

JRPP Ref. No.:	2014SYW151
DA No.:	DA14/1228
PROPOSED DEVELOPMENT:	Bulk Earth Works, Interim Stormwater Infrastructure, Landscaping, Tree Removal and Environmental Management Works including Realignment of an Existing Riparian Corridor Lot 1037 DP 1149525 at No. 1208 - 1274 The Northern Road, LLANDILO
APPLICANT:	Maryland Development Company Pty Ltd
OWNER:	St Marys Land Ltd
REPORT BY:	Aimee Lee, Senior Environmental Planner, Penrith City Council

Assessment Report

Executive Summary

Council has received a Development Application from Maryland Development Company Pty Ltd (Lendlease) seeking approval for the following works in the Central Precinct of the St Marys ADI Site:

- Importation of approximately 2,000,000m³ of clean inert fill and utilization of existing 300,000m³ of fill from an existing stockpile situated to the northern part the site;
- Compaction of the imported and existing fill to a finished level above the 1:100 year flood level to facilitate future development of the Central Precinct;
- Construction of associated preliminary interim stormwater engineering works including eight (8) detention basins and re-alignment of an existing riparian corridor; and
- Associated tree/vegetation removal.

In accordance with Schedule 3 - Designated Development of the Environmental Planning and Assessment Regulation 2000 (EP&A Regulation), the proposal is defined as a waste management facility as it involves the use/reuse of material from waste and disposal by landfilling of more than 100,000 tonnes of clean fill and is likely to cause significant impacts on drainage and/or flooding. Clause 8(c) of the Environmental Planning and Assessment Act 1979 (EP&A Act) further classifies the proposal as Regional Development as the development has a capital investment value (CIV) exceeding \$20 million. As a result, the Joint Regional Planning Panel (JRPP) – Sydney West Region is the consent authority pursuant to Section 23G and Schedule 4A(3) of the EP&A Act.

The applicant consulted the Director-General (now Secretary) of the Department of Planning and Environment in March 2013 in order to obtain requirements for the preparation of an Environmental Impact Statement (EIS) to accompany the subject Development Application. The Director-General, under Section 89G of the EP&A Act issued requirements for the preparation of an EIS in April 2013. To address the EIS requirements and other requirements provided by the NSW Office of Water, NSW Trade and Investment and Office of Heritage and Environment, the applicant has prepared the following studies/assessments which were submitted with the Development Application:

- Flood Assessment Report Site Contamination Status Summary Species Impact

Statement;

- Archaeological Assessment and Heritage Impact Statement;
- Aboriginal Heritage Assessment Report;
- Construction Traffic Management Plan;
- Vegetation Management Plan;
- Air Quality Impact Assessment
- Construction Noise and Vibration Assessment;
- Green House Gas Assessment;
- Civil Report Consultation Strategy; and
- Waste Management Strategy.

Sydney Regional Environmental Plan No. 30 – St Marys (SREP 30) applies to the site. The majority of the Central Precinct is zoned “Urban” to accommodate primarily residential development with limited non-residential development such as local retail and commercial land uses. The northern part of the Precinct is zoned Employment to accommodate employment generating land uses.

The proposal is defined as flood mitigation works which means:

“works and measures which are intended to reduce or eliminate the effects of flooding.”

Flood mitigation works are permitted in the Urban zone and Employment zone under the provisions of the SREP.

The applicant met with Council Officers including representatives from the NSW Environment Protection Authority in November 2014 to discuss the following issues identified during the assessment of the proposed development:

- Environment protection licensing requirements under the Protection of the Environment Operations Act, 1997 (POEP Act);
- Components of the proposal regulated under the POEO Act;
- Construction noise associated with the proposed 24/7 importation of fill;
- Duration of the proposed works;
- Construction traffic;
- Modelling analysis of the filling of the floodplain and associated flooding impacts on surrounding developments;
- Interface between the Riparian Corridor and Transmission easement;
- Finished levels of the platform and vertical clearance from the Transmission easement; and
- Widening of the proposed Riparian Corridor to achieve an improved biodiversity outcome.

In response to the above issues, the applicant submitted the following additional information:

- Further noise investigation;
- Dispersion modelling for particulate matter (PM¹⁰) concentrations;
- Revised Flood Report;
- Riparian Corridor Landscape Concept Plans; and
- Information in relation to the batters along the eastern boundary, interface with the southern property boundary and soil profile capability to facilitate vegetation growth.

To address the flood modelling concerns raised, the applicant entered into a peer review by Council's consultant.

The development application was advertised in local newspapers, exhibited and notified to adjoining property owners and occupants for thirty (30) days in accordance with the EP&A Act and EP&A Regulation. The notification period was between 20 October 2014 and 19 November 2014. Council received one (1) submission and 452 pro-forma submissions.

In view of the number of submissions received and in response to the request of one of the submitters, the JRPP held a public meeting on 18 June 2015 to facilitate discussions between the applicant and the submitters.

The issues raised in the public submissions relate to:

- Additional traffic generated by the bulk earthworks;
- Continuous monitoring of mitigation measures, penalties for failure to implement mitigation measures and mechanism for reporting non-compliance;
- Provisions for claims due to adverse business impacts;
- Damage to adjoining properties and infrastructure;
- Enforcement of the Construction Traffic Management Plan;
- Alternate haulage routes;
- Widening of Links Road;
- Sealing of access road;
- Monitoring of truck wash;
- Impact on air quality (PM₁₀ concentrations) and monitoring of air quality;
- Communication process in the event of failure of airborne pollutant mitigation measures;
- Asbestos and potential contamination;
- Insufficient compensatory flood storage;
- Inadequate consideration of future developments upstream;
- Health impacts associated with the Particulate Matter (PM₁₀) concentrations;
- Construction noise exceeding the normal management levels;
- Vibration caused by rolling machines used in construction and compaction;
- Tree removal and loss of biodiversity;
- Inconsistency with the Cumberland Plain Recovery Plan;
- Inclusion of additional land to offset/mitigate loss of trees/biodiversity;
- Development edge effects such as increase in bushfire and arson risk;
- Impact of domestic animals on fauna;
- Land and Environment Court decision on developments in floodplains; and
- Salinity and rising water table.

The application was referred to the following external authorities for comment:

- NSW Office of Water;
- National Parks and Wildlife Services (NPWS);
- Roads and Maritime Services (RMS);
- NSW Environment Protection Authority (EPA);
- Blacktown City Council;
- Hawkesbury City Council; and
- TransGrid.

The RMS, TransGrid, Blacktown City Council and Hawkesbury City Council raised no objection to the proposal. The NSW Office of Water issued their General Terms of Approval on 10 November 2014 subject to conditions. NPWS was concerned about the adverse impact on natural and cultural values and raised issues to be considered in future development proposals within the Precinct.

A Species Impact Statement (SIS) was submitted with the Development Application. The SIS concluded that the *“clearance of relatively small areas of natural and semi-natural vegetation is considered to be of minor consequence and the proposal is unlikely to result in any threatened species or ecological community becoming extinct”*.

A Flood Assessment Report was also submitted with the Development Application. The Assessment noted that the proposal will produce water level impacts up to 38mm at the upstream property boundary and 11mm at the downstream site boundary. The Assessment concluded that the level of impacts does not exceed Council's requirements of a maximum 100mm afflux. The proposal is also consistent with the level of impact adopted in the Central Precinct Plan (CPP).

The application has been assessed with respect to the Threatened Species Conservation Act 1995 (TSC Act), EP&A Act and other relevant Environmental Planning Instruments applicable to the subject site. It is considered that the proposal conforms to the relevant provisions of the various Environmental Planning Instruments and will not result in any adverse impact on the natural and built environment. Therefore it is recommended that the JRPP grant consent to the proposal subject to the recommended conditions of development consent.

Background

There are a number of previous approvals relevant to Development Application No. 14/1228 and these are outlined below:

- DA07/0494 - Filling of land and Torrens Title subdivision creating five (5) lots and construction of associated civil works;
- DA14/0411 - Demolition of existing structures, roads and hard surfaces and remediation of Land within the Central Precinct, St Marys;
- DA14/0766 - Construction of a temporary haulage road and associated infrastructure upgrades to facilitate the movement of trucks associated with future works within the Central Precinct, St Marys;
- DA14/0990 - Demolition of Hoop Antenna and Surrounding Hard Stand Area (Former Naval Radar Calibration Range); and
- DA15/0299 - Proposed staged residential subdivision including 380 x residential lots, residue lots, future roads and open space lots and associated road construction, bridge crossings, landscaping works, drainage infrastructure and a phased remediation strategy (this Application has yet to be determined).

Site & Surrounds

The Central Precinct is one of the six (6) precincts of the St Marys Development Site endorsed by the NSW Government for inclusion in the Urban Development Programme in 1993. The site is situated to the north-west of the Dunheved Industrial Area. Along the southern boundary is the Werrington County residential area. Wianamatta Regional Park is situated to the north and west of the site. South Creek is situated to the eastern portion of the Central Precinct thereby the site is subject to the Probable Maximum Flood (PMF) events from South Creek (refer to Attachment 1 – Locality Plan).

The vegetation community on the site consists of a mix of Cumberland Plain Woodland (CPW), Shale Gravel Transition Forest (SGTF), River-flat Eucalypt Forest (RFEF), Swamp Oak Forest (SOF) and Freshwater Wetlands with CPW being the dominant community. The more mature

CPW occurs along the west to south-west sections of the site and extends into the adjoining Regional Park. The regenerating CPW occurs in the central area. The eastern portion of the site is impacted by the Probable Maximum Flood (PMF) events from South Creek.

The Central Precinct has a total site area of approximately 133 hectares and is irregular in shape. It falls approximately 21m from the south-west to the north-east. There are two (2) existing warehouse buildings on the site. These buildings and the surrounding roads and hard surfaces have been approved for demolition and associated remediation under Development Consent No. 14/0411. Elizabeth Farm, a European Heritage Item identified under Sydney Regional Environmental Plan No. 30 - St Marys is situated in the southern part of the site.

Proposal

Key aspects of the proposal are outlined below:

a) Bulk earthworks, compaction and importation of fill including:

- Tree removal;
- Cut and fill of the site and utilization of up to 300,000m³ of crushed brick, concrete and soil from existing stockpiles situated on the site;
- Importation of 1,890,000m³ of clean fill; and
- Levelling and compaction of the fill over the site raising the ground levels above the 1 in 100 year flood level.

b) Construction of preliminary interim stormwater engineering works including:

- Excavation and construction of eight (8) sediment basins that drain to the adjacent creeks including South Creek; and
- Landscaping of the detention basin areas.

c) Environmental management works including:

- Rehabilitation and realignment of an existing riparian corridor over the site, including weed removal and revegetation;
- Use of extensive sediment and erosion control measures; and
- Implementation of various environmental mitigation measures to monitor, manage, and mitigate impacts of the proposed works throughout the lifecycle of the project.

The proposed bulk earthworks will be undertaken in four (4) phases (refer to Attachment 2 – Fill Phasing Strategy):

Phase 1 - Southern part of the Central Precinct and works in part of Dunheved Precinct

Phase 2 – Northern part of the Precinct; removal of existing stockpile

Phase 3 – Construction of East West Connector Road, new South Creek Bridge, culvert relief and M-Lock Bridge; and

Phase 4 – Dunheved Precinct

Up to fifty (50) employees will be working on the site during importation and compaction of fill. Access to the site will be restricted via a private haul road off Links Road. The site will be secured by temporary fencing and a temporary compound will be provided for staff as well as visitor parking. The primary source of fill will come from the NorthConnex project. However, during early stages of the proposal, fill will be sourced from Badgerys Creek and/or Burwood.

