

15 June 2016

Hansen Yuncken Pty Ltd
Attention: Mr Tim Ireson
 Building 1, Level 3
 73-85 O'Riordan Street
 ALEXANDRIA NSW 2015

Dear Sir

Re: Mamre West Precinct, Mamre Road, Orchard Hills
Response to WaterNSW Comments - SSD_7173

As requested we provide this letter which provides a response to a WaterNSW, comments to the NSW Department of Planning and Environment for the above project. The items raised by The Department were provided in a letter (Ref: D2016/4188) dated 31 May 2016 (refer enclosed).

Our response to Civil Engineering Comments are as follows:

Item 1 The widening of Mamre Rd will remove the large turnout areas currently used by WaterNSW staff and contractors to access the Pipeline corridor safely. These turnout areas are vital for the safe, 24-hour traffic movements of all vehicle types, including for large trucks required for maintenance and repair purposes, and security.

Response

The road widening plan for the road works external to The Site, provided for the SSD application, is conceptual in detail. A detailed plan of the turning areas will be completed as part of the Construction Certificate Documentation. The proponent will ensure that safe and adequate access for Water NSW vehicles are maintained.

The detailed plan will include consideration to the major valves noted in Item 2 below and will be completed in consultation with WaterNSW to ensure the needs of the key stakeholders are met.

Item 2 On the western side of Mamre Road there are two major valves above ground and directly adjacent to the boundary fence. The road widening will mean any new turnout will be located closer to the valves than is currently the case. This has not been considered in the engineering drawings, which must be revised to address this issue.

Response

Please refer to the above response for *Item 1*.

- Item 3 Also on the western side, the Pipelines are concrete encased at road level. This requires the level of the new road to be raised, which in doing so will also increase the steepness of the turnout areas.*

Response

Please refer to the above response for *Item 1*.

- Item 4 Fencing has been identified and it is noted that WaterNSW needs to be part of the process for determining fence type. WaterNSW minimum requirements are for either a 2.1m chain mesh fence with three strand barbed wire on top, or a 2.1m palisade fence.*

Response

It is proposed that the existing security fencing to the Pipeline will remain (2.1m high + 3 strand barbed wire). Should the proposed development impact the existing fencing – a new fence will be provided in accordance with WaterNSW's Fencing Requirements.

- Item 5 There has not been any consideration of WaterNSW's need to be able to access the northern and southern boundary line of the Pipelines, and there does not seem to be any allowance for this in the widening of Mamre Road.*

Response

Please refer to the above response for *Item 1* and *Item 4*. The proponent confirms that access will not be impacted by the proposal.

- Item 6 The road design must include measures to protect the valves and general corridor from the potential runoff from the proposed new lanes.*

Response

Please refer to the above response for *Item 1*.

- Item 7 The southwestern corner of the proposed development described as Block 4 is shown in the bulk earthworks cut and fill plan (Drawing: C012042.00-DA30 Bulk Earthworks Cut/Fill Plan) as being subject to a borrow pit. WaterNSW notes that this area was originally excluded from development as a result of flood concerns, and is currently used to convey stormwater from the Pipeline corridor. WaterNSW requires that the flow of stormwater from the Pipeline corridor must not be impeded or caused to flow back to the corridor.*

Response

All works over the estate and within flood ways will be completed in accordance with the 'Overland Flow Report' (Stages 1 & 2), submitted 20th April 2016, as endorsed by Council via email from Nicole Dukinfield 16th May 2016.

We confirm that any works in the above noted area will be completed in accordance with the requirements of the Overland Flow Report, Penrith Council Policy. We confirm that flow of stormwater from the Pipeline corridor will not be

impeded or caused to flow back to the Pipeline Corridor.

- Item 8 The erosion and sediment control plan for the proposed development contains no details of controls for the area of Block 4 noted in the EIS and the associated bulk earthworks cut and fill plan as a "borrow pit". To ensure there will be no impact to the Pipeline corridor during the construction phase, WaterNSW requires the EIS and the associated erosion and sediment control plans to be updated to reflect inclusion of these requirements.*

Response

suitable sedimentation and erosion controls for the development will be implemented prior to construction in a detailed Erosion and Sediment Control Plan. This will be prepared as part of Construction Certificate Documentation.

Erosion controls, including any works within floodway areas will be completed in accordance with the requirements of the Protection of the Environment Operations Act, Penrith City Council's Specifications and the Office of Environment and Heritage's 'Managing Urban Stormwater: Soils and Construction. Landcom, (4th Edition) March 2014 (The 'Blue Book'), Volume 1 and Volume 2

It should also be noted that the natural falls of the land are toward the north, away from the Pipeline Corridor. We confirm that the Pipeline corridor will not be affected from erosion or sediment relating to the proposed development works.

- Item 9 The proposed development includes earthworks that will result in an elevated batter along the boundary between the Pipeline corridor and the proposed development. The Pipeline corridor contains a raised berm that acts to direct stormwater from the subject site away from the corridor to existing drainage depressions. It is understood that the outcome of the flood studies was to require a portion of the land proposed for rezoning and development, specifically in Block 4, to be left undeveloped for flood management purposes. However, as the Pipeline corridor is not included in these assessments it is not clear what the impact of the development is on flood regimes. WaterNSW requests the consideration of the impact of the proposed development on flood regimes for the Pipeline corridor.*

In addition it is understood that this same area is to be subject to works for the purposes of use as a borrow pit. As the construction of the borrow pit is not included in the flood assessment and the EIS and its associated documents do not contain information on the management or final plan for this area it is not clear what impact the proposed works may have on the flood regimes for the Pipeline corridor.

Response

All works over the estate and within flood ways have been designed and will be completed in accordance with the 'Overland Flow Report' (Stages 1 & 2), submitted 20th April 2016, as endorsed by Council via email from Nicole Dukinfield 16th May 2016.

We confirm that the study area and flood model extends 400m to the south of the

estate property boundary and includes the Pipeline Corridor. The study shows that the inclusion of the filling and batters on the southern boundary does not affect or impede flows within the pipeline corridor, as defined in Section C3 of Penrith City Council Development Control Plan. Further we advise that a Sensitivity Assessment was completed which extended to the modelling for a distance of 2500m upstream of the estate boundary which confirmed the model outcomes as noted above.

- Item 10 It is noted that the EIS gives an undertaking that WaterNSW's security fencing requirements will be incorporated in the design. However the drawings and details provided on the design do not provide any detail in this regard. WaterNSW requires that it be consulted to determine the specific security fencing requirements for the southern boundary of the proposed development with the Warragamba Pipelines corridor.*

Response

Security fencing will be included as part of detail design documentation.

- Item 11 If access is required to any part of the corridor for works of any kind, written access consent is required from WaterNSW. No works are to be carried out in the corridor without consent.*

Information on access consents is available at:

<http://www.waternsw.com.au/water-quality/catchmentmanagement/special-areas/access>

Response

The requirement to access to the pipeline corridor is unlikely however if required liaison and consent to the access the corridor would be made in accordance with WaterNSW requirements.

We trust the above response and enclosed drawings meet your current needs. Please do not hesitate in contacting the undersigned if any further clarification is required.

Yours faithfully,

COSTIN ROE CONSULTING PTY LTD



MARK WILSON MIEAust CPEng NER
Director