HIGGINS

Project	**SH20 - RS 0147/RP 6740 - 7150 Rotorua Airport**	**ITP No.:**	
Client	**Waka Kotahi NZTA**	**Revision :**	1
Description of Work	Pre Treatment (If Req)- AP 65 (5% Cement Modified as SB) & TNZ M4 AP40 (2% Cement Modified as BC)		
Prepared By	Akshad Patle	**Approved By**	
Current Version:		**Date:**	22/03/2023

INSPECTION AND TEST PLAN (ITP)

Operation or Task Category	Task Description	Controlling Documents	Acceptance Criteria	Inspection or Test: Method	Inspection or Test: Frequency	Inspection or Test: Responsible Person	Verifying Document	Inspection / Test Authority (SC,PE, C, E, LT or Sp): Conduct	Witness	Produce Record	Approval	Hold Point	Witness Point	Quality Controller Sign Off	Date	Engineer Sign-off	Date	Compliance Manager Sign off	Date
	(e.g. procurement, temp works, construction activities)	*(e.g. list specifications & clause, drawing)*	*(e.g. slump value, cylinder strength, etc.)*	*(e.g. visual inspection, slump test)*			*(e.g. test result, pour record, material approval)*					Y/N	Y/N	Name / Signature	Date All Records verified complete	Name / Signature	Date All Records verified complete	Name / Signature	Date All Records verified complete
1. Procurement																			
What do we need to do to comply with the specification? e.g. approval of materials such as concrete etc.	Design																		
	Geometric Design	Austroads Guide to Road Design Part 3: Geometric Design, TNZ State Highway Geometric Design Manual	Principal Approval	Contractor and Principal peer review	per design revision	Contract / Rehab Manager		C or PE		C	E	Y		No design available at pre start to review					
	Pavement Treatment Design	Austroads Guide to Pavement Technology, New Zealand Guide to Pavement Evaluation and Treatment Design:2018 (Version 1.2)	Principal Approval	Contractor and Principal peer review	per design	Contract / Rehab Manager	Approvals Register - Pavement Rehabilitation Design Report	C or PE		C	E	Y		No design available at pre start to review					
	Material Geo Fabric: on the Sub grade (Digout Floor)																		
	Geofabric for draiange improvement on Sub Grade	TNZ F1 Specification	Pincipal Approval Picture for Docket over Roll		once per material change	Sub Contractor	Picture for Docket over Roll	SC	PE	PE	E	Y							
	Materials: GAP 65 Pre-treatment Material (for Type 1, 2-SB & 3-SB Only)																		
	Aggregate Sampling	NZS 4407:2015, WSP Rotorua Sampling Guide					Sampling Worksheet	SP	PE	SP	E	N	N						
	Source Property Test	CBR - BOPE NOC Contract Documents Maintenance Specification Section 2.5.3	Soaked CBR ≥ 30%	Soaked CBR test (NZS:4407:2015:3.15)		Project Engineer	Test Report	SP	PE	SP	E	N	Y						
	Production Property Test	Sand Equivalent - BOPE NOC Contract Documents Maintenance Specification Section 2.5.3	Sand Equivalent >35, OR <35 but well graded with no more than 10% by mass passing through a 0.425mm sieve	Sand Equivalent Test (NZS:4407:2015, 3.6)		Project Engineer	Test Report	SP	PE	SP	E	N	Y						
	Materials: M/4 AP40 Basecourse Material																		
	Aggregate Sampling	NZS 4407:2015, WSP Rotorua Sampling Guide					Sampling Worksheet	SP	PE	SP	E	N	N						
	Source Property Test	Crushing Resistance (3.3.1) - TNZ M/4: 2006, NZS 4407: 1991 Test 3.10 (The Crushing Resistance Test)	less than 10% fines passing 2.36mm sieve size under a load of 130kN	Curshing Resistance Test (NZS 4407:1991, Test 3.10)	One test for every 10,000m³ of source material	Quality Controller/ Project Engineer	Test Report	SP	PE	SP	E	N	Y						
