| Fulton Hogan | **Inspection and Test Plan – Control and Supervision of the Works** | **Doc ID:** FH-DP1-PM-ITP004C **Rev:** 01 |
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| | | |
|---|---|---|
| **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:** 29/08/2023 |
| **Construction Process:** Hot Mix Asphalt Production – SP1 Patching Mix | **Approved By:** Joseph Stella | **Date:** 29/08/2023 |
| **Specifications:** 60692389-PS-01-AV-0001 - Revision 1 (27 Mar 2023) | | |
| **Structure / Component:** Asphalt Pavement | | |

| Lot No: | Lot Details: | Lot size/Quantity: | Date: |
|---|---|---|---|

| Item No. | Task/Activity Description | Inspection/Test | | | | | HP/ WP/ AP/IP/ TP/ SCP | Responsibility<br>Project Engineer<br>Superintendent<br>Surveyor<br>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. Cl 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. Cl 14.13.15.6 | Verify | Aconex Correspondence | **WP** | FH Project Engineer / Contract Administrator / Principal's Design Consultant | WP released as per DCWC Mgt-GCOR-001444 | | |
| 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".<br>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. Cl 14.13.15.11 | Verify | Historical records of asphalt production<br>This ITP signed | **WP** | FH Project Engineer / Contract Administrator / Principal's Design Consultant | WP released as per DCWC Mgt-GCOR-001444 | | |

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| **Project:** MAPMP 2.0: DP1 – Minor Asphalt Works | **Reviewed By:** Noriko Wood | **Date:** 29/08/2023 |
| **Construction Process:** Hot Mix Asphalt Production – SP1 Patching Mix | **Approved By:** Joseph Stella | **Date:** 29/08/2023 |
| **Specifications:** 60692389-PS-01-AV-0001 - Revision 1 (27 Mar 2023) | | |
| **Structure / Component:** Asphalt Pavement | | |

| Item No. | Task/Activity Description | Inspection/Test | | | | | HP/ WP/ AP/IP/ TP/ SCP | Responsibility<br>Project Engineer<br>Superintendent<br>Surveyor<br>Foreman | Checked by: | | |
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| | | Frequency | Acceptance Criteria | Reference Documents | Inspection / Test Method | Record of conformity | | | AECOM | FH | Date |
| 1.4 | Aggregate Reference Samples | Prior to commencing works | The Reference Samples must be divided into two representative portions, with one being held by the Contractor and the second portion by the Principal's Design Consultant until completion of the Works.<br>Minimum quantities for each aggregate fraction:<br>14mm: 50kg<br>10mm: 40kg<br>7mm: 30kg<br>Dust: 20kg<br>Sand: 20kg | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.16.2, Table 14-17 | Verify | Aconex Correspondence | **HP** | FH Project Engineer / Contract Administrator / Principal's Design Consultant | | | |
| 1.5 | 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. Cl 14.11.4 | Verify | Aconex Correspondence | **HP** | FH Project Engineer / Contract Administrator / Principal's Design Consultant | HP released as per DCWC Mgt-GCOR-001429 | | |
| 1.6 | Production Trial | Prior to commencing construction trial | Successful trial of asphalt production with the mixing plant where the asphalt produced shows that the mix complies to the specification requirements. | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.12.1 | Verify | Aconex Correspondence | **HP** | FH Project Engineer / Contract Administrator / Principal's Design Consultant | HP released as per DCWC Mgt-GCOR-001429 | | |

**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:** 29/08/2023

**Construction Process:** Hot Mix Asphalt Production – SP1 Patching Mix | **Approved By:** Joseph Stella | **Date:** 29/08/2023