The main haulage route will be from the M4 Motorway, Mamre Road, the Great Western Highway, Glossop Street, and Forrester Road to the internal haul route. An alternate route is from the M4 Motorway, via Roper Road, the Great Western Highway, Glossop Street, Forrester Road and Links Road to the internal haul route.

Plans that Apply

- State Environmental Planning Policy (Infrastructure) 2007
- State Environmental Planning Policy No. 33—Hazardous and Offensive Development
- State Environmental Planning Policy No. 55—Remediation of Land
- Sydney Regional Environmental Plan No. 20—Hawkesbury/Nepean River
- Sydney Regional Environmental Plan No. 30—St Marys

Planning Assessment under Environmental Planning and Assessment Act 1979

Section 5A – Threatened Species Assessment

A Species Impact Statement (SIS), prepared in accordance with Sections 109 and 110 of the Threatened Species Conservation Act 1995 (TSC Act) and the requirements of the Director General of the Office of Environment and Heritage (OEH) was submitted with the proposal.

The purpose of the SIS is to identify threatened species issues and identify and provide mitigation measures to minimise potential adverse impacts arising from the proposal. A survey was carried out for the purpose of the SIS and noted that the vegetation community consists of a mix of Cumberland Plain Woodland (CPW), Shale Gravel Transition Forest (SGTF), River-flat Eucalypt Forest (RFEF), Swamp Oak Forest (SOF) and Freshwater Wetlands with CPW being the dominant community. The more mature CPW occurs along the west to south-west sections of the site and extends into the adjoining Regional Park.

The applicant proposes to remove approximately 158 ha of vegetation of which 65 ha is CPW. The CPW on the site however is degraded, sparse in nature and relatively small in size due to historic disturbance and therefore has a low level of conservation value. In view of the conditions of the CPW, the SIS concluded that the proposal is not likely to have a significant impact nor place the large and viable representatives in the Regional Park at risk of extinction.

Pursuant to Section 5A of the EP&A Act, the consent authority must also take into account whether the proposed development is consistent with the objectives or actions of the Cumberland Plain Recovery Plan (CPRP) in deciding whether there is likely to be a significant effect on threatened species, populations or ecological communities, or their habitats. The following is an assessment of the proposal against the relevant objectives and actions of the CPRP.

Cumberland Plain Recovery Plan (CPRP)

The CPRP was approved by the Minister for Climate Change and the Environment in January 2011 under Part 4 of the *Threatened Species Conservation Act 1995* Act and 6azette on 18 February 2011. The CPRP has also identified Priority Conservation Lands (PCLs) and they are situated in the vicinity of the site encompassing the Regional Park and the Deerubbin lands to the north.

The following is an assessment of the proposal against the relevant objectives and actions of the CPRP:

Objectives	Comments
1. <i>To build a protected area network, comprising public and private lands, focused on the priority conservation lands.</i>	Complies. The proposed Wianamatta Regional Park has been designated as priority conservation lands and the proposed works will not adversely impact on land zoned for the future regional park.
2. <i>To deliver best practice management for threatened species, populations and ecological communities across the Cumberland Plain, with a specific focus on the priority conservation lands and public lands where the primary management objectives are compatible with conservation.</i>	Complies. The proposed Wianamatta Regional Park has been designated as priority conservation lands and the proposed works will not adversely impact on land zoned for the future regional park.
3. <i>To develop an understanding and enhanced awareness in the community of the Cumberland Plain's threatened biodiversity, the best practice standards for its management, and the recovery program.</i>	Complies. The community awareness of the Cumberland Plain's threatened biodiversity is enhanced through the creation of the Regional Park.
4. <i>To increase knowledge of the threats to the survival of the Cumberland Plain's threatened species, populations and ecological communities, and thereby improve capacity to manage these in a strategic and effective manner.</i>	Complies. The identification and protection of the future regional park will preserve threatened species and communities in a strategic and effective manner whilst ensuring that potential threats can be managed under the control of NPWS once handed over.

In addition, the following table provides a summary of the general recovery actions that are linked to Penrith City Council and a comment on how each action relates to the current proposal.

Recovery Action	Comments
Action 1.4 Local councils will have regard to the priority conservation lands in identifying areas for inclusion in environmental protection and regional open space zones.	This has been achieved through the making of SREP 30 by the Minister for Planning and the reservation of the proposed Regional Park which has been identified in the CPRP as priority conservation lands.

<i>Recovery Action</i>	<i>Comments</i>
Action 2.2 Support and promote the adoption of best practice standards for bushland management and restoration (as specified in Appendix No. 2) on public and private lands within the Cumberland Plain	Several management plans including a Weed Management Plan, Feral and Domestic Animal Management Strategy, Bushfire Protection Assessment and an Open Space and Landscape Master Plan were prepared as part of the Precinct Plan and adopted by Council in March 2009. The proposal is consistent with these strategies.
Action 2.5 Local government will manage to best practice standards (as specified in Appendix No. 2) any lands which are under their ownership or for which they have care, control and management, which: <ul style="list-style-type: none"> contain any of the threatened biodiversity listed in Table 1 are located within the priority conservation lands or, if located outside these lands, have conservation as a primary management objective. 	Penrith City Council does not own any land at this stage. Any dedication of public land in the future will be considered in the assessment of future subdivision Development Applications.
Action 3.4 Work collaboratively with local government authorities and other organisations to inform communities about the value and role of remnant vegetation on the Cumberland Plain, the best practice standards for its management, and any opportunities to participate in the recovery program.	Council has adopted a Biodiversity Action Plan that includes education and community involvement programs. It should be noted that this action is not directly related to the determination of this development application.
Action 3.5 Work with Aboriginal communities, landowners, community groups, and students to deliver best practice management in the priority conservation lands, and to identify other opportunities for involvement in the recovery program.	See comments on Action 3.4 above
Action 3.7 Develop interpretive programs for key local reserves that contain examples of the threatened biodiversity addressed in the recovery plan.	See comments on Action 3.4 above
Action 4.3 DECCW will encourage local councils to prepare or review biodiversity strategies to be consistent with the recovery plan that guide protection, management and strategic investment in threatened biodiversity, both within and outside of the priority conservation lands.	See comments on Action 3.4 above

Recovery Action	Comments
Action 4.4 DECCW will work collaboratively with local councils to enhance the compliance and enforcement program with regard to the unauthorised clearing of bushland on the Cumberland Plain.	See comments on Action 3.4 above

In view of the above, the proposal is considered to be consistent with the objectives and actions of the CPRP in relation to:

- Contribution to the conservation of high quality biodiversity in the proposed Regional Park;
- Restriction on the clearance of habitat for threatened biodiversity;
- Limitation on the clearance to those with a lower biodiversity value; and
- Adoption of management plans that are consistent with the objectives and requirements of the Recovery Plan for regulating the development.

The proposal is therefore considered to be satisfactory having regard to the key considerations of the Threatened Species Conservation Act 1995.

Section 23G – Joint Regional Planning Panel (JRPP)

The application has been assessed in accordance with Section 23G of the Environmental Planning and Assessment Act and the application will be determined by the Joint Regional Planning Panel - Sydney West Region for the following reasons:

- It is a designated development for the purposes of a waste management facility; and
- It has a Capital Investment Value (CIV) of over \$20 million.

Section 79C(1)(a)(i) – The Provisions of any Environmental Planning Instrument

State Environmental Planning Policy (Infrastructure) 2007

The proposal was referred to the NSW Roads and Maritime Services (RMS) for comment in accordance with Schedule 3 - Traffic Generating Development under State Environmental Planning Policy (Infrastructure) 2007. The RMS raised no objection to the proposal as outlined within their correspondence dated 31 October 2014.

State Environmental Planning Policy No. 33—Hazardous and Offensive Development

An assessment has been undertaken of the application against relevant criteria within State Environmental Planning Policy No. 33—Hazardous and Offensive Development (SEPP 33) and it is concluded that the proposal does not fall under the definition of 'industry' and hence the definition of a potentially hazardous industry or potentially offensive industry. The applicant has undertaken a preliminary risk screening and the findings have confirmed that the proposed works do not constitute a potentially hazardous industry or a potentially offensive industry.

State Environmental Planning Policy No. 55—Remediation of Land

Clause 7 of State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55) provides the following key considerations to be addressed in the assessment of any Development Application.

- (1) *A consent authority must not consent to the carrying out of any development on land unless:*
- (a) *it has considered whether the land is contaminated, and*
 - (b) *if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and*
 - (c) *if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.*
- (2) *Before determining an application for consent to carry out development that would involve a change of use on any of the land specified in subclause (4), the consent authority must consider a report specifying the findings of a preliminary investigation of the land concerned carried out in accordance with the contaminated land planning guidelines.*

The proposed development does not propose a change in land use. The proposal however seeks to alter the natural land form which must be considered having regard to the site conditions, whether the land is suitable for such development and where remediation is required, the consent authority must consider a suitable investigative analysis ensuring that the land can be made suitable for the intended future purpose.

A Site Contamination Status Summary was submitted with the Development Application. The Summary noted that there are three (3) current Site Audit Statements applicable to the Central Precinct and they are outlined below:

- CHK001/1 - it is stated that the majority of the site is suitable for residential including substantial vegetable garden and poultry excluding the footprint of original buildings, carparks and roads and stockpiles;
- CHK001/6 - it relates to the existing buildings and paved areas across the site and states that these areas are suitable for commercial/industrial use or may continue to be used for commercial use and carparks but underlying soils need to be tested for chemical and ordnance contamination after demolition; and
- CHK001/7 - it relates to the stockpiles situated to the north of the site. The area may continue to be used as stockpile for crushed concrete but underlying soils need to be tested for chemical and ordnance contamination after stockpile removal.

The previous Site Audit Statements issued have demonstrated that the majority of the Central Precinct is suitable / remediated. However, areas underneath buildings, roads and existing stockpiles have the potential to contain contaminated material as these areas are inaccessible until demolition works progress. Further post demolition testing is intended to be undertaken in accordance with a Sampling and Analysis Quality Plan submitted with the Stage 1 subdivision of the Central Precinct (DA15/0299). In addition, a Contamination Management Plan has been provided which establishes a framework for identifying and addressing the discovery of contaminated material (including an Unexpected Finds Protocol) to protect workers and the surrounding public. Both documents have been considered by the NSW EPA Accredited Site Auditor.

Should any remediation works be found to be required through the above sampling, a Conceptual Remediation Strategy has also been prepared by JBS&G, with each stage being subject to a Specific Remedial Action Plan. Site Audit Statements will be issued for the remaining areas if they are found to be suitable. This approach has again been approved by a NSW EPA Accredited Site Auditor, ensuring that the site is capable of being made suitable for the future intended land use.

The Sampling Analysis and Quality Plan and Contamination Management Plan submitted with DA15/0299 along with the Specific Remedial Action Plans will ensure that unvalidated areas can be made suitable which satisfies Clause 7 of SEPP 55.

In addition to compliance with these strategy documents, the following recommendations are included as conditions of consent:

- Works are not to occur in areas that have not been validated by Site Audit Statements until they have been established as suitable for the proposed use; and
- A Fill Importation Protocol to ensure the material brought onto the site is suitable and will not cause land contamination is to be developed.

Subject to compliance with the recommended conditions, the site will be made suitable for future development thereby complying with provisions of Clause 7 of the SEPP.

Sydney Regional Environmental Plan No. 20 - Hawkesbury/Nepean River

According to Clause 11 of Sydney Regional Environmental Plan No. 20—Hawkesbury/Nepean River (No 2 - 1997), filling requires development consent. The proposal has demonstrated that it will not have a significant impact on threatened species and habitats, water quality will be maintained by the proposed stormwater management system and permits have been issued for disturbance or salvage of heritage remains. In this case, the proposal is considered satisfactory and can be supported subject to recommended conditions of consent.