		Weathering Quality Index (3.3.2) - TNZ M/4: 2006, NZS 4407: 1991, Test 3.11 (Weathering Quality Index Test)	AA, AB, AC, BA, BB or CA	Weathering Quality Index Test (NZS 4407: 1991, Test 3.11)	One test for every 10,000m³ of source material	Quality Controller/ Project Engineer	Test Report	SP	PE	SP	E	N	Y						
		California Bearing Ratio (3.3.3) - TNZ M/4: 2006, NZS 4402: 1986 Test 4.1.3, NZS 4407: 1991 Test 3.15 (California Bearing Ratio Test)	Soaked CBR ≥ 80%	California Bearing Ratio Test (NZS 4407: 1991, Test 3.15) after being compacted according to Vibrating Hammer Compaction Test at OWC (NZS 4402: 1986, Test 4.1.3)	One test for every 10,000m³ of source material	Quality Controller/ Project Engineer	Test Report	SP	PE	SP	E	N	Y						
	Production Property Test	Sand Equivalent (4.2.1.1) - TNZ M/4: 2006, NZS 4407: 1991 Test 3.6 or Clay Index (4.2.1.2) - TNZ M/4: 2006, NZS 4407: 1991, Test 3.5 or Plasticity Index (4.2.1.3) - TNZ M/4: 2006, NZS 4407: 1991 Test 3.4	Sand Equivalent ≥39; or Clay Index ≤3; or Plasticity Index ≤5	Sand Equivalent Test (NZS:4407:2015, 3.6); or Clay Index Test (NZS:4407: 1991, 3.5); or Plasticity Index Test (NZS 4407:1991, 3.4)	2 Samples required as per Table 1, Production Property Test Sampling (4.1) - TNZ M/4: 2006	Quality Controller/ Project Engineer	Test Report	SP	PE	SP	E	N	Y						
		Broken Face Content (4.2.2) - TNZ M/4: 2006, NZS:4407: 1991 Test 3.14	Broken Face Content ≥70% between 37.5mm and 4.75mm sieve and ≥2 broken faces	Broken Face Test (NZS:4407: 1991, Test 3.4)	2 Samples required as per Table 1, Production Property Test Sampling (4.1) - TNZ M/4: 2006	Quality Controller/ Project Engineer	Test Report	SP	PE	SP	E	N	Y						
		Particle Size Distribution (4.2.3) - TNZ M/4: 2006, NZS 4407: 1991 Test 3.8.1 (Wet Sieving Test)	Particle size distribution as per Table 2 and Table 3, 4.2.3 Particle Size Distribution	Wet Sieving Test (NZS 4407: 1991, Test 3.8.1)	2 Samples required as per Table 1, Production Property Test Sampling (4.1) - TNZ M/4: 2006	Quality Controller/ Project Engineer	Test Report	SP	PE	SP	E	N	Y						
	Materials: Cement																		
	Stabilising Agent Selection	Cement (4.1.2) - TNZ B/5: 2008	GP	Visual inspection of supplier docket	per truck load	Quality Controller/ Project Engineer	Supplier Docket Supplier Cert	Sp	E	Sp / PE	E	Y	Y						
	Materials: Water																		
	Water draw for stabilising	Water (5.0.0) - TNZ B/5: 2008	Free from impurities justified by use of municipal water supply	Visual inspection of hydrant use form	per truck load	Sub Contractor	Hydrant use form	SC	PE	PE	C	Y	Y						
	Sub Soil Drain Materal																		
	Sub Soil Drain Pipe	Sub Soil Drainage Contruction F/2 Specification	Principal Approval High Density Corrugated Punched Pipe of Iplex Nexus Flo/Marley Brand Class 500 Blue Strip, SN 4 - 110 Dia	Visual inspection and Certificate from Supplier	once per material type	Sub Contractor	Docket Picture	SC	PE		E	Y	N						
	Drainage geo fabric	Certificate from the supplier/Docket	Principal Approval Bidim A14 Class Min	Docket photograph	one per mateial approval	Sub Contrctor	Docket Picture	SC	PE		E	Y	N						
2. Pre-Implementation																			
	Work Pack complete and held on site	..\Work Pack						SC		SC	PE	N	Y						