**Specifications:** 60692389-PS-01-AV-0001 - Revision 1 (27 Mar 2023)

**Structure / Component:** Asphalt Pavement

| Item No. | Task/Activity Description | Inspection/Test | | | | | HP/ WP/ AP/IP/ TP/ SCP | Responsibility<br>Project Engineer<br>Superintendent<br>Surveyor<br>Foreman | Checked by: | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Frequency | Acceptance Criteria | Reference Documents | Inspection / Test Method | Record of conformity | | | AECOM | FH | Date |
| 1.7 | Construction Trial | Prior to commencing works | The Contractor must subject all the placing, compaction and finishing equipment and operating and supervisory personnel proposed for use on the Works to a trial using the construction procedures proposed for the Work. | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.12.3 | Verify | Aconex Correspondence | **HP** | FH Project Engineer / Contract Administrator / Principal's Design Consultant | HP released as per DCWC Mgt-GCOR-001429 | | |
| 1.8 | Production and Construction Trial Report | Prior to commencing works | The Contractor must provide the Contract Administrator with a Production and Construction Trial Report detailing the results of both production and construction trials as well as all compliance testing. | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.12.5 | Verify | Aconex Correspondence | **HP** | FH Project Engineer / Contract Administrator / Principal's Design Consultant | HP released as per DCWC Mgt-GCOR-001429 | | |
| 1.9 | Nomination of Job Mix | Prior to commencing works | The Contractor must issue an updated asphalt mix design report with the details of the Job Mixture within 3 working days after completion of the construction trial. | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.11.6 | Verify | Aconex Correspondence | **HP** | FH Project Engineer / Contract Administrator / Principal's Design Consultant | HP released as per DCWC Mgt-GCOR-001429 | | |
| **2.0** | **Coarse Aggregates Material Properties – Initial Testing** | | | | | | | | | | |
| 2.1 | Particle Density | Initial | Not less than 2300 kg/m$^3$ | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.5.2, Table 14-1 | AS 1141.6.1 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |

**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:** 29/08/2023

**Construction Process:** Hot Mix Asphalt Production – SP1 Patching Mix | **Approved By:** Joseph Stella | **Date:** 29/08/2023

**Specifications:** 60692389-PS-01-AV-0001 - Revision 1 (27 Mar 2023)

**Structure / Component:** Asphalt Pavement

| Item No. | Task/Activity Description | Inspection/Test | | | | | HP/ WP/ AP/IP/ TP/ SCP | Responsibility<br>Project Engineer<br>Superintendent<br>Surveyor<br>Foreman | Checked by: | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Frequency | Acceptance Criteria | Reference Documents | Inspection / Test Method | Record of conformity | | | AECOM | FH | Date |
| 2.2 | Water Absorption | Initial | Not more than 2.0% | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.5.2, Table 14-1 | AS 1141.6.1 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| 2.3 | Material Finer than 0.075mm in Aggregates (by washing) | Initial | Not more than 2.0% | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.5.2, Table 14-1 | AS1141.11.1 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| 2.4 | Particle Shape by Proportional Calliper (using a 3:1 ratio) | Initial | Not more than 5.0% of misshapen particles | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.5.2, Table 14-1 | AS1141.14 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| 2.5 | Flakiness Index (nominal 10 mm and larger aggregate) | Initial | Maximum 25% | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.5.2, Table 14-1 | AS 1141.15 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| 2.6 | Los Angeles Abrasion | Initial | Not more than 25% loss (B or K Test Grading) | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.5.2, Table 14-1 | AS 1141.23 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |

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**Project:** MAPMP 2.0: DP1 – Minor Asphalt Works | **Reviewed By:** Noriko Wood | **Date:** 29/08/2023

**Construction Process:** Hot Mix Asphalt Production – SP1 Patching Mix | **Approved By:** Joseph Stella | **Date:** 29/08/2023

**Specifications:** 60692389-PS-01-AV-0001 - Revision 1 (27 Mar 2023)

**Structure / Component:** Asphalt Pavement

| Item No. | Task/Activity Description | Inspection/Test | | | | | HP/ WP/ AP/IP/ TP/ SCP | Responsibility<br>Project Engineer<br>Superintendent<br>Surveyor<br>Foreman | Checked by: | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Frequency | Acceptance Criteria | Reference Documents | Inspection / Test Method | Record of conformity | | | AECOM | FH | Date |
| 2.7 | Soundness (using Sodium Sulphate) | Initial | Not more than 3% weighted loss | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.5.2, Table 14-1 | AS 1141.24 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| 2.8 | Wet Strength | Initial | Not less than 180kN | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.5.2, Table 14-1 | AS 1141.22 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| 2.9 | Wet / Dry Strength Variation | Initial | Not more than 25% | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.5.2, Table 14-1 | AS 1141.22 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| 2.10 | Secondary Mineral Content | Initial | Not more than 20% (Basic rock types only) | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.5.2, Table 14-1 | AS 1141.26 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| 2.11 | Friable particles | Initial | Not more than 0.2% | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.5.2, Table 14-1 | AS 1141.32 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |

