

EXPLANATORY ADDENDUM



Issue date: 27 November 2019
Issued by: Alex Lohrisch
Client: Goodman Property Services (Aust) Pty Ltd
Reference: MEM002-01-15-272-Mod Report Explanatory Addendum.docx
Subject: SSDA 7348 EXPLANATORY ADDENDUM TO MOD 2 CIVIL ENGINEERING REPORT (REV 11 SEPT 2019)

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Purpose This Explanatory Addendum is to respond directly to the Environmental Assessment Requirements (EARs) issued by DPIE on 15 NOV 2019. Additionally, this Explanatory Addendum is to concisely describe the amendments made to the previous Civil, Stormwater and Infrastructure Services Report (MOD 1, REV 10 AUG 2019), as a result of the changes proposed to SSDA 7348 Modification No. 2 (REV 11 SEPT 2019).

Responses to DPIE EARs Dated 15 NOV 2019

EARs	Response
Soil and Water	
Justify the need for any additional fill, detail the resulting finished ground levels and describe any changes to the approved drainage design;	Refer to Section 2 of AT&L's Civil, Stormwater and Infrastructure Services Report (MOD 2 2 SEPT 2019) for discussion regarding earthworks. Refer to Section 6 of AT&L's Civil, Stormwater and Infrastructure Services Report (MOD 2 2 SEPT 2019) for discussion regarding stormwater drainage. Within the later section of this Explanatory Addendum, an overarching note has been included to describe the main change to the SSDA approved drainage design. Generally, this change relates to amendments to the pit and pipe network within Road 1, to address the amended lot layout within Precinct 1.
A detailed and consolidated site water balance	Section 7 of AT&L's Civil, Stormwater and Infrastructure Services Report (MOD 2 2 SEPT 2019) includes all site water balance details, water supply source, usage calculations and efficiency measures. It shall be noted that the water balance completed in the SSDA Engineering Report is still reflective of the masterplan in Modification No.3. A site-specific Water Balance will be completed with the DA for the on-lot building works.
An updated assessment of potential impacts on surface and groundwater sources (quality and quantity), soil (including contamination, salinity and acid sulphate soil), related infrastructure, and watercourses	Assessment of potential impacts is completed in Section 3 of AT&L's Civil, Stormwater and Infrastructure Services Report (MOD 2 2 SEPT 2019). It shall be noted that the previous Soil and Water Management Plan (SWMP) prepared in accordance with the NSW Department of Housing Publication titled: Managing Urban Stormwater – Soils and Construction (2004) for the whole site, remains relevant and the key objectives have not changed. Sources of pollution, potential impacts and RULSE Analysis remain the same for the Modification No. 2.
An updated description of surface and stormwater management measures designed in accordance with Penrith City Council's Water Sensitive Urban Design Policy and principles, including drainage	A detailed description of all Stormwater Management including WSUD design principles is included within Section 6 of AT&L's Civil, Stormwater and Infrastructure Services Report (MOD 2 2 SEPT 2019).

design, on-site detention, measures to treat or reuse water, and proposed uses of potable and non-potable waters;	
An updated description of the proposed erosion and sediment controls during construction and operational phases of the development; and	A detailed description of the Erosion and Sediment Control measures is included within Section 3 of AT&L's Civil, Stormwater and Infrastructure Services Report (MOD 2 2 SEPT 2019).
Updated details of impact mitigation, management and monitoring measures.	A summary of the mitigation, management and monitoring measures is included within Section 3 of AT&L's Civil, Stormwater and Infrastructure Services Report (MOD 2 2 SEPT 2019). The CEMP developed for works in SSDA 7348 describes in detail all of the measures and will be updated prior to construction of Modification No. 2 works.
Infrastructure Requirements	
Details of any potential changes to infrastructure required on the site and identification of any upgrades required to facilitate the modification;	Refer to Section 9 of AT&L's Civil, Stormwater and Infrastructure Services Report (MOD 2 2 SEPT 2019). Generally, the utility servicing strategy is unchanged from the approved SSDA design. No changes to any road infrastructure are required as a result of Modification 2, although Road 2 has been deleted as part of this modification to support the new development layout within Precinct 1. Refer to AT&L civil drawings C0004 and C0005 for the civil infrastructure works extents.
Details of any impacts on existing easements	Refer to civil drawings C0004 and C0005 For Modification No. 2 civil infrastructure works extent. There are no changes to previously approved works within existing easements on the lands defined in the SSDA 7348, including Transgrid easements through the site.
An assessment of the impacts of the modification (construction and operation) on existing infrastructure surrounding the site.	There are no changes to previously approved works that affect any existing infrastructure surrounding the site. Specifically, in relation to utility services, the utility servicing strategy is unchanged from the approved SSDA design (refer to Section 9 of AT&L's Civil, Stormwater and Infrastructure Services Report (MOD 2 2 SEPT 2019). No changes to any road infrastructure are required as a result of Modification 2, although Road 2 has been deleted as part of this modification to support the new development layout within Precinct 1. Refer to AT&L civil drawings C0004 and C0005 for the civil infrastructure works extents.

