicated that it does not require any new open space that may arise from the development, stating open space and playing fields within Mudgee are plentiful. The school in itself will also be providing new community facilities which be able to be used by the community after-hours and on weekends.

The tangible contributions that the site and the development makes relates to the prior use of the site for wider drainage and sewer upgrades to this part of Mudgee, as well as those proposed under this DA which include:

- Significant upgrades to stormwater drainage and flood management upstream and within the site to benefit downstream land;
- Localised road upgrades that also benefit existing and future development at and around the school;
- Enhanced localised access / footpath upgrades.

Section 4.4.1 of the Plan indicates that if a works in kind agreement is entered into between the developer and the Council, the 1% contribution would not apply. The applicant is willing to explore alternatives to the flat 1% contribution, understanding the Minister in granting consent may determine a lower contribution rate which is reflective of the circumstances of the case and applying the 'reasonableness' test or even exempt the need for a contribution. A justification is set out further below.

Section 64 and Section 306

Council's Section 64 and Section 306 water utilities and stormwater services levies both identically enable exemption from payments where it can be demonstrated and justified that the development is by a non-profit and charitable organisation and the development will make a significant and positive contribution to the community. See below with our emphasis:

> *Mid-Western Regional Council may waive Developer Charges ordinarily attributable to subdivision and development, where the proponent demonstrates to Mid-Western Regional Council's satisfaction that it is a* ***non-profit and charitable organisation****,* ***which by virtue of carrying out such development****,* ***is considered*** *by the Mid-Western Regional Council* ***to be making a significant and positive contribution to the community***.

In this instance it can be demonstrated by the below listed points that exemption from payment would be applicable, due to:

- The applicant's not for profit status and ATO registered charity status (see **Appendix U**);
- The social infrastructure nature of the project;
- The applicant not being transient, but remaining within Mudgee's community and contributing to the ongoing development and welfare of the wider community and the town and region as exemplified by the current DA to maintain and enhance its services;
- The long-standing and positive contribution St Matthews Catholic College has made and will continue to make to the community and fabric of Mudgee; and
- The non-monetary and works-in-kind contributions that could be made or realised by the project, include roadworks, and significant stormwater works at the site and its boundary, as well as access to the school's hall and facilities and the like by the wider community.

Further, based on discussions with Council and information from Triaxial on the recent sewer works at the site, it is understood there would be sufficient capacity within Council's sewer and stormwater systems to cater for the development without further augmentation works. The tipping point for new works to these systems would not arise from this development, rather later residential redevelopment of the areas in and around the school site.

Council's position

The applicant's consultant team met with Council on 16 July 2019 on to discuss the application of an exemption from contributions. Council generally indicated that its position was as follows:

- There is a mandatory and expected payment of 1% of the Capital Investment Value (CIV) to a range of works of Council's choosing and having no direct relationship to the site (Section 7.12);
- A repayment / compensation on a proportionate basis to the developer to the school site's south is expected through Council's Section 64/306 levies for the excess sewer and water infrastructure that this developer has installed from which the school would benefit, alongside upgrading infrastructure to a level commensurate with the project's need, if and as required (Section 64 and Section 306);
- Whilst the proposed stormwater works appear suitable, again the developer to the south has paid for and undertaken these works through the school site to a mutual

benefit of both the school and developer, so a proportionate contribution for repayment of this infrastructure is warranted (Section 64 and Section 306);
- Provision of a footpath, road widening, and new roadworks at and around the site's perimeter is expected, noting none of this can be offset as part of a works in kind agreement, as Council has not scheduled or mapped any of these works in its contributions or delivery plans. (It is however worth noting Council is accepting of non-contiguous and out of sequence developments (including that significantly further south of the school site) and would otherwise require compensation to developers of non-contiguous lands that have developed outside mapped or scheduled development areas); and
- The social infrastructure nature and not for profit status of the school and the applicant makes no difference to Council.

Conclusion / Justification
Based on Council's current contributions and servicing plans it would be anticipated that no contributions or levies will be applicable to this project from a water supply or sewerage servicing perspective as the developer and development meets to exemption criteria and the development in itself generates no new hydraulic services demands of itself, whilst providing for significant drainage infrastructure improvements that benefit lands outside of the school alone.

Whilst the current Contributions Plan would require a 1% levy, without any option for exemption, offsets for directly-related works in kind may however apply through a works in kind agreement, or otherwise directly through a condition of consent imposed by the Department of Planning under this SSD DA. As noted, the school would not itself be a generator of new social infrastructure demand, rather it serves a population growth that would otherwise already be levied by Council through other (residential) developments as they arise. In effect, to seek contributions from the school would be to duplicate contributions already collected.

St Matthews Catholic College is a long-standing and essential piece of the community and social infrastructure in Mudgee for over 100 years. The school is well embedded in the fabric of Mudgee and its ongoing and growing community relationship will be strengthened by the project and the relocation which is required to support the school and community's growth.

Furthermore, as noted, CEBD is a registered charity under the ATO. Its not-for-profit status should be recognised as part of the decision-making process as to whether any contributions should be exempted (where they may apply) and the merits and circumstances of the case.

7.3 Crime Prevention through Environmental Design

Crime Prevention through Environmental Design (CPTED) is a crime prevention strategy that focuses on the planning, design and structure of cities and neighbourhoods. It reduces opportunities for crime by using design and place management principles that reduce the likelihood of essential crime ingredients (law, offender, victim or target, opportunity) from intersecting in time and space (source: NSW Police – Safer by Design).

Based on information made available on the NSW Bureau of Crime Statistics and Research (BOCSAR) webpage, Spring Flat / Mudgee is generally identified as being subject to low levels of crime and anti-social behaviour. In summary, BOCSAR's 2019 rating for different types of crime at Spring Flat / Mudgee (postcode 2850) is:

- Assault - Low
- Homicide - Very Low
- Robbery - Very Low
- Sexual Offences - Medium
- Theft - Very Low
- Malicious Damage to property - Medium

- Disorderly Conduct - Medium
- Drug Offences - Low
- Other Offences - Low
- Offences at schools and involving children or juveniles - Low.

In general, the Mudgee postcode would not be considered to be a high or very-high risk area under any measure of crime. Broadly it is a low risk area.

The relevant CPTED Principles under the NSW Police Safer by Design guidelines are:

- Territorial Re-enforcement
- Surveillance
- Access Control
- Space/Activity Management

These principles are addressed in turn below and in the CPTED section of the Architectural Design Report at **Appendix B**.

Territorial Reinforcement
The new school will be identifiable as a school with a distinct religious character and signage. As the site is remote from neighbours, Neighbourhood Watch is limited. Perimeter fencing shall secure the site, with lockable gates to control access. The school community has pride in the site and the presentation of the building. A generous setback at the corner of Bruce and Broadhead Roads will be appropriately landscaped to visually reinforce this pride in site. Availability for after-hours use of facilities by others members of the community will be available to bolster the inclusiveness of the new school in the community. Lighting within the school will promote territorial reinforcement.

Surveillance
As a school building, a key consideration is the supervision of students and passive surveillance to ensure safety and security of users. The building spaces have been designed with high transparency to allow students and staff to look into and through spaces. Visual obstructions are minimised and paths of travel made obvious and clear. Vegetation is designed to be either prostrate or higher to minimise concealment. After hours surveillance will be enhanced by the installation of a CCTV monitoring system. However, as also noted in the BOCSAR webpage and its Crime Mapping Tool, the 2019 statistics reveal that the Mudgee postcode (2850) is not considered to be a high or very high-risk area under any measure of crime. Broadly it is a low risk area.

Access Control
Perimeter fencing and lockable gates will control the access points to the site. Buildings which provide after-hours access are located near and are visible from the car park. The site fencing and building design allows the for separation of users and maintains contained/controlled access points access. Visitors to the site during school hours will only have access to the main entrance in the Administration Building – Professional Hub A. Other access to the school facilities during school hours will then be supervised. Main doorways to each of the Hubs will have access control cards so that the identity of all users can be monitored as required. Lockable internal doors will be master keyed with a hierarchical keying system giving access only to rooms that the person authorised with a key will have access.

Space and Activity Management
During school hours, staff patrol and passive surveillance adequately supervise the site access points and student access areas. CCTV provides localised vision after-hours to key site access areas and any potential surveillance weak spots.

7.4 Traffic and Parking

TTPP has prepared a Traffic, Parking and Transport Impact Assessment for the proposed development which addresses amongst other things the traffic generation of the development, its impacts on adjacent and nearby intersections, and construction traffic management. A separate Green Travel Plan has also been prepared. The TTPP reports can be found at **Appendix C**.

Construction Traffic and Operational Traffic matters are discussed in the sub-sections below.

7.4.1 Construction Traffic Management

Construction works for the proposal are expected to commence in June 2021 and take place over approximately 17 months. The planned construction staging, indicative dates and duration of works is:

- Site establishment 1 week
- Excavation 3 months
- Construction 6 months
- Fit out, finishing, and commissioning 9 months
- External works and civil works (6 months within the same 9 months for fit out)

For the duration of the works the activities likely to generate large vehicle movements include bulk excavation works associated with the grading and formation of the site, concrete pours, and deliveries of materials and pre-fabricated elements associated with the construction of the school.

Construction parking
Notably, there is ample space on-site to fully accommodate all parking demand associated with construction workers and sub-contractors within the boundary of the site. Parking on-street would not be permitted, nor would it be required. Of relevance, and again based on ample space on-site, no works zone will be necessitated on either of the site's road frontages.

Construction vehicle routes
Construction vehicles would generally have origins and destinations throughout the Mid-Western Region. To minimise the impact of construction traffic on local streets, dedicated construction routes will be developed to provide the shortest distances to/from the arterial road network.

The construction vehicle routes to and from the site are likely to be made via Castlereagh Highway and Bruce Road. Construction vehicles would travel northbound or southbound on Castlereagh Highway and turn onto Bruce Road and travel westbound towards the site. From Bruce Road vehicles would turn right to enter the site and turn left to exit the site back onto Bruce Road. When leaving the site vehicles would travel eastbound towards Castlereagh Highway.

Construction traffic generation
Typical construction activities are anticipated to generate up to 60 vehicle trips per day. Based on an 11-hour working day, this would equate to an average of six vehicle trips in an hour. During the peak construction period, it is anticipated that there would be up to 200 two-way vehicle movements per day or 20 vehicles per hour. Such vehicle movements are only anticipated on days of concrete pours due to the delivery of concrete. Pour volumes have yet to be determined however it is expected that there would be less than 20 major concrete pours on-site during the structural phase.

Peak construction vehicle movements would occur outside commuter peak periods to minimise the traffic impact and delay to the road network.

Construction Traffic Management Plan
A site-specific Construction Traffic Management Plan is to be submitted to TfNSW and Mid-Western Regional Council to appropriately detail the staging, timing and activities during the construction phase, indicate the designated haul routes, explain traffic control measures to be implemented at the site and assess the construction traffic volumes.