| Item No. | Task/Activity Description | Inspection/Test | | | | | HP/ WP/ AP/IP/ TP/ SCP | Responsibility<br>Project Engineer<br>Superintendent<br>Surveyor<br>Foreman | Checked by: | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Frequency | Acceptance Criteria | Reference Documents | Inspection / Test Method | Record of conformity | | | AECOM | FH | Date |
| 2.12 | Polished Aggregate Friction Value | Initial | Not less than 48 | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.5.2, Table 14-1 | AS 1141.41 | VicRoads Assigned Value | **TP** | Laboratory Technician | | | |
| **3.0** | **Coarse Aggregates Material Properties – Ongoing Production Testing** | | | | | | | | | | |
| 3.1 | Particle Size Distribution | 1 per 500 tonnes aggregate | To be reported | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.17.1 Table 14-18 | AS1141.11.1 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| 3.2 | Apparent Particle Density | 1 per 2000 tonnes aggregate | Not less than 2300 kg/m$^3$ | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.17.1 Table 14-18 | AS 1141.6.1 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| 3.3 | Flakiness Index (nominal 10 mm and larger aggregate) | 1 per 1000 tonnes aggregate | Maximum 25% | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.17.1 Table 14-18 | AS 1141.15 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| 3.4 | Wet Strength | 1 per 2500 tonnes aggregate | Not less than 180kN | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.17.1 Table 14-18 | AS 1141.22 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Frequency | Acceptance Criteria | Reference Documents | Inspection / Test Method | Record of conformity | | | AECOM | FH | Date |
| 3.5 | Weak/Friable particles | 1 per 1000 tonnes aggregate | Not more than 0.2% | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.17.1 Table 14-18 | AS 1141.32 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| 3.6 | Unsound Stone Content by Visual Assessment | 1 per 5000 tonnes aggregate | To be reported | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.17.1 Table 14-18 | RC 372.01 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| **4.0** | **Fine Aggregates Material Properties – Initial Testing** | | | | | | | | | | |
| 4.1 | Particle Density | Initial | Not less than 2300kg/m$^3$ | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.5.3, Table 14-2 | AS 1141.5 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| 4.2 | Water Absorption | Initial | Not more than 2.5% (crushed aggregate)<br>Not more than 2.0% (uncrushed aggregate) | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.5.3, Table 14-2 | AS 1141.5 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| 4.3 | Soundness (using Sodium Sulphate) | Initial | Not more than 3% for any fraction | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.5.3, Table 14-2 | AS 1141.24 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |

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**Project:** MAPMP 2.0: DP1 – Minor Asphalt Works | **Reviewed By:** Noriko Wood | **Date:** 29/08/2023

**Construction Process:** Hot Mix Asphalt Production – SP1 Patching Mix | **Approved By:** Joseph Stella | **Date:** 29/08/2023

**Specifications:** 60692389-PS-01-AV-0001 - Revision 1 (27 Mar 2023)

**Structure / Component:** Asphalt Pavement

| Item No. | Task/Activity Description | Inspection/Test | | | | | HP/ WP/ AP/IP/ TP/ SCP | Responsibility<br>Project Engineer<br>Superintendent<br>Surveyor<br>Foreman | Checked by: | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Frequency | Acceptance Criteria | Reference Documents | Inspection / Test Method | Record of conformity | | | AECOM | FH | Date |
| 4.4 | Degradation Factor<br>(Note: only applicable to dust) | Initial | Not less than 60 | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.5.3, Table 14-2 | AS 1141.25.3 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| 4.5 | Plasticity Index | Initial | Non-Plastic | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.5.3, Table 14-2 | AS 1289.3.3.1 (wet preparation) | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| 4.6 | Linear Shrinkage | Initial | Not more than 1% | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.5.3, Table 14-2 | AS 1289.3.4.1 (wet preparation) | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| 4.7 | Methylene Blue Value (Crushed aggregate only) | Initial | Not more than 5mg/gram | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.5.3, Table 14-2 | AS 1141.66 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| 4.8 | Sand Equivalent (natural sands) | Initial | Not less than 45 | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.5.3, Table 14-2 | AS 1289.3.7.1 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |

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**Specifications:** 60692389-PS-01-AV-0001 - Revision 1 (27 Mar 2023)

**Structure / Component:** Asphalt Pavement

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|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Frequency | Acceptance Criteria | Reference Documents | Inspection / Test Method | Record of conformity | | | AECOM | FH | Date |
| 4.9 | Material Finer than 0.075mm in Aggregates | Initial | Not more than 20% | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.5.3, Table 14-2 | AS 1141.11.1 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| **5.0** | **Fine Aggregates Material Properties – Ongoing Production Testing** | | | | | | | | | | |
| 5.1 | Particle Size Distribution | 1 per 500 tonnes aggregate | To be reported | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.5.3, Table 14-19 | AS1141.11.1 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| 5.2 | Plasticity Index | 1 per 1000 tonnes aggregate | Non-Plastic | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.5.3, Table 14-19 | AS 1289.3.3.1 (wet preparation) | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| 5.3 | Linear Shrinkage | 1 per 1000 tonnes aggregate | Not more than 1% | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.5.3, Table 14-19 | AS 1289.3.4.1 (wet preparation) | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| 5.4 | Methylene Blue Value (Crushed aggregate only) | 1 per 2000 tonnes aggregate | Not more than 5mg/gram | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.5.3, Table 14-19 | AS 1141.66 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |

| Item No. | Task/Activity Description | Inspection/Test | | | | | HP/ WP/ AP/IP/ TP/ SCP | Responsibility<br>Project Engineer<br>Superintendent<br>Surveyor<br>Foreman | Checked by: | | |
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| **6.0** | **Binder Testing – Jetbind E (PMB)** | | | | | | | | | | |
| 6.1 | Bituminous Binder Sampling and Submission | Every delivery of bitumen to the mixing plant | All samples of bitumen must be obtained in accordance with Appendix B of AS 2008.<br>The samples shall consist of two (2) 0.5 litre (minimum) sealed containers labelled appropriately identifying the relevant lot and traceability to the source.<br>These samples to be submitted to the Contract Administrator / Principal's Design Consultant. | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.17.5 | AS 2008 Appendix B<br>Verify | This ITP signed / Aconex Correspondence | **HP** | Laboratory Technician / FH Project Engineer / Contract Administrator / Principal's Design Consultant | | | |
| 6.2 | Viscosity at 165ºC | 1 test per manufactured batch of binder<br>(minimum 1 test per 250T of bitumen used) | To be reported | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.17.7 | AG:PT/T111 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |

| Item No. | Task/Activity Description | Inspection/Test | | | | | HP/ WP/ AP/IP/ TP/ SCP | Responsibility<br>Project Engineer<br>Superintendent<br>Surveyor<br>Foreman | Checked by: | | |
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| | | Frequency | Acceptance Criteria | Reference Documents | Inspection / Test Method | Record of conformity | | | AECOM | FH | Date |
| 6.3 | Torsional recovery at 25ºC, 30 s | 1 test per manufactured batch of binder (minimum 1 test per 250T of bitumen used) | To be reported | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.17.7 | AG:PT/T122 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| 6.4 | Softening point | 1 test per manufactured batch of binder | To be reported | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.17.7 | AG:PT/T131 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| 6.5 | Submission of binder test results | 1 test per manufactured batch of binder | Completion of the specified set of tests on the binder and submission of the test results to the Contract Administrator / Principal's Design Consultant. | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.17.7 | Verify | NATA-accredited test certificate | **HP** | FH Project Engineer / Contract Administrator / Principal's Design Consultant | | | |
| **7.0** | **Asphalt Production Testing** | | | | | | | | | | |

| Item No. | Task/Activity Description | Inspection/Test | | | | | HP/ WP/ AP/IP/ TP/ SCP | Responsibility<br>Project Engineer<br>Superintendent<br>Surveyor<br>Foreman | Checked by: | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Frequency | Acceptance Criteria | Reference Documents | Inspection / Test Method | Record of conformity | | | AECOM | FH | Date |
| 7.1 | Sampling | **Up to 100T:** 1 test per work period / shift;<br>**100T to 200T:** 2 tests per work period / shift;<br>**Above 200T:** 3 tests per work period / shift.<br>**Note:** AECOM can request additional testing if any concerns are raised with the asphalt material during the works. | Mix to be sampled from asphalt delivery trucks. | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.17.11, Table 14-21<br>Frequency amended as per DCWC Mgt-RTRFI-000069 | AS 2891.1.1 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| 7.2 | Asphalt mix temperature | Once per sample obtained as per Item 7.1 of this document | The temperature of the mix immediately following discharge from the mixer shall be within 10ºC of that nominated by the Contractor but shall not be greater than 175ºC (for polymer modified bitumen). | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.14.1 | Verify | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |

