

		<b>Inspection and Test Plan – Control and Supervision of the Works</b>		<b>Doc ID:</b> FH-DP1-PM-ITP004D <b>Rev:</b> 00	
<b>Principal's:</b> Melbourne Airport (APAM)			<b>Contract No:</b> CP1002		<b>Prepared By:</b> Michael Natalizio
<b>Project:</b> MAPMP 2.0: DP1 – Minor Asphalt Works				<b>Reviewed By:</b> Noriko Wood	<b>Date:</b> 19/05/2022
<b>Construction Process:</b> Hot Mix Asphalt Production – Type H Shoulder Mix				<b>Approved By:</b> Joseph Stella	<b>Date:</b> 19/05/2022
<b>Specifications:</b> 60692389-PS-01-AV-0001 - Revision 1 (27 Mar 2023)					
<b>Structure / Component:</b> Asphalt Pavement					

Lot No:	Lot Details:	Lot size/Quantity:	Date:
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Item No.	Task/Activity Description	Inspection/Test					HP/ WP/ AP/IP/ TP/ SCP	Responsibility Project Engineer Superintendent Surveyor Foreman	Checked by:		
		Frequency	Acceptance Criteria	Reference Documents	Inspection / Test Method	Record of conformity			AECOM	FH	Date
1.0	Preliminary Activities										
1.1	Submission of Production Plan	Prior to commencing works	The production plan must demonstrate that the production capacity and the hot storage capacity of the mixing plant is sufficient to supply asphalt to complete the work undertaken within any work period on time.	AECOM – MAPMP 2.0 DP1 Spec. CI 14.13.15.1	Verify	Aconex Correspondence	HP	FH Project Engineer / Contract Administrator / Principal's Design Consultant			
1.2	Checking of Weighting Devices and Certificates	Prior to commencing works	The Contractor must supply details of current certification of weighing equipment including belt weighers and weighbridges to the Contract Administrator.	AECOM – MAPMP 2.0 DP1 Spec. CI 14.13.15.6	Verify	Aconex Correspondence	WP	FH Project Engineer / Contract Administrator / Principal's Design Consultant			
1.3	Calibration of the mixing plant	Prior to commencing works	Calibrating all necessary devices and parameters at the mixing plant to achieve the “Job Mix”.  Established plants must provide historical records of the asphalt production over the previous one (1) month to verify consistency.	AECOM – MAPMP 2.0 DP1 Spec. CI 14.13.15.11	Verify	Historical records of asphalt production  This ITP signed	WP	FH Project Engineer / Contract Administrator / Principal's Design Consultant			
1.4	Submission and review of mix design	Prior to commencing works	Submission and review of a mix design report detailing the mix which meets the requirements of the specification.	AECOM – MAPMP 2.0 DP1 Spec. CI 14.11.4	Verify	Aconex Correspondence	HP	FH Project Engineer / Contract Administrator / Principal's Design Consultant			

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2.0	Asphalt Production – Type H Shoulder Mix										
2.1	Temperature	Every loaded truck or at intervals of 15 minutes if more than one truck is dispatched in 15 minutes.	≤175°C	Section 407.11(a), 407.15	Thermometer	Load inspection sheet / docket	TP	Plant Operator / Laboratory Technician			
2.2	Temperature	One test per 250 tonnes (or part thereof) if lot is >40 tonnes	≤175°C	Internal	Thermometer	Load inspection sheet / test report	TP	Laboratory Technician			
2.3	Visual inspection for segregation, uncoated particles, separated binder, excess binder or overheating	Every loaded truck	>95% coarse aggregate coated with binder, no obvious separated binder or uncoated particles	Section 407.11 (b)	Visual Check	Load inspection sheet	TP	Plant Operator			

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2.4	Visual inspection for segregation, uncoated particles, separated binder, excess binder or overheating	One test per 250 tonnes (or part thereof) if lot is >40 tonnes	>95% coarse aggregate coated with binder, no obvious separated binder or uncoated particles	Internal	Visual Check	Load inspection sheet	TP	Laboratory Technician			
2.5	Maximum density	On every production day	± 35 kg/m <sup>3</sup> of its 6-point rolling average	Section 407.11(e), 407.15	AS2891.7.1	NATA-accredited test certificate	TP	Laboratory Technician			
2.6	Binder content	One test per 250 tonnes (or part thereof) if lot is >40 tonnes	±0.3% of mix design specification	Section 407.10, 407.15	AS2891.3.3 or AGPT/T234	NATA-accredited test certificate	TP	Laboratory Technician			
2.7	Full sieve analysis	One test per 250 tonnes (or part thereof) if lot is >40 tonnes	See <b>Table 1</b> Table 1 of this document.	Section 407.10, 407.15	AS2891.3.3 or AGPT/T234	NATA-accredited test certificate	TP	Laboratory Technician			
2.8	Moisture content	One test per 250 tonnes (or part thereof) if lot is >40 tonnes	≤0.5% moisture	Section 407.11 (b)	RC 211.01	NATA-accredited test certificate	TP	Laboratory Technician			
3.0	<b>RAP Testing <sup>(1)</sup> - RAP Level 1 and 2 (as per Table 407.121 Section 407)</b>										