7.4.2 Existing traffic volumes and mode share of existing students and staff

The existing traffic volumes at and around the site were surveyed by TTPP in February 2019 in typical weekday and non-school holiday circumstances. The surveys considered a range of seven localised intersections from which access to the site is gained. These are:

- Castlereagh Highway/ Lions Drive/ Burrundulla Road;
- Bruce Road/ Robertson Street;
- Lions Drive/ Robertson Street;
- Broadhead Road/ Bruce Road;
- Broadhead Road/ Lions Drive;
- Spring Flat Road/ Bruce Road; and
- Spring Flat Road/ Castlereagh Highway.

All intersections presently operate at a level of service of 'A" in both the AM and PM peak periods. Only the Castlereagh Highway/ Lions Drive/ Burrundulla Road intersection operates at a level of service of 'B' – which is only during the AM peak, otherwise it also operates at an 'A'. Overall, the existing road network surrounding the subject site operates well, with ample spare capacity.

The existing mode share of students and staff at the Lewis Street, Mudgee school site is as follows based on 373 existing students and 44 existing staff (2019). The majority of students are driven to school by a parent (41.0%). Some students drive themselves to school, presumably students in Years 11 and 12 (9.1%) while some are driven by a peer (2.3%). Students travelling to school by bus make up 33.6%. Students who walk or cycle to school make up 9.8% and 4.2% of the population, respectively. Staff predominately commute to school by car (81.6%). Some staff car-pooled with another staff member (5.3%). The remaining mode share is evenly proportioned with 2.6% of staff being dropped-off by their spouse/other, caught the bus, walked or cycled to school.

7.4.3 Operational Traffic Management

Traffic Generation
Based on recently devised RMS average vehicle trip rates for high schools in regional areas of:

- AM peak period – 0.35 trips per student, and
- PM peak period – 0.24 trips per student.

Adopting these rates, the proposed development would be expected to generate:

- 238 vehicle trips in the AM peak period, and
- 163 vehicle trips in the PM peak period.

As a check, TTPP has compared the above trip generation estimates against trip generation rates calculated on a first principles basis, namely, the number of car parking spaces proposed at the future site. Trip generation estimates based on first principles are described below.

Future trip generation has been estimated based on mode share data gathered by TTPP for current high school students and staff. TTPP has estimated that trip generation during school peak periods would comprise the following:

- 175 parents' car transporting students to/ from school (subject to adoption of targets in the Green Travel Plan),
- 59 staff driving and parking at the school, and
- 20 senior students driving and parking at the school.

Data gathered by TTPP in early 2019 at a similar high school suggests that typical arrival and departure trends for staff and students occur as follows:

- AM Peak:
  - Staff trips – 80% of trips occur in the peak
  - Student trips – 90% of trips occur in the peak.
- PM Peak:
  - Staff trips – 10% occur in the peak
  - Student trips – 100% of all trips occur in the peak.

Based on this the following table (derived from Table 8.1 of the TTPP report) sets out the Peak Vehicle Trips.

Peak Period	Peak Period Vehicle Trips				RMS Rates
	Staff (59)	Senior Students (20)	Students dropped off / picked up (175)	Total	
AM	47	18	157.5x2=315	380	238
PM	6	20	175x2=350	376	163

TTPP has applied the higher, more conservative trip generation estimates of 380 AM peak and 376 PM peak trips.

Traffic Distribution

Traffic generated by the proposed school has been distributed based on the location of high school students' place of residence. Residences are generally concentrated within the Mudgee township and to the north-west of the subject site. Trip distribution based on current data is shown in Figure 8.1 of the TTPP report as well as **Figure 37** below.

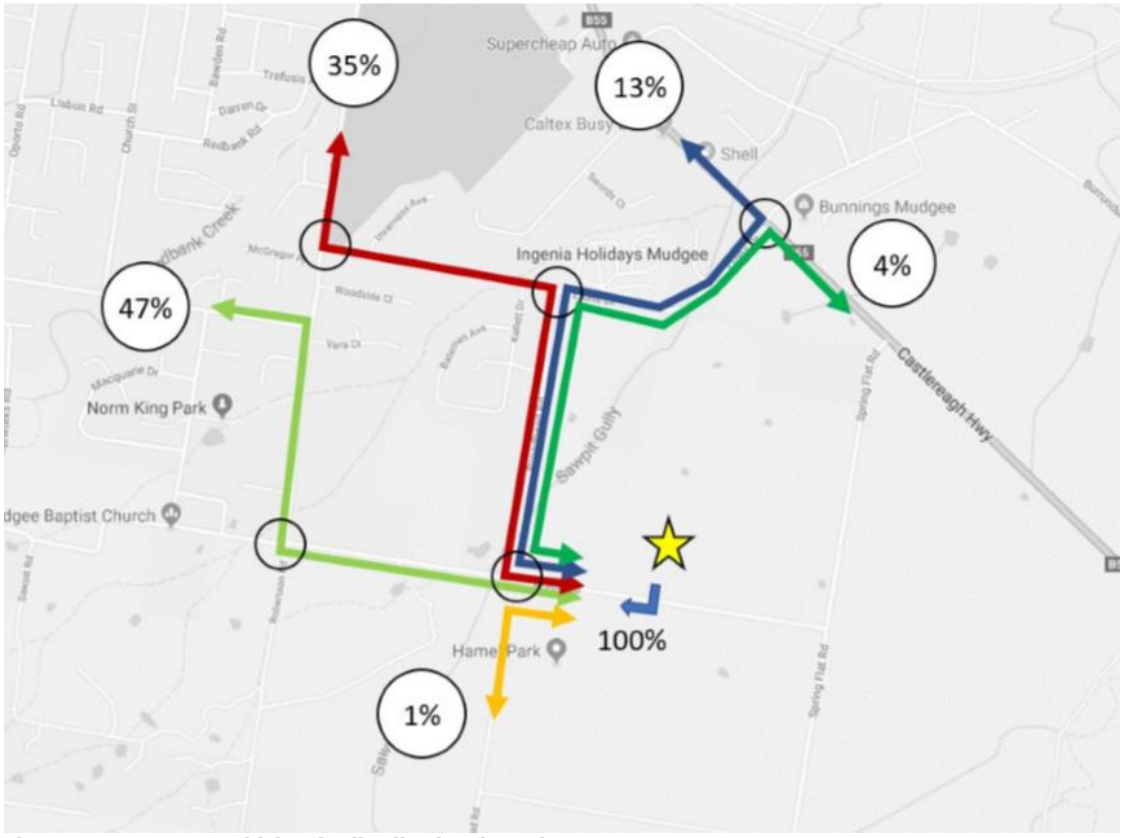

Figure 37 – Current vehicle trip distribution (TTPP)

TTPP reports that Ratio Consultants Pty Ltd (on behalf of Mid-Western Regional Council) prepared the Population Projections Review (2005-2031) Report (dated October 2005) which states population growth rates in the Mudgee township. It has estimated a population growth rate of 2.0% per annum (p.a.) between 2011-2016 based on census data, and projects a growth rate of 1.4% p.a. between 2016-2031.
It is appreciated that there is likely to be future residential development across surrounding vacant lots with other progressive growth in Mudgee towards its south and near the school site. Adopting a conservative growth rate, a trip proportion of 2.0% has been applied to streets which lead to the south-west. Having consideration of this, future trip distribution through the local road network is estimated as per Figure 8.2 in the TTPP report and in **Figure 38** below.

One of Council's concerns was to seek to avoid vehicle trips over existing unsealed roads and managing trips towards sealed roads around the school. The overwhelming preference was that vehicle trips to and from the school would be directed towards Broadhead Road and to the road network to west of the school. This would also avoid not only sections of unsealed road but intersections with the Castlereagh Highway.

As seen from **Figures 37** and **38**, the vast majority of movements are expected to be to the west (77%-82%), with no future movements coming and going via the unsealed section of Bruce Road, arising from management of vehicles movements through driver education via the school and signage .

Of perceived traffic risks at intersections with the Castlereagh Highway, a relatively minor 17-18% of trips will rely on access via the highway. TTPP has also reviewed its site notes and traffic camera footage for issues regarding unsafe gaps in traffic flows, near-misses and the like. In the peak periods, all turning movements are operating well with there being frequent gaps in the major traffic stream for turning manoeuvres to occur. Overall, there are no capacity and safety issues at the Castlereagh Highway intersections.

Crash data for the past 5 years secured by TTPP for the Castlereagh Highway, Lions Drive, Robertson Street, Bruce Road, Spring Flat Road and Broadhead Road area indicates only one non-casualty (tow away) incident occurred. This involved a hit animal in June 2016, further signifying that no intersection issues arise. No other incidents were reported, including any involving fatalities or any injuries.

Overall, the proposed development is not expected to cause any noticeable impacts on the performance and safety of the local road network. Delays to vehicles travelling on the surrounding network would be minor and would not cause any noticeable impacts on the road network performance.

Figure 38 – Future vehicle trip distribution (TTPP)

Traffic Impacts and Intersection Performance

TTPP has undertaken SIDRA modelling to assess traffic impacts upon, and the performance of, seven intersections during the AM and PM peaks surrounding the site. Five scenarios have been considered:

- Scenario 0 (S0) – Existing Conditions ("Base Case") which is based on 2019 traffic data.
- Scenario 1 (S1) – Future Case Without Development Traffic, which considers 2.0% per annum background growth in Mudgee up to year 2026 (refer Section 8.3).
- Scenario 2 (S2) - Future Case With Development Traffic, which considers Scenario 1 plus traffic generation associated with the future high school.
- Scenario 3 (S3) – Future Case + 10 Years Without Development Traffic, which considers 2.0% per annum background growth in Mudgee up to year 2036 (refer Section 8.3).
- Scenario 4 (S4) – Future Case + 10 Years With Development Traffic, considers Scenario 3 plus traffic generation associated with the future high school.

The summarised results of the SIDRA modelling are expressed below (based on Tables 8.2 to 8.6 of the TTPP report).

The results effectively show that:

- Under Scenario 1 all intersections still operate at a level of service of 'A' in both the AM and PM peak, and the Castlereagh Highway/ Lions Drive/ Burrundulla Road intersection will also continue to operate at a level of service of 'B' in the AM peak and drop for 'A' to 'B' in the PM peak. This remains a good level of service;
- In adding the school's traffic generation to Scenario 1 (thereby creating Scenario 2), the same outcomes result for all intersection as for Scenario 1.

- Adding a further 10 years' growth (to 2036) still results in the same outcomes for Scenarios 3 and 4.

Whilst additional marginal delays result at intersections, none lose their various 'A' and 'B' level of service ratings. The full results are detailed in the TTPP report at **Appendix C**.

Further detailed SIDRA modelling results for Scenario 4 indicate that the average delay and queue length for the right turn movement from Castlereagh Highway to Lions Drive would remain unchanged. Notwithstanding this, it is also understood that the Bunnings Warehouse Mudgee is seeking to relocate to the south side of Castlereagh Highway. As such, relocation of the Bunnings site may impact the future operation of the nearby intersection. However, the extent of the impact would not be known until a traffic impact assessment for the development is completed by the proponent.

