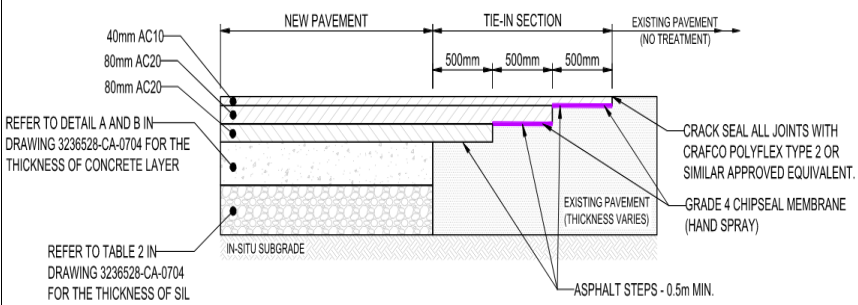
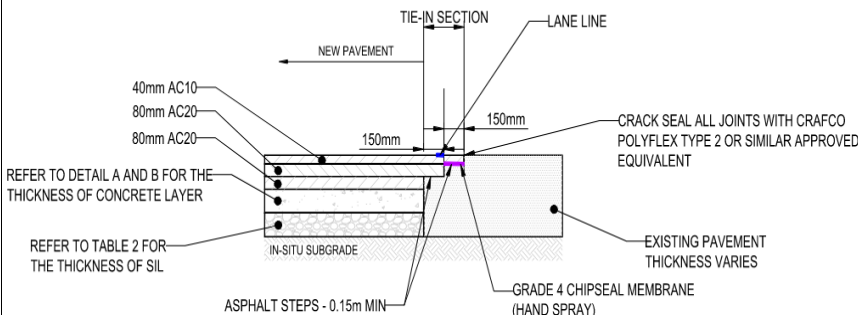
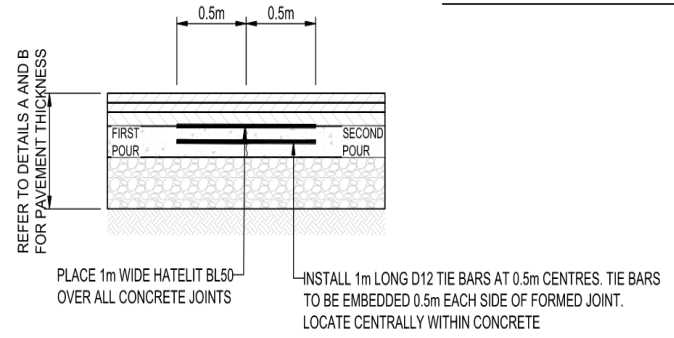
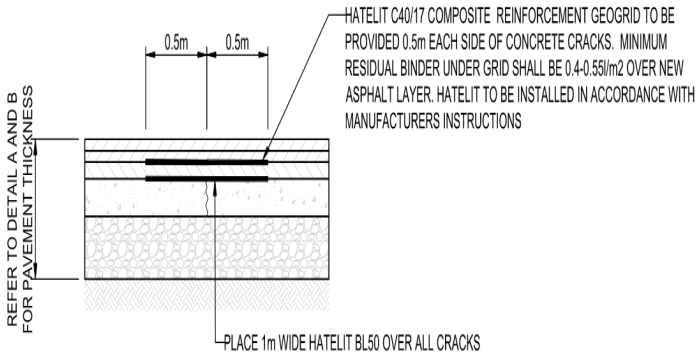


Pavement - Structural Asphalt on Concrete									
Project Name:		Weymouth RAB: Roscommon Road and Weymouth East				Design Report	Weymouth Construction		
ITP Prepared By:		AA - FH		Date:	17/12/2024		Peer Review By:	SS - FH – initial version only	Date: 18/12/2024
No.	ACTIVITY DESCRIPTION	VERIFICATION ACTIVITY	METHODS OR REFERENCE	FREQUENCY	ACCEPTANCE CRITERIA	TYPE	RECORDS (Responsibility)	ONSITE RESPONSIBILITY	SIGNOFF
Milling/Excavation									
1	Identification and location of services	Service plans and GPR Markouts	Trained contractor staff	Full Pavement Extent	Services sufficiently deep to avoid damage.	Mandatory HOLD POINT Engineer Signoff Required	Photos and Report	Project Engineer	MSQA Signoff
2	Milling / Cut to Waste (350mm at Weymouth and 400mm at Roscommon)	Stringline	Dip from stringline or survey as-built	5m each lane	+0 / -20mm to design level	Mandatory HOLD POINT Engineer Signoff Required	Stringline Sheet	Project Engineer	MSQA Signoff
3	Subgrade	No unacceptable subgrade materials after excavation	Visual Inspection	NA	Free of detritius and loose material. Subgrade Treatment may Required	Inprocess Inspection	Site diary	Project Engineer	
Subgrade Treatment									
4	Subgrade Testing and Treatment	Testing, Scala Penetrometer Testing, Shear Vane testing, and Proof rolling	Design Report	At 10m intervals staggered in each wheel path	For, Subgrade CBR > 3%, Scala < 50mm per blow, shear vane >= 60kPa and no visual movement under static roller. - No Undercut required	Mandatory HOLD POINT Designer Signoff Required	Testing results, QA and video of proof rolling.	Project Engineer	MSQA Signoff
5	Subgrade Testing and Treatment	Testing, Scala Penetrometer Testing, Shear Vane testing, and Proof rolling	Design Report	At 10m intervals staggered in each wheel path	For, Subgrade CBR 2 - 3%, Scala 50 - 100mm per blow, shear vane 40 - 60kPa and visual movement under static roller. - No Undercut required at Weymouth East and Geotextile to remain at bottom of concrete subbase. - 150mm undercut required at Roscommon Road and geotextile placed before backfilling with granular	Mandatory HOLD POINT Designer Signoff Required	Testing results, QA and video of proof rolling.	Project Engineer	MSQA Signoff
6	Subgrade Testing and Treatment	Testing, Scala Penetrometer Testing, Shear Vane testing, and Proof rolling	Design Report	At 10m intervals staggered in each wheel path	For, Subgrade CBR 1 - 2%, Scala >= 100mm per blow, shear vane 20 - 40kPa and visual movement under static roller. - 200mm Undercut required at Weymouth East and geotextile placed before backfilling with granular. - 250mm undercut required and geotextile placed before backfilling with granular	Mandatory HOLD POINT Designer Signoff Required	Testing results, QA and video of proof rolling.	Project Engineer	MSQA Signoff
