Aurecon Australasia Pty Ltd ABN 54 005 139 873 Ground Floor, 25 King Street Bowen Hills QLD 4006 Locked Bag 331 Brisbane QLD 4001 Australia T +61 7 3173 8000 F +61 7 3173 8001 E brisbane@aurecongroup.com W aurecongroup.com



Design Certificate

Project Description: Cement Australia, Glebe Island Silo Strengthening.

Location: Cement Australia, Glebe Island Depot, New South Wales.

Project Owner: Cement Australia Pty Limited.

It is hereby certified that the above-named structures, including:

- New concrete foundations and columns
- Concrete reinforcement to internal silo linings
- New sections of reinforced concrete perimeter walls under the silos

has been designed by Aurecon Australasia Pty Ltd (ABN 54 005 139 873). The design was carried out for Cement Australia Pty Limited in accordance with sound, widely accepted engineering principles and practice, and in accordance with Part B of the Building Code of Australia. The design was based on the requirements of the following Australian Standards listed as reference documents in the BCA,

AS1170.0-2002 Structural Design Actions – General Principles

AS1170.1-2002 Structural Design Actions – Permanent, Imposed and other Actions

AS1170.2-2011 Structural Design Actions – Wind Actions

AS1170.4-2007 Structural Design Actions – Earthquake actions in Australia

AS4100-1998 Steel Structures

AS3600-2001 Concrete Structures

And the following documents not referenced in the BCA,

AS3774-1996 Loads on Bulk Solids Containers

■ EN1991-4:2006 Eurocode 1 – Actions on structures – Part 4: Silos and tanks

The certified design consists of construction using concrete, steel reinforcement, and structural steel, and is described on the following engineering drawings:



503124-0000-DRG-SI-0001	Rev 0	Cover Sheet
503124-0000-DRG-SI-0003	Rev 0	General Notes
503124-0000-DRG-SI-0004	Rev 0	Structural Concrete and Steel Notes
503124-0000-DRG-SI-0010	Rev 0	General Site Plan
503124-0000-DRG-SI-0011	Rev 0	General Arrangement and Elevation
503124-0000-DRG-SI-0012	Rev 0	Silo Strengthening Plan
503124-0000-DRG-SI-0013	Rev 0	Typical Silo Strengthening, Plan and Section
503124-0000-DRG-SI-0014	Rev 0	Typical Silo Strengthening, Details Sheet 1
503124-0000-DRG-SI-0015	Rev 1	Typical Silo Strengthening, Details Sheet 2
503124-0000-DRG-SI-0016	Rev 0	Silo Roof Plan, Showing Silo Roof Access
503124-0000-DRG-SI-0018	Rev 0	Existing Equipment Layout, Basement
503124-0000-DRG-SI-0019	Rev 0	Proposed Equipment Layout, Basement
503124-0000-DRG-SI-0020	Rev 1	Laydown Area, Temporary Site Office and Amenities Block

Graham Findlay

For Aurecon Australasia

NPER: 55458 RPEQ: 06671

26 November 2019