7.4.4 Parking

The proposed number of parking spaces is 75 spaces within an on-grade car park. This will serve staff, students and visitors and include 2 accessible spaces. A 12-bay student drop-off and pick-up area is also proposed along with a three-bay bus bay.

The car parking provision is based on Council's DCP which states that the car parking for educational establishments shall be:

- Provision for at least three (3) parking spaces for buses, plus
- Adequate pick-up space, plus
- 1 space per 30 m2 GFA of "shop" area, plus
- 1 space per staff member, plus
- 1 space per 10 senior students (Year 11 and up).

The bus bay requirement has been met by the proposed design, which has involved discussions with both Council and Ogden's – the local bus service provider, including for the existing school site.

Based on the maximum assumed number of school students at the site (680) and the likely ongoing mode share for pick-up and drop off (41%), some 279 students would be transported to/from school by a parent / carer. A car occupancy rate of 1.4 students has been deduced from the questionnaire conducted by TTPP. This results in 199 cars to the school site in the AM and PM peak periods.

It is proposed to provide 12 bays within the kiss and ride zone which would be used by parents / carers to drop-off and pick-up students. On the basis of a standing duration of one-minute per vehicle, each bay could accommodate 15 cars in a 15-minute period. Therefore, the 12 bays could accommodate a total of 180 cars in a 15-minute period. The peak number of cars estimated to pick-up students is expected to be in the order of 140 cars (70% of total cars). Furthermore, there is 50 m of aisle length on approach to the kiss and ride zone which could accommodate an additional 7-8 cars within the site. The 12 bays is assumed to adequately cater for demand in both the AM and PM peaks.

With respect to 'shop' parking, as part of the development it is proposed to provide a canteen with a gross floor area (GFA) of 50 m2. On this basis, one parking space would be provided for use by a canteen assistant. This again meets Council's DCP requirement.

Based on an assumed maximum number of full-time staff of 59 by 2026, there would be a requirement to provide 59 staff car parking spaces on-site. The DCP requirement has been satisfied in this regard.

Estimates predict some 100 Year 11 students and some 100 Year 12 students at the school by 2026. To that end 20 car parking spaces are provided for senior students consistent with the DCP rate of 10%.

Collectively, the DCP would require that 80 car parking spaces is provided on-site and allocated for staff (59), the shop assistant (1) and senior students (20). Notwithstanding this, it is also noted that the DCP advises that parking provision be based on the net increase in demand for parking created by a development. As such, the car parking requirements for future development have also been assessed using a first principles approach.

TTP has adopted a first principles approach to rationalising the parking. The proportion of staff who drive and park at school comprises those who commute alone (81.6%) and those who car-pool with a colleague as the driver (5.3%). This equates to 86.8% of future staff would require a parking space, i.e.: 86.8% x 59 staff = 51 car parking spaces.

Of all high school students, 9.1% identify as driving and parking at school. This equates to: 9.1% x 200 senior students = 18 car parking spaces.

Based on mode share of existing high school students and staff, the new high school would require 69 on-site car parking spaces to accommodate future parking demand. Therefore, provision of 75 car parking spaces at the future high school campus is deemed sufficient and would not result in the need for on-street parking. This also caters for visitor parking during the day (a component not required or considered by Council's DCP).

The First Principles method of estimating the site-generated parking demand is considered to be more accurate compared to Council's DCP parking rates on the basis that estimates are based on actual data from the existing school. For this reason, the 75 car parking spaces which are proposed on-site would sufficiently accommodate the future parking demand of the new high school and is considered acceptable.

7.4.5 Proposed roadworks

The proposed roadworks are as described in Section 4.6 and as shown in **Figure 35** of this EIS. These include:

- Roadworks to Broadhead Road and Bruce Road to the full extent of the site frontages;
- Roadworks to the Broadhead Road and Bruce Road intersection to cater for bus movements; and
- Footpath along the site frontage of Broadhead Road and suitable pedestrian crossing to connect to existing footpath.

The roadworks are consistent with the rural setting of the school and maintain the use of table drains in lieu of kerb and guttering on either side of both roads.

More specifically, the road upgrades would involve road sealing and widening to accommodate one traffic lane in each direction. Traffic lanes would have a width of 3.5 m (minimum) and the overall carriageway width would be 9 m.

The extent of the proposed upgrades on Broadhead Road, north of Bruce Road, would be up to the recently completed section of road near No. 38 Broadhead Road which measures approximately 400 m long. On Bruce Road, east of Broadhead Road, the extent of proposed works would be up to the school property frontage. The carriageway width east of the bus bay egress driveway would transition from 9 m to 6 m over a transition length of 50 m.

The intersection of Broadhead Road and Bruce Road would be widened in accordance to permit the swept path of a bus turning left from Broadhead Road to Bruce Road.

7.4.6 Green Travel Plan

A Green Travel Plan (GTP) is included as part of **Appendix C** and operates as a strategy to be further devised to encourage travel to and from the school campus using transport modes that have low environmental impacts, for example active transport modes including walking, cycling, public transport, and which encourages better management of car use.

Active transport presents a number of interrelated benefits including:

- improved personal health benefits;
- reduced traffic congestion, noise and air pollution caused by motor vehicles;
- greater social connections within communities; and
- cost savings to the economy and individual.

The following objectives have been identified in order to facilitate a modal shift towards more sustainable transport modes to achieve the vision of the GTP:

- Improve access, safety, amenity and convenience of sustainable transport modes for travel to/from the campus;
- Establish a culture of active and public transport use by incentivising sustainable transport modes;
- Achieve modal shift away from car usage by limiting car parking provision to an amount that is required on a daily basis (i.e not providing an oversupply); and
- Maximise use of proposed bus infrastructure (e.g. bus bay) to support modal shift away from car usage.

Based on a survey and review of existing travel characteristics of the school community, there is a high dependency upon car use for both staff and students. The collected data suggests that there is an opportunity to increase bus travel, walking and cycling. Providing parking to an amount which is required on a daily basis (i.e. not providing an oversupply) would form one of the key drivers to discourage car travel and generate a modal shift away from car trips towards greater use of public transport and active travel.

The aim of the GTP is to encourage modal shift away from private vehicles by implementing measures that influence the travel patterns of staff and students. To ensure that the GTP is having the desired effect, the implementation of the GTP would be regularly monitored. The success of the GTP is measured by setting modal share targets and identifying the measures and actions that have the greatest impact.

The mode share targets set for the commencement of operations at the school are set out in Table 4.2 of the GTP and as replicated below.

Mode Share	Staff Existing	Staff Target	Students Existing	Students Target
Private Car	92%	87%-89%	52%	47%-49%
Public Transport	3%	5%-6%	34%	37%-40%
Active Travel	5%	6%-7%	14%	15-16%
TOTAL	**100%**	**100%**	**100%**	**100%**

TTPP has set out detailed methods of encouraging modal shirt away from cars – see Section 5 of the GTP. These include site-related measures, off-site measures, development of a transport access guide, and information and communication.

The site-related measures include:

- Managing on-site car parking provision;
- Suitable and sufficient bicycle parking facilities;
- Encouraging walking groups;
- Encouraging bicycle user groups;
- Effective use of school notice boards;

- Provision of end of trip facilities;
- School uniform options;
- Public Transport incentives and discounts;
- Interest free loan scheme for travel by bus, rail and bicycle;
- Car share scheme; and
- Online car sharing forum / mobile app.

The off-site measures include:

- Investigations with Mid-Western Regional Council to provide walking and bicycle routes that would be utilised by the school as well as future developments in the vicinity, and
- Provision of signage to improve walking and cycling experience. Signage would include way finding for bicycle riders on the best and safest route to the new school site.

An Action Plan and a Management and Monitoring regime has been developed by TTPP to assist in facilitating the recommended outcomes.

7.5 Ecologically Sustainable Development

An ESD report prepared by Cundall assessing the proposed development's performance against all relevant requirements accompanies this EIS at **Appendix N**.

As noted in earlier sections, the development will be constructed to a standard equivalent to a 4-star Green Star Design & As Built v1.3 rating - Industry Best Practice, but the actual GBCA full certification will not be sought. At this stage, the development is able to achieve a minimum of 45 credit points (the required target for 4-star Green Star) and potentially up to 50 credit points based on Cundall's review. A detailed review of the checklist is included in Cundall's ESD report which accompanies this EIS at **Appendix N**.

Further, the Building Services Report by Calibre (at **Appendix D**) includes such measures as:

- It is proposed to install roof-top photovoltaic systems on Blocks C and E on the site.
- In terms of domestic water supply test results indicate that the proposed development can be serviced without the requirement for on-site booster pumps or water storage.
- The hot water system shall be designed to the most economical energy efficient for its use and peak demand requirements, complying with AS/NZS 3500.1 & 4 and local authority requirements.
- It is proposed that above ground rainwater tanks shall be installed adjacent to the toilet areas of the relevant buildings, to harvest rainwater from the roof catchment, and re-use it for toilet flushing. The rainwater tanks shall be sized based on the available roof catchment area, and calculated rainwater collection versus the usage within the building.
- The rainwater re-use shall have a mains water by-pass system that will switch to mains potable water supply in the event of the rainwater tanks being empty.
- Water efficient fixtures and fittings are to be selected using the Water Efficiency Labelling and Standards (WELS) scheme.

To address the CSIRO projected impacts of climate change, the design of the development responds based on the following anticipated changes in forthcoming decades.

NSW Climate Projections Map for 2060-2079 indicates for the Mudgee and surrounding areas:

- By 2030 maximum temperatures are projected to rise by 0.7°C and continue to rise by 2.1° by 2070;
- Rainfall is projected to increase by 5-10% during Autumn and decline in Spring;
- Severe fire weather is projected to increase during Spring and Summer;
- By 2030 an average of 9 more days is are expected above 35°C per year and continue to rise to 27 days per year by 2070; and

- By 2030 an average of 8 fewer nights are expected below 2°C per year and continue to decrease by 23 nights per year by 2070.

The project design's general philosophy has been founded on the consideration of site contextual and climatic concerns. These include solar orientation and access, overshadowing, prevailing seasonal winds patterns and temperatures. The building aggregation, floor planning, window orientation, shading and operation, cross ventilation strategies, and insulation levels respond to those considerations.

The proposed design allows capacity for climate control systems to be expanded, with materials selections including light weight options and flexible construction allowing for possible further adaptation strategies if required.

The landscaping proposal responds to the local conditions, with preference for endemic local species, and drought tolerate plants.

The proposed design is alert to possible further climatic mitigation requirements and proposes a light touch with open ends which can best respond or adapt to future changes.