Sydney Regional Environmental Plan No. 30 - St Marys

As assessment has been undertaken of the application against relevant criteria within Sydney Regional Environmental Plan No. 30—St Marys (SREP 30) and the findings of the assessment are outlined below.

Permissibility

The majority of the Central Precinct is zoned "Urban" under SREP 30. The northern portion of the Precinct is zoned "Employment" and a small area to the north-east is zoned "Drainage". The proposed filling and associated bulk earthworks, preliminary interim stormwater engineering works and environmental management works are permitted in the Urban and Employment zones subject to development consent. Works ordinarily incidental or ancillary to drainage are permitted in the Drainage zone.

Aims and Objectives

The applicant seeks approval for filling the site and associated earthworks in order to raise the levels of the site above the 1:100 year flood level to facilitate future urban and employment generating developments in accordance with the Central Precinct Plan. The extent of fill is generally consistent with the "Potential Fill Area" identified on the SREP 30 Structure Plan. The applicant has also commissioned various consultants to carry out environmental assessment to determine the potential impact and recommend appropriate mitigation measures to ensure a desirable environmental, social and economic outcome can be achieved.

Noise

A Construction Noise Assessment Report was submitted with the Development Application. The Report has identified two (2) noise sensitive receivers and the extent of exceedance in these areas. To address these identified exceedances, the applicant has undertaken additional

investigations and in turn established a boundary identifying where bulk earthworks can occur without exceeding the noise management levels (refer to Attachment 3 – Extent of Works Without Exceedance of Noise Management Levels). A number of recommendations have been made as a result of the additional investigation and these recommendations are outlined below:

- Construction of a 3m high acoustic barrier;
- Reduction in the timeframe for completion of works;
and
- Incorporation of a Noise Management Strategy into the Construction Environmental Management Plan.

In addition, the applicant has reviewed the plant/equipment list and provided a more refined list nominating smaller machinery and reduction in the number of plant to carry out the works. These recommendations can be conditioned accordingly (refer Condition Nos. 25, 26, 27, 28 and 29).

Air Quality

An Air Quality Impact Assessment prepared by Wilkinson Murray was submitted with the application. The Assessment has identified potential air quality impacts resulting from the proposed bulk earthworks and recommended a Construction Dust Management Plan be developed and implemented to monitor and manage particulate air quality impacts to the surrounding area.

Subsequent to the meeting with Council officers in November 2014, the applicant undertook further dispersion modelling. The further analysis undertaken indicated that the air quality impact assessment criteria would likely be exceeded at approximately 100m and 500m south of the southern boundary. To minimise the potential impacts of the proposal, the review has recommended the following additional mitigation measures:

- Establishment of exclusion zones which identify areas where the predicted PM₁₀ concentrations exceed the impact assessment criteria (refer to Attachment 4 – Maximum Predicted 24 hour PM₁₀ Concentrations for Zone 1 and Zone 3);
- Continuous monitoring of ground level concentrations of PM₁₀ at the most affected off-site receptors to mitigate exceedance while works are conducted within the exclusion zones;
- Development a reactive management plan to ensure the criteria are met; and
- Prioritisation of works during periods of rain or southerly winds within the exclusion zones and avoid work during dry or windy weather conditions.

Notwithstanding the development will still give rise to a certain level of impacts, the applicant has sufficiently demonstrated that the impact can be managed through the establishment of exclusion zones and the air quality impact assessment criteria can be achieved through implementation of appropriate mitigation measures. In this regard, no environmental objection is raised.

To ensure the air quality impact assessment criteria can be achieved, it is recommended that a Construction Environmental Management Plan (CEMP) is prepared and submitted for Council's approval prior to the commencement of works. The CEMP is to include details of appropriate environmental management practices and controls to be implemented on the site to address the potential environmental issues associated with the proposed bulk earthworks. Subject to compliance with the recommended condition, the performance objective to minimise adverse impact on the air quality can be achieved (refer Condition No. 30).

Conservation

A Species Impact Statement (SIS) and a Vegetation Management Plan were submitted with the Development Application. The SIS has undertaken a survey of the existing vegetation, identified the extent and species of trees to be removed and assessed the direct and indirect impact associated with the proposed tree removal. The survey noted that the vegetation on the site consists of a combination of Cumberland Plain Woodland (CPW), Shale Gravel Transition Forest (SGTF), River-flat Eucalypt Forest (RFEF), Swamp Oak Forest (SOF) and Freshwater Wetland with CPW being the dominant vegetation community within the Precinct.

The CPW community consists of young and degraded woodland including low variant derived native grassland. It is relatively small in size and the distribution is sparse. The more mature CPW is situated along the west and south-west sections of the site and extends into the Regional Park and the regenerating CPW is situated in the central area of the site.

While the existing vegetation provides a habitat for a number of threatened species including but not limited to the Cumberland Plain Land Snail and *Grevillea juniperina* subsp. *Juniperina*, the SIS concluded that the loss of this habitat is not considered to be significant.

To mitigate the potential impacts of the proposal, the applicant has made the following recommendations:

- Continued mowing of a buffered edge between the residential development area and the Regional Park;
- Retention where possible of stands of trees and vegetation;
- Avoiding the use of fertiliser at the perimeter of the Regional Park;
- Identification and management of weeds during and after construction; and
- Control of feral and over-abundant native animals; and
- Control of domestic animal access.

Council in assessing the application has taken into consideration the conservation objectives outlined in Clause 24 of the SREP and the development controls relevant for tree removal under Clause 52 of the SREP. No objection is raised to the proposal as the SIS has satisfactorily demonstrated that the vegetation community is of a poor quality and its removal is not considered to be significant. The proposal is unlikely to result in any threatened species or ecological community becoming extinct. Furthermore, a significant proportion of the native flora and fauna species and fauna habitat will be conserved within the adjoining Regional Park.

Part of the proposal involves consolidation of a number of existing channels across the site into a riparian corridor. The re-aligned corridor will form part of the drainage system and it will be used as a corridor park in the future. The proposed channel will be 35m wide with an additional 10m vegetated riparian zone on either side of the channel. It was raised with the applicant that the proposed width is inconsistent with Council's normal DCP requirements for a 20m riparian zone with a 10m vegetated buffer for a Category 2 stream. In response, the applicant has provided indicative concepts for the future embellishment of the channel/riparian corridor and the following information:

- The purpose of the bulk earthworks is to establish the general principles of the stormwater arrangements including the provision of a drainage channel;
- The channel structure provides multiple functions including a low-flow drainage line conveying normal stormwater flows, conveyance of flood waters and to act as flood storage during a local or regional flood event. Ultimately the watercourse and the core riparian zone will emulate a natural watercourse;

- The 35m wide channel represents the core riparian zone and the width of the watercourse within the core riparian zone is variable;
- The maximum slope of the core riparian zone will be 1(V):4(H) connecting the watercourse to the top of the channel at the finished ground level of the surrounding land. However, details of the core riparian zone will be subject to further design; and
- The 10m vegetated riparian zone is additional to the vegetation and improvements within the core riparian zone.

The applicant further stated that the indicative channel/riparian corridor will ultimately reflect a natural water course and no objections have been raised by the NSW Office of Water in their General Terms of Approval (GTAs) dated 10 November 2014.

As a result, no objection is raised to the proposed riparian corridor from a biodiversity/conservation perspective having regard to the following:

- GTAs have been issued by the Office of Water. The GTAs require the applicant to obtain a Controlled Activity Approval prior to the commencement of works on the channel which in turn requires plans and designs to be prepared;
- The corridor will resemble a natural state subject to future embellishment details;
- The opportunity for planting vegetation up to 4m within the transmission easement will facilitate a suitable biodiversity outcome;
- The potential retention of trees across the Precinct has been adequately addressed. The applicant is proposing the reuse of topsoil; and
- The availability of mitigation measures including the 900 ha regional park and the various strategies adopted as part of the Central Precinct Plan for the management of weeds, feral and domestic animals, bushfire and macrofauna.

Various conditions of consent are also recommended to ensure the following:

- Relevant documents are submitted with the application for a Controlled Activity Approval;
- A Landscape and Vegetation Management Plan prepared in consultation with TransGrid for the transmission easement is submitted to Council for approval;
- The applicant is to liaise with NPWS for the reuse of woody debris and felled trees;
- A detailed tree survey is submitted showing trees to be retained;
- Protection of the Green and Golden Bell Frog;
- Proper stripping and stockpiling of topsoil; and
- Implementation of existing mitigation strategies.

Subject to compliance with the recommended conditions, it is considered that the potential impact on the natural environment will be minimised and the proposal is supportable.

Heritage

The applicant has submitted an Archaeological Heritage Assessment Report and Archaeological Assessment as well as a Heritage Impact Statement with the Development Application. Permits have been issued by the NSW Office of Environment and Heritage (OEH) under Section 90 of the NPWS Act allowing archaeological salvage excavation of Aboriginal objects or places in four (4) areas. The Assessment Report noted the status of the salvage works as follows:

- Management Zone 2 and Zone 3 - Collection has completed. Bulk earthworks may be undertaken in these areas;
- Management Zone 4 - No further archaeological work is needed; and
- Management Zone 1 – collection to be carried out in conjunction with the bulk

earthworks enabling Aboriginal parties to monitor topsoil stripping and collection of objects.

To minimise the potential impacts, the applicant has recommended an induction be undertaken for employees on required actions if heritage items are identified during works, particularly in Management Zone 1. This will provide the Aboriginal community an opportunity to be engaged in the management of items of Aboriginal heritage significance in accordance with the objectives of Clause 25 of the REP. This recommendation will be conditioned (refer to Condition No. 23).

An Archaeological Assessment for Elizabeth Farm was undertaken in 2008 which reviewed and assessed the nature of Elizabeth Farm, identified the constraints and opportunities and made recommendations to manage any identified heritage issues. One of the recommendations was to seek approval from the NSW Heritage Office for disturbance of archaeological remains.

The applicant has since applied to the Heritage Division of the Office of Environment & Heritage for the disturbance of the archaeological remains. The Heritage Division has issued a Section 140 Excavation Permit (2014/S140/16) under the Heritage Act 1977 for the removal of the archaeological artefacts of Elizabeth Farm. The approval was granted subject to the provision of an Interpretation Strategy. The impact of the proposed development on this heritage site has been considered as part of the application for the Excavation Permit and it is therefore consistent with the objectives of Clause 25 of the SREP.

Council's Heritage Advisor has reviewed the proposal and requested that the draft Interpretation Strategy and information relating to the storage of items be submitted to Council. Appropriate conditions have been prepared and recommended accordingly (refer to Condition Nos 21 and 22).

Watercycle

The Central Precinct is relatively flat and predominantly undeveloped and is traversed by a number of watercourses. It is anticipated that the likely impacts of the proposal on the existing site drainage will be connected to the following:

- Impact on the downstream water quality due to pollution and sedimentation; and
- Increasing flooding impacts on the upstream and downstream environment.

To address the stormwater quantity and stormwater quality issues, the applicant has incorporated the following in a Preliminary Stormwater Management System that accompanies the Development Application:

- Provision of a number of dry bio-infiltration basins, a riparian corridor and a drainage reserve to manage the collection and flow of stormwater. The capacity of the basins has taken into consideration the stormwater flows resulting from the proposed development and future built development; and
- Reduction of post-development pollutant loads to maintain and/or improve the quality of stormwater flowing onto the adjoining catchment.

Details of erosion and sediment control measures have also been incorporated into the Erosion and Sedimentation Control Plans submitted with the application and they include:

- Utilisation of a paved temporary construction entry/exit point;
- Provision of temporary drains and diversion banks to maintain non-erosive velocities and

- direct runoff to temporary sediment trapping structures;
- Provision of filters to all downstream locations;
- Diversion of runoff from disturbed areas to temporary sediment basins;
- Progressive re-vegetation during construction staging; and
- Positioning diversion banks upstream of stockpiles.