**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:** 29/08/2023

**Construction Process:** Hot Mix Asphalt Production – SP1 Patching Mix | **Approved By:** Joseph Stella | **Date:** 29/08/2023

**Specifications:** 60692389-PS-01-AV-0001 - Revision 1 (27 Mar 2023)

**Structure / Component:** Asphalt Pavement

<table>
<tr><th rowspan="2">Item No.</th><th rowspan="2">Task/Activity Description</th><th colspan="5">Inspection/Test</th><th rowspan="2">HP/ WP/ AP/IP/ TP/ SCP</th><th rowspan="2">Responsibility<br>Project Engineer<br>Superintendent<br>Surveyor<br>Foreman</th><th colspan="3">Checked by:</th></tr>
<tr><th>Frequency</th><th>Acceptance Criteria</th><th>Reference Documents</th><th>Inspection / Test Method</th><th>Record of conformity</th><th>AECOM</th><th>FH</th><th>Date</th></tr>
<tr><td>7.3</td><td>Moisture content</td><td>Once per sample obtained as per Item 7.1 of this document</td><td>To be reported</td><td>FH Internal</td><td>RC 211.01</td><td>NATA-accredited test certificate</td><td>TP</td><td>Laboratory Technician</td><td></td><td></td><td></td></tr>
<tr><td>7.4</td><td>Combined aggregate grading</td><td>Once per sample obtained as per Item 7.1 of this document</td><td>Grading to be within the "job mix" envelope grading:<br><table><tr><th>Sieve Size (mm)</th><th>Job Mix</th><th>Job Mix Envelope</th></tr><tr><td>13.2</td><td>100</td><td>94 - 100</td></tr><tr><td>9.5</td><td>85</td><td>79 - 91</td></tr><tr><td>6.7</td><td>72</td><td>66 - 78</td></tr><tr><td>4.75</td><td>59</td><td>54 - 64</td></tr><tr><td>2.36</td><td>45</td><td>40 - 50</td></tr><tr><td>1.18</td><td>35</td><td>31 - 39</td></tr><tr><td>0.600</td><td>26</td><td>23 - 29</td></tr><tr><td>0.300</td><td>17</td><td>15 - 19</td></tr><tr><td>0.150</td><td>10.3</td><td>8.3 - 12.3</td></tr><tr><td>0.075</td><td>5.5</td><td>4.0 - 7.0</td></tr></table></td><td>AECOM – MAPMP 2.0 DP1 Spec. Cl 14.14.8, Table 14-14<br><br>Job Mix Formula as submitted in FHPL-GCOR-000464</td><td>AS 2891.3.3</td><td>NATA-accredited test certificate</td><td>TP</td><td>Laboratory Technician</td><td></td><td></td><td></td></tr>
<tr><td>7.5</td><td>Average Added Filler Content</td><td>At the end of each production shift</td><td>Average added filler content to be within ± 0.2% of the "job mix" target.</td><td>AECOM – MAPMP 2.0 DP1 Spec. Cl 14.14.8, Table 14-14</td><td>Verify</td><td>Batch Records</td><td>TP</td><td>Laboratory Technician</td><td></td><td></td><td></td></tr>
</table>

| Item No. | Task/Activity Description | Inspection/Test | | | | | HP/ WP/ AP/IP/ TP/ SCP | Responsibility<br>Project Engineer<br>Superintendent<br>Surveyor<br>Foreman | Checked by: | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Frequency | Acceptance Criteria | Reference Documents | Inspection / Test Method | Record of conformity | | | AECOM | FH | Date |
| 7.6 | Bitumen content | Once per sample obtained as per Item 7.1 of this document | Within ± 0.3% of the "job mix" bitumen content by mass.<br>**From JMF:** Within 5.2% - 5.8% | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.14.8, Table 14-14<br>Job Mix Formula as submitted in FHPL-GCOR-000464 | AS 2891.3.3 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| 7.7 | Average bitumen content | At the end of each production shift | The Contractor shall determine the average bitumen content of each size of asphalt produced during each continuous mixing period or shift based on the total quantity of bitumen used and total asphalt produced.<br>Average bitumen content must be not less than the bitumen content of the "job mix" (Job Mix Bitumen Content is 5.5%). | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.13.15.7, 14.14.8, Table 14-14<br>Job Mix Formula as submitted in FHPL-GCOR-000464 | Verify | Batch Records | **TP** | Laboratory Technician / FH Project Engineer | | | |

