BA ROADS ONE CULTURE ONE PLACE	INSPECTION AND TEST PLAN	
	Project:	
	Construction Process:	Asphalt Placement
Client: **Contract No.**	**Specification:**	VicRoads Sections 407 Hot Mix Asphalt (2023); Section 404- Stone Mastic Asphalt; Section 405 – Regulation Gap Graded Asphalt; Section 417- Open Grade Asphalt and AS2150 (2005) Hot Mix Asphalt – A Guide to Good Practice
Date:	**Structure/Component:**	Asphalt Pavement

Lot No:	Lot Details:	Lot Qty:

Item No.	Task/Activity Description	Inspection / Test				HP/ WP/ AP/ IP/ TP/ SCP	Responsibility	Comments	Checked by:		
		Frequency	Acceptance Criteria	Reference Documents	Inspection/ Test Method				BARS	Client	Date
PRELIMINARY											
1.1	Dot approved mix registration letter	Prior to commencing works	HP missing: "All asphalt mixes proposed for use in the works shall have a mix design registered by Department of Transport as 'General', unless otherwise approved by the Department of Transport. The registration for all mixes incorporated into the works shall be current at the time of their use. The Contractor shall submit documentation to the Superintendent nominating the asphalt mixes to be supplied no less than 7 days prior to their use."	407.09	Verbal communication / inspection on site	HP	Engineer				
1.2	Submission of RAP Management plan	Prior to commencing works	No asphalt containing RAP shall be supplied until the Department of Transport approved RAP Management Plan has been submitted at least 14 days prior to the asphalt works commencing and approval to proceed is given by the Superintendent. Onetime sign off Hold Point - Not repeated	407.13(f)	Verbal communication / inspection on site	HP	Engineer				
1.3	Cold Temperature Requirement: Asphalt Plant Supply	Prior to commencing paving	If surface temperatures are likely to drop below DOT minimum pavement temperature requirements, Evotherm to be added to asphalt mix. (See 'Table 407.171 Minimum Pavement Temperatures Prior to Laying Asphalt' at end of document).	Approval to Lay Asphalt	Verbal Communication n & Delivery Dockets	HP	Asphalt Supervisor/ Engineer				

1.4	Site Inspection and Base Condition	Prior to commencing paving	The surface on which asphalt is to be placed is essentially dry and free from puddles and defects (holes, cracks, unstable material, and edge irregularities)	407.18 AS2150 10.1	Visual Inspection	WP	Foreman/ Engineer				

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PLACEMENT OF ASPHALT											
2.1	Ambient Conditions for Placing	Prior to commencing paving	The majority of the surface area to be paved has a temperature greater than or equal to those specified in Table 407.171. Where approved by the Superintendent, placement of dense graded asphalt in layers 35 mm or greater may take place at pavement temperatures up to 5ºC below those specified in Table 407.171.	407.17	Infrared Thermometer	IP	Foreman/ Engineer				
2.2	Cold Temperature Requirement: Site Inspection	Prior to commencing paving	Wind Speed is to be checked at the beginning of the shift. If speeds exceeds 30kmph the client is to be contacted and conditions assessed.	407.17	Anemometer	IP	Asphalt Supervisor/ Engineer				

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2.3	Surface Preparation	Prior to commencing paving	The area to be paved is free of all loose and deleterious material	407.18 AS2150 10.3	Sweep Clean and Inspect	WP	Foreman/ Engineer				
2.4	Tack Coat	Prior to commencing paving	Cationic Rapid Set Bitumen emulsion (60% bitumen) to be applied at an application rate of no less than 0.5l/m2. The applied rate is to be doubled on joints and chases. Tack coat must be allowed to turn from brown to black before paving. The Contractor shall submit the details of the trackless tack coat proposed to be used in the works, as per 407.08d The application rate for the tack coat shall be 0.15 to 0.30 L/m^2 of residual bitumen (except for joints and chases where rates shall be doubled).	407.19 AS2150 11 HP	Records	WP	Foreman/ Engineer				
2.5	Planning of Joints	Prior to commencing paving	a) Joints against a granular pavement', 'junctions at limits of work' and 'treatment of exposed edges against traffic' b) Runs to be marked to ensure placement of joints satisfy the following unless otherwise approved by the Client: Transverse Joints Offset from layer to layer by at least 2m Longitudinal Joints Offset from layer to layer by at least 150mm and be within 300mm of the lane line or Centre of the lane. Wearing course shall be on lane lines.	407.21d,e,f) 407.21	Measure and mark out runs and submit Paving Plan to Client if requested	WP	Foreman/ Engineer				