It is therefore considered that the applicant has satisfactorily addressed the requirements of Clause 28 of the SREP particularly in relation to erosion and sediment measures and minimisation of the adverse impact on water quality and collection of gross pollutants from entering watercourses.

Soils

A preliminary analysis of the site's geotechnical conditions and groundwater properties was undertaken by SKM for the preparation of the Central Precinct Plan (CPP). The preliminary analysis noted salinity of the soil and salinity remedial activities, including filling, will reduce the potential for surface salinisation. In accordance with the findings of the preliminary analysis, the CPP has incorporated appropriate management measures for future planning of the site and these measures include:

- Constructing the base of the embankment with free-draining rock fill;
- Shaping the filled landform as a cambered embankment to shed water rapidly and direct the runoff into graded natural water; and
- Lining all basins and swales with an impermeable liner to prevent infiltration into groundwater.

To minimise the adverse environmental and economic impacts caused by soil constraints and to ensure compliance with SREP 30, it is recommended that the above management measures and the Water Soils and Infrastructure Report of the CPP be reinforced by way of a condition (refer to Condition No. 20).

Waste Management

A Waste Management Strategy has been submitted with the application. The Strategy provides an outline of the matters which will be addressed in the Waste Management Plan to be implemented during the bulk earthworks. To ensure compliance with the waste management objective of the REP, a condition is recommended for the submission of a completed waste management plan prior to the commencement of works (refer Condition No. 8).

Consultation with the National Parks and Wildlife Service

In accordance with Clause 44 of the REP, the National Parks and Wildlife Service (NPWS) was consulted. In response, NPWS has requested the following in relation to stormwater management, the riparian corridor and future subdivision:

- Liaise with OEH regarding any encroachment of temporary or permanent sediment control structures or basins flowing into or located within the future regional park;
- Use of local native species of the relevant Cumberland Plain vegetation community for any re-vegetation and hydro seeding in close proximity of the Regional Park;
- Increase the width of the riparian corridor in order to provide effective connectivity;
- Use of local native species for the revegetation of the riparian corridor;
- Design the waterway sinuous to emulate a more natural watercourse including riffles, pools and native macrophytes. The shape of the "S" bend should be

- proportional to the scale of the stream (width and depth);
- Mature trees that are cleared from the site shall be offered for recycling as ground habitat in the adjoining Regional Park;
- Facilitate the movement of native fauna and vegetate with low-growing Cumberland Plain species especially where the riparian corridor intersects with the road and electricity easement in order to provide connectivity for the corridor; and
- Future subdivision shall provide a road or open space along the interface with the Regional Park to minimise potential impacts such as stormwater runoff, wastewater, pest and weed encroachments, fire management, illegal dumping, motorbike riding and bike jumps.

The concerns raised by NPWS with respect to the width and design of the riparian corridor were shared by Council and relayed to the applicant for action. In response, concept design plans for the future embellishment of the corridor were submitted which sufficiently demonstrate that the engineered channel proposed in this application will be transformed through future development applications into a landscaped riparian corridor. The future design will also provide graded embankments and suitable planting reflective of the biodiversity outcomes intended.

The current design is an engineering solution to facilitate fill importation and changes to the levels in the floodplain as an interim measure. As a result, the concerns raised by NPWS will be addressed through future Development Applications for the Precinct.

The application was referred to OEH and no objection to the fill or drainage strategy was raised. The final location of basins in the regional park is yet to be confirmed however it is noted that the REP provides for zoned drainage infrastructure in the regional park. The request for consultation with OEH with respect to using local native species for re-vegetation of the riparian corridor and recycling of felled trees in the adjoining Regional Park will be conditioned accordingly (refer Condition Nos 15 and 16).

Demolition

Council has granted consent to DA14/0411 for the demolition of existing structures on the site including paved areas.

Filling and Flood Management

In accordance with Clause 49(1) of the REP, the applicant seeks approval for filling of land in order to raise the level of the site to facilitate future development of the Central Precinct. According to the REP, filling of land below the level of the PMF is prohibited unless the consent authority is satisfied that:

- (a) *the proposed development will not be inconsistent with the principles set out in the manual entitled Floodplain Development Manual: the management of flood liable land published by the New South Wales Government, and*
- (b) *in the case of land identified on the Structure Plan as "potential fill area", the proposed development will not be inconsistent with the performance objectives of this plan*

In accordance with the Structure Plan a majority of the eastern side of the Central Precinct is identified as a Potential Fill Area (refer to Attachment 5 – Sydney Regional Environmental Plan No. 30 Structure Plan) and the extent of fill shown on the Cut/Fill Plan (refer to Attachment 6 – Cut and Fill Plan) has demonstrated that the proposal is consistent with the Structure Plan.

Clause 50 further states that filling of land below the level of the PMF is prohibited. However,

the consent authority may grant consent to the filling of land where it is satisfied that:

- (a) *the proposed development will not be inconsistent with the principles set out in the manual entitled Floodplain Development Manual: the management of flood liable land published by the New South Wales Government, and*
- (b) *in the case of land identified on the Structure Plan as “potential fill area”, the proposed development will not be inconsistent with the performance objectives of this plan, and*
- (c) *in the case of land not identified on the Structure Plan as “potential fill area” but within the Regional Open Space zone or the Road and Road Widening zone, the proposed development is necessary as part of development to be carried out on the land.*

Accordingly, a Flood Modelling Assessment was undertaken and addressed the following aspects associated with the proposed filling:

- Increase in flood levels;
- Increase in downstream velocities;
- Redistribution of flow;
- The cumulative effects;
- Alternative opportunities for flood storage;
- The adverse impact on the development potential of the surrounding properties;
- Increase in the flood liability of buildings on surrounding properties;
- Local drainage flow/runoff problems;
- and
- Filling within the drip line of existing trees.

Preliminary flood modelling indicated an 89mm afflux at the upstream boundary and 11mm at the downstream boundary. This represents a significant increase from the 43mm afflux identified in the Central Precinct flood assessment adopted by Council in March 2009. The results of the preliminary flood modelling have not included any additional culverts under the East-West Connector Road and widening of South Creek Bridge and hence the variation.

Meetings were held with the applicant and the applicant's consultant in April and May 2015 to discuss the possibilities of minimising the adverse flood impacts and raise the design of the South Creek Bridge to the 1:100 year flood level (no freeboard).

Subsequent to the meeting, a revised Flood Assessment Report was submitted in June 2015 with the following proposed works:

- Inclusion of the proposed bulk earthworks DEM for the Central Precinct into the model;
- Inclusion of the Dunheved fill into the model at levels at or above the developed Flood Planning Level;
- Removal of the abutment and embankments of Old Munitions Road;
- Removal of the stockpiles on the north-western South Creek Floodplain;
- Raising the crest level of the East-West Connector Road to the 1% AEP level with no freeboard (crest levels vary from 19.7m AHD - 20.4m AHD);
- Expansion of the South Creek waterway opening under the East-West Connector Road (120m top of creek width);
- Inclusion of the Dunheved Link Road with a crest level to provide 1% AEP immunity with no freeboard;
- Inclusion of an M-Lock Bridge under the Dunheved Link (150m wide);
- Minor re-shaping of the opening at the Dunheved Link to provide a trapezoidal opening with an invert at 18m AHD;
- Inclusion of a landscaped berm at the southern end of the Dunheved fill area; and

- Inclusion of nine (9) reinforced concrete block culverts with dimensions of 2400mm x 2700mm under the East-West Connector Road to the west of the South Creek Bridge with an upstream invert of 16.8m AHD.

As a result of the proposed works, the Flood Assessment Report indicates that the adverse flood impacts at the upstream boundary will be reduced to 38mm and the downstream boundary will remain at 11mm. This Flood Assessment Report has been peer reviewed by Worley Parsons, Council's consultant for the South Creek Flood Study. Worley Parsons has made recommendations regarding the flood modelling and they were relayed to the applicant. A Final Flood Assessment Report addressing the recommendations made by Worley Parsons was submitted in July 2015.

The findings of the final Flood Impact Assessment Report are outlined below:

- The model was used to assess the proposed development including proposed fill layout, upgrades to the East-West Connector Road, widening of the South Creek Bridge and addition of high flow culverts on the west bank, addition of Dunheved Link, removal of the abutments and embankments at Old Munitions Road and removal of existing stockpiles on the western bank of South Creek;
- Options have been modelled to identify the preferred option. The preferred developed option demonstrates a balance of flood immunity, flood impacts, constructability and environmental impacts is achievable;
- Three (3) interim scenarios have been modelled and the modelling has demonstrated that the preferred option can be phased such that impacts during development do not materially exceed the impacts of the final development;
- This modeling takes into account the proposed filling of the Central Precinct and the North and South Dunheved Precincts;
- The proposed development produces water level impacts of 38mm at the upstream site boundary and 11mm at the downstream site boundary in the 1% AEP event;
- The 38mm impact complies with Council's DCP maximum afflux requirements of 100mm and is consistent with the level of impacts adopted in the Central Precinct Plan;
- Upstream impacts are limited to the Sydney Water Recycled Water Project Site and are localised and do not inundate any additional buildings;
- The Dunheved Golf Course, Links Road reserve and footpath are already inundated under existing conditions;
- Downstream impacts are 11mm and 16mm in the regional and local tailwater scenarios and do not cause a significant increase in flood extent or inundation of additional properties; and
- An independent peer review by Worley Parsons considered the impacts are equal to or lesser than those documented in the FIA Report.

The final Flood Assessment Report incorporating appropriate mitigation measures as well as phasing of the proposed filling without the recommended works has adequately addressed the principles and guidelines set out in the Floodplain Development Manual and demonstrated that the road systems can facilitate safe evacuation during flood events. In turn the proposed bulk earthworks can be carried out on the land without additional flood planning impacts on the surrounding properties.

The applicant has considered alternate options to filling such as constructing raised concrete slabs to form appropriate building platforms or constructing raised buildings above the flooding levels. These options are considered not feasible due to cost, integration with the adjoining Regional Park and residential areas and greater environmental impact. The do nothing approach is considered undesirable as the proposal is inconsistent with the vision of the Central Precinct Plan with respect to the delivery of affordable housing and regional open

space. This approach will also reduce the likelihood of delivering the internal link between the eastern and western side of the St Marys Development Site.

Based on the findings of the Final Flood Assessment Report, the Development Application, subject to implementation of the recommended mitigation measures, can be supported as the applicant has demonstrated that the proposal will have minimal impact on flood levels upstream and downstream of the site and that the velocity will be at an acceptable limit. In turn the objectives with respect to minimisation of impact on flood levels upstream and downstream of the site and minimisation of flood risk to both people and property can be achieved. A condition has been recommended to ensure implementation of the proposed mitigation measures.

Section 79C(1)(a)(iia) – The Provisions of any Planning Agreement

Penrith City Council, St Marys Land Limited and Lend Lease Development entered into a Planning Agreement in May 2009. The St Marys Penrith Planning Agreement has made provisions for open spaces, transport, human services and infrastructure works for the Western and Central Precincts of the St Marys Development Site.

In addition, a State Development Agreement (State Deed) was entered into between the land owner and developer and the NSW Government. The State Deed specifies a series of obligations to be provided including, but not limited to:

- Staged transfer and dedication of 900 ha of land to NPWS as a Regional Park for the sum of \$3;
- Staged monetary contributions of \$6 million towards capital improvements within the 900 ha Regional Park;
- Monetary contributions towards a Plan of Management for the 900 ha Regional Park; and
- Erection of stock proof fencing in stages along the boundaries of the 900 ha Regional Park.

The Agreement is not relevant to the proposed bulk earthworks.

