



Inspection and Test Plan - Control and Supervision of the Works

Document # GT4-ITP-012

Revision: 0 Date: 06/09/2023

Client: **Hobart International Airport Pty Ltd Construction Process:** Prepared by: Reviewed by: Approved by: Name: David Hart Name: Project: **Project Mercury Early Works At Hobart Concrete Structural Footings** Name: Zac Buick **International Airport Contract No:** MER-EW-001 Specifications: Hobart Airport Project Mercury Early Works Civil Structure / Component: Concrete Structural Footings Signed: Signed: Signed: **Location: Hobart International Airport** Date: 5/09/2023 Date: 7/09/2023 Date:

Item			Inspection / Controls and Ver	ification Detail			HP/ WP/	Responsibility	Checked by:		
No.	Task/Activity Description	Frequency	Acceptance Criteria	Reference Documents	Inspection / Test Method	Record of conformity	AP/	Project Engineer Site Engineer Superintendent Surveyor Foreman	QAV	Fulton Hogan	Date
1	Preliminary Works										
1.1	Check that current revision drawings are being used	Prior to Commencing Work	Issued For Construction (IFC) and latest available revision used	IFC Project Drawings/ Drawing Register	Document review	Latest revision IFC drawings ITP signed	HP*	Site Engineer	N/A		
1.2	Implementation of all measures and controls	Prior to commencing any activity	All necessary measures and controls are being implemented, that is: PSP, EMP, TMP, SWMS & WP	OHSMP, EMP, TMS, SWMS, WP	Visual Inspection	This ITP Signed	HP*	Site Engineer	N/A		
2	Material Conformance										
2.1	Materials & source Approval - Reinforcing	Prior to works commencing 1 per delivery	Reinforcing supply quantities in accordance with the drawings and AS/NZS 4671.	Work Procedure	Visual Inspection	Receival inspection checklist	IP	Site Engineer	N/A		
2.2	Materials & source Approval - Cast-in Items	Prior to works commencing 1 per delivery	Cast-In items to be in accordance with the drawings and manufacturer specifications. All surface exposed, cast-in components are to be hot dip galvanised and fire protected as required.	EW-ST-DRW-10- 0005	Visual Inspection	Receival inspection checklist	ΙP	Site Engineer	N/A		
2.3	Source In-situ Concrete Material	Each Lot	Concrete shall be at minimum 28-day strength, F'c of 32 MPa and when placed shall be well rammed to ensure thorough consolidation. Concrete slump shall be 100mm +/- 20mm	EW-ST-DRW-10- 0005 Table 5.1 of AS1379		Mix Design	ΙP	Site Engineer	N/A		
3	Construction \ Erection of Formwork										_
3.1	Set Out	Each Lot	Provide 24 hr inspection notice for Superintendent confirmation of footings location.	EW-ST-DRW-10- 0005	Verify	This ITP signed	HP	Site Engineer			
3.2	Excavation	Each Lot	Excavation to be to the depth and size required for the concrete footing.	EW-ST-DRW-10- 0020	Verify	This ITP signed	IP	Site Engineer	N/A		
			confirmation of footings location. Excavation to be to the depth and size required for	0005 EW-ST-DRW-10-	,				N/A		

Item			Inspection / Controls and Ver	ification Detail			HP/	Responsibility	y Checked by:			
No.	Task/Activity Description	Frequency	Acceptance Criteria	Reference Documents	Inspection / Test Method	Record of conformity	WP/ AP/ IP/ TP/ SCP	Project Engineer Site Engineer Superintendent Surveyor Foreman	QAV	Fulton Hogan	Date	
3.3	Blinding Concrete	Each Lot	Min. 200mm of concrete blinding layer below the base of the pad footing. Where a footing does not extend to the level required within the acceptable founding material, the contractor is to provide a weak-mix blinding concrete (minimum N15) for the footprint of the footing to achieve the required depth	EW-ST-DRW-10- 0020 EW-ST-DRW-10- 0005	Inspection	This ITP signed	<u>P</u>	Site Engineer	N/A			
3.4	Formwork	Each Lot	Formwork shall conform to shapes, lines, levels and dimensions of the concrete shown or indicated on the Drawings.	Work Procedure	Verify	This ITP signed	IP	Site Engineer	N/A			
4	Reinforcement											
4.1	Steel Fixing	Each Lot	Reinforcement type and design to be in accordance with DWG EW-ST-DRW-10-0020 Reinforcing steel shall be bent and placed in accordance with AS 4671 and sufficient bar chairs shall be installed to ensure reinforcement is in the correct position.	EW-ST-DRW-10- 0020 Work Procedure	Verify	This ITP signed	ΙP	Site Engineer	N/A			
4.2	Reinforcement Installation	Each Lot	Pre-pour Checklist Completed: - Position and spacing check and recorded - Cover checked and recorded - Reinforcing supports checked and recorded - Laps at required length	Work Procedure	Inspection	This ITP signed	IP	Site Engineer	N/A			
4.3	Cast-In Items	Each Lot	Installation of cast in items as per manufacturer specifications	Work Procedure	Verify	This ITP signed	IP	Site Engineer	N/A			
5	Inspections											
5.1	Pre-pour Inspection	Each Lot	Concrete shall not be placed until: (i) the evidence that the forms, reinforcement, any stressing materials and embedments conforming to the requirements of the specification and the drawings, has been reviewed by the Superintendent (ii) all foreign material has been completely removed from the forms Superintendent requires 48 HR notice for inspection.	Work Procedure	Inspection	Pre Pour Inspection Checklist Completed	НР	Site Engineer/ Superintendant				

