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Our ref: SYDGE234348-G08-Rev4

Richard Crookes Constructions Level 3, 4 Broadcast Way Artarmon NSW 2064

Attention: Ms Bella Basaglia

Dear Ms Basaglia,

## SSD 6471 Sydney Modern Project: s4.55 Mod Design Development – Geotechnical letter for proposed new circular gallery space

Richard Crookes Constructions (RCC) appointed Coffey Services Australia (Coffey) to provide, amongst other professional services, geotechnical advice regarding the suitability of the project site for future use as a gallery space.

Coffey understands that RCC proposes to include the new circular gallery space as part of this development and intends to request a Section 4.55 modification to the approved SSD 6471 under the Environmental Planning & Assessment Act 1979.

The new circular gallery space is situated in the northern end of the project site. The addition of the new circular gallery space requires modification of the previously proposed linear shoring wall SH8 to five smaller walls (SH8A to SH8E) that form a semi-hexagonal shape. Coffey understands that an additional 475m³ of material will consequently be generated.

Coffey has reviewed available geotechnical information for the area (investigation carried out by Coffey and others). We anticipate a surficial layer of Fill ranging in thickness from under 1m at SH8A to over 5m at SH8E. The fill is anticipated to be underlain weathered Sandstone, which in turn anticipated to be underlain by Shale.

Coffey has carried out geotechnical analyses for the shoring walls SH8A to SH8E and provided advice to RCC and their designers, Arup. Coffey has also been engaged by DECC Pty Ltd (the contractor engaged by RCC for installation of the pile wall) to observe pile founding conditions. Coffey observed the drilling of approximately, 1 in 3 of the pile borings, with the remainder inspected by DECC.

Copies of Coffey's geotechnical advice and pile observations records may be sought from RCC and DECC respectively.

The addition of the new circular gallery space is not anticipated to have a significant impact on regional groundwater levels.

Coffey's professional advice should be read with reference to the attached "Important Information about your Coffey Report".

For and on behalf of Coffey,

James Searle

Senior Engineering Geologist