Section 79C(1)(b) – The Likely Impacts of the Development

Context and Setting

The Central Precinct is one of the six (6) precincts of the St Marys site endorsed by the NSW Government for inclusion in the Urban Development Program. A majority of the Central Precinct is zoned Urban to accommodate residential uses with limited non-residential uses such as retail and commercial uses. The northern portion of the Precinct is zoned Employment. The Structure Plan of SREP 30 has identified that filling is required for the Precinct and the extent of filling is required to accommodate development. The proposed earthworks and associated civil works seek to deliver the desired future urban form of the Precinct.

Access, Transport and Traffic

A Construction Traffic Management Plan (CTMP) was submitted with the application. The CTMP estimated that during the peak scenario, there will be a maximum of 22 truck movements (in and out) based on 24-hour, 7-day a week operations. The proposal will generate an average of 16 truck movements (in and out). Having regard to the capacity of the local road system and the industrial developments in the locality, the CTMP concluded that the proposal is unlikely to result in significant adverse impacts on existing traffic operations. Furthermore, parking and layover

areas will be provided within the site and therefore the proposal will not have any adverse impacts on the local parking conditions.

It should be noted that Development Application 14/0766 for the construction of a temporary haulage road to facilitate transportation of fill to the Central Precinct was approved by Council in March 2015. The applicant has recently lodged a Section 96 application with Council seeking approval for the modifications to the temporary haulage road off Links Road into the Dunheved Development Site. The Section 96 application seeks a number of amendments and the following are relevant to the proposed bulk earthworks:

- Widening of Links Road and construction of a 100m right turn bay into the Dunheved Development Site; and
- Construction of a holding area for entering trucks to wait adjacent to the entrance of the haulage road within the Dunheved Development Site.

Assessment of the Section 96 application has been completed and the application is recommended for approval. The proposed modifications will further improve traffic and parking conditions in the locality.

To further minimise the impact on the residential amenity of the surrounding developments associated with the haulage route, it is recommended that part of the haulage route be amended replacing Mamre Road with Wallgrove Road. This will also be addressed through the separate Section 96 application to modify Development Consent 14/0766 for the construction of the haulage road.

Noise and Vibration

A Construction Noise Assessment was undertaken by Wilkinson Murray providing an evaluation of the likely impacts of construction noise generated by the earthmoving equipment and vibration resulting from filling of the site and associated traffic noise. Two (2) noise sensitive receivers have been identified through this Assessment:

- North – residential dwellings in Llandilo situated approximately 850m from the northern boundary of the Central Precinct; and
- South – residential dwellings in Werrington County backing onto the southern boundary of the Central Precinct.

The Assessment has considered both construction works during the day and night time deliveries and noted that noise impacts to the north will experience 5dBA exceedance above the weekend noise management criteria levels. Werrington County will experience exceedance up to 28dBA during the weekend and exceedance up to 23dBA during weekdays.

To address these identified non-compliances and to protect the residential amenity of the surrounding developments, additional investigations have been undertaken by the applicant. During the course of the additional investigations, the applicant has established a boundary where bulk earthworks can occur without exceeding the noise management levels particularly for Werrington County. A number of recommendations have been made based on the findings of the further investigations which are outlined below:

- Construction of a temporary 3m high acoustic barrier. The barrier could consist of earth mounding, fences or a combination of both;
- Shorten the timeframe for completion of works south of the established boundary;
- Refinement of plant/equipment selection; and
- Incorporation of a Noise Management Strategy into the Construction Management Plan.

The further investigation has facilitated assessment of the proposal and enabled a better understanding of the extent of construction noise impacts through identification of the extent to which work could be carried out within the site without exceeding the criteria, and areas where if work was being undertaken noise management/mitigation measures would need to be put in place. The model has also used more precise cut and fill volumes and more detailed information relating to timeframes (only 2-3 months in these areas) and equipment. The revised calculations have also suggested that the levels at receivers in Werrington County will be 55 to 60dBA, compared with the 65 to 69dBA modelled previously. Whilst this still exceeds the criteria of 44dBA, it is a better outcome for residents. The construction of the proposed 3 metre barrier will also assist with further reduction in the number of impacted parties. Nonetheless, management Plans are still required to be developed, and conditions have been recommended to address this aspect.

The further investigation has also determined that the use of vibratory rollers may cause vibration impacts to the residences of Werrington County, as work will be carried out within the safe working distances specified by the guidelines. However, this could be negated by the use of smaller rollers at distances within 100 metres from these properties. This aspect will be addressed through a condition of consent.

In regard to the traffic noise impacts associated with the truck route for the delivery of the fill material, it is noted that the increase was found to be negligible during the daytime. However, during night time the traffic noise levels along Glossop Street and Forrester Road will be noticeable with a low level of exceedance. To manage the traffic noise impact during the nighttime, the applicant has recommended that protocols be developed for the truck drivers. Given the impact will be higher only over the initial 4 months, this is considered to be a positive outcome. The development of a truck driver protocol will be required through a condition of consent. The recommendation to modify the haulage road will improve the acoustic privacy for residents along Mamre Road.

These recommendations will be conditioned in order to further reduce noise impacts (refer to Condition Nos 25, 26, 27, 28 and 29).

Social and Economic

The proposed bulk earthworks will provide a flood free platform for future residential development and employment generating land uses thereby promoting employment opportunities and economic activities in the locality.

Section 79C(1)(c) – The Suitability of the Site for the Development

The site is suitable for the proposed development for the following reasons:

- The site is zoned to accommodate the proposed development in accordance with SREP 30;
- The site will be suitable for the bulk earthworks and future residential and employment generating developments subject to implementation of the recommendations within the submitted remediation strategy;
- The site, subject to filling, will provide a landform above the 100 year ARI which will be capable of supporting future residential developments;
- The potential environmental impacts of the proposal on the site and the surrounding areas can be mitigated through implementation of appropriate mitigation measures;
- The site will be adequately serviced by roads, utility services and stormwater infrastructure;
- The proposal is consistent with the St Marys Central Precinct Plan; and

- The SIS has concluded that the proposal is unlikely to result in any threatened species or ecological community becoming extinct.

Section 79C(1)(d) – Any Submissions

Community Consultation

In accordance with the EP&A Act and EP&A Regulation, the Development Application was advertised, exhibited and notified to nearby and adjoining residents. The exhibition period was between 20 October and 19 November 2014. Council received one (1) submission and 452 pro-forma submissions.

A public meeting was held on 18 June 2015 to discuss the issues raised in the submissions which was chaired by representatives from the JRPP with attendance from the applicant, Council officers and the public. The key issues raised during the public meeting are summarised below with representations made both in support and in opposition to the proposed development:

- Implications of filling of the floodplain (local and regional impacts);
- Adequacy of the modeling analysis undertaken;
- Concerns with the scope of public notification;
- Concerns with the applicant's consultation process;
- Protection of significant flora and fauna;
- Concerns with noise, dust and vibration impacts on neighbouring properties;
- Employment benefits of the proposed works;
- Greater housing choice and availability resulting from the proposed works;
- Enabling the growth of the area to continue to reside in the area; and
- Positive feedback on the quality of development and professionalism of the applicant.

In response to the items discussed, the applicant was requested to specifically address the following:

- Clarify the intended management measures to address noise, dust and vibration impacts;
- Ensure the flood modeling has sufficiently considered local and regional impacts;
- Impacts on greenhouse gas emissions;
- Contamination of imported materials;
- Stockpile re-use;
- Traffic; and
- Level of information in relation to the proposed bulk earthworks and Stage 1 subdivision of the Precinct.

Consideration has been given to the submissions made and the applicant has sufficiently addressed these issues as outlined within the body of this report and the submission of summary table below.

Submissions

The following issues were raised in the submissions received and have formed part of the assessment.

<i>Issue</i>	<i>Comments</i>
<i>No compensatory flood storage has been proposed</i>	<p>According to the Final Flood Assessment Report, the proposed will result in a maximum increase upstream of the site along South Creek of approximately 38mm. The level of impact is consistent with the DCP requirements and the adopted Central Precinct Plan. A number of improvements to the floodway have been proposed to partially counter the loss of conveyance and these include:</p> <ul style="list-style-type: none"> • Removal of the Old Munitions Road embankment; • Removal of stockpiles on the western floodplain; • Increase in waterway area through the South Creek Bridge; and • Additional culverts under the western section of the East-West Corridor road. <p>The flood assessment concludes that the proposed measures included as part of the development will maintain the conveyance capacity through the South Creek floodplain.</p> <p>Furthermore, the reduction in conveyance through the fill platforms will also be partially offset by the increased conveyance provided through the above measures.</p> <p>In this case it is considered that the proposal has due consideration of the NSW Floodplain Risk Guideline – Floodway Definition (2007).</p>
<i>No consideration of future developments upstream has been incorporated in the analysis undertaken</i>	<p>The Flood Assessment Report has due consideration to upstream and downstream developments. Council's South Creek Flood Study carried out in conjunction with Blacktown City Council, Liverpool Council and Fairfield Council has taken into consideration the entire South Creek Catchment. All flood studies are based on the existing condition. Future developments in the South West Growth Centre, the Broader Western Sydney Employment Area and Badgerys Creek Airport have to carry out respective flood studies to ensure the water quantity and quality and incorporate appropriate mitigation measures if required.</p>
<i>Asbestos and contamination</i>	<p>There is no evidence of asbestos present on the site. Council has no records of fill containing asbestos being imported to the site. Site Audit Statements have been issued for a majority of the Central Precinct. Site Audit Statement CHK001/1 in particular states that the majority of the site is suitable for residential use including substantial vegetable gardens and poultry. However the extent of the contamination (if any) and the necessity for remediation under building footprints, car</p>

<i>Issue</i>	<i>Comments</i>
	<p>parks, road pavements and the stockpiles has yet to be determined. A special condition has been recommended restricting importation of fill to these areas subject to further investigation in accordance with EPA Guidelines and State Planning Policies.</p> <p>It is considered that subject to compliance with the recommended condition, issues related to asbestos will be satisfactorily addressed.</p> <p>It is also noted that the applicant has separately lodged a Development Application (DA15/0299) for the stage 1 subdivision of the Central Precinct. This development application has outlined a staged remediation strategy which includes provision for Site Audit Statements. The proposed approach includes:</p> <ul style="list-style-type: none"> • A Sampling Analysis and Quality Plan which will guide the investigations of all of the areas that are not yet subject to a Site Audit Statement, including the sampling methodology and assessment criteria. These investigations will occur prior to any works being carried out in these areas; • A Conceptual Remediation Strategy which address the different contaminants that may be found on the site and proposes how these would be remediated; and • A Contamination Management Plan to manage unexpected finds (including ordnances) across the Central Precinct for every stage. <p>It should be noted that the Contamination Management Plan has been considered by a NSW EPA Accredited Site Auditor.</p> <p>The above procedures are therefore considered adequate and will be followed for each stage of the Central Precinct development.</p>
<i>Continuous monitoring of mitigation measures and penalties for failure to implement the mitigation measures</i>	<p>Appropriate conditions have been recommended to ensure the continuous implementation of environmental mitigation measures (refer to Condition Nos 25 to 30).</p> <p>Failure to implement the mitigation measures will be a breach of the development consent. Council will investigate any breach identified. Should the investigation establish a breach of the development consent, Council will initiate compliance action to rectify the breach which could include a Notice of Intention to Serve an Order and potential penalty fines.</p>