INSPECTION AND TEST PLAN (ITP)

Operation or Task Category	Task Description	Controlling Documents	Acceptance Criteria	Inspection or Test			Verifying Document	Inspection / Test Authority				Hold Point	Witness Point	Quality Controller Sign Off	Date	Engineer Sign-off	Date	Compliance Manager Sign off	Date
				Method	Frequency	Responsible Person		SC,PE, C, E, LT or Sp											
	(e.g. procurement, temp works, construction activities)	*(e.g. list specifications & clause, drawing)*	*(e.g. slump value, cylinder strength, etc.)*	*(e.g. visual inspection, slump test)*			*(e.g. test result, pour record, material approval)*	Conduct	Witness	Produce Record	Approval	Y/N	Y/N	Name / Signature	Date All Records verified complete	Name / Signature	Date All Records verified complete	Name / Signature	Date All Records verified complete
What planning and documentation is needed before we commence operations	Communication Plan implemented	..\4.5 CSCMP						SC		SC	PE	N	Y						
	Are any consents /approvals required, including for taking water.	Hydrant Use form	Forms available for applicable days	Visual inspection and recording	Daily as required	Sub Contractor	Hydrant Use Form	SC		SC		N	Y						
	Quality Control forms on site	RQP, ITP, Scala Penetrometer Test Records, Material test sheets etc.	Visual Confirmation		Daily as required	Supervisor			C			N	N						
	Person(s) on site with authority to stop work if quality of final outcome is compromised for any reason	QMP	At least one nominated staff member on site at all times			Site Supervisor, Quality Controller, Engineer	Pre-start sheets, timesheets	C or PE		PE		N	N						
	On site Prestart Meeting	Site design information - Earthworks plan - design drawings.	Visual confirmation and walk over - confirm associated works -verify extent of works - verify digouts or additonal items	Visual inspection and recording- variation approval process	Prior to any phyusical work engagement	Supervisor	Pre Strart Attendance sheet	SC		PE	E	Y	Y						
	Highlight the extent for different pavement types	Reference from Project Drawing Sheet C 01, 02 & 03		Survey/Mobile Roads, Marks with Dazzle	Chainages for every different pavement sections	Sub Contractor/ Supervisor	Project Drawings	SC					N						
	Records Management (i.e. it is known what documented records are to be kept)	ITP and QMP state what quality documentation is required	Filled in and Signed ITP	Visual inspection, recording and approval	As per hold points in collaboration with the programme	Quality Controller	ITP	C		C	E	Y	Y						
2. Temporary Works (including Traffic Management, Environmental and Health and Safety Controls)																			
What do we need to do to comply with the drawings? e.g. erection of formwork, traffic management etc .	Traffic Management Approved / Implemented (copy in Job Pack on-site)	Site Specific TMP, COPTTM, Higgins TTM SOP, SCR Form	Passing SCR audits	Visual inpsection and recording		STMS	Site Specific TMP, SCR	C	C	C	C	N	Y						
	Environmental controls in place (Seal of Existing Catchpits or storm water line)	HSE Audit, JSEA				Site Supervisor	HSE Audit, JSEA	C	C	C	C	N	Y						
	Health and Safety controls in place (e.g. Isolate work area)	HSE Audit, JSEA				Site Supervisor	HSE Audit, JSEA	C	C	C	C	N	Y						
	Standard Operating Procedures / JSEAs available on site	HSE Audit				Site Supervisor	HSE Audit	C	C	C	C	N	Y						
	Any service covers or utilities identified and protected to Service Authorities expectations	PTW Process, B4UDIG	Work always undertaken under live PTW	Visual inpsection and recording	Weekly	Permit Issuer	PTW	SC	PE	SC	PE	N	Y						
3. Construction - Pre-treatment Digouts (for Type 1, 2 SB & 3 SB)																			
