

12 July 2019

Chris Ritchie Director Industry Assessment Department of Planning, Industry & Environment 23-33 Bridge Street SYDNEY NSW 2000

Attn: Shaun Williams, Planning Officer Industry Assessments

Dear Chris,

## DEXUS QUARRYWEST PROJECT (SSD 6801) - SECTION 4.55 MODIFICATION (MOD 8) - RESPONSE TO SUBMISSIONS

DEXUS Quarry WEST Subtrust (DEXUS) is proposing to modify the development consent for the QuarryWEST Project within the Greystanes Southern Employment Lands. The proposed modification involves the construction of an internal overhead gantry/conveyor structure to link the warehouse facilities in Warehouses E3 and E4. The proposal is described in the Statement of Environmental Effects (SEE) for the proposal dated 22 May 2019.

The Department of Planning, Industry & Environment (the Department) received advice from 3 government authorities in response to the exhibition/referral of the SEE, namely:

- Blacktown City Council;
- Cumberland Council; and
- Fire & Rescue NSW (FRNSW).

Blacktown and Cumberland Councils did not raise any issues with the proposed modification, however FRNSW requested additional information in relation to fire safety related matters.

A response to these matters has been prepared by the project fire safety engineer, Innova Services (Innova), and is attached to this letter.

In summary, Innova advises that the proposed gantry/conveyor structure is able to comply with the applicable performance requirements of the Building Code of Australia (BCA), and that the insulated panel materials would comply with applicable standards including the Insulated Panel Council Australasia Code of Practice.

These matters would be addressed in detail as part of the building certification requirements (ie. Construction Certificate and Occupation Certificate) under the *Environmental Planning and Assessment Act 1979*. This would include preparation of a Fire Engineering Brief and Fire Engineering Report, in consultation with FRNSW.

DEXUS and PJEP trust that this additional information adequately addresses the comments raised by FRNSW. Should you have any enquiries in relation to this matter, please do not hesitate to contact me on 0400 392 861.

Yours faithfully, PJEP – Environmental Planning

Phil Jones

Principal Environmental Planner Cc: DEXUS, SPM Attachments: Innova advice, 11 July 2019



Fire Safety Engineering Building Services Engineering ABN 14 162 610 568

Our Ref: 19102-L03

12 July 2019

#### Qanstruct (Aust) Pty Ltd

Level 3, 338 Kent Street Sydney NSW 2000

Attention: Josh Horan (jhoran@qanstruct.com.au)

Dear Josh

### FIRE ENGINEERING STATEMENT

### DEXUS QUARRY WEST LOT E- SSD 6801 MOD 8 - WAREHOUSE E3 AND E4, PROSPECT HIGHWAY PEMULWUY

We refer to the proposed modification to the development consent for Lot E (Warehouse E3 and E4) at the abovementioned premises.

The purpose of this statement is to provide confidence to the Consent Authority that the matters raised in Fire and Rescue New South Wales correspondence (FRNSW Ref: BFS 19/2000 | D1944426 dated 27 June 2019) have been considered, and will be addressed in detail prior to issue of the necessary building permit(s) as required by the *Environmental Planning and Assessment Act 1979*.

Following identification of the BCA DTS non-conformances by the Authority Having Jurisdiction, in order to obtain a building permit (i.e. Construction Certificate) a Fire Engineering Brief and a Fire Engineering Report must be prepared by an accredited fire safety engineer and submitted to FRNSW for review and comment.

FRNSW will be consulted about the matters raised in the correspondence, along with other matters, at the appropriate time.

The FRNSW correspondence identifies three items related to compliance with the National Construction Code Volume 1, Building Code of Australia that will require consideration and consultation with FRNSW. Those items are repeated below in **bold** for ease of reference.

1. Consideration be given to the impact that the new conveyor structure including supporting columns will

have on the requirements for emergency vehicle access between the warehouses.

Whilst the conveyor passes over the roadway currently relied upon for access to Warehouse E3 and E4 a Performance Solution can demonstrate compliance with CP9 subject to consultation with FRNSW during design development. The fire safety strategy will rely upon:

- The conveyor structure is independent to that of the warehouses, with physical protection provided to the columns to protect them from impact damage; and
- There is redundancy in the design as alternative pathways that circumnavigate the remainder of the building are available (refer to the shaded area in Figure 1); and

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 The clear height to the underside of the conveyor exceeds the 4.5 m required under Clause 5.5 of FRNSW's Policy No.4 (Guidelines for Emergency Vehicle Access); and





Figure 1: Indicative pathway around conveyor location

# 2. Confirmation that the insulated sandwich panels are a compliant product that is suitably certified in accordance with the National Construction Code and relevant Australian Standards.

Materials used in construction will comply with the BCA.

In addition, any Insulated Sandwich Panels (ISP), utilised in the development shall be specified to meet the following requirements:

- The ISPs shall be identified in accordance with the Insulated Panel Council Australasia (IPCA) Code of Practice (CoP) (004.2:2014).
- Certification be provided from the accredited installer (e.g. a Code Compliant Company with the CoP) that the panels (All EPS must meet AS 1366.3 1992, use only 100% FR bead) and the installation of same comply with the requirements of the CoP.
- The use of ISP's should be identified in accordance with the requirements of the CoP e.g. labels (see Annexure D of CoP for examples) being placed on all doors leading into the buildings/compartments/rooms that have utilised ISPs;
- A warning placard shall be provided at the site entry point.



3. Details regarding how fire separation is proposed to be maintained between the warehouses should be provided to FRNSW for review and comment. Any fire engineered solution relied upon to provide an appropriate level of separation should be developed by a suitably qualified Fire Engineer and included as an essential fire safety measure within the Fire Safety Schedule for the warehouses.

Warehouse E3 and warehouse E4 could be considered as a united building as a result of the conveyor connection. Alternatively, fire separation between the two buildings would retain the classification as two separate buildings.

In the case of the former, the connection between the two buildings would not constitute a BCA DtS non-conformance.

However, in the case of the latter, which is likely to be employed in this instance, it will be necessary to demonstrate that a fire is not expected to spread between the two buildings despite the conveyor connection.

Due to the complexity associated with the equipment connecting the two buildings a DtS compliant form of separation between the two buildings may not be physically possible.

This is yet to be determined.

In the event of the development of a Performance Solution, the combination of spatial separation between the two buildings; sprinkler protection; the limited fuel load; as well as any other active and passive separation measures deemed to be appropriate e.g. a fire rated shutter at one end of the connection, is likely to restrict the spread of fire between the buildings.

An indicative point of separation is shown in Figure 2.



Figure 2: Indicative point of separation



#### **SUMMARY**

We consider that an assessment can be undertaken by a C10 Accredited Fire Engineer in consultation with project stakeholders (including FRNSW and the Principal Certifier, to demonstrate that the building works will comply with the Performance Requirements of the Building Code of Australia (NCC Vol. 1).

This may be via either or a combination of the following approaches that will be undertaken in consultation with FRNSW:

- The design becoming Building Code of Australia (NCC Vol. 1) DTS compliant
- Comparison to the Building Code of Australia (NCC Vol. 1) DTS Provisions
- Compliance with the Building Code of Australia (NCC Vol. 1) Performance Requirements (absolute assessment).

Should you require any additional information with regards to this advice please do not hesitate to contact the undersigned on 0424 590 503 or trent@innovaservices.com.au.

Yours faithfully

**Innova Services Pty Ltd** 

FPOL

Trent De Maria Senior Fire Engineer

Van Paull

Jason Powell Director C10 Accredited Fire Engineer (BPB0801) MIEAust, CPEng