Fulton Hogan	Inspection and Test Plan - Runway Grooving of Asphalt Surfacing	Document # FH-927-QU-ITP-008 Revision: 0 Date : 1/10/2025

Client: Melbourne Airport (APAM) **Project:** Melbourne Airport Runway 09-27 Overlay Early Works	**Construction Process:** Runway Grooving of Asphalt Surfacing **Specifications:** *Standard Specifications for Airside Works - Part 2 Rev 0.1 - March 2023* **Location:** Melbourne Airport	Prepared by: Name: Noriko Wood Senior Pavement Engineer	Reviewed by : Name: Faiyaaz Ahmad Site Engineer	Approved by : Name: Jordan Nicolaou Senior Project Engineer

Item No.	Task/Activity Description	Inspection / Controls and Verification Detail				Record of conformity	HP/ WP/ AP/ IP/ TP/ SCP	Responsibility
		Frequency	Acceptance Criteria	Reference Documents	Inspection / Test Method			
1	**Trials**							
1.1	Trial section of grooving in new asphalt surfacing	Prior to the commencement of grooving works.	Construction of a trial section of grooving that complies with the requirements of Sections 2 and 3 of this ITP.	GHD-SPC-001 7005 **HP 7005-1**	Inspection	This signed ITP	**HP**	Quality Manager
2	**Grooving**							
2.1	Commencement of grooving in new asphalt surfacing.	Prior to the commencement of grooving works.	Grooving of asphalt surfacing commenced no less than 8 weeks after the completion of the construction of the asphalt surfacing.	GHD-SPC-001 7004(a)	Inspection	This signed ITP	**IP**	Site Engineer
2.2	Grooving of new asphalt surfacing as per specified dimensions, length, extent and shape.	During grooving works, on at least 15 randomly selected grooves within a lot. Submission of groove lots to be within 48 hours of completion of a lot.	Width, depth and spacing of grooves are as indicated on Drawings. Floor of grooves are parallel to the finished surface of the pavement. Square grooves are square with sides perpendicular to the surface of the runway; trapezoidal grooves are a consistent trapezoidal shape and not round or semi-circle. The deviation from specified groove shape is not more than specified in Note 1. Grooves are cut continuously across the width of the pavement and are cut to extend over the length of the pavement, as shown on the Drawings.	GHD-SPC-001 7004(c)(d)(f)(g) Table 7007-1 **WP 7007-1**	Inspection; random selection in accordance with AS 1289.1.4.2	This signed ITP	**WP**	Site Engineer
2.3	Grooving of new asphalt surfacing as per specified alignment.	During grooving works, on at least 15 randomly selected grooves within a lot. Submission of groove lots to be within 48 hours of completion of a lot.	Alignment of grooves reset to truly perpendicular to the runway centreline at 150 m intervals along the runway. Grooves are cut in parallel straight lines perpendicular to the runway centreline and comply with the requirements of Note 1. Grooves on rapid exit taxiways are in straight lines and oriented as indicated on Drawings.	GHD-SPC-001 7004(e) Table 7007-1 **WP 7007-1**	Inspection; random selection in accordance with AS 1289.1.4.2	This signed ITP	**WP**	Site Engineer

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2.4	Grooving of new asphalt surfacing near inset light fittings.	During grooving works adjacent to inset light fittings.	Grooving is stopped to leave a regular (rectangular or square) ungrooved area symmetrically surrounding the light fitting. Grooves are not sawn closer than 150 mm and not more than 900 mm from the edge of any inset light.	GHD-SPC-001 7004(h)	Inspection	This signed ITP	**IP**	Site Engineer
2.5	Grooving of new asphalt surfacing near cable slots.	During grooving works adjacent to cable slots.	Grooves are not sawn closer than 150 mm and not more than 900 mm from the edge of any cable slots.	GHD-SPC-001 7004(i)	Inspection	This signed ITP	**IP**	Site Engineer
2.6	Grooving of new asphalt surfacing near cable arrestors.	During grooving works adjacent to cable arrestors.	Grooves are not sawn closer than 3,000 mm each side of a cable arrestor system.	GHD-SPC-001 7004(j)	Inspection	This signed ITP	**IP**	Site Engineer
3	**Slurry Removal**							
3.1	Cleaning of grooved surface.	Progressively during grooving and at the completion of grooving works.	Slurry produced by grooving equipment is flushed from grooves as it is produced and removed by suction into a mobile container. Residual slurry is removed to produce a clean pavement free from all material arising from the cutting of grooves.	GHD-SPC-001 7006	Inspection	This signed ITP	**IP**	Site Engineer
3.2	Notification of completion of cleaning of pavement surface.	At the end of each work period in which grooving works have been undertaken.	Contract Administor is notified of completion of cleaning of pavement surface.	GHD-SPC-001 7006 **WP 7006-1**	Inspection	This signed ITP	**WP**	Site Engineer