What do we need to do to comply with the specification, drawings, and quality requirements during the construction process? e.g. placement of materials such as concrete, asphalt or fill material and required testing.	Open Digout Depth as per the Attachment 1	Pavement Rehabilitation Design Report 2019/20 030-0147-6900-7190 Rotorua Airport		Install Geogrid 30/30, (Class C) Geoteextile on Floor		Sub Contractor	Photo Graphs with chaniange highlighted	SC	PE	PE		N	Y						
	Excavation floor drainage	Higgins SOP 0128 - Digout Repair	4-8% toward edge of seal	Digital level	As required	Quality Controller/ Supervisor	Dig out QA form	PE	C	PE	C	N	N						
	Sub Grade material hardness (In case of undercut req. on Soft Patch)	Higgins SOP 0128 - Digout Repair	≥45 Clegg	Cleg Hammer	2 per patch	Quality Controller/ Supervisor	Cleg hammer form	PE	C	PE	C	N	N						
4. Construction - Sub Soil Draiange																			
	Subsoil depth and discharge point into SW system around As per the Cross section Attached with this ITP	Location as duirected by the principal engineer and methodology as per F/2 Specification	Slope to be confirmed on the site with visual inspection / Laser Level on Site, Blue Strip facing upward	Visual inspection to confrim Sub soil draiange installed to the correct depth with pipe surrounded by BIDIM A14	As required	Sub Contractor	Photo Graphs with Depth and position of blue strip	SC	PE		E	Y	N						
	Bedding/ Surrounding material 20/40 drainage 5 round pebbles	Quarry Docket	Round Shape as per Drainage Specification F2. Depth under pipe & each layer should be min 75 MM	Visual inspection	As required	Sub Contractor	Photographs	PE	C		E	Y	N						
5. Construction - Granular make up and In-situ Modification (GAP 65 5% cement - 250 mm depth for Sub Base @ Pavement Type 1,2 SB & 3 SB) and (TNZ M/4 AP 40 2 % Cement 200 mm depth for Base Couse throughout)																			
	Plant and Machinery Seletion	Plant and Equipment (6.0.0) - TNZ B/5: 2008	Cement Spreading Truck, Direct Injection Stabilising Mill, Vibratory **Single Drum Roller**, **Pad Footed Roller** and PTR	Visual Inspection	Pre-establishment	Sub Contractor	Daily Site Record	SC		PE	E	Y	Y						
	Weather including temperature	Weather Limitations (7.1.1) - TNZ B/5: 2008	Ambient air temp ≥5° C, Wind speed ≤25km/h, Rainfall ≤0mm	Visual Inspection, Met Service /Windy	Throughout process	Sub Contractor	Daily Site Record, Metservice	SC		PE	E	Y	Y						
	Spreading of Cement	Spreading of Cement (7.3) - TNZ B/5: 2008	Within ± 0.5 kg/m² of the specified rate and within ± 2.5% of the specified rate	Mat test (1m² canvas) and Average Usage Test	per 400m² and upon emptying the spreader	Sub Contractor	Mat Test Form and truck dockets	SC		PE	E	Y	Y						
	Addition of Water	Addition of Water (7.5) - TNZ B/5: 2008	90-100% OWC	Nuclear Densometer Testing prior to Stabilisation	≥1 per 1000m² lot	Sub Contractor	NDM Record	SC		PE	C	Y	Y						
	Cut Depth	Control of cut depth (7.6.1) - TNZ B/5: 2008	-5mm and +15mm of design stab depth	Physical Measure and Visual Record	≥1 per 200m of cut length	Sub Contractor	Photographs and Daily Site Record	SC		PE	C	Y	Y						
	Tie in points	Austroads Guide to Road Design Part 3: Geometric Design, NZ3910 Variations TNZ State Highway Geometric Design Manual	Principal Approval	Physical Measure and Visual Record	Pre-physical work commencement	Sub Contractor	Design alteration variation ACCPETANCE	SC		PE	E	Y	Y						
	Longitudinal Joints	Overlap on longitudinal joints (7.6.2) - TNZ B/5: 2008	The greater of 100m or 50% of layer thickness	Visual Record	per sucessive cut	Sub Contractor	Photographs, Daily Site Record and Stabilising Plan	SC		PE	C	N	Y						
	Continuity of Layer	Continuity of stabilised layer (7.6.3) - TNZ B/5: 2008	Longitudinal overlap 1m	Visual Record	per sucessive cut	Sub Contractor	Photographs, Daily Site Record and Stabilising Plan	SC		PE	C	N	Y						