**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:** 29/08/2023

**Construction Process:** Hot Mix Asphalt Production – SP1 Patching Mix | **Approved By:** Joseph Stella | **Date:** 29/08/2023

**Specifications:** 60692389-PS-01-AV-0001 - Revision 1 (27 Mar 2023)

**Structure / Component:** Asphalt Pavement

| Item No. | Task/Activity Description | Inspection/Test | | | | | HP/ WP/ AP/IP/ TP/ SCP | Responsibility<br>Project Engineer<br>Superintendent<br>Surveyor<br>Foreman | Checked by: | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Frequency | Acceptance Criteria | Reference Documents | Inspection / Test Method | Record of conformity | | | AECOM | FH | Date |
| 7.8 | Maximum density | Once per sample obtained as per Item 7.1 of this document | To be reported | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.17.11 | AS 2891.7.1 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| 7.9 | Bulk density | Once per sample obtained as per Item 7.1 of this document | To be reported | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.17.11 | AS 2891.7.1 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| 7.10 | Voids in mineral aggregate (VMA) | Once per sample obtained as per Item 6.1 of this document | 15% minimum | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.14.8, Table 14-13 | AS 2891.8 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| 7.11 | Voids filled with bitumen (VFB) | Once per sample obtained as per Item 6.1 of this document | 70% minimum to 80% maximum | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.14.8, Table 14-13 | AS 2891.8 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |

| Fulton Hogan | **Inspection and Test Plan – Control and Supervision of the Works** | **Doc ID:** FH-DP1-PM-ITP004C **Rev:** 01 |
|---|---|---|
| **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:** 29/08/2023 |
| **Construction Process:** Hot Mix Asphalt Production – SP1 Patching Mix | **Approved By:** Joseph Stella | **Date:** 29/08/2023 |
| **Specifications:** 60692389-PS-01-AV-0001 - Revision 1 (27 Mar 2023) | | |
| **Structure / Component:** Asphalt Pavement | | |

| Item No. | Task/Activity Description | Inspection/Test | | | | | HP/ WP/ AP/IP/ TP/ SCP | Responsibility<br>Project Engineer<br>Superintendent<br>Surveyor<br>Foreman | Checked by: | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Frequency | Acceptance Criteria | Reference Documents | Inspection / Test Method | Record of conformity | | | AECOM | FH | Date |
| 7.12 | Marshall Air Voids | Once per sample obtained as per Item 6.1 of this document | 2.5% minimum to 4.5% maximum | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.14.8, Table 14-13<br>Job Mix Formula as submitted in FHPL-GCOR-000464 | AS 2891.8 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| 7.13 | Marshall stability | Once per sample obtained as per Item 6.1 of this document | 10kN minimum | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.14.8, Table 14-13 | AS 2891.8 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |
| 7.14 | Marshall flow | Once per sample obtained as per Item 6.1 of this document | Report only | AECOM – MAPMP 2.0 DP1 Spec. Cl 14.14.8, Table 14-13 | AS 2891.8 | NATA-accredited test certificate | **TP** | Laboratory Technician | | | |

| Fulton Hogan | **Inspection and Test Plan – Control and Supervision of the Works** | **Doc ID:** FH-DP1-PM-ITP004C **Rev:** 01 |
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|---|---|---|
| **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:** 29/08/2023 |
| **Construction Process:** Hot Mix Asphalt Production – SP1 Patching Mix | **Approved By:** Joseph Stella | **Date:** 29/08/2023 |
| **Specifications:** 60692389-PS-01-AV-0001 - Revision 1 (27 Mar 2023) | | |
| **Structure / Component:** Asphalt Pavement | | |

**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:**

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

**Notes**