

APPENDIX 8: INDICATIVE DELIVERY PROGRAMME

Released under the Official Information Act 1982

CHRISTCHURCH CATHEDRAL REINSTATEMENT Draft Master Programme 25 Nov 2016



ID	Task Name	Duration	Start	Finish	2017	2018	2019	2020	2021	2022	2023	2024	2025
1	CHRISTCHURCH CATHEDRAL DEVELOPMENT	1725 days	Mon 9/01/17	Thu 14/12/23									
2	KEY DATES	1000 days	Mon 16/12/19	Thu 14/12/23									
3	Stabilisation Complete	0 days	Mon 16/12/19	Mon 16/12/19									
4	Reinstatement sufficiently complete to open Cathedral	0 days	Thu 14/12/23	Thu 14/12/23									
5	Ancillary buildings operational	0 days	Wed 25/10/23	Wed 25/10/23									
6	Tower complete	0 days	Thu 23/11/23	Thu 23/11/23									
7	ESTABLISHMENT	1573 days	Mon 9/01/17	Tue 16/05/23									
8	Establish the Joint Venture	20 days	Mon 9/01/17	Fri 3/02/17									
9	Director & supporting PMO engagements	20 days	Tue 7/02/17	Mon 6/03/17									
10	Create Christchurch Cathedral Fundraising Trust	20 days	Tue 7/02/17	Mon 6/03/17									
11	Raise \$20M funds	200 days	Mon 8/01/18	Tue 19/12/17									
12	Raise additional \$10M funds	340 days	Tue 28/05/19	Mon 27/05/19									
13	Raise additional \$7.5M funds	470 days	Mon 3/05/21	Fri 30/04/21									
14	Raise additional \$7.5M funds	180 days	Mon 3/05/21	Tue 25/01/22									
15	Raise additional \$5M funds	340 days	Wed 26/01/22	Tue 16/05/23									
16	DESIGN & CONSENTING	1172 days	Mon 23/01/17	Mon 1/11/21									
17	Engage design consultants	5 days	Mon 23/01/17	Fri 27/01/17									
18	Preliminary Design	40 days	Mon 30/01/17	Mon 27/03/17									
19	Preliminary Design	30 days	Mon 30/01/17	Mon 13/03/17									
20	Update Cost Plan	5 days	Tue 14/03/17	Mon 20/03/17									
21	Preliminary Design Approved	5 days	Tue 21/03/17	Mon 27/03/17									
22	Developed Design	50 days	Tue 28/03/17	Fri 9/06/17									
23	Developed Design including peer reviews	40 days	Tue 28/03/17	Thu 25/05/17									
24	Heritage NZ consultations, reviews & approvals	20 days	Tue 28/03/17	Thu 27/04/17									
25	Update Cost Plan	5 days	Fri 26/05/17	Thu 1/06/17									
26	Developed Design Approved	5 days	Fri 2/06/17	Fri 9/06/17									
27	Sufficient design drop for early stabilisation works building consent	0 days	Fri 9/06/17	Fri 9/06/17									
28	Detailed Design for Stabilisation	80 days	Mon 12/06/17	Fri 29/09/17									
29	Progressive Staged Detailed Design drops	60 days	Mon 12/06/17	Fri 1/09/17									
30	Heritage NZ consultations, reviews & approvals	30 days	Mon 26/06/17	Fri 4/08/17									
31	Structural Peer Reviews	20 days	Mon 7/08/17	Fri 1/09/17									
32	Update Cost Plan	10 days	Mon 4/09/17	Fri 15/09/17									
33	Detailed Design Approved	10 days	Mon 18/09/17	Thu 29/09/17									
34	Design During Stabilisation Works	275 days	Fri 8/09/17	Tue 23/10/18									
35	Ongoing investigation & design development addressing evolving issues	250 days	Fri 8/09/17	Mon 17/09/18									
36	Heritage NZ consultations, reviews & approvals	200 days	Fri 6/10/17	Mon 6/08/18									
37	Cost plan revisions	250 days	Fri 6/10/17	Mon 15/10/18									
38	Design approvals	250 days	Fri 13/10/17	Tue 23/10/18									
39	Detailed Design for Reinstatement	270 days	Mon 2/10/17	Wed 7/11/18									
40	Detailed Design	250 days	Mon 2/10/17	Tue 9/10/18									
41	Heritage NZ consultations, reviews & approvals	200 days	Tue 31/10/17	Tue 28/08/18									
42	Structural Peer Reviews	100 days	Tue 22/05/18	Tue 9/10/18									
43	Facade Peer Reviews	40 days	Wed 18/07/18	Tue 11/09/18									
44	Fire & Services Peer Reviews	20 days	Wed 12/09/18	Tue 9/10/18									
45	Update Cost Plan	10 days	Wed 10/10/18	Wed 24/10/18									
46	Detailed Design Approved	10 days	Thu 25/10/18	Wed 7/11/18									
47	Design for Ancillary Buildings	170 days	Mon 6/04/20	Mon 7/12/20									
48	Preliminary design	30 days	Mon 6/04/20	Wed 20/05/20									
49	Cost plan update & approvals	10 days	Thu 21/05/20	Thu 4/06/20									