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What do we need to do to comply with the specification, drawings, and quality requirements during the construction process? e.g. placement of materials such as concrete, asphalt or fill material and required testing.	Stabilised Material Particle Size Dsictribution (On Base Course only)	Particle size distribution of stabilised material (7.6.4) - TNZ B/5: 2008	NZTA B/^ Section 7.5.8	Wet Sieve	3 Per Lot	Lab Technician	Test Report	LT		PE or C	E	Y	N						
	Strength Test Conducted -ITS (On Base Course only)	TNZ B2 /NZTA Best Practice Guide/ NZTA T 19 Notes	NZTA T19 Table 1 for Cement Modified Base course with results min 300 KPA for ITS	Lab Testing on Sample collected after hoeing	1 per lot	Lab Technician	Test Report	LT		PE/C	E	Y	N						
	Establish Compaction Target	Higgins 'Interim Pavement Layer Compaction Guide' - Technical Note, Compaction (7.7) - TNZ B/5: 2008, Acceptance criteria for stabilised pavement layer compaction (7.7.1) - TNZ B/5: 2008	Formal Agreement	Plateau Density Testing	1 time, or additional tests when material changes visually (Recommend a minimum of 1-2 tests per section)	Sub Contractor	NDM Record	LT/SC		PE or C	C	N	Y						
	Compaction Acceptance	Acceptance criteria for stabilised pavement layer compaction (7.7.1) and Table 5 - TNZ B/5: 2008, Acceptance criteria for pavement layer compaction (7.6) - TNZ B/2: 2005	Mean value ≥ 98% and Minimum Value ≥ 95%	Nuclear Densometer Testing in Direct Transmission mode	≥ 5 tests per 1000m² lot	Sub Contractor	NDM Record	PE or C		PE or C	C	N	Y						
	Control Testing	Control testing during and after construction (7.7.2) - TNZ B/5: 2008	Nil	Vibrating Hammer Compaction Test at OWC (NZS 4402: 1986, Test 4.1.3)	when agreed	Sub Contractor	Test Report	PE or C		PE or C	E	N	N						
	Surface Roughness	TNZ TM 7003 v1 2. Roughness Requirement	a. No 20 m reading in any lane shall exceed 70 NAASRA count/KM	Measured in the Wheel paths of all lane surfaced under the contract in both directions	On Completion Surface	Sub Contractor/ Lab Technician	Test Report	LT		PE	E	Y	Y						
	Surface Shape	Surface shape (7.8) - TNZ B/5: 2008 ;	Between -5mm and +15mm	String lines or Survey Asbuilt	during construction and prior to seal	Sub Contractor	String Sheet/Survey Asbuilts	PE		PE	E	Y	Y						
	Cross Fall	Crossfall (7.9) - TNZ B/5: 2008	0.5% ≤ X ≤ -0.5%	3m straight edge or Survey Asbuilt	during construction and prior to seal	Sub Contractor	Cross Fall Records/Survey Asbuilts	PE	C	PE	E	Y	Y						
