Robert Bird Group
Member of the Surbana Jurong Group

Robert Bird Group Pty Ltd ABN 67 010 580 248 - ACN 010 580 248
Level 11, 151 Castlereagh Street Sydney NSW 2000
PO Box A2309 Sydney NSW 1235 Australia
P: +61 (0) 2 8246 3200 F: +61 (0) 2 8246 3201 www.robertbird.com

Certificate for Design & Inspection

Issued in accordance with the Building Code of Australia - Part A2.2(a)(iii);

Structural Engineering Works – (applicable New South Wales only)

Development consent number	SSD6957
Construction certificate number	
Project name & address	*Crown Sydney Hotel Resort, Barangaroo South*

Class of Building or Structure	*Class 6, 7a & 7b*	**RBG Job No.:** 14031
Description of work to be Certified	This certificate is for the purposes of supporting pool loads on L64. The elements covered by this certificate are as follows: • L64 suspended post tensioned concrete slabs • L64 concrete columns and core walls. The structural elements covered by this certification have been checked for the plunge pool loads based on information provided in Aconex Correspondence CSHR-RFI-000800 and the following files: • Crown Resorts-Penthouse External Bath-191114.pdf • CRS_AD_10T6401[V] • CRS_AD_11T6401[N] • CRS_AD_64T0029[A] • CRS_IAD_11T6402_B	
Type of certificate	Design and Installation of Structural Components for the work described above.	
Standards used in the design & installation	Australian Standards and Codes relevant to the structural component and as referenced in the Building Code of Australia. Refer to attached Project Design Criteria list for standards and codes specific to this project.	
Certificate Details	(a) The Structural elements of the work described above have been designed & installed in accordance with the BCA, related Australian Standards, and accepted engineering principles; and (b) The structural design has been verified by a suitably qualified engineer who has not been involved in the original design. (c) We have been responsible for periodic inspections on the structural engineering work described above. These inspections have been sufficient to establish that the work has been performed reasonably in accordance with the approved structural plans, structural specifications, and the intent of the structural design, subject to any instructions issued by us and any items detailed in the attached Schedule	
Issuer	**I,** Simon Cloherty BEng, MIEAust, CPEng, MICE, RPEQ, NPER **Signed:** …….. **Date: 17th September 2020** **For and on behalf of Robert Bird Group Pty Ltd**	
Attachments	Drawing Transmittal; Schedule; Project Design Criteria;	
Plans approved	Refer attached Drawing Transmittal for relevant approved plans.	

Schedule

Attachment to 'Certificate for Design & Inspection'

Project name & address	*Crown Sydney Hotel Resort, Barangaroo South*
RBG Job No.:	14031

Description of work covered by this Certificate	• L64 suspended post tensioned concrete slabs • L64 concrete columns and core walls.
Specific areas of work excluded from this Certificate	• *Façade.* • *Blast Rating requirements*
Details of any omissions pertaining to the certified work	*Nil*
List 'Certificates' or 'Statements of Compliance' from others, relied upon in issuing this Certificate	Fire Engineering Report – Report No. s131441_Crown Sydney_FER_09

Project Design Criteria

(Tick all standards appropriate to the project)

Attachment to 'Certificate for Design & Inspection'

Project name & address	*Crown Sydney Hotel Resort, Barangaroo South*
RBG Job No.:	14031

Standards / Codes

☒ AS 1170 Structural Design Actions
- ☒ Part 0 - General Principles
- ☒ Part 1 - Permanent, Imposed and other actions
- ☒ Part 2 - Wind actions
- ☐ Part 3 - Snow & Ice actions
- ☒ Part 4 - Earthquake actions in Australia

☐ AS 1288 Glass in Buildings - Selection and Installation

☐ AS 1657 Fixed Platforms, Walkways, Stairs and Ladders - Design, construction and installation

☐ AS 1664.1 Aluminium Structures – Limit State Design

☐ AS 1664.2 Aluminium Structures – Allowable Stress Design

☐ AS 1684 Residential Timber-framed Construction

☐ AS 1720 Timber Structures

☐ AS 2159 Piling – Design and Installation

☐ AS 2327 Composite Structures

☐ AS 2870 Residential Slabs and Footings - Construction

☒ AS 3600 Concrete Structures

☐ AS 3700 Masonry Structures

☐ AS 4100 Steel Structures

☐ AS 4600 Cold-formed Steel Structures

☐ AS 4678 Earth Retaining Structures

Other: .....