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ID	Task Name	Duration	Start	Finish
50	Developed design	50 days	Fri 5/06/20	Thu 13/08/20
51	Cost plan update & approvals	10 days	Fri 14/08/20	Thu 27/08/20
52	Detailed design	60 days	Fri 28/08/20	Mon 23/11/20
53	Cost plan update & approvals	10 days	Tue 24/11/20	Mon 7/12/20
54	Design for Replacement Tower	140 days	Mon 1/03/21	Fri 17/09/21
55	Preliminary design	30 days	Mon 1/03/21	Wed 14/04/21
56	Cost plan update & approvals	10 days	Thu 15/04/21	Thu 29/04/21
57	Developed design	40 days	Fri 30/04/21	Fri 25/06/21
58	Cost plan update & approvals	10 days	Mon 28/06/21	Fri 9/07/21
59	Detailed design	40 days	Mon 12/07/21	Fri 3/09/21
60	Cost plan update & approvals	10 days	Mon 6/09/21	Fri 17/09/21
61	Building Consents	1077 days	Mon 12/06/17	Mon 1/11/21
62	Submit, process & uplift early stabilisation building consent	20 days	Mon 12/06/17	Fri 7/07/17
63	Submit, process & uplift balance of stabilisation building consent	30 days	Mon 2/10/17	Mon 13/11/17
64	Submit, process & uplift reinstatement works building consent	30 days	Thu 8/11/18	Thu 20/12/18
65	Submit, process & uplift ancillary buildings building consent	30 days	Tue 8/12/20	Fri 29/01/21
66	Submit, process & uplift tower building consent	30 days	Mon 20/09/21	Mon 1/11/21
67	MAIN CONTRACTOR PROCUREMENT - STABILISATION	105 days	Mon 13/02/17	Thu 13/07/17
68	EOI GETS	20 days	Mon 13/02/17	Fri 10/03/17
69	Contractor evaluation, interview & shortlist	5 days	Mon 13/03/17	Fri 17/03/17
70	Prepare tender documents	10 days	Mon 20/03/17	Fri 31/03/17
71	Selected RFP Tender period	30 days	Mon 3/04/17	Wed 17/05/17
72	Review & recommendation	10 days	Thu 18/05/17	Wed 31/05/17
73	Approval	10 days	Thu 1/06/17	Thu 15/06/17
74	Contractor engagement	10 days	Fri 16/06/17	Thu 29/06/17
75	Off site works for initial stabilisation	10 days	Fri 30/06/17	Thu 13/07/17
76	MAIN CONTRACTOR PROCUREMENT - REINSTATEMENT	210 days	Thu 8/03/18	Thu 17/01/19
77	EOI GETS	20 days	Thu 8/03/18	Fri 6/04/18
78	Contractor evaluation, interview & shortlist	5 days	Mon 9/04/18	Fri 13/04/18
79	Prepare tender documents	10 days	Wed 18/07/18	Tue 31/07/18
80	Selected RFP Tender period	30 days	Wed 1/08/18	Tue 11/09/18
81	Review & recommendation	10 days	Wed 12/09/18	Thu 25/09/18
82	Approval	10 days	Wed 26/09/18	Thu 5/10/18
83	Contractor engagement	10 days	Wed 10/10/18	Wed 24/10/18
84	Off site works for initial reinstatement	40 days	Thu 8/11/18	Thu 17/01/19
85	ENABLING WORKS	30 days	Fri 30/06/17	Thu 7/09/17
86	Mobilise for stabilisation works	10 days	Fri 30/06/17	Fri 14/07/17
87	Initial stabilisation works	40 days	Fri 14/07/17	Thu 7/09/17
88	Stabilisation	536 days	Fri 8/09/17	Mon 16/12/19
89	Underpinning shallow foundations	40 days	Fri 8/09/17	Fri 3/11/17
90	Remove existing steel frame and supporting concrete foundation beams from western end	20 days	Fri 8/09/17	Thu 5/10/17
91	Site measure for new steel frame, complete shop drgs & fabricate	60 days	Fri 22/09/17	Mon 18/12/17
92	Demolish west wall and rose window to porch level	10 days	Fri 6/10/17	Thu 19/10/17
93	Install new preassembled West Wall structural steel braced frame into west wall	20 days	Tue 19/12/17	Mon 29/01/18
94	Connect new West Wall Braces Frame to existing clerestory roof and deconstruct damaged portions of the Clerestory walls	20 days	Tue 30/01/18	Tue 27/02/18
95				