	Surface Finish	Surface finish (7.10) - TNZ B/5: 2008	Tightly bound matrix post sweep	Visual inpsection	prior to seal	Sub Contractor	Pre-seal inspection sheet	C	C and E	C or PE	E	Y	Y						
	Pre-sealing Requirements	Pre-sealing requirements (7.12) - TNZ B/5: 2008, Pre-sealing requirements (9) - TNZ B/2 Notes: 2005	≤80%, however 65% is ideal	Nuclear Densometer Testing	if required, ≥5 tests per 1000m² lot	Sub Contractor	NDM Record	C	E	PE	E	Y	Y						
6. Chip Sealing 2/4 - 2 Coat Chipseal with Catonic Emulsion or 180/200 Binder																			
6.1. Procurement	**Chipseal Resurfacing**																		
What do we need to do to comply with the specification? e.g approval of materials such as concrete etc.	Binder - Penetration Grade	TNZ M/1	Table 1	Property Test	Annual	Bitumen Supplier/ Surfacing Project Manager	IANZ Report's	C		C	N	N	Y						
	Binder - Polymer Modified Emulsion	Higgins Internal Specification	% PMB Required, PH, Residue by Evaporation, Viscosity	Property Test	1/100,000 litres supplied			C		C	N	N	Y						
	Source Property -Coarse Aggregate - Crushing Resistance	TNZ M6, RNZ 9805:2009	<10% fines under 230kN minimum	Sample Test - Crushing Resistance	1 test per 10,000m³ or 1 test per annum if less than 10,000m³ produced per annum	Surfacing Project Manager		C		C	N	Y	N						
	Source Property -Coarse Aggregate - Weathering Resistance		AA or BA	Weathering Quality Index				C		C	N	Y	N						
	Production Property - Skid Resistance	NZTA T/10	Meet Skid performance Requirement	Aggregate Perfomance Method	Each Site			C		C	N	Y	N						
	Production Property - Cleaness Value	NZTA P/17, M/6	G2 - 89 min, G3 - 87 min, G4 - 85 min	Sample Test - Cleaness Value	Per Stockpile <100m3 - 1 Sample 100-500m3 - 2 Samples >500m3 3 Samples			C		C	N	Y	N						
	Production Property - Particle Size/Shape		As per Table 2 and 3 NZTA M/6	Sample Test - Particle Size/Shape				C		C	N	Y	N						
	Production Property - Broken Faces		98%	Sample Test - Broken Faces				C		C	N	Y	N						
	Chipseal Designs	EBOP NOC Design Report, Chipsealing in NZ, NZTA P/17	Client Approval	Review	Annual		EBOP NOC Design Report Acceptance	C		C	N	Y	N						
6.2. Construction	**Chipseal Resurfacing**																		
	Finalise Sprayrate	EBOP NOC Design Report, Chipsealing in NZ, NZTA P/17	N/A	Review	Each Site	Surfacing Supervisor	Site/Spray Instruction	C		C	C	N	Y						
	Check weather	N/A	Not foggy or raining or wet surface. Base Temp ≥ 10ºC and rising. No rain forecast in next 24 hours	Weather Forecast	Prior to establishment each day	Surfacing Project Manager	Daily Report, Chip Sealing Quality and Site Record	PE		PE	C	N	Y						