Page 2 of 8

Item				HP/	Responsibility		Checked by:				
No.	Task/Activity Description	Frequency	Acceptance Criteria	Reference Documents	Inspection / Test Method	Record of conformity	WP/ AP/ IP/ TP/ SCP	Project Engineer Site Engineer Superintendent Surveyor Foreman	QAV	Fulton Hogan	Date
6	Placing and Finishing Concrete										
6.1	Pour Concrete Footings	Each Lot	Footings shall be constructed in accordance with the detail shown on the drawings.	EW-ST-DRW-10- 0020	Inspection	Concrete pour record and delivery docket	HP*	Site Engineer	N/A		
6.2	Finishing	Each Lot	Concrete to be vibrated to ensure compaction and air voids removed. Screed finish required on exposed surfaces Concrete surface finishes to meet Class 4 requirements as per table 3.2.3 and 3.3.5.1 of AS 3610. (Attached Below)	Work Procedure	Verify	Completion of prepour inspection checklist	IP	Site Engineer	N/A		
6.3	Concrete Testing	Each Lot	Testing for conventionally reinforced elements: UNO in specifications or on drawings, the contractor is to arrange for project sampling for every 50m³ of concrete supplied (1000m³ in the case of shrinkage tests alone). Provide slump, 7-and 28-day compressive strength and shrinkage test results in accordance with AS 1379 and AS 1012.1 to the engineer, as a minimum. Concrete Testing to be carried out as per specifications in AS 1379	Work Procedure	Verify	Test Results	TP	Site Engineer	N/A		
7	Post Pour Details and Inspections										
7.1	Concrete Curing	Each Lot	Concrete to be cured as per project specifications. All concrete elements are to be actively cured for a minimum of 14 days following pouring by ponding or an approved proprietary system. The contractor shall submit the proposed curing methodology to the engineer for approval prior to pouring.	EW-ST-DRW-10- 0005	Verify	This ITP Signed	ΙP	Site Engineer	N/A		
7.2	Removal of Formwork	Each Lot	Stripping of vertical faces in accordance with C.1.8.13 of EW-ST-SPC-000001.	EW-ST-SPC- 000001	Verify	This ITP Signed	IP	Site Engineer	N/A		
7.3	Allowable Tolerances Level & Alignment	Each Lot	Surface Tolerances to be in accordance with Table 3.3.5.1 of AS 3610 As-built survey completed for lot	AS 3610	Verify	This ITP Signed	SCP	Site Engineer	N/A		
7.4	Post-pour Checklist	Each Lot	Completion of Pre Pour checklist quality checks.	Work Procedure	Inspection	Pre Pour Inspection Checklist Completed	HP*	Site Engineer	N/A		

File Name: GT4-ITP-012 - Concrete Structural Footings.xlsx

Item			Inspection / Controls and Ver	ification Detail			HP/ WP/	Responsibility		Checked by:	
No.	Task/Activity Description	Frequency	Acceptance Criteria		Inspection / Test Method	Record of conformity	AP/ IP/ TP/	Project Engineer Site Engineer Superintendent Surveyor Foreman	QAV	Fulton Hogan	Date
7.5	Backfilling	Each Lot	Backfilling to match pavement design and to occur min. 72 hours post concrete pour.	Work Procedure	Inspection	This ITP Signed	HP*	Site Engineer	N/A		

Final Inspection

The signature below verifies that this ITP has been completed in accordance with the FH's Quality system Procedures and verifies lot compliance with specifications.