Summary of Report Changes:

Section	Description of Change	Reasons for Change
Executive Summary	SSDA Modification description changed Final comment on previous approval background changed	MOD 2 Design
Agency Consultation	Transgrid consultation updated	Discussions relevant to detailed design and to a lesser extent MOD 2 Design
1.0 Introduction	SSDA Modification description changed	MOD 2 Design
2.2 Earthworks	Commentary updated and Table 3 updated with MOD 2 earthwork volumes	MOD 2 Design - Precinct 1 reconfigured to suit revised development layout, which has changed earthworks quantities

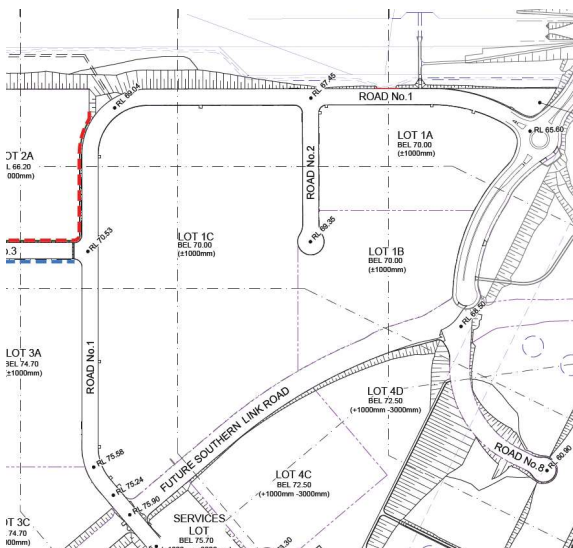
3.3.2 Design of Sediment and Erosion Control Measures	Table 6 updated to reflect temporary basin changes associated with the detailed design	Temporary Basin 1C now removed due to changes in Precinct 1 stormwater catchments (catchment 1C has been removed). Temporary Basins 1A and 1B have been adjusted to account for the revised Precinct 1 stormwater catchments and removal of Temporary Basin 1C
6.3.5 On-Site Detention	Minor changes within Tables 9 and 10, to suit current detailed design, as a result of DRAINS modelling.	Changes required as a result of revised DRAINS modelling to suit detailed design
10.1 Staging	SSDA Modification description changed	MOD 2 Design
Appendix A	Design drawings updated	MOD 2 Design
Appendix C	DRAINS Model updated	MOD 2 Design
Appendix D	MUSIC Model updated	MOD 2 Design

Summary of Design Changes:

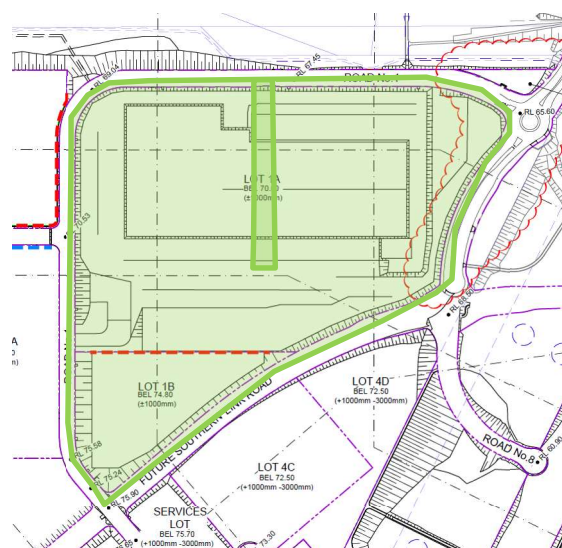
1.0 Precinct 1 Layout and Road 2 Removal

Precinct 1 has been modified to suit the revised on-lot building layout, which includes the removal of Road 2.