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				Method	Frequency	Responsible Person		SC,PE, C, E, LT or Sp											
	(e.g. procurement, temp works, construction activities)	*(e.g. list specifications & clause, drawing)*	*(e.g. slump value, cylinder strength, etc.)*	*(e.g. visual inspection, slump test)*			*(e.g. test result, pour record, material approval)*	Conduct	Witness	Produce Record	Approval	Y/N	Y/N	Name / Signature	Date All Records verified complete	Name / Signature	Date All Records verified complete	Name / Signature	Date All Records verified complete
What do we need to do to comply with the specification, drawings, and quality requirements during the construction process? e.g placement of materials such as concrete or fill material and required testing.	Ensure limits of site are marked	EBOP NOC Design Report	Visual Inspection	Visual	Prior to start sealing each site	Surfacing Supervisor	Chip Sealing Quality and Site Record	C		C	C	N	Y						
	Establish TTM	TMP	Comply with TMP	Visual	Each Site	Surfacing Supervisor / STMS	Daily Diary / STMS Record	C		C	C	N	Y						
	Sweep surface clean of deleterious material	P/17	Visual Inspection	Visual	Each site, prior to start of sealing	Surfacing Supervisor	Chip Sealing Quality and Site Record	C		C	C	N	Y						
	Record ATP's on site	N/A	Visual Inspection	Visual	Each site, prior to start of sealing	Surfacing Supervisor	Chip Sealing Quality and Site Record	C		C	C	N	Y						
	Confirm correct treatment(s) and chip	EBOP NOC Design Report	Details/chip correct	Visual	Each Site	Surfacing Supervisor	Chip Sealing Quality and Site Record	C		C	C	Y	N						
	Cutback Bitumen Blend	RNZ 9803_0513	+/- 2PPH Cutter, +ve for Adhesion agent presence	Sample and test	1 Sample per Per Sprayer load, tested at frequency of 1 per 100,000l sprayed	Surfacing Project Manager, Surfacing Supervisor	IANZ Report's	C		C	C	N	Y						
	Bitumen Application Rate	E/2 Certificate, Seal Design / Spray Instruction	Current E/2 Certificate +/- 4% per Spray Run	Test, Review	Per Sprayer, Per Site	Surfacing Supervisor/ Supervisor	E/2 Certificate. Spray Sheets	C		C	C	N	Y						
	Chip Application Rates	Chipsealing in NewZealand	As per Chipping Guide	Visual	Each Site		Chip application check sheet. Chip Sealing Quality and Site Record	C		C	C	N	Y						
	Rolling	Chipsealing in NewZealand	Mimimum as per CS in NZ - Bit volume / 3600	Visual	Each Site		Chip Sealing Quality and Site Record	C		C	C	N	Y						
	Cleanup	Chipsealing in NewZealand	Site including adjacent surfaces free of loose chip	Visual	Each Site		Chip Sealing Quality and Site Record	C		C	C	Y	N						
	Post Sweeping	Chipsealing in NewZealand	Site including adjacent surfaces free of loose chip	Visual	Each Site		Site Record	C		C	C	Y	N						
	Linemarking and RRPM Reinstated	MOTSAM	Matches previous linemarking - within 48hours of sealing	Visual	Each Site		Site Record	C		C	C	N	Y						
	Removal of TTM	TMP	Comply with TMP	Record	Each Site	STMS/ Supervisor	STMS Record / Daily Report	C		C	C	N	Y						
6.3. Post Construction	**Chipseal Resurfacing**																		
	Resurfacing Construction Completion report	NOC; MS 6.1.3	Comply with Requirement of NOC MS 6.1.3	Record	Each Site	Resurfacing Construction Completion report	Daily Report / STMS Record	C		C	C	N	Y						
	Chipseal Post-Verification Testing and Report	NOC; MS 6.1.3	Comply with Requirement of NOC MS 6.1.3	Record	Each Site	Surfacing Manager	Chipseal Post-Verification Testing and Report	C		C	C	Y	N						
7. Close Out																			
What do we need to do to handover to the Client or next work activity?	Post Construction Walkover		Formal Agreement	Visual Inspection	Post seal sweep	Quality Controller, Supervisor and Engineer	Meeting Minutes	C	C, PE and E	C	E	Y	Y						
	Pavement Rehabilitation Construction Completion Report	Pavement Rehabilitation Construction Completion Report (6.1.2) - BOPE 2_14-001_601 Maintenance Specification	Engineer Approval	Visual Inspection	≤2 months of 1st Coat Seal	Contract Manager/ Quality Control	Signed Report	C	C, PE and E	C	E	Y	Y						