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2.6	Commencement of Placing	Prior to commencing Paving	The placement of asphalt on the sub-base or granular base for a new pavement or for an overlay of an existing bituminous surfaced pavement shall not commence until the consent to proceed is obtained from the Client.	407.23	Review ITP & Site Conditions	HP	Supervisor / VicRoads Superintendent				
2.7	Delivery of Mix	Each load	Asphalt is not segregated; the binder is not separated or does not contain uncoated particles and the temperature from the mixing plant is not more than 175°C. Mix delivery temperature no lower than 135°C	407.20	Visual Inspection & Delivery Docket	WP	Tipman				
2.8	Traceability	Each lot	Ability to locate asphalt test results placed in three dimensions. Cold weather records to be collected in addition to the ITP with hourly temperature and wind speed checks Asphalt temperature is recorded in attached template	BARS Doc 5.2.05, 5.2.06 407.17(a)	Measure and Record on Daily Lot Record	IP	Foreman/ Engineer				
2.9	Layer Thickness and Level Control	Regularly during paving	The thickness of the asphalt layer conforms to asphalt thickness on drawings or specifications. To be checked at 10m to 20m intervals.	407.25 (a) & (b)	Dips	WP	Foreman / Level hands				

2.10	Paver Stoppages	If paver stops	A transverse joint shall be constructed if the asphalt in front of the screed cools to below 120°C	407.25 (c)	Temp gun	WP	Foreman/ Engineer				
2.11	Surface Finish of Wearing Course	During paving and after the final roll	(a) The finished surface of the asphalt wearing course shall be of uniform appearance, free of dragged areas, cracks, open- textured patches, and roller marks. (b) The temperature of each load of asphalt must be checked at the completion of initial rolling. The minimum required temperature of 110°C	407.29 (a)(i)	(a) Visual Inspection Temp gun	WP	Foreman/ Engineer				
2..12	Kerb and Channel	During paving and after the final roll	The edge of the wearing course shall be either flush with or not more than 5 mm above the lip of the channel unless otherwise specified	407.29 (a)(ii)	Visual Inspection & Measurement	WP	Foreman/ Engineer				

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2.13	Compaction	Per Lot (6 shot test) For lots greater than 2000m^2 split into	Dense Grade Asphalt For layers <50mm, if characteristic density ratio is: 95.0% or greater Accept lot 93.0% to 94.9% Lot may be accepted at a reduced rate For layers ≥50mm if characteristic thickness is: 96.0% or greater Accept lot 94.0% to 95.9% Lot may be accepted at a reduced rate Stone Mastic Asphalt For layers <50mm if characteristic density ratio is: 96.0% or	Table 407.271	VicRoads Code of Practice 500.05 and 500.16	TP	Laboratory Technician				

		two equal sublots (ie firsts and last 50% of the lot laid).	greater Accept lot 93.0% to 95.9% Lot may be accepted at reduced rate Compaction reports are to be submitted to the Client to demonstrate conformance with these requirements. For OGA Layers not less than 5 passes with a static steel-drum roller with a minimum overall mass of 6 tonnes	Table 404.141							
2.14	Open Road After Asphalt	Completion of paving asphalt	The Contractor shall not place traffic on the Finished Surface until the Superintendent has agreed the temperature of the asphalt is less than 50°C and is trafficable.	404.14	Temp gun	HP	Supervisor / VicRoads Superintendent				
2.15	Level Conformance	Each Lot	The mean surface level and the variation in surface level for the base, intermediate and wearing courses within each lot shall meet the requirements as specified in 407.30 (b) **Table 407.292: Minimum Number of Level Measurements per Lot** Scale of Surface Level Measurement: Scale A — Minimum Number of Measurements Per Lot: 80 Scale of Surface Level Measurement: Scale B — Minimum Number of Measurements Per Lot: 40 **Table 407.293 Mean Surface Level Tolerances for the Sub-base and Pavement Courses** Scale of Surface Level Measurement: Scale A — Granular or Cement Treated Subbase: $\bar{x}$ Range (mm) +4 to –8, Max. S (mm) 8; Asphalt Layers: $\bar{x}$ Range (mm) ± 5, Max. S (mm) 8 Scale of Surface Level Measurement: Scale B — Granular or Cement Treated Subbase: $\bar{x}$ Range (mm) +6 to -12, Max. S (mm) 13; Asphalt Layers: $\bar{x}$ Range (mm) ± 8, Max. S (mm) 10	Table 407.292 and Table 407.293	Survey Results	WP	Surveyor				

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FINAL INSPECTION: (HOLD PONT)	This is to verify that the final inspection has been carried out in accordance with the B.A Roads Service's Quality Procedures and Project Quality Plan and the product are hereby certified to confirm contract specifications: **BA Road Services** Print Name: Position: Signature: Date:

Table 407.171: Minimum Pavement Temperatures Prior to Laying Asphalt

Asphalt Type	Intermediate or Base Courses	Wearing Course
All asphalt with a specified binder class of C170 or C320	5°C	10°C
All asphalt with a specified binder class of C600 or containing a PMB	10°C	15°C