**Horseshoe Bend APU Planning Proposal**

**Summary of supporting studies**

1. **Economic Impact Assessment**

An Economic Impact Assessment was undertaken for the proposal and concluded that improvements to, and continued use of St Paul’s Parish Hall, and the development of a multi-purpose facility to be used in association with ASC education establishment will complement the existing education attributes of the precinct. The proposal will provide short term employment benefits during the construction stage. The proposed MPC will not result in an increase in employment associated with the ASC.

1. **Social Impact Assessment**

The proposal is supported by a Social Impact Assessment which concludes the multi-purpose facility will contribute to the continued and improved functioning of the ASC and provide a positive outcome for the wider community.

1. **Architectural Plans/Statement of Heritage Impact**

The subject lands are located within the Central Maitland Heritage Conservation Area (HCA). A Statement of Heritage Impact and supporting architectural plans have been prepared for the proposed restoration and adaptive re-use of St Paul’s Parish Hall and the construction of the proposed “multi-purpose centre”. Three (3) listed heritage items are located in the general vicinity of the subject lands. The former Presbyterian High School Manse (State Heritage Item) Free Church Street, the Maitland Mercury building (local item) corner of High Street and Hunter Street, and former bank building also known as Mansfield House (Local item) High Street.

The design of the new Multipurpose Centre (MPC) building behind St Paul’s Parish Hall provides a scaled increase in the bulk of the new building over the smaller hall. Setting the larger building back into the site minimises effects of views from the site towards the surrounding HCA and similarly from the HCA to the site. The use of a contemporary design for the MPC building ties it to the nearby All Saints College St Peters campus and the St Nicholas Early Childhood Centre.

It is considered the proposed adaptive re-use of the former St Paul’s Parish Hall and construction of a new MPC building will have minimal impact on the heritage significance of the surrounding HCA. Further assessment in terms of consistency with Council heritage controls will form part of the development application process.

1. **Acoustic Assessment**

An Acoustic Assessment has been prepared for the development and use of the subject land as a multi-purpose centre associated with ASC. The assessment addresses both construction and operational noise with consideration to:

* *Road Noise Policy (RNP, DECCW 2011)*
* *Noise Policy for Industrial (NPfI) (NSW EPA. 2017)*
* *Interim Construction Noise Guidelines (NSW DECC, 2009)*
* *Association of Australia Acoustical Consultants Guideline for Educational Facilities Acoustics*

It is considered there could be short term noise impacts on adjoining residents during the construction phase of the development. In accordance with best practice guidelines, construction activities and noise generating machinery are managed through restrictions on operational times and days. The Acoustic Assessment has recommended a range of mitigating measures to help reduce the likelihood of noise impacts on adjoining residences during construction.

The proposed operation of the multi-purpose facility is generally consistent with the ASC school hours and activities associated with indoor sports and general learning. The Acoustic Assessment identifies construction measures, including insulation levels, to mitigate any potential noise impacting upon surrounding residents. The report concludes that noise associated with construction and operation of the proposed muti-purpose facility can be managed and complies with relevant criteria addressed in the above-mentioned policies and industry standards.

1. **Contamination Testing/Remediation Action Plan**

Douglas Partners conducted a Detailed Site Investigation for contamination over the footprint of the development area including areas to the south (basketball courts) and playing fields to the east and northeast.

The test results indicated the presence of contamination within fill material exceeding adopted site assessment criteria for recreation landuses, including schools. Elevated heavy metals were also detected above ecological criteria within the grass playing fields to the east and basketball courts to the south.

Asbestos testing was also conducted on “placed fill” on site which originated from excavations conducted on the subject lands. The results indicated that four fragments analysed contained asbestos. Additional site-specific contamination testing identified exceedance of criteria for recreational landuse. Due to the extensive fill across the site, and elevated contamination concentrations, remediation of the site will be required.

The report recommends additional investigations to further assess the development footprint in order to assess data gaps in previous investigations. The Preferred Remediation Strategy recommended within the submitted Remediation Action Plan (RAP) lists a staged remediation methodology to achieve the remediation goals.

Stage 1 – Additional Investigations /Data Gap Analysis

Stage 2 – Initial Preparation and Site Meeting

Stage 3 – Stripping of Landscape Areas/Validation (where or if required)

Stage 4 - Validation Imported Fill Material (if required)

Stage 5 – On-Site Management of Imported Fill

A Validation Assessment Report will be prepared by the environmental consultants in accordance with NSWEPA (2020). The validation report shall describe the remediation approach adopted, methodology, results and conclusions of the assessment and make a statement regarding the suitability of the site for the proposed school facility.

An additional investigation report maybe required along with an update/revision of the RAP based on the findings of the additional investigations. It is considered that the site can be made suitable for the proposed development subject to the implementation of the submitted RAP.