AP40 Layer (Subgrade improvement layer)									
7	150mm or 200mm or 250mm Excavation	Stringline	Dip from string line	10m each lane	+0 / -20mm No trafficking of the excavated subgrade	Mandatory HOLD POINT Designer Signoff Required	Marked up drawing	Project Engineer	MSQA Signoff
8	Class C Geotextile	N/A	NZTA F/7	NA	Geotextile material and construction in accordance with NZTA F/7 Placed as per subgrade treatment	In process Inspection and Contractor Records	Testing Results	Project Engineer	

9	ATAP40 (material)	No non-compliant results	Material test results	Once	Compliance with AT Series 800 Specification for the Supply of Aggregates	Contractor Records	Testing Results	Project Engineer	
10	ATAP40 (Compaction)	Compaction	CIV	Every 10m in each lane	CIV>=35	Contractor Records	Testing Results	Project Engineer	
11	ATAP40 (Level Tolerance)	Stringline	Dip from string line	10m each lane	+5 / -25mm No trafficking of the excavated subgrade	Contractor Records	Testing Results	Project Engineer	
12	ATAP40 (Surface finish)	N/A	Visual Inspection	NA	Free of detritus and loose material	Inprocess Inspection	Site diary	Project Engineer	
New Pavement Joint									
13	Transverse Tie In To existing pavement	Pavement Joint	Visual Inspection	Each Subsection		Mandatory HOLD POINT Designer Signoff Required	Photos and Report	Project Engineer	MSQA Signoff
14	Longitudinal Tie In To existing pavement	Pavement Joint	Visual Inspection	Each Subsection		Mandatory HOLD POINT Designer Signoff Required	Photos and Report	Project Engineer	MSQA Signoff
Concrete Subbase									
15	Concrete Subbase	Strength and slump	Concrete docket	each pour	Strength = 20MPa Slump = 130mm pump mix Pump mix being used hence cannot specify slump. Shape of the concrete to be closely monitored due to fluidity nature of pump mix on graded surface	Inprocess Testing	Docket	Project Engineer	
16	Concrete Subbase	Levels / thickness	Dip from stringline or survey as-built to top of subbase (Surveyor to provide set-out information prior to concrete pour)	10m each lane	For Weymouth Road, Target Depth = 150mm below design surface -0 / +10mm For Roscommon Road, Target Depth = 200mm below design surface -0 / +10mm	Mandatory HOLD POINT Designer Signoff Required	Stringline Sheet	Project Engineer	MSQA Signoff
17	Concrete Subbase	Rough trowel surface finish	Visual Inspection	NA	Rough surface verified over 100% of surface area	Inprocess Inspection	Production Recurs	Project Engineer	

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18	Concrete Joint – if two different pours	Joints	Visual Inspection	Each Subsection		Mandatory HOLD POINT Designer Signoff Required	Photos and Report	Project Engineer	MSQA Signoff
19	Crack Bandage if crack occurs	Cracks	Visual Inspection	Each Subsection		Mandatory HOLD POINT Designer Signoff Required	Photos and Report	Project Engineer	MSQA Signoff