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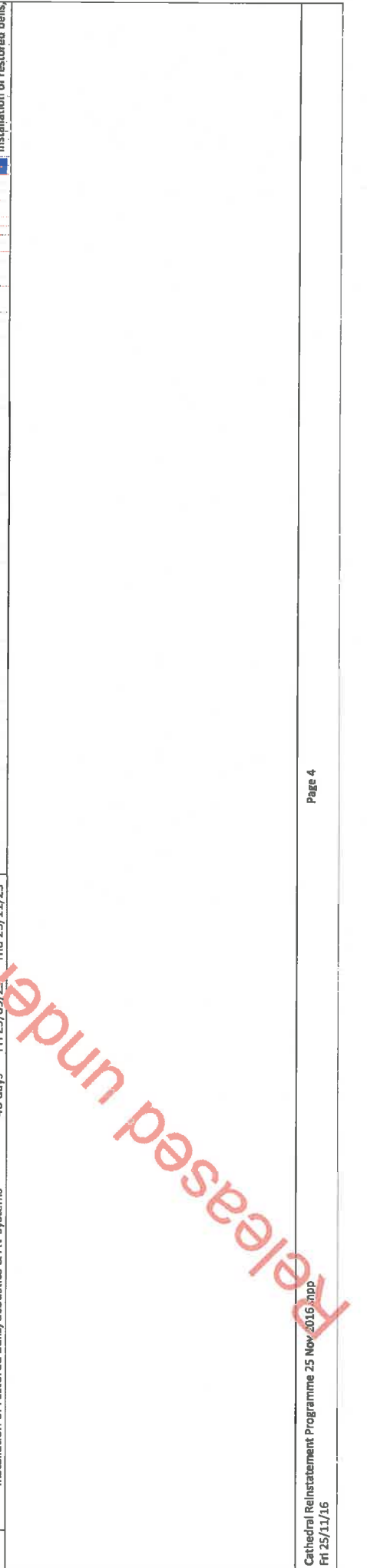


ID	Task Name	Duration	Start	Finish
96	Install new screw piles for new temporary clerestory structural steel braces frames	20 days	Mon 6/11/17	Mon 4/12/17
97	Construct new reinforced concrete foundation block for Clerestory Braced Frames & erect new preassembled braces frames over (incl measure & fabrication)	60 days	Tue 5/12/17	Tue 13/03/18
98	Connect Clerestory braced frames to existing 200 UC chord members below side aisle roof	15 days	Wed 14/03/18	Thu 5/04/18
99	Deconstruct porch & complete balance of west wall bracing	15 days	Fri 6/04/18	Fri 27/04/18
100	Install precast concrete foundation block for new temporary steel frames	20 days	Mon 30/04/18	Fri 25/05/18
101	Install new preassembled Transsept Gable Securing Frames to north and south transept gables	20 days	Mon 28/05/18	Mon 25/06/18
102	Secure Phase 1.8 Transsept Frame Foundation Blocks thru existing walls using RB32 through ties secured to double PFC	30 days	Tue 26/06/18	Mon 6/08/18
103	Temporary strengthening badly damaged southern gable wall pier using heavy duty fabric straps with timber packers	20 days	Tue 26/06/18	Mon 23/07/18
104	Provide temporary roof level cross-ties between the Phase 1.9 Transsept Gable Securing Frames.	20 days	Tue 7/08/18	Mon 3/09/18
105	Install precast concrete foundation blocks for North porch securing frame	20 days	Tue 4/09/18	Mon 1/10/18
106	Install new preassembled North Porch Securing Frame	20 days	Tue 2/10/18	Tue 30/10/18
107	High level works (in man baskets) removing or securing loose masonry, ahead of other work at low level.	30 days	Fri 8/09/17	Thu 19/10/17
108	Connect new West Wall Braced Frame to existing adjacent masonry piers.	20 days	Wed 28/02/18	Tue 27/03/18
109	Reconstruct portion of the north aisle roof and wall damaged by tower including capping beam rafters roof braces and a new temporary light weight roof	40 days	Wed 31/10/18	Wed 9/01/19
110	Deconstruct and temporarily reinstate damaged portion of North Porch roof	40 days	Wed 31/10/18	Wed 9/01/19
111	Shore arches, cover & brace existing windows opening with timber framing plywood & new or make good timber framing plywood & new or make good existing flashings	40 days	Fri 18/10/19	Mon 16/12/19
112	Temporary strengthening of badly damaged north and south walls of Apse using heavy duty fabric straps with timber packers	20 days	Tue 24/07/18	Mon 20/08/18
113	Reinstatement Works	110 days	Fri 12/07/18	Thu 14/12/18
114	Replace existing damaged south aisle roof brace with a new RB32 roof brace.	30 days	Fri 12/07/19	Thu 22/08/19
115	Progressively install timber propping to support side aisle rafters & stabilise damaged north and south aisle walls	40 days	Fri 23/08/19	Thu 17/10/19
116	Progressively shore clerestory piers and arches with new braced shoring towers and timber propping working from west to east	40 days	Fri 18/10/19	Mon 16/12/19
117	Progressively shore transept piers & arches with new braced shoring towers & timber propping working from west to east	40 days	Tue 17/12/19	Tue 25/02/20
118	Progressively prop and shore remaining damaged piers and arches at the eastern end of the Cathedral	40 days	Wed 26/02/20	Thu 23/04/20
119	Mobilise for reinstatement works	10 days	Fri 24/04/20	Fri 8/05/20
120	Strengthening of existing walls with reinforcing & grouting & FRP& structural steel	200 days	Mon 11/05/20	Wed 3/03/21
121	Internal & external stone masonry minor repair including reinforcing, pinning & grouting	400 days	Thu 4/03/21	Thu 6/10/22