Issue	Comments
<i>Mechanism for reporting and recording non-compliance with the terms of the Development Application</i>	Any issues arising from the proposal should be directed to the Principal Certifying Authority and site foreman. Where Council is advised of failures to achieve compliance, the concerns will be investigated. If the investigation establishes a breach of the development consent, compliance action will be initiated to rectify the breach.
<i>Provisions for claims due to adverse business impact</i>	This is not a matter for consideration under 79(C) of the EP&A Act however it is not considered that the works and haulage route will detrimentally affect business operations within the immediate locality.
<i>Additional traffic generated by the proposal</i>	The Construction Traffic Management Plan estimated a total of 16 truck movements in and out per hour for an average scenario and 22 truck movements for the peak scenario. Given that fill importations will occur on a 24-hour basis, it is anticipated that the traffic will be spread out and the local road network has sufficient capacity to accommodate the additional traffic generated from the proposed works. The western section of Links Road services a smaller portion of industrial developments and it is concluded that the proposal will have minimal impact on Links Road.
<i>Mechanism to manage and rectify damages to the Golf Club driveway and other public infrastructure</i>	<p>Conditions have been recommended for the submission of pre and post development dilapidation reports on Council's infrastructure assets. The applicant will be required to rectify any damage to public infrastructure as a consequence of the proposed works. In addition, the applicant will be required to lodge an Infrastructure Restoration Bond prior to the commencement of works. The bond may be used to repair or reinstate any damage that occurs to Council's public infrastructure assets.</p> <p>In accordance with the CTMP, vehicles are prohibited to queue/park in Links Road and a designated parking area will be provided within the site for vehicle parking.</p> <p>The CTMP will form part of the development consent and the applicant is required to comply with the conditions of the development consent. As trucks are prohibited to queue/park in Links Road it is not anticipated that there will damage to the Golf Club's assets.</p>
<i>Consideration for an alternate haulage route or entrance to the site</i>	The haulage route nominated by the applicant has taken into consideration traffic congestion, occurrence of high truck movements and potential disturbance to motorists, local residents, businesses, education facilities, etc. Council has reviewed the proposed haulage route and recommended that part of the haulage route be amended by replacing Mamre Road with Wallgrove Road to maintain the residential amenity for the developments along Mamre Road. This will be addressed by way of a condition of consent in the subject application and in the Section 96 application to modify

<i>Issue</i>	<i>Comments</i>
	Development Consent 14/0766 for the construction of a haulage road.
<i>Widening of Links Road to facilitate passing of traffic into the site</i>	<p>Council approved Development Application 14/0766 in March 2015 for the construction of a temporary haulage road to facilitate transportation of fill to the Central Precinct. The applicant has recently lodged a Section 96 application with Council seeking a modification to the temporary haulage road off Links Road into the Dunheved Development Site. The proposed modifications amongst other things include:</p> <ul style="list-style-type: none"> • widening of Links Road and construction of a 100m right turn bay into the Dunheved Development Site; and • construction of a holding area for entering trucks to wait adjacent to the entrance to the haulage road within the Dunheved Development Site. <p>Assessment of the Section 96 application has been completed and the application is recommended for approval as it will further improve management of construction traffic and minimise any potential impacts on local traffic and parking conditions.</p>
<i>Sealing of access road prior to the commencement of the proposed bulk earthworks</i>	Construction of the haulage road is the subject of a separate Development Application (DA14/0766). The approved haulage road will be surfaced with asphaltic concrete to prevent dust and erosion. Upon completion of the haulage road, a final inspection will be carried out to ensure the haulage road is constructed in accordance with the consent. The road shall not be used until subject to a satisfactory final inspection.
<i>Monitoring of truck wash</i>	A condition has been recommended for the implementation of the recommendations of the Construction Traffic Management Plan in which it is stated in the Drivers Code of Conduct that all trucks are to utilise the shakedown/wash areas before leaving the site.

<i>Issue</i>	<i>Comments</i>
<i>PM¹⁰ concentration and monitoring of watering to the worksite</i>	<p>The Air Quality Impact Assessment prepared by Wilkinson Murray has made recommendations for the preparation of a Construction Dust Management Plan in which watering is recommended for surface improvements and surface treatment.</p> <p>Further dispersion modelling has also resulted in nomination of additional mitigation measures including:</p> <ul style="list-style-type: none"> • Establishment of exclusion zones; • Continuous monitoring of ground level concentrations of PM¹⁰ at the most affected off-site receptors; • Development of a reactive management plan; and • Prioritisation of works during periods of rain or southerly winds within the exclusion zones. <p>In this regard, conditions have been recommended for:</p> <ul style="list-style-type: none"> • The submission of a Construction Environmental Management Plan (CEMP) for Council's approval. The CEMP is required to address amongst other things air quality management; and • The management of air quality in Zone 1 and Zone 3.
<i>Communication process in the event of the failure of airborne pollutant mitigation measures</i>	<p>A standard condition for the erection of a site notice has been recommended. The site notice will contain details of the Principal Certifying Authority and person in charge of the work site. Any issues arising from the proposal should be directed to the Principal Certifying Authority and site foreman. Where Council is advised of any failures, the concerns can be investigated and alternate measures pursued with the Certifying Authority to resolve the concerns raised.</p>
<i>Inconsistency with the Cumberland Plain Recovery Plan</i>	<p>The application has been assessed against the relevant provisions of the Threatened Species Conservation Act 1995 (TSC Act) and it is concluded that the proposal is unlikely to have a significant impact nor place the large and viable representatives in the Regional Part at risk of extinction.</p> <p>Pursuant to Section 5A of the EP&A Act, the consent authority must also take into account whether the proposed development is consistent with the objectives and/or actions of the Cumberland Plain Recovery Plan (CPRP) in deciding whether there is likely to be a significant effect on threatened species, populations or ecological communities, or their habitats.</p> <p>It is noted that the proposed Wianamatta Regional Park has been designated as priority conservation land and Council has implemented appropriate recovery actions to ensure the Recovery Actions of the CPRP can be achieved. In view of the above, it can be satisfied that the proposal is consistent with the CPRP.</p>

Issue	Comments
<i>Edge effects including increase in bushfire and arson risk</i>	To minimise potential edge effects, the CPP has incorporated various strategies including but not limited to weed management, feral and domestic animal management and bushfire management. .
<i>Impact of domestic animals on fauna</i>	A Feral and Domestic Animal Management Strategy has been formulated as part of the CPP and the CPP was adopted by Council in March 2009.
<i>Recent appeal in the Land and Environment Court</i>	<p>In the recent appeal <i>Riverstone Parade Pty Ltd v Blacktown City Council</i> [2015] NSWLEC 1005, the NSW LEC refused the filling of the floodplain on the basis that the flooding impacts were deemed to be unacceptable as the development failed to demonstrate compliance with Clause 20 of State Environmental Planning Policy (Sydney Region Growth Centres) 2006 (the Growth Centres SEPP). Clause 20(2)(b) states that the consent authority must not grant consent for development unless it is satisfied that the proposed development:</p> <p><i>“does not increase flood levels on adjoining properties in events up to the design 100 year recurrence flood.”</i></p> <p>The NSW LEC dismissed the appeal on the basis that the proponent had failed to demonstrate that the development did not increase flood levels as per the requirements of the applicable environmental planning instruments. The NSW LEC further applied the same test to consider regional flood impacts and established the Riverstone development unacceptable.</p> <p>The Growth Centres SEPP is not applicable to the Central Precinct and the subject Development Application. SREP 30 is the relevant environmental planning instrument.</p> <p>Clause 28(5) of SREP 30 states that “there is to be only minimal impact upon flood levels upstream or downstream of the land to which this plan applies as a consequence of its development”.</p> <p>The Flood Assessment Report for the proposed bulk earthworks has demonstrated that:</p> <ul style="list-style-type: none"> • Flood levels are predicted to be 38mm upstream and 11mm downstream and the level of water impact is consistent with the level adopted by the Central Precinct Plan (CPP); • No additional properties will be subject to flooding in the design 1% AEP flood event; and • The increase in flood level will not have an adverse economic impact. <p>Therefore this appeal is not a relevant precedent and does not</p>

Issue	Comments
	preclude favourable consideration of this application
<i>Enforcement of the Construction Traffic Management Plan</i>	he Construction Traffic Management Plan will be enforced by way of conditions of consent.
<i>Management of noise and vibration associated with the proposal</i>	<p>To minimise noise impacts and to protect the residential amenity of the surrounding developments, additional investigations have been undertaken by the applicant. During the course of the additional investigations, the applicant has established a boundary where bulk earthworks can occur without exceeding the noise management levels, particularly for Werrington County. A number of recommendations have been made based on the findings of the further investigations:</p> <ul style="list-style-type: none"> • Construction of a temporary 3m high acoustic barrier is recommended. The barrier could consist of earth mounding, fences or a combination of both. It has the potential of reducing the noise levels by approximately 5dBA; • Shorten the timeframe for completion of works south of the established boundary. • Refinement of plant/equipment selection; and • Incorporation of a Noise Management Strategy into the Construction Management Plan. <p>These recommendations will be conditioned in order to further reduce noise impacts (refer to Condition Nos. 25 and 29).</p> <p>To minimise the potential impacts arising from vibration, the plant/equipment list has been reviewed and refined. The refined list has nominated smaller machinery to be used and includes a reduction in the number of plant to carry out the works. The applicant further proposes community consultation, a complaint management strategy, respite period and monitoring of noise levels across the site in addition to the Construction Management Plan.</p>
<i>Greenhouse gas emissions</i>	<p>A Greenhouse Gas Assessment prepared by Wilkinson Murray was carried out and submitted with the Development Application. The Assessment provided estimated emissions associated with the proposal based on the "Greenhouse Gas Assessment Workbook for Road Projects" dated June 2011 prepared by the Transport Authorities Greenhouse Group.</p> <p>The Assessment can only provide an estimate as emissions will be highly dependent on duration, weather, construction methodology and anticipated plant usage.</p> <p>The Assessment found that the proposal will account for less than 0.005% of the current NSW emissions based on the following construction activities:</p>

<i>Issue</i>	<i>Comments</i>
	<ul style="list-style-type: none"> • Transport of construction materials to the site; • Vehicles, machinery and plant used on site; • Electricity consumption associated with the construction the office and other amenities; • Construction staff travelling to the site; and • Vegetation removal.
<i>Salinity and water table</i>	<p>The Water, Soils and Infrastructure Report prepared by SKM for the Central Precinct Plan has provided management measures for the future planning of the site including guidelines for the construction of embankments, basins and swales. This Report has concluded that the planned development in the Central Precinct is unlikely to result in surface salination and remedial actions including raising the ground level by filling and limiting infiltration will further reduce this possibility.</p> <p>These elements have been considered in the design of the bulk earthworks strategy and stormwater strategy. The proposal to retain and rehabilitate native vegetation along the riparian corridor will also facilitate stabilisation of the soil within the corridor.</p> <p>A condition has been recommended to ensure the soil salinity management measures contained in the Water, Soils and Infrastructure Report are implemented.</p> <p>The final landform data used for flood assessment will be submitted to Council to facilitate assessment of future developments.</p>

Section 79C(1)(e) – The Public Interest

In view of the above assessment, it is considered that the proposal, subject to appropriate conditions, will not generate any significant issues of public interest.

Conclusion

The above assessment has demonstrated that the proposal has met the relevant provisions of the following legislation:

- a. *Environmental Planning and Assessment Act 1979*
- b. *Threatened Species Conservation Act 1995*
- c. *State Environmental Planning Policy No. 33–Hazardous and Offensive Development*
- d. *State Environmental Planning Policy No. 55 – Remediation of Land*
- e. *State Environmental Planning Policy (Infrastructure) 2007*
- f. *Sydney Regional Environmental Plan No. 20 - Hawkesbury/Nepean River*

g. *Sydney Regional Environmental Plan No. 30 – St Marys*

The proposed subdivision is consistent with the desired future character as identified in SREP 30 and the Central Precinct Plan.

The findings of the SIS have demonstrated that the proposal is unlikely to have a 'significant effect' on threatened species and ecological communities.