MOD 1 Drawing



MOD 2 Drawing

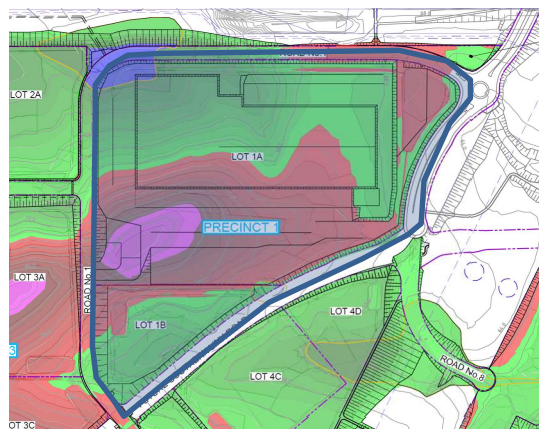
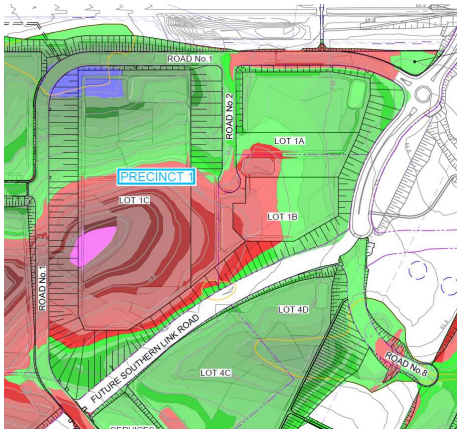


2.0 Earthworks and Retaining Walls

As a result of the changes associated with item 1.0 above, earthworks across Precinct 1 have changed.

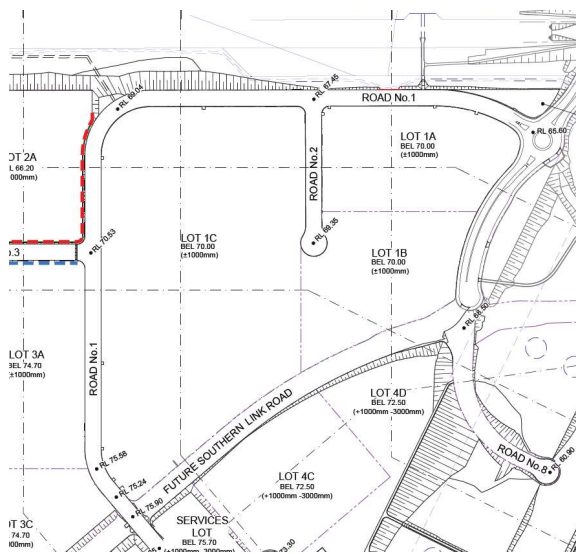
MOD 1 Drawing

MOD 2 Drawing

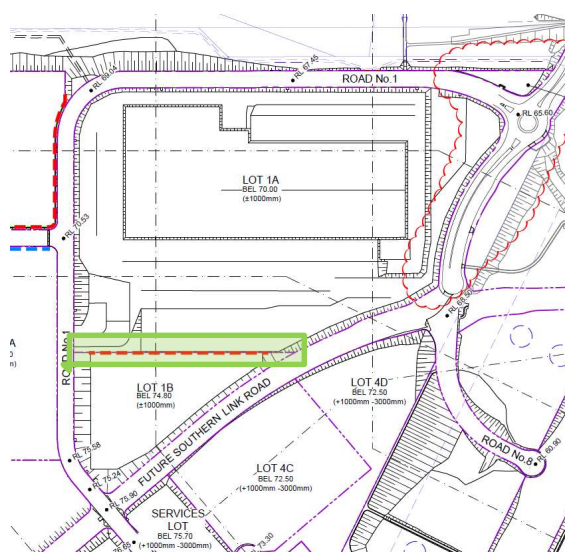


A new retaining wall (Retaining wall 20) has been added between Lot 1A and 1B to address the level differences between Lot 1A and Lot 1B.