In relation to specific climate considerations, the future development has adapted as follows:

Hotter days and more frequency heatwave events

- Heating and cooling systems are proposed to accommodate a margin of external temperature change throughout their lifecycle. Efficiencies in the built form, architectural design, building construction and 2019 building code energy efficiency requirements also contribute to higher performing, more efficient heating and cooling systems which reduce energy consumption and the system's ability to respond to periodic changes in outlying conditions.
- All plant spaces are external to the building and capable of expansion in size should higher system capacities be required upon replacement to accommodate current climate projects at the time. Similarly, the building construction and decentralised nature of the site provides adequate access to install additional services to accommodate sudden changes in internal or external environmental and operational conditions as may be needed due to climate change
- Monitoring systems are proposed to record the some facets of building use to enable data driven decisions on future replacements to meet climate adaption needs. This will also include recording of site temperature with capacity to integrate additional environmental monitoring devices in the future which can facilitate comparisons between climate and building system demands
- Energy supply systems have spare capacity factored in to accommodate future increase in electrical load
- As noted, rooftop photovoltaic systems will assist to decreased energy demand during peak solar irradiation periods of the day with capacity for expansion in future to meet any other increased to load, whether driven by climate change response/adaption or operational reasons
- All building services equipment and devices will be selected to accommodate appropriate expected operating temperature ranges throughout their lifecycle.

Extended drought periods and extreme rainfall events

- The proposed site has been designed with above ground rainwater tanks to collect water from the majority of available roof area. The tanks are positioned externally and capable of expansion as needed to adapt to increasing intensity of rainfall events and duration between events. Overflow is provided to central in-ground tank which is planned for irrigation purposes, therefore prioritising the servicing of the building needs to conserve critical water resources.

- Rainwater re-use is paired with the targeted 5-6 star WELS fixtures and fittings increases the water efficiency which reduces the demand on town water supply in drought periods.
- The buildings are sited to mitigate the impact of flooding and damage in extreme rainfall events
- The proposed site also has enough area to integrate future potable water storage, filtration and pumping systems should future township climate adaptions plans recommended increased public infrastructure resilience in the future

Gustier wind conditions

- The buildings have been sited and orientated to mitigate the impact of prevailing winds and aggregated in a nesting fashion to create protected spaces to provide shelter or protection from these winds.

7.6 National Construction Code, Fire Safety, and Access

The BCA Statement at **Appendix P** prepared by BM+G has sought to confirm that the proposed new building works can readily achieve compliance with the BCA pursuant to clause 145 of the *Environmental Planning & Assessment Regulation 2000*. And ensure the consent authority can be satisfied that subsequent compliance with the fire & life safety and health & amenity requirements of the BCA, will not necessarily give rise to design changes to the building which may necessitate the submission of an application under Section 4.55 of the *Environmental Planning and Assessment Act 1979*.

To that end, BM+G advises that subject to a range of measures being appropriately addressed by the project design team, compliance with the provisions of the BCA is readily achievable. In addition, it is considered that such matters can adequately be addressed in the preparation of the Construction Certificate documentation without giving rise to any inconsistencies with the Development Approval.

Further, the Access Report at **Appendix Q** prepared by Morris Goding Access Consulting has addressed the Access to Premises Standards as detailed within the National Construction Code 2019 and the minimum level of compliance requirements for Accessibility or Deemed to Satisfy Provisions. The Standard references the technical requirements of the built environment through the Australian Standard 1428 series. Achieving compliance to the Access to Premises Standard goes a significant way to achieving compliance with the requirements of the Disability Discrimination Act (DDA). The key elements of the Access to Premises Standard include:

- Part D3 – Access for People with a Disability.
- Part E3 – Passenger Lifts.
- Part F2 – Sanitary and Other Facilities

Other Applicable Standards & Legislation referenced includes:

- Disability Discrimination Act (DDA) 1992.
- National Construction Code 2019.
- AS1428.1 – 2009, Part 1: General Requirements for Access – New Building Work.
- AS1428.2 – 1992, Part 2: Enhanced and Additional Requirements – Buildings and Facilities.
- AS1428.4.1 – 2009, Part 4.1: Means to Assist the Orientation of People with Vision Impairment – TGSI.
- Disability (Access to Premises – Buildings) Standards 2010 (DAPS 2010).
- AS2890.1 – 2004, Part 1: Off-Street Car Parking.
- AS2890.6 – 2009, Part 6: Off-Street Parking for People with Disabilities.
- AS1735.12 – 1999: Lift Facilities for People with Disabilities

Morris Goding Access Consulting confirms that the proposed development, whilst having a range of current departures from the BCA that could be covered under a Performance Solution, these can be resolved by a redesign according to specific recommendations and in doing so comply with the relevant Deemed to Satisfy Provisions.

The project architect's Alleanza, along with BM+G and Morris Goding Access Consulting will continue to work to resolve any outstanding matters.

7.7 Contamination and Geotechnical Matters

7.7.1 Site Contamination

A Detailed Site Investigation (DSI) has been prepared in July 2019 as a follow-up to a 2019 Preliminary Site Investigation. The DSI has been prepared in general accordance with:

- NSW EPA (1995) Sampling Design Guidelines.
- NSW OEH (2011) Contaminated Sites: Guidelines for Consultants Reporting on Contaminated Sites.
- NEPC (2013) National Environmental Protection (Assessment of Site Contamination) Measure. Referred to as ASC NEPM (2013).
- NSW EPA (2017) 3rd Ed. Contaminated Land Management: Guidelines for the NSW Site Auditor Scheme.

Field observations by Martens in May 2019 included:

- The site was unused and largely covered by grass, with mature trees located at the northwest corner of site.
- Dam located in the northwest portion of site.
- Power box was located near mature trees in northwest portion of site.
- Stockpiles located in northwest corner of site.
- Topsoil consisting of silty clay, with underlying alluvium up to maximum termination depth of 7.0m.

Laboratory and analytical testing results confirmed the following:

- An elevated concentration of cadmium for at one testing location for a tri-composite sample. Further discrete testing of the contaminant samples that made up the composite indicated concentration of cadmium to be below the Site Assessment Criteria (SAC). The elevated level of cadmium with the composite was noted by the lab as a 'hotspot' with the original sample. Given all subsequent discrete tests have returned non-detect values, the initial composite exceedance does not require further consideration in relation to remediation or management.
- Laboratory analysis of all dam silt samples were all below the SAC.
- No asbestos was found at the site.
- Overall the site is not considered to generally have a risk of contamination and the site is considered suitable for the proposed land use.
- No further investigations or remediation is considered necessary.
- If any unexpected finds (such as fibro material in fill, odours or staining) are encountered during site construction works, the unexpected find will require assessment by Martens to determine requirements for additional investigation and/or remedial action.
- If any soil material is to be removed from site, a formal waste classification assessment may be required in accordance with NSW EPA Waste Classification Guidelines (2014).

The Detailed Site Investigation has been prepared by Martens and is found at **Appendix G**.

7.7.2 Geotechnical matters

No groundwater was observed or encountered at the site during test drilling. present within the bedrock profile. Ephemeral perched groundwater may be encountered within the soil profile and / or at the soil / rock interface at times of, and following, heavy or extended periods of rainfall.

Existing OEH eSpade data and mapping indicates that the site is located within the Craigmore soil landscape and that the site is located in an area of moderate salinity potential. At site visit by Martens (the project's geotechnical and contamination consultant) in May 2019 found no obvious signs of saline conditions across the site. This included observations that:

- Vegetation growth appeared healthy and uninhibited;
- No water marks or salt crystals were observed on the ground surface;
- The site surface drainage appeared generally good; and
- No evidence of concentrated surface erosion was observed.

Lab testing of soil profiles collected at the site generated the following conclusions:

- Sub-surface materials at the site are categorised as non-saline and no specified saline soil management strategies are required;
- In accordance with AS2159 (2009), an exposure classification of 'Non-aggressive' may be adopted for buried concrete and steel piles. In accordance with AS3600 (2018), an exposure classification of 'A1' may be adopted for shallow concrete footings founding in alluvial soil;
- Sub-surface materials at the site generally have a moderate dispersive potential, requiring the inclusion of erosion mitigation measures in design and construction; and
- Sub-surface materials at the site are categorised as non-sodic.

No acid sulphate soils are found at the site. The site is not mapped by Council in its LEP nor described by Council in its section 10.7(2) and (5) Planning Certificate as being affected as such.

A Geotechnical Assessment has been prepared by Martens and accompanies this EIS at **Appendix F**.

7.8 Earthworks / Civil Engineering

A range of civil engineering and earthworks is proposed at and around the site to address and manage primarily water quantity and quality at the site.

As noted in Section 4.9 of this EIS, the proposed works to mitigate the effects of the large catchment draining through the site includes:

- Upgrading the existing culverts under Bruce Road to have sufficient capacity to allow flood waters under Bruce Road and Broadhead Road to pass through and around the site. Currently the flood waters are constricted by the existing culverts under Bruce Road. Upgrading these culverts will allow the passage of stormwater through the Bruce Road and Broadhead Road intersection along the north-western side of the school site.
- Construction of a levee bank running along the perimeter of the riparian zone to protect the school site from the stormwater flowing through the Broadhead Road culverts; and
- Increasing the level of Broadhead road around the intersection with Bruce Road.

In order to determine the effectiveness of the proposed levee bank and culvert upgrades on the school site, a HECRAS model was developed by Triaxial. **Figure 36** of this EIS (and Figure 3 of the Triaxial report) shows the terrain model as run with the levee bank included through the proposed school site and the culvert upgrades on Broadhead and Bruce Roads. Cross sections were developed from the terrain model and the flood extent at each cross section is indicated by the thick blue line.

In order to determine the required levels of the levee bank the water surface level was obtained from the HECRAS model and used to set the height of the levee bank. A 500mm freeboard was applied to the water surface level in line with Mid Western Regional Council requirements.

Internal stormwater management within the site has been assessed using Mid Western Council's DCP and with the use of both a DRAINS model and a MUSIC model, to address water quantity and water quality, respectively. The model data and the models themselves are included as part of **Appendix H**.

The DRAINS model considered the impacts of 5 year, 20 year, and 100 year ARI events with durations of 5, 10, 20, 30, 60 and 90 minutes. The pipe sizes for the development were based on a worst-case and more common 5 year ARI storm event. The combined positive effects of both the flood mitigation works and the on-site stormwater management will result in reduced flooding impact within the site, particularly the developed part including the school. Overall, the works enhance the site's capacity to deal with a variety of flood events and manage further downstream flows.

To address the flood mitigation and stormwater management measures, earthworks on the site will require a range of cut and fill works to establish the site's base levels to meet the expected freeboard levels, as well as providing for the establishment of the levee and the bioswale basin. Overall, the cut and fill works will be generally neutral across the site with only a minor excess of cut resulting by 43m3.