No.	ACTIVITY DESCRIPTION	VERIFICATION ACTIVITY	METHODS OR REFERENCE	FREQUENCY	ACCEPTANCE CRITERIA	TYPE	RECORDS (Responsibility)	ONSITE RESPONSIBILITY	SIGNOFF
Emulsion – Tack and Blind (Concrete and AC layer)									
20	Emulsion tack coat	CAT60 cationic emulsion or approved alternative	Visual Inspection	each lot	Hand spray tack coat emulsion	Inprocess Testing	Photos	Project Engineer	
Structural Asphalt (AC20 – 160mm in two lifts 80mm each)									
21	AC20	Check weather reports	Forecast and thermometer	Daily	No fog, rain or wet surface. Base temp $\geq 7^{\circ}\text{C}$	Inprocess Testing	AC check sheet	Project Engineer	
22	AC20	Ensure previous layer is broomed clean	Visual	Prior to starting	Free of detritus and loose material	Inprocess Testing	AC check sheet	Project Engineer	
23	AC20	Production tests	Grading, binder content, max density, temp	As per M/10	NZTA M/10	Inprocess Testing	Lab test	Project Engineer	
24	AC20	Surface finish inspection	Visual inspection by the Engineer	Each lot	Uniform texture, no roller marks, no bleeding, cracking or shoving, no crushing of the aggregate.	Inprocess Testing	Inspection sheet	Project Engineer	
25	AC20	Density testing	NDM	Every 30m2	Air voids (4% - 6%)	Inprocess Testing	Inspection sheet	Project Engineer	MSQA Signoff
26	AC20	As-built layer	Stringline	Each lot	First layer = 60mm +/- 10mm	Inprocess Testing	As-build drawings & stringline measures	Project Engineer	
27	AC20	As-built layer	Stringline	Each lot	Second layer = 60mm +/- 10mm	Inprocess Testing	As-build drawings & stringline measures	Project Engineer	
28	Joint Inspection	Visual	Design Report	Each Subsection		Mandatory HOLD POINT Auckland Transport Signoff Required		Project Engineer	MSQA Signoff
No Cores on AC20									
29	AC20	Density testing	Cores (Random testing plan to be agreed with client)	1/300m2 or min 4 no.	Air voids to meet NZTA M/10:2020	Mandatory HOLD POINT Auckland Transport Signoff Required	RFI response	Project Engineer	MSQA Signoff
30	AC20	Thickness	Cores depth (Random testing standard)	1/300m2 or min 4 no.	- Target depth 160mm	Mandatory HOLD POINT Auckland Transport Signoff Required	Core test report	Project Engineer	MSQA Signoff
Hatelit grid to be laid in between asphalt layers									
31	Hatelit C40/17	Length direction grid overlap	Visual inspection	Ongoing during install	Min. 250mm	Inprocess Testing	Photo / diary note / check sheet	Project Engineer	

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32	Hatelit C40/17	Cross direction grid overlap	Visual inspection	Ongoing during install	Min. 150mm	Inprocess Testing	Photo / diary note / check sheet	Project Engineer	
33	Hatelit C40/17	Tack coat	Visual inspection	Ongoing during install	0.5 lt / m2, residual bitumen emulsion (depending on surface condition)	Inprocess Testing	Photo / diary note / check sheet	Project Engineer	