Print Name:

Signature:

Date:

Legend

HP	Hold Point	Work shall not proceed past the HP until released by the Superintendent	IP	Inspection point	Formal Inspection to be done and recorded
HP*	FH Hold Point	Work shall not proceed past the HP* until released by FH	TP	Test Point	Product compliance test to be undertaken and recorded/reported
AP	Approval Point	Written or verbal approval given by the Superintendent	SCP	Survey conformance point	A qualified surveyor to check product/section/structure and report
WP	Witness Point	An inspection which must be witnessed by the Superintendent	WP*	Fulton Hogan Witness Point	An inspection which must be witnessed by Fulton Hogan Representative

TABLE C2 VERTICAL FACE FORMWORK MINIMUM STRIPPING TIMES AFTER CASTING

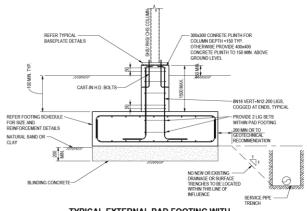
Position:

		Average temperatur	e					
Classification	Greater than 20°C	Between 12°C and 20°C	Between 5°C and 12°C					
Class 1, Class 2 or Class 3 (see Note 1)	1 d	2 d	3 d					
Class 4 or Class 5	9 h	12 h	18 h					
All	A minimum of 1 d applies to the stripping of vertical fac where frost damage is likely							

TABLE 3.3.5.1 MAXIMUM TOLERANCES FOR STRAIGHT ELEMENTS

	Quality of surface finish	Cla	ss 1	Cla	ss 2	Cla	ss 3	Cla	ss 4	Cla	ss 5	Ref.
	Percentage of readings	95	100	90	100	80	100	70	100	70	100	Clause
1	Face step, in mm:											3.3.5.2(b)
	(a) Within the element	1	2	2	3	3	5	5	8		*	
	(b) At in situ construction joint	2	3	2	3	3	5	5	8	*	*	
2	Surface undulations, in mm:											
	(a) I = 300									l		
	(a − b) ≤	1	2	2	4	3	4	5	7	*	*	3.3.5.2(a)
	(b) I = 1500									l		
	(a − b) ≤	2	4	3	6	5	7	8	10		*	
3	Flatness, in mm:											3.3.5.2(c)
	(a) 1.25 m grid	4	5	6	7	7	10	*	*	*	*	
	(b) at 5 m over 10 m (not applicable to precast concrete)	5	7	7	10	10	15	*	*	*	*	
4	Out-of-plumb, in mm:											3.3.5.2(d)
	(a) height <3 m	3	5	4	6	5	7		*	٠	*	
	(b) 3 ≤ height <8 m (not applicable to precast concrete)	6	8	8	10	10	12	*	*	*	*	

NOTES:



TYPICAL EXTERNAL PAD FOOTING WITH PEDESTAL DETAIL
SCALE - 1:20

Item			Inspection / Controls and Ver	rification Detail		HP/ WP/	Responsibility		Checked by:	
No.	Task/Activity Description	Frequency	Acceptance Criteria		Inspection / Test Method	AP/ IP/ TP/	Project Engineer Site Engineer Superintendent Surveyor Foreman	QAV	Fulton Hogan	Date

Item		Inspection / Controls and Verification Detail						Responsibility		Checked by:	
No.	Task/Activity Description	Frequency	Acceptance Criteria		Inspection / Test Method	Record of conformity	TP/	Project Engineer Site Engineer Superintendent Surveyor Foreman	QAV	Fulton Hogan	Date

Item			Inspection / Controls and Ver	rification Detail		HP/ WP/	Responsibility		Checked by:	
No.	Task/Activity Description	Frequency	Acceptance Criteria		Inspection / Test Method	AP/ IP/ TP/	Project Engineer Site Engineer Superintendent Surveyor Foreman	QAV	Fulton Hogan	Date

Item			Inspection / Controls and Ver	rification Detail			HP/ WP/	Responsibility		Checked by:	
No.	Task/Activity Description	Frequency	Acceptance Criteria		Inspection / Test Method	Record of conformity	AP/ IP/ TP/	Project Engineer Site Engineer Superintendent Surveyor Foreman	QAV	Fulton Hogan	Date