The MUSIC model has determined that the site's stormwater run-off can be treated to meet Council's DCP requirements (as they align with ANZECC population targets). These are:

- Reduction of Total Suspended Solids (TSS) of 85%
- Reduction of Phosphorus (P) of 65%
- Reduction of Nitrogen (N) of 45%
- Reduction of Gross Pollutants of 100%

To achieve these outcomes / targets, two bioretention basins are required:

- One adjacent the riparian corridor and levee to the north of the development site; and
- The other within the car park to treat run-off before discharging from the site towards Bruce Road.

The MUSIC model has determined that the bioswales will reduce TSS to in excess of 86%; reduce of P by 67%; reduce N by 49.9%; and reduce gross pollutants by 100%.

Additionally, sediment and erosion controls will be implemented during works as set out by Triaxial within its documentation. Construction-related stormwater controls on site will be detailed in an erosion and sediment control plan, generally in accordance with the "Blue Book" - Managing Urban Stormwater: Soils and Construction (Landcom NSW). The plan articulates the measures proposed which includes silt fences around the perimeter of the development site and location of works as well as within the road reserves subject of works. Grated inlet pit filters will also be employed throughout the works site.

Details of the proposed earthworks and approach to civil engineering matters can be found in Triaxial's documentation at **Appendix H**.

7.9 Construction Air and Water Quality

The proposed works have the potential to cause localised and minor construction-related air and water run off impacts. Standard mitigation measures are proposed to suppress dust and other air quality issues, whilst a sediment and erosion control and other site-based water detention mechanisms form part of the stormwater management plan by Triaxial at **Appendix H**.

Details relating to airborne dust and sediment control, are provided in the Construction Management Plan prepared by North Construction & Building, which accompanies this EIS at **Appendix R**.

As articulated by the Construction Management Plan, dust control will be implemented in areas of all active excavation and construction. Dust control will also be implemented within the construction zone as determined by the Contractor, and as required for the health and safety of employees.

All works will be undertaken in accordance with NSW *Protection of the Environment Operations Act 1997*.

Dust management will be most critical during the earthworks phase and the range of measures to address this include:

- Construction methods will be employed as required that will keep air pollution to a minimum, to ensure that airborne pollutants from activities onsite do not cause undue disruption or inconvenience;
- Where appropriate and/or required by the client, removal of mud from the wheels and bodies of haulage equipment before they enter public roads or other sealed pavements by means of facilities such as truck wash downs and wheel washes;
- Dust generating activities which cannot be adequately controlled by water or other means will be ceased;
- Unsealed construction access routes will be sealed through use of coarse aggregates;
- Progressively rehabilitate and revegetate areas of disturbance including, where necessary undertaking short-term stabilisation of temporary stockpiles and disturbed areas;
- Limiting areas of vegetation and soil disturbance through delineating work areas to minimise the potential for erosion;
- Delivery of raw materials (gravel and sand) in load covered trucks;
- Trucks not to be overfilled so that excavated material drops onto the roadways. All loads carried on public roads or in areas that could affect private property, to be covered;
- Any excessive materials dropped onto externally sealed roads to be cleaned up as soon as possible;
- Truck tailgates to be securely closed before leaving the site;
- Long-term stockpiles to be stabilised by establishing a short lived, fast growing temporary cover crop; and
- The area of construction disturbance to be minimised wherever possible.

7.10 Biodiversity and Arboricultural Matters

The advice of appropriately qualified biodiversity and arboricultural consultants has been sought with respect to ecological and tree protection measures.

Biodiversity

As noted earlier, the need for a BDAR been jointly waived by the Department and OEH in letters dated 18 April 2019, and 26 March 2019, respectively – see correspondence at **Appendix I**. The agencies each confirm that the development *is not likely to have any significant impact on biodiversity values.* Accordingly, that there is no need for the SSD application to include a BDAR.

Arboricultural

An arborist's report has been prepared by McArdle and Sons Arboricultural Services and accompanies this EIS at **Appendix J**. McArdle and Sons Arboricultural Services provides an assessment of the health of the trees (amongst other things) and recommends trees for

removal, transplanting/replanting or protection. The report makes detailed and specific recommendations with respect to the trees to be retained and tree protection measures which will be adhered to during the works.

As noted, eight (8) trees are proposed to be removed as part of this DA. These are all planted trees along the street frontages which are either dead or dying, and/or of low significance or value, and which are not indigenous to the area and are not habitat trees or koala feed trees. A further nine (9) are proposed to be removed and replanted as a result of their location under the existing power lines running down Broadhead Road. A small number of trees require removal to facilitate the proposed access arrangements along Bruce Road.

The eight trees to be removed at the development site (as shown on the Landscape Plans at **Appendix M**) are located as follows:

- Bruce Road Frontage
  - Tree 2 Dead tree Recommended for removal
  - Tree 5 Dead tree Recommended for removal
  - Tree 9 *Eucalyptus nicholii* Retain and protect (prune dead wood)
  - Tree 10 *Eucalyptus nicholii* Retain and protect (remedial prune)
  - Tree 11 *Eucalyptus nicholii* Recommended for removal
  - Tree 13 *Eucalyptus nicholii* Recommended for removal
- Broadhead Road Frontage
  - Tree 22 Dead tree Recommended for removal
  - Tree 27 Dead tree Recommended for removal

The two trees recommended by the arborist for retention and protection are mature trees which are of variable condition but are both nominated as of medium significant, as are all trees in this general stretch of Bruce Road.

These trees have been identified for removal under the landscape and architectural plans with advice from both Triaxial and TTPP with respect to the necessary roadworks and access arrangements to the site, largely for the bus turning area and the servicing access. Their removal is warranted in the context of their significance, likelihood of survival and the need to gain appropriate access to the site.

As noted, the trees are planted native, but non-endemic, species of no significance from an ecological and biodiversity perspective. The majority of planted trees will be retained, particularly those framing the site at the corner of Broadhead Road and Bruce Road and thereby will soften the school's edge at the car park. The tree removal will also assist in providing the school with identifiable address and access points. In the context, the tree removal proposed is insignificant and warranted.

The Landscape Plan and Landscape Statement have been prepared by TaylorBrammer and accompany this EIS at **Appendix M** to articulate the level and scope of replacement planting.

7.11 Wind Impacts

Wind impacts arising from the development are likely to negligible upon users of the proposed school, pedestrians, and adjacent neighbours. The development itself, being up to 2 storeys in height, is not of a type or scale to generate downdraft winds. The school, and surrounding, environment is not one of a high pedestrian traffic environment for which a level of comfort will be required to be attained. Nearby residential properties are sufficiently distant from the school site to be unaffected by any change (if any) to the wind environment. Wind impacts arising will be negligible and generally indiscernible.

7.12 Noise and Vibration Impacts

Wilkinson Murray has carried out a Noise and Vibration Impact Assessment for the construction noise and vibration impacts and operational noise impacts of the development – See **Appendix S**. Noise and vibration has been assessed with reference to relevant EPA and DPI&E guidelines for both operational and construction noise.

An ambient noise survey, noise monitoring and noise level recording of exist traffic noise levels has been undertaken to assess the impacts of construction and operational noise on 4 adjoining residential properties:

- (R1) 227 Bruce Road - to the east of the development site;
- (R2) 198 Bruce Road - directly opposite the development site;
- (R3) 66 Broadhead Road – directly opposite the development site; and
- (R4) 56 Broadhead Road – to the north-west of the development site.

The construction noise criteria for these residential receivers has been determined based on the EPA's *Interim Noise Construction Guideline* (2009) and *Noise Policy for Industry* (2017). Whilst the recorded ambient background noise levels were 29 dBA, in accordance with the *Noise Policy for Industry* convention the minimum is taken as 35 dBA. Accordingly, the daytime construction noise management level is this 35 dBA + 10 dBA (45 dBA).

Based on assumed and typical construction equipment and their noise source levels, plus an assumed construction program over three distinct stages (Bulk Excavation; Building Construction; and Façade and Fitout works), Wilkinson Murray has predicted the likely noise impacts to these residential receivers for construction noise. A similar exercise has been carried out with respect to potential vibration impacts. The results are set out below.

Similarly, operational noise from the school has been considered, including worst-case scenarios for:

- Mechanical plant services;
- Classroom activities;
- Use of the Chapel for a range of school or community functions;
- Use of the multi-purpose hall for a range of school or community functions;
- Performing Arts uses within the school;
- Timber and Metal technology classes;
- The cumulative operation of all classroom and school activities concurrently;
- School bells and announcements;
- Car park use and vehicular movements;
- General outdoor play, activity and use of the school grounds during school hours; and
- Road traffic noise arising from the predicted additional vehicles arising from the use on the surrounding road network adjacent to the school.

The relevant recommended noise levels or criteria set for assessment are:

- 40 dBA for the intrusive noise criterion for residential receivers during daytime (7am to 6pm)
- 35 dBA for the intrusive noise criterion for residential receivers during evening (6pm to 10pm)
- 45 dBA for emission guidelines for outdoor play and activities
  This has applied the *Noise Policy for Industry* (2017).
- 55 dBA for road traffic noise as determined by the *NSW Road Noise Policy* (2011) in relation to impacts upon residences for additional traffic on existing local roads.

7.12.1 Construction Noise

Based on Wilkinson Murray's assessment the following summarises the results of the predicted construction noise indicating whether exceedences to the daytime construction noise management level at the four residences are likely to occur over the course of the three

anticipated stages of works. The detailed assessment results are in the Wilkinson Murray report at Table 4-8.

Residence	NML	Stage of Works	Exceedence
R1 - 227 Bruce Road	45 dBA	Bulk Excavation	Up to +3 dBA (48 dBA)
		Building Construction	None
		Façade and fitout works	None
R2 - 198 Bruce Road	45 dBA	Bulk Excavation	Up to +7 dBA (52 dBA)
		Building Construction	Up to +4 dBA (49 dBA)
		Façade and fitout works	None
R3 - 66 Broadhead Road	45 dBA	Bulk Excavation	Up to +12 dBA (57 dBA)
		Building Construction	Up to +9 dBA (54 dBA)
		Façade and fitout works	Up to +2 dBA (47 dBA)
R4 - 56 Broadhead Road	45 dBA	Bulk Excavation	Up to +8 dBA (53 dBA)
		Building Construction	Up to +5 dBA (50 dBA)
		Façade and fitout works	None

Wilkinson Murray has advised, that the review of the predicted noise level range indicates maximum exceedances of up to 12dBA may occur during site preparation and excavation works. This exceedance is not unusual for construction works in relatively quiet areas and can be mitigated by construction noise management procedures - see further below.

The resultant noise levels within surrounding residences would not be likely to adversely impact upon normal daytime residential activities. The adoption of reasonable and feasible noise management and mitigation is recommended. These measures should be determined in detail when a contractor, with defined construction techniques, has been engaged on the project.

7.12.2 Construction Vibration

Given the likely construction methodology involved and the distance between works and the closest surrounding residential and associated structures, ground vibration is not considered to be a potential issue. Based on Wilkinson Murray's review of the site layout and surrounding receivers, the minimum distance between any potentially vibration generating activities and surrounding residences will be a minimum of 100 metres. Additionally, safe working distances will be achieved and no further assessment of vibration is warranted.