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Building Code of Australia

☒ Fire Rating Requirements (Appendix – New South Wales)

Other: Our design has been completed in accordance with Coffey's Geotechnical reports as listed below;

- GEOTLCOV24105AX-AN Rev 2
- GEOTLCOV24015AX-AQ Rev 2

Drawing Transmittal

Sydney Office
Address: Level 11, 151 Castlereagh Street, Sydney NSW 2000
Phone: +61(0)2 8246 3200
Fax: +61(0)2 8246 3201

Robert Bird Group
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Job No: 14031
CROWN RESORT SYDNEY
ALONG THE HUNGRY MILE
BARANGAROO
2000 AUSTRALIA

D - Disk or CD
E - Electronic
T - Tracing
H - Half-size or A3 print

U - Upload to Internet Project Register
L - Latest Revision
P - Print
1 - dwg **2** - dwf **3** - pdf **4** - rvt **5** - 12D Data
(Apply number suffix after letter)

To:	BATES SMART ARCHITECTS 43 Brisbane Street, Surry Hills NSW 2010	**Sent As:**	U1 U3
	WILKINSON EYRE ARCHITECTS 33 Bowling Green Lane, London EC1R 0BJ		U1 U3
	CROWN RESORTS LTD - CROWN SYDNEY HOTEL RESORT Level 2 Crown Towers, 8 Whiteman Street, Southbank VIC 3006		U1 U3
	CJ ARMS Level 1, 250 Bay Street, Port Melbourne VIC 3207		U1 U3
	CORE ENGINEERING GROUP Suite 401, Grafton Bond Building, 201 Kent Street, Sydney NSW 2000		U1 U3
	FORTUNE SHEPLER SALING INC. 37 Woodland Road, Maplewood, NJ United States 07040		U1 U3
	LEHR CONSULTANTS INTERNATIONAL; ACOUSTIC LOGIC CONSULTANCY		U1 U3
	COMMERCIAL AQUATICS; ST. LEGERE; ACOR		U1 U3
	INHABIT; MEYER DAVIS; ROWAN WILLIAMS DAVIES & IRWIN; SURFACE DESIGN		U1 U3
From:	DAMON KAMBOURIS / DENIS GOGGIN		
Sent:	Thursday, 17 September 2020		

Document No.	Title	Rev.	Status
CRS-SD-03_A_03-02	Insitu Column Splice Details - Sheet 2	E	For Construction
CRS-SD-03_A_03-03	Insitu Column Splice Details - Sheet 3	B	For Construction
CRS-SD-03_A_03-06	Insitu Column Splice Details - Sheet 6	B	For Construction
CRS-SD-03_A_03-61	Helical Column Splice Details - Sheet 1	B	For Construction
CRS-SD-03_H_03-25	Column Schedule - Level 5 to Roof - Sheet 5	F	For Construction
CRS-SD-04_H_03-05	Level 5 to Roof - Insitu Wall Elevations - Sheet 5	L	For Construction
CRS-SD-04_H_03-09	Level 5 to Roof - Insitu Wall Elevations - Sheet 9	L	For Construction
CRS-SD-04_H_03-13	Level 5 to Roof - Insitu Wall Elevations - Sheet 13	L	For Construction
CRS-SD-04_H_03-17	Level 5 to Roof - Insitu Wall Elevations - Sheet 17	N	For Construction
CRS-SD-04_H_03-22	Level 5 to Roof - Insitu Wall Elevations - Sheet 22	M	For Construction
CRS-SD-04_H_03-25	Level 5 to Roof - Insitu Wall Elevations - Sheet 25	J	For Construction
CRS-SD-04_H_03-28	Level 5 to Roof - Insitu Wall Elevations - Sheet 28	K	For Construction
CRS-SD-04_H_03-32	Level 5 to Roof - Insitu Wall Elevations - Sheet 32	H	For Construction
CRS-SD-07_T_64-01	Level 64 Loading Plan	B	For Construction
CRS-SD-09_T_03-07	Jump Rise Element Tower Plan Core 1 Sheet 7	C	For Construction
CRS-SD-10_T_64-01	Level 64 General Arrangement Plan	O	For Construction
CRS-SD-11_T_64-01	Level 64 Bottom Reinforcement Plan	A	For Construction
CRS-SD-12_T_64-01	Level 64 Top Reinforcement Plan	A	For Construction
CRS-SD-13_T_64-01	Level 64 Post Tensioning Plan	A	For Construction
CRS-SD-20_H_05-14	Hotel and Tower Slab Sections - Sheet 4	C	For Construction
CRS-SD-20_H_05-16	Hotel and Tower Slab Sections - Sheet 6	D	For Construction