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3.1	Moisture content of RAP	One test per 500 tonnes of RAP	Not exceeding the maximum moisture content acceptable for the asphalt plant nominated in the RAP Management Plan – Fulton Hogan Infrastructure Services. Any materials with moisture content greater than the nominated moisture content should be allowed to drain before being utilised.	Section 407.13(c)  FH RAP Management Plan Section 3.2	AS2891.10	NATA-accredited test certificate	TP	Laboratory Technician / RAP Yard Supervisor			
3.2	Binder content of RAP	One test per 500 tonnes of RAP	± 0.5 of target binder content  1 out of 10 consecutive results is allowed outside tolerance	Section 407.13(c), 407.11	AS2891.3.3	NATA-accredited test certificate	TP	Laboratory Technician / RAP Yard Supervisor			
3.3	Sieve analysis of RAP	One test per 500 tonnes of RAP	<a href="#">See Table 2</a>  <b>Table 2</b> of this document.	Section 407.13(c)	AS2891.3.3	NATA-accredited test certificate	TP	Laboratory Technician / RAP Yard Supervisor			
4.0	RAP Testing <sup>(1)</sup> - RAP Level 2 (as per Table 407.121 Section 407)										

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4.1	Binder viscosity	One test per 1000 tonnes lot of RAP used for Level 2 mixes as per Table 407.121	Viscosity of the blend of virgin and RAP binder shall fall within the range in the table below: <table><tr><th>Specified Binder Class</th><th>Binder Blend Viscosity Range (Pa.s @ 60°C)</th></tr><tr><td>C170</td><td>170 – 240</td></tr><tr><td>C320</td><td>320 – 500</td></tr><tr><td>C600</td><td>600 – 880</td></tr></table>	Specified Binder Class	Binder Blend Viscosity Range (Pa.s @ 60°C)	C170	170 – 240	C320	320 – 500	C600	600 – 880	Section 407.13(e)	AGPT/T192 or AS 2341.2, AGPT/T193	NATA-accredited test certificate	TP	Laboratory Technician			
Specified Binder Class	Binder Blend Viscosity Range (Pa.s @ 60°C)																		
C170	170 – 240																		
C320	320 – 500																		
C600	600 – 880																		

#### Final Inspection

The signature below verifies that this ITP has been completed in accordance with the Fulton Hogan's Quality \System Procedures and verifies lot compliance with specifications.

**Print Name:** \_\_\_\_\_ **Position:** \_\_\_\_\_ **Signature:** \_\_\_\_\_ **Date:**     /     /

#### Legend:

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

**Principal's:** Melbourne Airport (APAM)

**Contract No:** CP1002

**Prepared By:** Michael Natalizio

**Project:** MAPMP 2.0: DP1 – Minor Asphalt Works

**Reviewed By:** Noriko Wood

**Date:** 19/05/2022

**Construction Process:** Hot Mix Asphalt Production – Type H Shoulder Mix

**Approved By:** Joseph Stella

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**Notes**

<sup>(1)</sup>: An approved RAP management plan addressing RAP stockpile management, RAP sampling and testing, RAP process control, RAP traceability, RAP binder blend viscosity (RAP Level 2) and asphalt plant capability shall be submitted to DoT at least 14 days prior to the asphalt works. No asphalt containing RAP shall be supplied until DoT approves the management plan.

**Table 1: Production tolerances for mix grading (Table 407.101 in DoT Section 407)**

Sieve size AS (mm)	Tolerance on percentage passing (by mass)			
	Size 7	Size 10	Size 14	Size 20
37.5	Nil	Nil	Nil	Nil
26.5	Nil	Nil	Nil	Nil
19.0	Nil	Nil	Nil	± 6
13.2	Nil	Nil	± 6	± 6
9.5	Nil	± 6	± 6	± 6
6.70 - 4.75	± 6	± 6	± 6	± 6
2.36 – 0.600	± 5	± 5	± 5	± 5
0.300 – 0.150	± 3	± 3	± 3	± 3
0.075	± 1.0	± 1.0	± 1.0	± 1.0

1. If post compaction grading is checked by binder extraction and sieve analysis after placement, the positive tolerances shall be increased by one percentage point.

**Table 2: RAP grading tolerances (Table 407.131 in DoT Section 407)**

Description	Tolerance (from target grading)	Allowable number of results outside of tolerance
Passing 26.5 mm sieve and larger	± 10	1 out of 5 consecutive results
Passing 4.75 mm to 19.0 mm sieve	± 8	1 out of 5 consecutive results
Passing 1.18 mm and 2.36 mm	± 6	1 out of 5 consecutive results
Passing 0.300 mm and 0.600 mm	± 5	1 out of 5 consecutive results
Passing 0.150 mm	± 3	1 out of 5 consecutive results
Passing 0.075 mm	± 2	1 out of 10 consecutive results