7.12.3 Operational Noise

The following table summarises the results of Wilkinson Murray's assessment of the likely operational noise impacts arising from the operation of the school.

Residence	Noise Limit	Use	Compliance
R1 and R2 Bruce Road	40 dBA (day) 35 dBA (evening)	Mechanical plant services; Classroom activities; Use of the Chapel for a range of school or community functions; Use of the multi-purpose hall for a range of school or community functions; Performing Arts uses within the school; Timber and Metal technology classes; The cumulative operation of all classroom and school activities concurrently; School bells and announcements; and Car park use and vehicular movements	Yes
	45 dBA	Outdoor play and activities	Yes
	55 dBA	Road traffic noise	Yes
R3 and R4 Broadhead Road	40 dBA (day) 35 dBA (evening)	Mechanical plant services; Classroom activities;	Yes

		Use of the Chapel for a range of school or community functions; Use of the multi-purpose hall for a range of school or community functions; Performing Arts uses within the school; Timber and Metal technology classes; The cumulative operation of all classroom and school activities concurrently; School bells and announcements; and Car park use and vehicular movements	
	45 dBA	Outdoor play and activities	Yes
	55 dBA	Road traffic noise	Yes

Wilkinson Murray concludes that the predominant sources of potential operational noise were identified as the Chapel, multi-purpose hall, performing arts facilities (music and drama), Timber and Metal technology workshop and future mechanical plant.

All relevant criteria can be achieved by the development. Detailed mechanical plant selection will take place during the detailed design phase. Acceptable noise levels due to plant operation are likely to be achieved given the location of plant within services zones and the distance between plant locations and receivers. Further assessment should be carried out to confirm compliance when detailed mechanical services design and plant selection becomes available.

Noise from outdoor activities held on the site (school and community use) are expected to generally achieve a LA90 background + 10dBA emission 'guideline'. Operation of outdoor areas should be managed to minimise noise emissions to nearby residences by measures such as restricting use prior to 7.00am and limiting the use of whistles and PA system (where feasible).

Road traffic generated by the development will comply with the NSW Road Noise Policy (RNP) guidelines at all surrounding receivers.

7.12.4 Noise Mitigation Strategies

Wilkinson Murray further advises with respect to construction noise impacts that the following mitigation strategies should be applied to assist in reducing amenity impacts upon neighbouring residential uses:

- Selection of quietest feasible construction equipment;
- Use of rock saws and ripping in preference to rock breakers if rock removal is required (unlikely in this scenario);
- Localised treatment, such as barriers, shrouds and the like around fixed plant, such as pumps and generators; and
- Provision of respite periods, particularly on Saturdays.

In addition, the following measures should be included in a Noise and Vibration Management Plan:

- Plant Noise Audit – Noise emission levels of all critical items of mobile plant and equipment should be checked for compliance with noise limits appropriate to those items prior to the equipment going into service. To this end, testing should be established with the Contractor.
- Operator Instruction – Operators should be trained to raise their awareness of potential noise problems and to increase their use of techniques to minimise noise emission.
- Equipment Selection – All fixed plant at the work sites should be appropriately selected, and where necessary, fitted with attenuators, acoustical enclosures and other noise attenuation measures to ensure that the total noise emission from each work site complies with EPA guidelines.
- Site Noise Planning – Where practical, the layout and positioning of noise-producing plant and activities should be optimised to minimise noise emission levels.

Adoption of these measures is aimed at working towards achieving the noise management levels established at surrounding receivers. An effective community liaison program should also be applied.

The recommended Noise and Vibration Management Plan would address:

- Noise and vibration mitigation measures;
- Noise and vibration monitoring;
- Response to complaints;
- Responsibilities;
- Monitoring of noise emissions from plant items;
- Reporting and record keeping;
- Non-compliance and corrective action; and
- Community consultation and complaint handling

The Wilkinson Murray report can be found at **Appendix S**.

7.13 Aboriginal Cultural Heritage

An ACHAR has been prepared by Artefact Heritage (see **Appendix K**) to address the potential for any Aboriginal cultural heritage at the site and within the area subject of the works for this DA. This has included an extensive requisite consultation regime (as set out in Section 3.0 of the ACHAR and at Section 6.0 of this EIS).

The ACHAR has found / concluded that:

- No previously recorded Aboriginal sites are located within the study area;
- One newly identified Aboriginal site is located within the study area (BR IF 01);
- One area of potential archaeological deposit was identified within the study area (BR PAD 01);
- The proposed works subject of this DA will not impact either of BR IF 01 or BR PAD 01; and
- Further stages of development, subject to additional approval processes, may impact BR IF 01 and/or BR PAD 01. This will be addressed at the relevant time, and relative to any future scope of works.

As noted in Figures 7.16 and 11.2 of the ACHAR, the works are remote from BR IF 01 or BR PAD 01 under this DA and are unaffected by any corresponding construction at, or use of, the site.

Artefact has recommended mitigation and management measures which will protect BR IF 01 and/or BR PAD 01, under this DA and further works, should they be in the area(s) of BR IF 01 and/or BR PAD 01. This includes:

- A no-go zone to be implemented around the delineated boundary of BR PAD 01 and BR IF 01 prior to construction and during the operational life of the school.
- Further archaeological investigation within the area of BR PAD 01 and BR IF 01 should the development scope change and impacts be likely within the delineated areas.
- No impacts to BR PAD 01 and BR IF 01 can occur without further archaeological investigation, consultation with the Registered Aboriginal Parties and approvals.
- Standard unexpected finds policy and protocols to be implemented in the event of Aboriginal archaeological objects or human remains being identified during ground disturbing works.

Importantly, no further work in relation to a Aboriginal Cultural Heritage Management Plan (ACHMP) is required at this time or in relation to the scope of works and development under this SSD DA.

7.14 Bushfire Risk

Based on a review of Council's section 10.7(2) and (5) Planning Certificate the site is not a mapped bushfire prone location.

Council has subsequently advised, as part of the pre-lodgement consultation process, that the site is now mapped in draft as being bushfire affected, albeit so far informally on unpublished mapping.

Council has indicated that the site is identified as 'rural grasslands' which is a fire source. Given the likely managed lands approach arising from the development's design and landscaping treatment, coupled with the perimeter roads acting as Asset Protection Zones (APZs), Council advised that no bushfire report would be expected, and accordingly the use would not be classified as a 'special fire protection purpose'. Accordingly, it would avoid the need for any section 100B bush fire safety authority under the *Rural Fires Act 1997*.

7.15 Social and Economic Impacts

The social and economic impacts of the proposed development are deemed to be positive given the school's long-standing and important role within the social fabric of Mudgee and the surrounding region. The positive education and social benefits which will arise from investment in new school infrastructure and new or refined models of education in a new setting and surrounds are palpable.

The new school will build capacity for St Matthews Catholic School Mudgee where no such capacity presently exists. The site and development is an important step by the school to future-proof its activities and remain a strong provider of education and other services to the Mudgee community. The development facilitates future-proofing for the next generations of school children in this locality, providing new up-to-date and state-of-the art school accommodation within the existing community and social fabric of Mudgee thereby ensuring a continuity of connectivity and identity with the established community networks.

The new site and development will ease pressure on existing services and aims to enhance education by consolidating high school activities to one location. Presently, the school uses adjacent commercial spaces to supplement its floor space needs.

From a physical infrastructure perspective, the new school and its community spaces will become an immediate community asset. New and expanded community spaces result from the development including the new community hall, sports courts and multi-function spaces.

Additionally, the construction of the new secondary campus provides:

- Economic stimulation to the regional labour market and investment during the construction phase of the project. Cost benefit analysis, economic appraisal, qualitative and quantitative measures leading to this DA confirm the project is cost effective and the best value for money for the Trustees of the Roman Catholic Church for the Diocese of Bathurst.

- Environmental design measures in building form, materials, thermal comfort, energy efficiency, water conservation, Aboriginal heritage conservation, landscaping, management of environmental hazards, waste management and construction standards.

- Social benefits and prosperity from investment in social infrastructure and facilities which meet the educational objectives and goals for the region. To that end, key outcomes include:

  - New educational facilities that make a major contribution to meeting short and long term growth in demand for high school teaching facilities in Mudgee and the region;
  - Creation of a cohesive new educational campus;
  - Enhancement of the high school community;
  - Safe and secure school environment through the principles of crime prevention through environmental design; and
  - New facilities that can be shared with community use.

- Sustainability Benefits
  - Reuse of an existing site that is currently underutilised;
  - Flexibility to ensure the ongoing functional operation of the facility without the need for costly work to accommodate the changing technological, security or procedural needs;
  - Passive solar and shading design measures;
  - Use of sustainable (non-rainforest) recycled, plantation or composite timbers;
  - Use of materials with good thermal insulation performance;
  - Energy efficient fittings and fixtures such as lighting, and any heating/cooling systems; and
  - Environmental performance of new elements to be 'Best Industry Practice' and in compliance with section I and J of the BCA as required.

The consequences of not proceeding with the development of this new secondary campus at this site can only be identified as negative.

7.16 Suitability of the Site

The site's suitability for the proposed development is demonstrated through:

- the permissibility of the development in accordance with both Council's LEP and the Education SEPP within the RU4 – Primary Production Small Lots zone and the proposal's consistency with the relevant zone objectives;
- the proposal's general consistency with key strategic planning policies relevant to Mudgee, the region, and this type of development;
- the site's location as part of the ongoing and progressive redevelopment and urbanisation in and towards Mudgee's south;
- the site's general lack of environmental issues including contamination, natural hazards, and heritage;
- the site's connectivity to the balance of Mudgee; and
- the proposal's relative benign nature in terms of environmental impacts upon other uses within the locality and the site's immediate vicinity in terms of streetscape, traffic generation and environmental impacts.

As noted in Section 4.1, the decision to relocate the senior school to new accommodation at the Spring Flat site has essentially been driven by regional population growth; expected and growing demand for student places at the school; managing growth and school community expectations; and providing the requisite capacity.

The Trustees of the Roman Catholic Church for the Diocese of Bathurst and school considered a range of options including 'do nothing' or 'as is'; a master plan for limited expansion within the existing school campus; ongoing acquisition of adjacent sites within Mudgee town centre; or pursuing a new green field option (the subject DA). The cost-benefit profile of the greenfield option was seen as the superior / optimal service delivery option for the school as it provides

for a significant increase in capacity for the school, allowing for enhanced management of growth.

7.17 The Public Interest

The proposal involves the realisation of the long-awaited enhancement of education services in Mudgee by the applicant through the proposed relocation of high school education. The development will bring new and contemporary education facilities to (this part of) Mudgee and allow for the future-proofing of St Matthews Catholic School Mudgee's and the Trustees of the Roman Catholic Church for the Diocese of Bathurst's education provision in Mudgee and the region.