1. **Archaeological Due Diligence**

An Archaeology Due Diligence Assessment was undertaken for the proposed Multi-Purpose centre site and refurbishment of the existing St Paul’s Hall. No archaeological sites or Potential Archaeological Deposits (PADs) were identified during the site survey. As no sites or PADs were identified, there are no impacts on the archaeological record. The assessment report recommends that should any Aboriginal objects be uncovered during earth works, all work will cease in that location immediately and the Environmental Line contacted. Similarly, persons responsible for the management of onsite works will ensure all staff, contractors and others involved in the construction are made aware of statutory legislation protection sites and places of significance.

1. **Ecological Assessment**

An ecological assessment was prepared for the site in relation to the development of the multi-purpose facility footprint and use of the surrounding area of the subject land. The report concluded that there were no threatened flora or fauna species recorded within he the survey area. The site did not contain any Ecological Endangered vegetation communities.

A total of (17) trees are proposed to be removed from site which include a number of introduced weed species. The proposal will include the establish of landscaping of the site with native vegetation species.

1. **Flood Impact Assessment – (Local Catchment and Regional Hunter River Catchment)**

A Flood Impact Assessment has been undertaken for the proposal for both regional flooding from the Hunter River and localized flooding from local storm events.

Local Catchment Flooding – The subject land is located within the Hunter River floodplain within an urban environment. A TRUFLOW model of the local catchment has been produced and submitted for the assessment of the proposal. The local catchment draining to the site is approximately 1ha in size. If the local stormwater drainage network is exceeded, then the total area of approximately 19ha can drain to a topographic depression centred on Odd Street.

Two topographical depressions have been identified within the locality. In a local rainstorm scenario, with insufficient local drainage capacity, these depressions will begin to fill and eventually become connected via Carrington Street at a level of approximately 7.1mAHD. The outlet for overland flow from the combined storage is at a level of approximately 7.2mAHD via Raglan Street.

A conservative estimate of local catchment flood conditions was modelled including the entire catchment and no sub-surface stormwater drainage network, resulting in retention of all catchment rainfall within the local floodplain storage until the overflow along Raglan Street is reached.

The flood impact assessment modelling identified three potential critical conditions for flood impacts associated with the proposal.

 1. Local redistribution of overland flow running through the site

 2. Loss of volumetric storage within the Odd Street topographic depression

 3. Loss of volumetric storage within the combined depressions.

Three (3) 1% AEP design event scenarios were simulated for the pre- and post-development conditions. Results show a negligible change in the modelled peak flood levels or velocities for each of the three scenarios. A flood peak level increase of 7mm has been modelled within the Odd Street storage for the 6hr storm duration, with zero impact on the Cathcart Street storage. For the 12hr storm duration a peak flood level increase of 4mm has been modelled across the combined storages. This does not represent a tangible adverse impact, particularly given the conservative assumption of a full blockage of the stormwater drainage network.

The flood impact assessment, supported by a TRUFLOW hydraulic model, concludes the proposal development of the site has a negligible impact to the modelled peak flood levels and peak flood velocities.

Hunter River Regional Flooding Impact- As stated above, the subject lands are located within the Hunter River Floodplain. The proposed development is subject to the flooding provisions of the MLEP 2011 and Maitland DCP 2011. The proposal is also subject to Ministerial Direction 4.1 Flooding, which is addressed in the Planning Proposal appended to this report as **Attachment A**.

The submitted Flood Impact Assessment (FIA) included flood modelling for the 5% AEP, 2% AEP, 1% AEP and 0.5% AEP events to define basic line flood conditions for the purpose of assessing flood risk and the basis for the Flood Impact Assessment. The (FIA) determined that most of the site has a high-risk hazard and at peak flood conditions comprise of tailwater with low velocity flows.

With regard to management of flood risk to property, the ground floor of the proposed multi-purpose facility will have a finished floor level of 9.72mAHD which is the 1% AEP flood level adopted by Council. As the proposal does not comprise of habitable rooms, the finished floor level is not required to be 0.5m above this level. However, the entire sub-floor area needs to be flood compatible and should be constructed and fitted out in accordance with Flood Aware Design Requirements.

The FIA concludes that the proposed development will have minor impacts upstream and minimal impacts downstream of the site. Minor impacts occur in peak velocity as localised redistribution mostly contained on the site for a short period of time within a flood event. The management of risk to life and property from flooding is consistent with that of the existing area, with evacuation of Central Maitland in advance of the flood event.

The proposal is considered compatible with the flood hazard and behaviour associated with the site. The site is not within a floodway, does not result in significant impacts to other properties and does not enable residential development.

1. **Traffic and Parking Assessment**

A Traffic and Parking Assessment has been undertaken for the proposed multi-purpose facility. Access to the proposed facility will be shared through the existing vehicle access crossing off Hunter Street currently providing access for St. Nicholas Early Learning Childcare Centre.

The proposal seeks to provide an additional and improved facility for the existing school population not resulting in any increase in student enrolments or employment of additional staff. The new facility maybe used for some after school activities associated with the school such as sports training and parish and community uses. As the additional traffic generated is outside school hour use and does not coincide with peak road network traffic periods, it is reasonable to conclude that the additional traffic loading will not adversely impact on the local road network.