MOD 1 Drawing



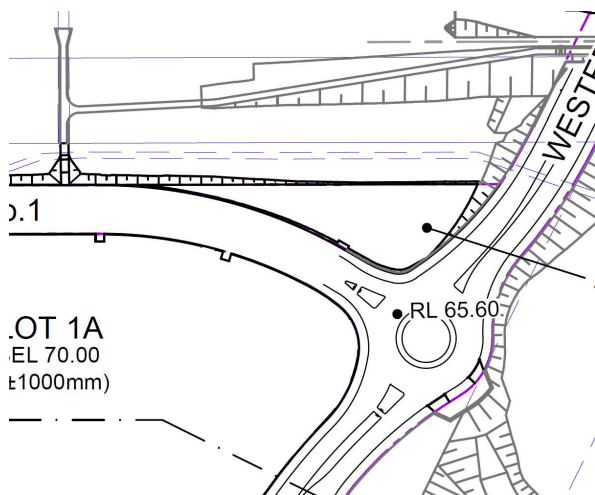
MOD 2 Drawing



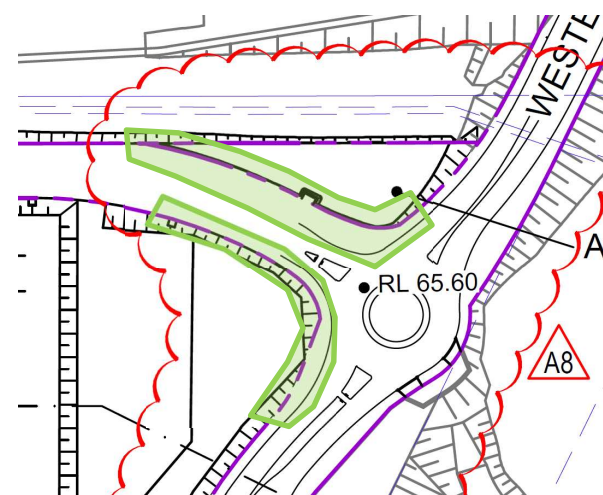
3.0 Proposed Boundary Adjustments – Road 1 and WNSLR Intersection

The proposed boundaries at the Road 1 and WNSLR intersection have been modified. These modifications have been completed to increase the road reserve area, so to facilitate (if required), future upgrades of the intersection without, or at least, minimise future land acquisition and services adjustments/relocations.

MOD 1 Drawing



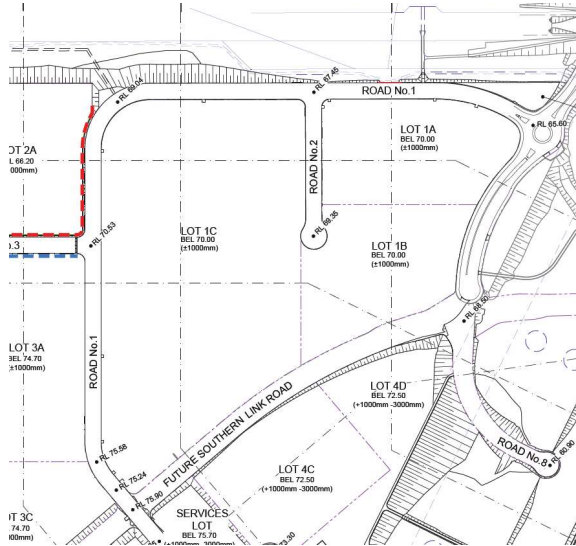
MOD 2 Drawing



4.0 Stormwater in Road 1

The stormwater pit and pipe design within Road 1 has been modified to suit the revised Precinct 1 lot layout. Generally, this has involved upsizing pipework along the southern/eastern side of Road 1 to account for the stormwater outlet point for Lot 1B.

MOD 1 Drawing



MOD 2 Drawing