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4	**Quality Assurance**							
4.1	Compliance	Lot information to be submitted within two weeks of completing works.	The Contractor must measure the requirements for grooves specified in subclauses 7004(c) to 7004(g) on at least 15 randomly selected grooves within a lot. Random selection must be in accordance with AS 1289.1.4.2. Lot submissions must be within 2 weeks of completing works.	GHD-SPC-001 7007(B) **WP 7007-1**	Review of Lot Submission details	This signed ITP	**WP**	Site Engineer
4.2	Non-conforming work	As required throughout the completion of works	Any grooves that do not meet all the requirements of the specification must be deemed nonconforming and the work must be rectified to comply with all requirements of the specification. Where rectification requires the removal and replacement of asphalt or concrete, all requirements of the specifications must apply. Any damage to other infrastructure (lights fittings, drains, manholes, adjacent pavements, etc.) shall be recorded as a non-conformance and the damage made good by the Contractor to the satisfaction of the Contract Administrator at no additional cost to the Principal.	GHD-SPC-001 7008	Verfication of Remediation method.	This ITP signed by Contract Adminstrator	**HP**	Site Engineer

Note 1:

Property	Tolerance	Compliance requirement (minimum % of compliant measurements in lot sample)
Perpendicularity	Maximum 80 mm deviation of groove from a line drawn perpendicular to the runway centreline.	90 %
Straightness	Maximum 80 mm deviation of groove from a line drawn between the two end points of the groove.	80 %
Square grooves		
Width	-0 mm + 1.6 mm	85%
Depth	-1.6 mm + 1.6 mm	80 % deeper than tolerance 95% shallower than tolerance
Spacing	± 2 mm between selected groove to the groove on either side	90 %
Shape (difference between width at top and bottom of groove)	max 0.2 mm	95 %
Trapezoidal grooves		
Width at top	-0.5 mm, +1.6 mm	85 %
Width at bottom	-0.5 mm, +1.6 mm	85 %
Depth	-1.6 mm + 1.6 mm	80 % deeper than tolerance 95% shallower than tolerance
Spacing	± 2 mm between selected groove to the groove on either side	90 %
Shape (maximum deviation of any side of trapezoid groove from template)	Max 0.6 mm	80 %

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: Position: Signature: Date: / /

Legend

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HP	Hold Point	Work shall not proceed past the HP until released by the Contract Administrator	**IP**	Inspection point	Formal Inspection to be completed 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
WP	Witness Point	An inspection which may be witnessed by the Contract Administrator or Client	**NMS**	Nominal Mix Size	The nominal size of the asphalt mix
AP	Approval Point	Written or verbal approval given by the Contract Administrator			

Document Control

Date	Author	Description of Change	Revision	
15/08/2022	N.Wood	Document published	1.0 (Runway Overlay)	
29/09/2022	N.Wood	Updated Reference Documents to include reference to GHD-DD-SPC-001, removed reference to 7004(b) in Item 2.02 Reference Documents	1.1 (Runway Overlay)	
16/09/2025	F.Ahmed	Updated Reference Documents, Updated Document Number for re-use for 09/27 Overlay Early Works	A (09/27 Overlay EW)	
1/10/2025	J.Kremers	Updated as per GHD comments.	B (09/27 Overlay EW)	
3/10/2025	J.Kremers	Transmitting as approved ITP	0 (09/27 Overlay EW)	