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ID	Task Name	Duration	Start	Finish
122	Internal & external stone masonry major repair requiring deconstruction then refabrication & installation	400 days	Thu 4/03/21	Thu 6/10/22
123	Install permanent ties between existing and new elements throughout the building	100 days	Mon 11/05/20	Mon 28/09/20
124	New white precast concrete rose window frame	10 days	Thu 4/03/21	Wed 17/03/21
125	Nave column repair & base isolator installation with two levels of foundations, foundation tie beams and ground floor	200 days	Thu 4/03/21	Fri 17/12/21
126	Envelope	560 days	Tue 29/09/20	Thu 29/12/22
127	Complete roof framing	100 days	Tue 29/09/20	Wed 3/03/21
128	Complete roof membranes, cladding, gutters & down pipes	80 days	Wed 20/01/21	Tue 18/05/21
129	Final fix & fit off	60 days	Wed 19/05/21	Wed 11/08/21
130	Windows & façade reinstatement	120 days	Fri 15/07/22	Thu 29/12/22
131	Fit Out & Services	200 days	Fri 12/08/22	Thu 18/05/23
132	Fit out & services to all areas	200 days	Fri 12/08/22	Thu 18/05/23
133	Outdoor Areas	100 days	Fri 27/01/23	Thu 15/06/23
134	Builders works including footpaths & parking areas & roads	60 days	Fri 27/01/23	Thu 20/04/23
135	Hard landscaping	30 days	Fri 21/04/23	Thu 1/06/23
136	Soft landscaping	10 days	Fri 2/06/23	Thu 15/06/23
137	Cathedral Close Out & Commissioning	150 days	Fri 19/05/23	Thu 14/12/23
138	Furnishings	100 days	Fri 19/05/23	Thu 5/10/23
139	Final commissioning	40 days	Fri 6/10/23	Thu 30/11/23
140	Final clean	10 days	Fri 24/11/23	Thu 7/12/23
141	Final statutory inspections & Code of Compliance	10 days	Fri 1/12/23	Thu 14/12/23
142	Practical Completion	0 days	Thu 14/12/23	Thu 14/12/23
143	Visitors Centre & Ancillary Buildings	640 days	Tue 27/04/21	Wed 25/10/23
144	Structural works	200 days	Tue 27/04/21	Wed 16/02/22
145	Envelope & façade	200 days	Thu 17/02/22	Wed 23/11/22
146	Fit out & services	200 days	Thu 24/11/22	Wed 30/08/23
147	Café tenancy fit out	40 days	Thu 31/08/23	Wed 25/10/23
148	Visitors centre tenancy fit out	40 days	Thu 31/08/23	Wed 25/10/23
149	Replacement Tower	461 days	Thu 17/02/22	Thu 23/11/23
150	Structural works	200 days	Thu 17/02/22	Wed 23/11/22
151	Envelope & façade	161 days	Thu 24/11/22	Thu 10/07/23
152	Fit out & services	60 days	Fri 7/07/23	Thu 08/09/23
153	Installation of restored bells, acoustics & AV systems	40 days	Fri 29/09/23	Thu 23/11/23



APPENDIX 9: COST ESTIMATE

Released under the Official Information Act 1982