The proposal employs various strategies to support a shift toward use of sustainable transport modes, in lieu of car use. It also creates multiplier effects within Mudgee through construction activity and other co-related services.

The proposal suitably addresses or mitigates impacts upon the environment and the amenity of its neighbours. It provides for upgrades to services, infrastructure and connectivity in this part of Mudgee as well as built form appropriate to its use and location. To forego the development of the site as proposed would not be in the public interest.

8.0 ENVIRONMENTAL RISK ASSESSMENT

The Environmental Risk Assessment (ERA) establishes residual risks by reviewing the significance of environmental impacts and the ability to manage those impacts. The ERA for the St Matthews Catholic School Mudgee – Secondary Campus development site has been adapted from Australian Standard AS4369.1999 Risk Management and Environmental Risk Tools.

In accordance with the SEARs, the ERA addresses the following significant risk issues:

- the adequacy of baseline data;
- consideration of potential cumulative impacts due other developments in the vicinity (completed, underway or proposed); and
- measures to avoid, minimise, and if necessary, offset the predicted impacts, including detailed contingency plans for managing any significant risk to the environment.

The matrix below indicates the likely significance of environmental impacts from both construction and operation of the development and assigns a value between 2 and 10 based on the likelihood of an impact occurring and the consequences of that impact. For example, an Almost Certain and Catastrophic Risk is rated as having value of 10; a Possible Catastrophic Risk is rated as having a value of 8 as is a Likely Major event. A Rare Insignificant risk is rated as having a value of 2.

Based on the rating of the risk, appropriate risk control actions can then be applied.

The sum of the values assigned provides an indicative rating of potential residual impacts after the mitigation measures are implemented.

Consequence / Likelihood	Insignificant = 1	Minor = 2	Moderate = 3	Major = 4	Catastrophic = 5
Almost Certain = 5	Significant	Significant	High	High	High
Likely = 4	Medium	Significant	Significant	High	High
Possible = 3	Medium	Medium	Significant	Significant	High
Unlikely = 2	Low	Medium	Medium	Significant	Significant
Rare = 1	Low	Low	Medium	Medium	Significant

Likelihood		**Consequence**	
Almost Certain	Is expected to occur in most circumstances	Catastrophic	Severe adverse impact - (Death)
Likely	Will probably occur in most circumstances	Major	Major adverse impact - (Extensive Injuries)
Possible	Might occur at some time	Moderate	Moderate adverse impact - (Medical treatment required)
Unlikely	Could occur at some time	Minor	Minor adverse impact - (First aid treatment)
Rare	May only occur in exceptional circumstances	Insignificant	Insignificant adverse impact - (No injuries)

	Risk Control Actions
High	The risk is unacceptable. Eliminate the design feature
Significant	High Priority for action
Medium	Responsibility to be allocated
Low	Manage by routine procedure and control

The following sets out the likely impacts of the project (Construction and Operational), potential mitigation measures, and the Risk Assessment.

Noise and Vibration *(Construction and Operational)*

- Increased noise and vibration during construction
- Construction hours proposed
- Increased noise during operation and function of the school

Noise and vibration impacts are likely to arise, particularly for adjacent uses outside of the site. This includes nearby residential uses, which are some distance from the site of works. Moderate but no excessive construction noise impacts will be experienced. No discernible vibration impacts are predicted. Earthworks are generally minimal given the relatively flat site.

As noted in the preceding section, the works will generally comply with EPA construction noise at some locations and moderately exceed these in other locations, relative to the stage of the works. Implementation strategies to mitigate impacts upon neighbours will help reduce those noise impacts which are likely to exceed acceptable target levels. Similarly, operational noise mitigation strategies will be employed to meet noise targets, noting operational noise will generally be wholly compliant with the relevant standards and targets.

Mitigation through adoption of a noise management plan to minimise noise impacts from the construction phase. Further, operational mitigation with appropriate plant selection, noise suppression and shielding within the plant and machinery. Management of the use of the out of school hours spaces will also ensure noise generated can be minimised.

It is understood EPA's standard construction hours and flexible provisions as applied by the Department's standard conditions will be applied. These are 7am to 6pm Monday to Friday and 8am to 1pm Saturday with additional non-intrusive works outside of these hours during Monday-Friday and Saturdays only.

Risk Assessment Rating = Likely Likelihood (4) + Moderate Consequence (3) = **Significant (7).**

Mitigation Measures from the acoustic assessment will suitably address this risk.

Traffic and Parking *(Construction and Operational)*

- Increased localised traffic on roads and at intersections (during both construction and operation)
- Marginal reduction only level of service at intersections generally.
- Public transport and green travel alternatives to car use.

Short-term construction-related impacts are inevitable. Local roads will nonetheless be able to cope with this additional traffic for the duration of the works. As with noise impacts, off-site construction and the modular design means much of the construction traffic that would other be experienced is absent.

Traffic management principles set out by TTPP in the Transport Assessment will be employed as standard Mitigation Measures and a Construction Traffic Management Plan will be necessitated.

The operational traffic will result in only marginal reductions in the level of service of a range of nearby intersections. None will drop to any level lower than 'good' or a 'B'.

Risk Assessment Rating = Possible likelihood (3) + Minor Consequence (2) = **Medium (5)**.

Mitigation Measures applied address both construction and operational traffic management.

Visual Impacts, amenity, overshadowing (*Operational*)

- Visual impact from local residences and public roads.
- Reduced amenity to the site's residential neighbours including privacy, overlooking and loss of solar access.
- Wind impacts.

The development will to a greater part transform the southern portion of the site from an unused paddock to a secondary campus with a cluster of buildings of 1-2 storeys in height. The bulk, scale and form of the development, when viewed from Broadhead Road, Bruce Road, or neighbouring properties will not be out of character of the progressive urbanisation of this part of Mudgee. The school buildings will be set back from the road frontages. The existing and significant extent of perimeter plantings and mature trees which define the site's edge will be retained and protected. This will enhance the retention of the existing amenity of the site and how the site is read and viewed from adjacent places. The trees will also assist in screening the development from different views.

Given the site's relative distance from sensitive (residential) neighbours, overlooking, privacy, wind, solar access and overshadowing impacts are negligible and indiscernible if occurring at all.

Risk Assessment Rating = Rare (1) likelihood + Rare (1) Consequence = **Low (2)**.

No Mitigation Measures are required.

Aboriginal Cultural Heritage *(Construction and Operational)*

- Material impacts upon any Aboriginal cultural heritage and relics.

The development is unlikely to impact upon any Aboriginal cultural heritage as the development site is removed from BR IF 01 and/or BR PAD 01 as established under the development and by its ACHAR.

The project's ACHAR recommends mitigation and management measures which will protect BR IF 01 and/or BR PAD 01, under this DA and further works, should they be in the area(s) of BR IF 01 and/or BR PAD 01. This includes:

- A no-go zone to be implemented around the delineated boundary of BR PAD 01 and BR IF 01 prior to construction and during the operational life of the school.
- Further archaeological investigation within the area of BR PAD 01 and BR IF 01 should the development scope change and impacts be likely within the delineated areas.
- No impacts to BR PAD 01 and BR IF 01 can occur without further archaeological investigation, consultation with the Registered Aboriginal Parties and approvals.
- Standard unexpected finds policy and protocols to be implemented in the event of Aboriginal archaeological objects or human remains being identified during ground disturbing works.

Risk Assessment Rating = Unlikely (2) likelihood + Minor (2) Consequence = **Medium (4)**.

No additional Mitigation Measures are required.

Air Quality *(Construction)*

- Decrease in air quality.

The development is likely to only impact upon air quality through dust generation during the earthworks / construction phase of the project. Any dust generated will be managed via a final Construction Management Plan.

Risk Assessment Rating = Possible (3) Likelihood + Moderate (3) Consequence = **Significant (6)**.

Mitigation Measures proposed beyond that expected to be applied as a standard condition by the Department in consultation with the EPA are set out in Section 8.2 below.

Tree loss and Biodiversity *(Construction and Operational)*

- Loss of remnant bushland or planted trees within the development site
- Significant impact upon flora and fauna

Eight planted trees are required / proposed to be removed under the proposed development. These are generally dead (six of the eight) or planted native, but non-endemic, species (2 required to be removed to secure the site services access and bus turning area). The remainder of the trees (at the development site) will be retained and protected.

There will be no impact upon the remnant native tree cluster to the north-west of the overall site. These trees in any case are subject to a BDAR waiver as described and set out in various places within the EIS.

Risk Assessment Rating = Possible (3) likelihood + Insignificant (1) Consequence = **Medium (3)**.

No Mitigation Measures are required, on the assumption that the standard tree protection requirements will be enforced as a condition of consent.

Contamination and Acid Sulphate Soils *(Construction)*

- Exposure of contamination, hazardous materials or acid sulphate soils during construction causing harm to human health.
- Contamination reducing the suitability of the site to continue as an education facility.

Based on a physical investigation of the site and borehole testing no contamination or asbestos or other hazardous materials were encountered.

The site is not mapped as being subject to acid sulphate soils. Assessments also conclude that the site is not subject to any groundwater nor soil salinity.

Risk Assessment Rating = Rare (1) likelihood + Rare (1) Consequence = **Low (2)**.

Water Quality *(Construction and Operational)*

- Stormwater run-off impacts.

Construction-related stormwater controls on site will be detailed in an erosion and sediment control plan, generally in accordance with the "Blue Book" - Managing Urban Stormwater: Soils and Construction (Landcom NSW). The plan articulates the measures proposed which includes silt fences around the perimeter of the development site and location of works as well as within the road reserves subject of works. Grated inlet pit filters will also be employed throughout the works site.

Ongoing stormwater management is addressed via a Flood Mitigation Plan and a Stormwater Management Plan prepared by Triaxial.

Risk Management Rating = Possible (3) likelihood + Minor (2) Consequence = **Medium (5)**.

No additional Mitigation Measures are required aside from any standard conditions that may be imposed.

Waste Management *(Construction and Operational)*

- Generation of construction and operational waste.

A Waste Management Plan has been prepared in relation to both the construction and operational phases of the project. The waste profile of the development is generally benign in the sense that the earthworks and cut/fill balance will be minimal (+43m2) and no contaminated material or asbestos exists on-site requiring disposal.

The operational waste likely to be generated is that already known to occur at the existing high school component of the Lewis Street site in Mudgee. The volumes of waste are relatively minimal and constitute typical food waste, recyclables and other consumables typical of school activities.

Risk Management Rating = Unlikely (2) likelihood + Minor (2) Consequence = **Medium (4)**.

No additional Mitigation Measures are required.

Crime *(Operational)*

- Potential areas of criminal or anti-social behaviour arising from the development

The review of the design and operation of the building against the CPTED Principles (see Section 7.3) has revealed that the potential for any new safety or security concerns as well as criminal or anti-social behaviour is low.

Risk Assessment Rating = Unlikely (2) likelihood + Minor (2) Consequence = **Medium (4)**.