The site is suitable for the proposal and the development providing opportunities for future housing and infrastructure and is in the public interest.

In view of the above assessment, it is recommended that the Joint Regional Planning Panel - Sydney West Region grant consent to this application under Section 80(1)(a) of the Environmental Planning and Assessment Act 1979 subject to the recommended conditions of consent accompanying this report.

Recommendation

-
1. That DA14/1228 for bulk earthworks including compaction and importation of fill, construction of preliminary interim stormwater engineering works including excavation, construction and landscaping of sediment basins, rehabilitation and realignment of an existing riparian corridor and implementation of various environmental mitigation works at Lot 1037 DP 1149525, 1208-1274 The Northern Road, Llandilo be approved subject to the attached conditions; and
 2. That those making submissions are notified of the determination.

CONDITIONS

Standard Conditions

1 A001

The development must be implemented and/or installed substantially in accordance with the following plans stamped approved by Council, the application form and any supporting information received with application, except as may be amended in red on the attached plans and by the following conditions.

Drawing Title	Plan No.	Prepared By	Date
General Notes and Legends	89914020-BE01-10 02	Cardno	28.07.14
Context Plan	89914020-BE01-10 03 Revision 3	Cardno	28.07.14
Road Hierarchy Plan	89914020-BE01-10 11 Revision 3	Cardno	28.07.14
General Arrangement Plan	89914020-BE01-11 01 Revision 3	Cardno	28.07.14
Overall Bulk Earthworks Strategy Plan	89914020-BE01-11 02 Revision 3	Cardno	28.07.14
Cut/Fill Plan	89914020-BE01-11 11 Revision 3	Cardno	28.07.14
Site Grading Plan Sheet 1 to Sheet 25	89914020-BE01-12 01 Revision 3 to 89914020-BE01-122 5	Cardno	28.07.14
Site Grading Sections Sheet 1 and Sheet 2	89914020-BE01-12 51 Revision 3 and 89914020-BE01-125 2	Cardno	28.07.14
Road Typical Cross Sections	89914020-BE01-12 81 Revision 3	Cardno	28.07.14
Erosion and Sedimentation Control Plan	89914020-BE01-13 01 Revision 3	Cardno	28.07.14
Erosion and Sedimentation Control Details Sheet 1 and Sheet 2	89914020-BE01-13 11 Revision 3 and 89914020-BE	Cardno	28.07.14
Road Longitudinal Sections Sheet 1 to Sheet 35	89914020-BE01-14 10 Revision 3 to 89914020-BE01-143 5	Cardno	28.07.14

Drawing Title	Plan No.	Prepared By	Date
Riparian Channel Layout Plan	89914020-BE01-14 61 Revision 3	Cardno	28.07.14
Riparian Channel Longitudinal Section Sheet 1	89914020-BE01-14 62 Revision 3	Cardno	28.07.14
Riparian Channel Longitudinal Section Sheet 2	89914020-BE01-14 63 Revision 3	Cardno	28.07.14
Riparian Channel Typical Cross Sections	89914020-BE01-14 64 Revision 3	Cardno	28.07.14
External Catchments Plan	89914020-BE01-14 81 Revision 3	Cardno	28.07.14
Environmental Impact Statement	-	JBA	September 2014
Survey Plan	C212CP1 Sheet 1 to Sheet 3	Whelans Insites	
Flood Assessment Report	Project No. EN04189 Final	Jacobs	20 July 2015
Site Contamination Summary	43352-58277	JBS&G	17 July 2014
Species Impact Statement	Report No. 13091RP1 Revision 2	Cumberland Ecology	27/02.2014
Archaeological Assessment and Heritage Impact Statement		Casey & Lowe	July 2008 19 and September
Aboriginal Heritage Assessment Statement	Ref 13-0393grc1	GML Heritage & Jo McDonald CHM	25 September 2014
Construction Traffic Management Plan Version 3	Job Reference 89914020	Cardno	September 2014
Civic Report Version 0	Job Reference 89914020	Cardno	26 September 2014
Vegetation Management Plan	-	JMD	Sept 2014
Table of Compliance	13070	JBA	1 October 2014
Consultation Strategy	13070	JBA	29 September 2014
Air Quality Impact Assessment	Report No. 14145-A Version C	Wilkinson Murray	September 2014
Construction Noise & Vibration Assessment	Report No. 14145-N Version B	Wilkinson Murray	September 2014
Green House Gas Assessment	Report No. 14145-G Version B	Wilkinson Murray	September 2014

Drawing Title	Plan No.	Prepared By	Date
Waste Management Strategy	43352-58294	JBS&G	17 July 2014
Stockpile Plan	C257-B-005h.dwg	Whelans Insite	23.11.2007

2 **A005 - APPROVED BODYS CONSENT (FOR INTEGRATED DAS)**

A copy of the General Terms of Approval issued by NSW Office of Water (ref 10 ERM2014/0945) dated 10 November 2014 under the Water Management Act 2000 shall be submitted to the Principal Certifying Authority, before the Construction Certificate can be issued for the same development. A copy of the approval shall be submitted to Penrith City Council with the copy of the Construction Certificate, if Council is not the Principal Certifying Authority.

3 **D001 - Implement approved sediment& erosion control measures**

Erosion and sediment control measures shall be installed **prior to the commencement of works on site** including approved clearing of site vegetation. The erosion and sediment control measures are to be maintained in accordance with the approved erosion and sediment control plan(s) for the development and the Department of Housing's "Managing Urban Stormwater: Soils and Construction" 2004.

(Note: To obtain a copy of the publication, you should contact Landcom on (02) 9841 8600).

4 **D002 - Spraygrass**

All land that has been disturbed by earthworks is to be spray grassed or similarly treated to establish a grass cover.

5 **D06A – Approval for bulk earthworks/major filling operations (Use for bulk earthworks/ major filling operations)**

A Fill Importation Protocol is to be developed by a suitably qualified consultant and approved prior to the issue of the Construction Certificate. Should Council not be the Certifying Authority, then a copy of Council's written approval is to be provided to the Private Certifying Authority.

The Protocol is to detail the procedures that will be followed throughout all filling works, to ensure that only suitable fill material is imported onto the development site. It is also to address the suitability and reuse of the existing stockpiled materials, as identified in the "Stockpile Locations" plan prepared by Cardno Limited dated 17 November 2014 (Drawing No. 89914020-SK1006).

At minimum, an appropriately qualified person/s (as defined in the Penrith Development Control Plans) shall:

- Supervise all filling works.
- (On completion of filling works) carry out an independent review of all documentation relating to the filling of the site, and submit a review findings report to Council and any Principal Certifying Authority. All fill material documentation is to (at minimum):
 - o be prepared by an appropriately qualified person (as defined in the Penrith Development Control Plans) with consideration of all relevant guidelines, standards, planning instruments and legislation (e.g. EPA, NEPM, ANZECC, NH&MRC),
 - o clearly state the legal property description of the fill material source site and the total amount of fill tested,
 - o provide details of the volume of fill material to be used in the filling operations,
 - o provide a classification of the fill material to be imported to the site in

accordance with the NSW Environment Protection Authority's "Waste Classification Guidelines" 2009, and

- o (based on the fill classification) determine whether the fill material is suitable for its intended purpose and land use and whether the fill material will or will not pose an unacceptable risk to human health or the environment.
- Certify by way of a Compliance Certificate or other written documentation that fill materials have been placed on the site in accordance with all conditions of this consent and that the site will not pose an unacceptable risk to human health or the environment. A copy of the Compliance Certificate or other documentation shall be submitted to Council and any Principal Certifying Authority.

The approved Fill Importation Protocol is to be adhered to throughout all stages of the development. If the Principal Certifying Authority or Penrith City Council is not satisfied that suitable fill materials have been used on the site, further site investigations or remediation works may be requested. In these circumstances the works shall not be carried out prior to any further approved works.

6 D009 - Covering of waste storage area

All waste materials stored on-site are to be contained within a designated area such as a waste bay or bin to ensure that no waste materials are allowed to enter the stormwater system or neighbouring properties. The designated waste storage areas shall provide at least two waste bays / bins so as to allow for the separation of wastes, and are to be fully enclosed when the site is unattended.

7. D026 - Liquid wastes

Only clean and unpolluted water is to be discharged into Penrith City Council's stormwater drainage system. Liquid wastes suitable for discharge to the mains sewer are to be discharged in accordance with Sydney Water requirements.

If mains sewer is not available or if Sydney Water will not allow disposal to the sewer then a licensed waste contractor is to remove the liquid waste from the premises to an appropriate waste facility.

The waste contractor and waste facility are to hold the relevant licenses issued by the NSW Environment Protection Authority.

8 H006 - Submission of and implement waste management plan

A completed waste management plan shall be submitted to Penrith City Council for consideration and approval. Council must approve the plan before a Construction Certificate can be issued for the approved development.

The waste management plan shall be prepared in accordance with the Waste Planning Development Control Plan (2004), and shall address all waste materials likely to result from the proposed development, with details of the estimated waste volumes, onsite storage and management, proposed re-use of materials, designated waste contractors, recycling outlet and / or landfill site.

The approved waste management plan must be implemented on-site and adhered to throughout all stages of the development, with supporting documentation / receipts retained in order to verify the recycling and disposal of materials in accordance with the approved plan.

9 **P001 - Costs**

All roadworks, dedications and drainage works are to be carried out at the applicant's cost.

10 **P002 - Fees associated with Council land (Applies to all works & add K019)**

Prior to the commencement of any works on site, all fees associated with Penrith City Council-owned land and infrastructure shall be paid to Council. These fees include Road Opening fees and Infrastructure Restoration fees.

Special Conditions

11 **A special BLANK**

No fill importation works are to occur in those areas marked as stockpiles, building footprint or hardstand areas on the "Stockpile Locations" plan prepared by Cardno Limited dated 17 November 2014 (Drawing No. 89914020-SK1006) until such time as they have been confirmed as suitable for the intended use, with the issue of a Site Audit Statement from a NSW Accredited Site Auditor.

The contamination status of these areas is to be investigated in accordance with the relevant NSW Environment Protection Authority Guidelines and State Planning Policies. The investigation report is to be submitted to and approved by Council. If Penrith City Council is not the certifying authority, the assessment is still required to be submitted to Council for approval.

Should it be identified in the investigations that remediation works are required to be undertaken on the site, a separate development application is to be submitted to Council for this work. No work is to proceed in those areas until such time as this new application has been approved by Council, and Council has approved the Site Audit Statement and Report associated with the remediation works.

The development shall also be carried out in accordance with the procedures set out in the Contamination Management Plan Central Precinct Llandilo (ref 43352/61064 Rev B) prepared by JBS&G Australia Pty Ltd dated 5 March 2015 and the conditions and procedures set out in the Site Audit Statements relating to the Central Precinct.

12 **A special BLANK**

On-site construction activities (other than the delivery of fill) are to be carried out during the following hours:

- Monday to Friday: 7.00am to 6.00pm
- Saturday: 7.00am to 5.00pm

Delivery of fill material can occur 24 hours, 7 days a week.

13 **A Special (BLANK)**

Construction Certificates shall not be issued for any part of the site requiring a controlled activity approval until a copy of the approval has been provided to Council.

14 **A Special (BLANK)**

The applicant shall liaise with NSW Office of Environment and Heritage for any temporary or permanent sediment control structures or basins flowing into or located within the future Regional park land.

15 **A Special (BLANK)**

The applicant shall liaise with National Parks and Wildlife Services in relation to any re-vegetation and hydro seeding in close proximity of the Regional Park land. The applicant shall consider use of local native species of the relevant Cumberland Plain vegetation

community.

16 **A Special (BLANK)**

Mature trees that are cleared from the site shall be offered to National Parks and Wildlife Services for recycling as ground habitat (logs) in the adjoining Regional Park.