34	Hatelit C40/17	Emulsion on overlaps	Visual inspection	Ongoing during install	0.5 lt / m2 if required	Inprocess Testing	Photo / diary note / check sheet	Project Engineer	
35	Hatelit C40/17	Evenly laid grid	Visual inspection	Ongoing during install	Minimal air voids in grid, grid pulled tight	Inprocess Testing	Photo / diary note / check sheet	Project Engineer	
Asphalt Surfacing 40mm – AC10									
36	Roughness of Road	Insitu	Contract Spec 4415	Every 100m	The new pavement shall have an average dynamic roughness, when measured over a length of 100m, of less than 60 NAASRA counts/km for any three consecutive results and no individual value greater than 70	Inprocess Inspection	NAASRA count	Project Engineer	
37	Shape of road	3m straight edge	NZTA M/10 spec	At joints and any other areas of concern	Irregularities < 5mm under straight edge	Inprocess Inspection	Check sheet	Project Engineer	
38	Temperature Limitations	Temperature	Contract Spec / M10 Spec	Every Site	Asphalt not to be paved when foggy or raining, or placed on a wet surface or when temperature is below the base temperature limitations of 120 Degree	Inprocess Inspection	Asphalt QA	Project Engineer	
39	Surface Preparation	Visual	NZTA M/10 spec	Every Site	Swept clean; all necessary measures to prevent ponding prior to any surfacing	Inprocess Inspection	Visual	Project Engineer	
40	Asphalt Production Tests for AC10	Production Tests	Grading, binder content, max density, temp	As per M/10	NZTA M/10	Laboratory Testing	IANZ Lab	Project Engineer	
41	Joint Placement	Paving Plan		Every Site	Paving Plan to be completed for every site with dimensions. Joint sealing shall be applied between new and existing surfacing. Joints off-set 150mm	Inprocess Inspection	Nil	Project Engineer	
42	AC10 - Layer thickness – 40mm compacted depth	Insitu	Contract Spec / NZTA M10 Spec	Continuous	40 mm minimum and 45 mm maximum compacted depth	Mandatory HOLD POINT Auckland Transport Signoff Required	Asphalt QA	Project Engineer	MSQA Signoff
43	AC10	Density testing	NDM	Every 30m²	NZTA M/10	Mandatory HOLD POINT Auckland Transport Signoff Required	RFI response	Project Engineer	MSQA Signoff

No.	ACTIVITY DESCRIPTION	VERIFICATION ACTIVITY	METHODS OR REFERENCE	FREQUENCY	ACCEPTANCE CRITERIA	TYPE	RECORDS (Responsibility)	ONSITE RESPONSIBILITY	SIGNOFF
44	Reinstatement of Linemarking and RRPM's	Visual	NZTA M7 approved (Class B or C as required for anticipated traffic level)	Every site	*Carried out within 12 hours of each shift completed and as per the existing markings * Suitable Traffic Control to remain in place until pavement markings have been reinstated	Inprocess Inspection	Linemarking Records	Project Engineer	
APPROVALS									
Approved by Project Engineer :		TBC		Signature:		Date:			
Approved by Contract Manager :		TBC		Signature:		Date:			
Approved by Client Rep :		TBC		Signature:		Date:			