No additional Mitigation Measures are required.

ESD, and climate change-related adaptability *(Construction and Operational)*

- Potential increase in emissions.
- Changed impacts upon and of the development resulting from climate change

Based on the ESD credentials for the development and the targets set the development (4-star Green Star, the development will ensure a high quality and flexible sustainable outcome for the site. The development will enhance the applicant's and the school's commitments to ESD.

The development is also flexible to address impacts upon it, and of it, upon the CSIRO's Climate Change impacts. The development is resilient and adaptable to change that is predicted in ensuring decades within the Mudgee region.

Risk Assessment Rating = Possible (3) likelihood + Minor (2) Consequence = **5 (Medium)**.

No additional Mitigation Measures are required. An anticipated condition of consent to satisfy the 4-star Green Star rating without registration or via demonstration of equivalency would be anticipated for this project.

8.1 Cumulative Impacts Assessment

In light of the above and the assessment in Section 7.0 of this EIS, it is considered that the proposed development on its own or whether in conjunction with other developments occurring nearby at the same time, does not give rise to any cumulative environmental impacts that cannot be appropriately managed through the mitigation measures identified in Section 8.2 below.

It is understood that there will be no concurrent works proposed in the vicinity of the site, and if so, none of a scale to significantly contribute to major impacts upon the locality in tandem with this development.

8.2 Mitigation Measures

Mitigation measures required to address the potential impacts of the development (as derived from various specialist studies and reports supporting this DA) are listed below:

Noise and Vibration (Construction and Operational)

- A Construction Noise Management Plan, to be implemented by the Contractor, should be prepared. This plan should clearly identify the strategies to be put in place to minimise potentially adverse noise impacts upon the surrounding community. This would include the following:
    - Noise and vibration mitigation measures;
    - Noise and vibration monitoring;
    - Response to complaints;
    - Responsibilities;
    - Monitoring of noise emissions from plant items;
    - Reporting and record keeping;
    - Non-compliance and corrective action; and
    - Community consultation and complaint handling
- In order to minimise the potential impact at residences the following recommendations made with respect to operational matters:
    - Restrict the use of outdoor play areas prior to 7.00am.
    - Minimise PA use and ensure speakers are appropriately located and limited to achieve acceptable levels.
    - The LAmax noise level from the PA system operation shall not exceed 45 dBA at the nearest residential boundary.
    - The PA system should use small low-powered horn-type speakers oriented in such a manner to fire away from residential premises.
    - Speakers should be mounted at a downward angle of 45o and as close to ground level as possible.
    - Only nominated persons, trained in the appropriate use of the system, should be permitted to operate the PA system.
    - A sound limiter is to be installed to ensure that the maximum limiting criterion at residential boundaries is not exceeded.
    - It is recommended that management of noise be included in any site management plan.
- Road traffic generated by the development will comply with the NSW Road Noise Policy (RNP) guidelines at all surrounding receivers.

Construction and Operational Traffic

- A site-specific Construction Traffic Management Plan is to be submitted to TfNSW and Mid-Western Regional Council to appropriately detail the staging, timing and activities during the construction phase, indicate the designated haul routes, explain traffic control measures to be implemented at the site and assess the construction traffic volumes.
- A Green Travel Plan shall be completed for the school upon commencement of operation, consistent with the finding, requirements and recommendations of the TTPP Green Travel Plan as submitted with this DA.

Air Quality / Dust Management

- North Constructions (NCB) will ensure that all its construction facilities erected on the site are operated to minimise the emission of smoke, dust, cement dust and other substances into the atmosphere;
- If monitoring is required by the Client, the monitoring will comply with the Office of Environment & Heritage Approved Methods for Sampling and Analysis of Air Pollutants in NSW;

- Construction methods will be employed as required that will keep air pollution to a minimum, to ensure that airborne pollutants from activities onsite do not cause undue disruption or inconvenience;
- Where appropriate and/or required by the client, removal of mud from the wheels and bodies of haulage equipment before they enter public roads or other sealed pavements by means of facilities such as truck wash downs and wheel washes;
- NCB will cease dust generating activities which cannot be adequately controlled by water or other means;
- Where applicable:
    - Plant and equipment not be left idling when not in use.
    - Stabilise unsealed construction access routes through use of coarse aggregates;
    - Progressively rehabilitate and revegetate areas of disturbance including, where necessary undertaking short-term stabilisation of temporary stockpiles and disturbed areas.
    - Limiting areas of vegetation and soil disturbance through delineating work areas to minimise the potential for erosion.
    - Delivery of raw materials (gravel and sand) in load covered trucks.
- Trucks not to be overfilled so that excavated material drops onto the roadways. All loads carried on public roads or in areas that could affect private property, to be covered;
- Any excessive materials dropped onto externally sealed roads to be cleaned up as soon as possible;
- Truck tailgates to be securely closed before leaving the site;
- All vehicles and machinery must comply with the Office of Environment & Heritage requirements and be fitted with properly maintained emission controls relevant to their date of manufacture;
- Long-term stockpiles to be stabilised by establishing a short lived, fast growing temporary cover crop;
- The area of construction disturbance to be minimised wherever possible.
- Progressive rehabilitation of disturbed areas to occur as the work front progresses. delete if not applicable for project; and
- The burning of timber and other combustible materials shall not be permitted.

Water Quality

- All necessary precautions shall be undertaken to avoid the spillage of oil, fuel, spoil, waste material, rubbish or other substances from any source which may adversely affect water quality in the water catchment;
- North Constructions will provide adequate controls to ensure that any water entering the natural watercourse system or stormwater drainage system from areas disturbed by the site complies with any water quality criteria nominated by the Office of Environment & Heritage for the Project;
- Spill control equipment will be on site whenever oil or fuel is present;
- Temporary toilet facilities are serviced regularly;
- Run-off from site shall be controlled and managed to mitigate the impact of potential pollutants before it is disposed to stable areas or directed into the permanent drainage systems;
- Should there be any spillage it shall be immediately removed or mitigated and destroyed;
- Where there is a requirement to wash plant/equipment it shall be conducted in an appropriate area to prevent erosion and pollution the permanent drainage system; and
- If monitoring is required, the monitoring will comply with the Office of Environment & Heritage (EPA) Approved Methods for Sampling and Analysis of Water Pollutants in NSW.

8.3 Student and Staff Caps

Based on consideration of the above section and assessment in the preceding section, the imposition of a student and/or staff cap to limit or control the development is not warranted. As noted elsewhere in this EIS, it is the applicant's strong preference that no limits or caps be imposed so that the intent of the available provisions of *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017* is maintained and maximised to ensure appropriate flexibility. It is our view that conditions with a trigger point threshold are more appropriate in managing the need for any modification or new DA with respect to incremental and minor manageable growth.

Applying *Planning Circular PS17-004 – Regulating expansion of schools* the principles set out for consent authorities' consideration in determining whether to place a condition on a consent that will impose and numerical limit on student and staff numbers at school sites articulates that any cap can only be imposed if there is an extremely strong evidence and valid planning reason for doing so. The following provides an assessment against these principles.

It should be remembered that the school is moving for the exact reasons a consent would otherwise limit growth. There is no further room for any expansion, whether by DA or any other approval pathway. The objectives is to move to a site that enables growth.

Application of outcome-based consent conditions to retain flexibility

The consent authority should consider whether an outcome-based condition would mitigate the impact, rather than a prescriptive, numerical cap. Section 4.17 of the EP&A Act allows conditions to be expressed as an outcome or an objective, so long as there are clear criteria against which achievement of the outcome or objective can be assessed.

If a cap on student numbers is considered warranted, the condition should be drafted to require delivery of the desired outcome of the cap. For example, a cap condition placing an upper limit of student and staff numbers above current enrolment needs could be applied and the condition drafted to require certain measures to be implemented progressively prior to any increase in student numbers. This could include a condition requiring the applicant to submit revised traffic and pedestrian management plans to the consent authority to reflect the increased number to the satisfaction of the approval of the consent authority. This approach delivers an absolute limit to growth at the school but provides flexibility for incremental increases up to the limit permitted by the cap condition to address future operating needs without the need for a new application or a modification.

As noted in the Circular, the consent authority should recognise the need for flexibility when limiting staff and student numbers. Non-government schools (such as St Matthews Catholic School - Mudgee) can also experience similar fluctuations in enrolments due to changes in population and parental preference. Staff numbers may also fluctuate at schools depending on student numbers and specialist learning needs of the school. Should a consent authority determine that a cap is required, then it should also consider how the cap may be reasonably implemented with sufficient flexibility to allow the school to meet increased student enrolment demands.

9.0 CONCLUSION

The site at Broadhead Road and Bruce Road, Spring Flat provides the Trustees of the Roman Catholic Church for the Diocese of Bathurst and the St Matthews Catholic School with a significant opportunity to relocate its high school students and staff to a new location and which enables progressive expansion of the school population and enhanced quality of its education services. The site is highly suitable for the proposed development given the strategic and statutory planning basis underlining its ability for redevelopment for urban purposes. The site's environmental constraints are few and where these do exist are able to be suitably managed.

The subject land lies within the Mid-Western Regional Council area and is subject to the *Mid-Western Regional Local Environmental Plan 2012* (LEP). The area subject of the development is within that part of the site zoned RU4 – Primary Production Small Lots. The proposal is permissible on the subject land under the LEP, as well as under the Education SEPP, by virtue of the RU4 zone also being a prescribed zone for the purposes of clause 35(1) of that SEPP.

The proposal is also consistent with all other relevant provisions under the LEP including those in relation to salinity, earthworks, and groundwater protection. There are no height, density, or other built form controls that limit the development. The smaller development site itself is unaffected by biodiversity, contamination, heritage (whether Aboriginal or non-Aboriginal), or significant bushfire risk.

The proposal contributes toward the achievement of the objects of the relevant strategic planning policies including the 'Central West and Orana Regional Plan 2036' and 'Better Placed: An integrated design policy for the built environment of New South Wales', which amongst other things advocate for development in support of education services for the region and better designed developments in their context.

The proposal has been considered with reference to State Environmental Planning Policy No. 55 - Remediation of Land. In accordance with requirements under Clause 7(4), a Stage 2 (Detailed) Environmental Site Assessment has been prepared. The assessment concludes the likelihood of contamination of the site is nil / low. Studies and testing have also revealed that the site's development is unlikely to affect any groundwater reserves and alter any salinity that may occur at the site.

The site is not affected by any ongoing delivery of, or preservation of land for, agriculture and primary production as the land is not presently being used for such purposes, and has no long-standing or identifiable history as such.

A range of environmental impacts principally related to the construction of the development (such as noise, air quality, traffic, and parking) are able to be suitably mitigated and managed. From an operational standpoint, the development's key likely issues concern traffic and stormwater management.

The development, as proposed, is worthy of approval by the Minister / Department and its consistency with the relevant strategic and statutory planning requirements is in the public interest due to wider community and educational benefits the development will bring to Mudgee and the Region.