17 **A Special (BLANK)**

The riparian corridor shall be designed to emulate a natural watercourse and provide biodiversity connectivity. The applicant shall consult with National Parks and Wildlife Services with respect to the selection of suitable local native species from the riparian forest ecological community.

The vegetation within the electricity easement should comprise suitable low-growing Cumberland Plain species to provide connectivity to the riparian corridor.

18 **A Special (BLANK)**

The applicant shall, at all times, comply with all the conditions stated in TransGrid's letter to Penrith City Council dated 10 April 2015.

19 **A Special (BLANK)**

The proposed haulage route is to be modified and all construction traffic shall use M4 Motorway, Wallgrove Road, Great Western Highway, Glossop Street, Forrester Road and Links Road.

At no time should trucks access the Great Western Highway or Mamre Road via Saddington, Putland or Princess Mary Streets, St Marys.

20 **A Special (BLANK)**

The soil salinity management measures outlined in the Water, Soils and Infrastructure Report prepared by SKM dated May 2009 for the Central Precinct Plan shall be considered and implemented.

21 **C Special BLANK**

Prior to commencement of works, the archaeologist shall present to Penrith City Council details of the proposed removal of archaeology of Elizabeth Farm including the process, means of storage of items, location of the storage and final relocation of items.

22 **C Special BLANK**

Prior to commencement of works, the applicant shall develop and present to Penrith City Council for approval, a Draft Interpretation Strategy including the use of salvaged brickwork in the strategy, locations and draft interpretation themes.

23 **C Special BLANK**

Prior to commencement of bulk earthworks particularly prior to the commencement of topsoil stripping in Management Zone 1, an induction, conducted by a suitably qualified archaeologist, shall be undertaken for all bulk earthwork contractors on required actions if heritage items are identified during works.

24 **D - Mud/Soil**

Mud and soil from vehicular movements to and from the site must not be deposited on the road.

25 **D special BLANK**

Prior to the issue of the Construction Certificate, a detailed protocol for truck drivers is to be developed to manage traffic noise impacts associated with the use of the haulage routes. This protocol is to be implemented throughout the development.

26 **D - Vibratory Rollers**

The use of vibratory rollers is not permitted, except in line with the recommended distances

included in Table 5.1 of the 'Central Precinct - Bulk Earthworks: Project Application Noise & Vibration Assessment' prepared by Wilkinson Murray dated September 2014 (Report No. 14145-N, Version B). The use of smaller vibratory rollers or drum rollers can be used at distances closer than 100 metres from residents.

27.D Special BLANK

Prior to the issue of the Construction Certificate, a Construction Environmental Management Plan (CEMP) is to be prepared by a suitably qualified person and submitted to Council for approval. If Council is not the certifying authority, a copy of Council's approval is to be provided to the Principal Certifying Authority.

The CEMP is to address the environmental aspects of the development and is to include details on the environmental management practices and controls to be implemented on the site. The CEMP is to address, but is not limited to the following:

- Noise control and hours of operation - with particular consideration given to the recommendations included in Section 4.3, 4.4 and 4.5 of the 'Central Precinct - Bulk Earthworks: Project Application Noise & Vibration Assessment' prepared by Wilkinson Murray dated September 2014 (Report No. 14145-N, Version B) and the correspondence prepared by Cardno Limited dated 9 February 2015 titled "Central Precinct, St Marys - DA14/1228 Response to Council Concerns Regarding Noise and Air Quality (Ref. 89914020)".
- Air quality management (including dust suppression) - with particular consideration given to the recommendations included in Section 9 of the 'Central Precinct Fill Placement: Air Quality Impact Assessment' prepared by Wilkinson Murray dated September 2014 (Report No. 14145-A, Version C) and the correspondence prepared by Cardno Limited dated 9 February 2015 titled "Central Precinct, St Marys - DA14/1228 Response to Council Concerns Regarding Noise and Air Quality (Ref. 89914020)".
- Water quality management.
- Waste management.
- Community consultation and liaison.
- Incorporate a program for regular monitoring at sensitive receivers (particularly noise and air monitoring) throughout the development works, along with a review of procedures with consideration of the findings of this monitoring.

The approved CEMP is to be implemented and adhered to during all development stages.

28 D Special BLANK

For works in the areas south of the yellow line shown in Figure 1 of the correspondence prepared by Cardno Limited dated 9 February 2015 titled "Central Precinct, St Marys - DA14/1228 Response to Council Concerns Regarding Noise and Air Quality (Ref. 89914020)", noise-producing plant and equipment is restricted to:

- 2 x 40 tonne excavator;
- 8 x Moxy dump trucks;
- 2 x 85 compactor; and
- Truck and dogs.

29 D Special BLANK

Temporary 3-metre high acoustic barriers are to be constructed when works are being undertaken in the areas south of the yellow line shown in Figure 1 of the correspondence

prepared by Cardno Limited dated 9 February 2015 titled "Central Precinct, St Marys - DA14/1228 Response to Council Concerns Regarding Noise and Air Quality (Ref. 89914020)". These barriers can consist of earth mounds, fences or a combination of both, and are to be located as shown in Figure 3 of the above document.

These barriers are to be maintained until such time as works are being carried out in the immediate vicinity of each barrier. Details of how the barriers will be managed during the works is to be included in the Construction Environmental Management Plan.

30 **D Special BLANK**

When works are being undertaken in Zone 1 within 500 metres of the southern site boundary and in Zone 3 within 110 metres of the southern site boundary, ground level concentrations of PM₁₀ are to be continuously monitored at the most affected off-site receptors and a reactive management plan is to be implemented such that the air quality impact assessment criterion is met. The reactive management plan is to identify a range of mitigation measures that can be implemented to reduce particulate and dust emissions from the site.

31 **D Special - Tree survey plan**

Prior to commencement of any works, the applicant is to provide a detailed tree survey plan that clearly identifies which trees will be retained across the precinct. The applicant should aim to retain as many trees as possible within the Riparian Corridor and proposed Open Space areas.

32 **D Special - Landscape and Vegetation Management Plan**

Prior to the commencement of any works, the applicant is to submit to Council for approval a Landscape and Vegetation Management Plan for the TransGrid easement. The Landscape and Vegetation Management Plan is to seek to achieve biodiversity outcomes for the entire length of the TransGrid easement through the Central Precinct. The Landscape and Vegetation Management Plan is to have been prepared in consultation with TransGrid and evidence is to be provided to Council that demonstrates that TransGrid have agreed to the implementation of the Landscape and Vegetation Management Plan.

33 **D Special - Controlled Activity Approval and associated information**

Prior to the commencement of any works, all associated documents as required by the NSW Office of Water General Terms of Approval (GTA's) (10/11/2014) must be submitted to Council for approval. These are:

1. Vegetation Management Plan
2. Erosion and Sediment Control Plan
3. Soil and Water Management Plan

All plans must adhere to the Office of Water GTA's (10/11/2014) and be prepared in accordance with the following Office of Water Guidelines:

- Vegetation Management Plans
- Riparian Corridors
- In-stream works
- Outlet structures
- Watercourse crossings

Prior to the commencement of any works, the applicant is submit to Council a copy of the Controlled Activity Approval obtained from the NSW Office of Water for the modification of the creek through the Central Precinct.

34 **D Special - Tree felling**

Trees identified for removal are to be felled and lowered to the ground slowly to allow any

resident fauna time to escape and to ensure they aren't injured by falling trees and branches. This replaces the need for pre-clearing survey and inspection. Any native fauna found that do not self-relocate are to be relocated to the regional park. This is to be done under the supervision of a qualified ecologist. If any injured fauna are found, WIRES is to be contacted immediately.

35 **D Special - Stockpile and re-use of topsoil**

Topsoil is to be stockpiled and reused as per correspondence from JBA (18/2/2015). Stripping of topsoil is to be limited to the organic layer only. Topsoil is to be stockpiled in suitably sized stockpiles such that any organic matter breaks down before being spread throughout the development lots, as well as in the local parks and the riparian corridor. Topsoil is to be stripped to an average depth of 150 mm across the site, resulting in approximately 200,000m³ of topsoil being stripped on site. Once final levels have been achieved, the topsoil is to be spread as outlined below.

A preliminary topsoil balance has been undertaken across the proposed land uses across the Central Precinct. Principle assumptions within the topsoil balance include:

- uniform stripping of 150 mm of topsoil across the site;
- placement of 500 mm of topsoil on open spaces, including the riparian
- corridor; placement of 300 mm of topsoil within the road verges; and
- placement of 100 mm of topsoil within lots.

The topsoil balance is to be refined during future design stages to ensure efficiency and to facilitate appropriate growing conditions for vegetation.

36 **D Special - Green and Golden Bell Frog**

Immediately prior to any works being undertaken in and around the wetland areas in the central/north areas of the precinct, an ecologist is to confirm that no Green and Golden Bell Frogs (*Litoria aurea*) are present. If any individuals are found, work is to cease until a Green and Golden Bell Frog management plan prepared in consultation with the Office of Environment and Heritage has been submitted to, and approved by Council.

37 **D Special - Re-use of Woody Debris**

Prior to the commencement of any works, the applicant is to provide evidence that they have contacted the NSW National Parks and Wildlife Service (NPWS) to determine the possibility of reuse of woody debris and felled trees from within the Central Precinct within the Regional Park for habitat. If the material is wanted by the NPWS, then Lend Lease is to arrange for the material to be transported to a suitable location as identified by NPWS.

38 **D Special - Implementation of existing plans**

The following existing plans and impact mitigation strategies prepared as part of the Central Precinct Plan 2009 are to be implemented:

1. Central Precinct Weed Management Plan (Cumberland Ecology, 2008);
2. Central Precinct Feral and Domestic Animal Management Strategy (Cumberland Ecology, 2008);
3. Central Precinct Bushfire Management Plan (BES, 2008); and
4. St Mary's Macrofauna Management Plan (Cumberland Ecology, 2005).

39 **K Special**

Prior to the release of the Subdivision Certificate for Stage 1 subdivision of the Central Precinct, the applicant shall implement the mitigation works recommended in Final Flood Assessment Report (Project No. EN04189) prepared by Jacobs dated 20 July 2015 including but not limited to:-

- Inclusion of the proposed bulk earthworks DEM for Central Precinct into the model;

- Inclusion of the Dunheved fill into the model at levels at or above the developed Flood Planning Level;
- Removal of the abutment and embankments of Old Munitions Road;
- Removal of the stockpiles on the north-western South Creek Floodplain;
- Raising the crest level of the East West Connector Road to the 1%AEP level with no freeboard (crest levels vary from ~19.7mAHD - 20.4mAHD);
- Expansion of the South Creek waterway opening under the East West Connector Road (120m top width);
- Inclusion of the Dunheved Link Road with a crest level to provide 1%AEP immunity with no freeboard;
- Inclusion of M-Lock Bridge under the Dunheved Link (~150m wide);
- Minor re-shaping of the opening at the Dunheved Link to provide a trapezoidal opening with an invert at ~18mAHD;
- Inclusion of a landscaped berm at the southern end of the Dunheved fill area; and
- Inclusion of a bank of 9/2400 x 2700mm RCBC under the East West Connector Road to the west of the South Creek Bridge with an upstream invert of 16.8mAHD.

40. **K Special**

The flood planning levels for future developments in the Central Precinct should be based on the flood levels established by the Final Flood Assessment Report (Project No. EN04189) prepared by Jacobs dated 20 July 2015. Prior to the release of the Subdivision Certificate for stage 1 subdivision of the Central Precinct, the applicant shall submit to Penrith City Council the following information to facilitate assessment of future developments in the Central Precinct:

- (a) A flood map incorporating the 1:100 year flood extent for the Central Precinct;
- (b) The final land form; and
- (c) The data used for flood assessment.