PE – Project Engineer C – Contractor E – Engineer/Principal Representative Sp – Supplier SC – Sub Contractor LT – Lab Technician

Quality Control Records Compiled by:

Name: _____
Role: _____
Signature: _____
Date: _____

Reviewed / Approved by:

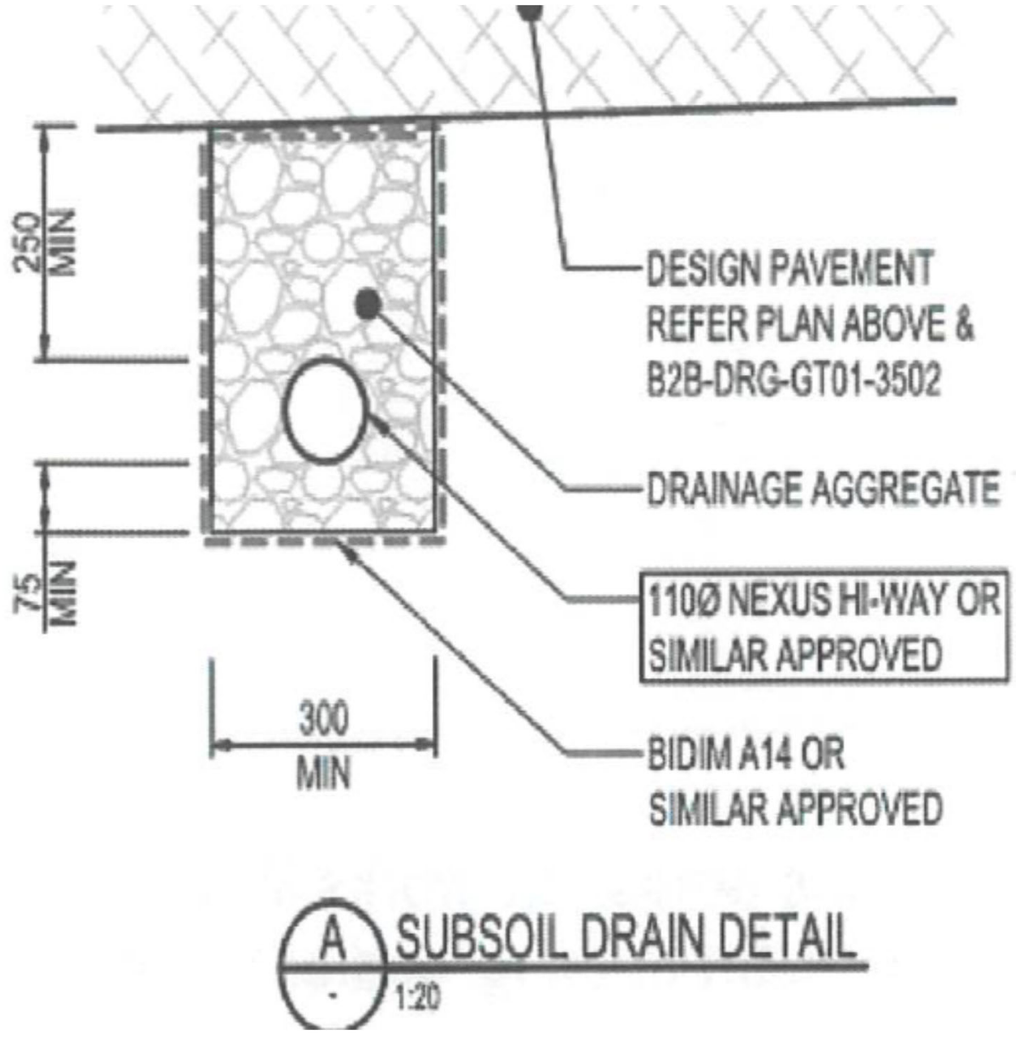
Name: _____
Role: _____
Signature: _____
Date _____

Attachment 1 Rotorua Airport SH 20 RS 0147 RP 6740 - 7150

Structural configuration for different pavement types

Undercut + SG improvement					Sub base				Base Course			
Type	RP Start	RP Finish	Total Cut Depth (mm)	Special ground improvement required	Thickness	Material (mm)	Stabilisation %	Hoe / Stabilisation Depth (mm)	Thickness	Material (mm)	Stabilisation %	Hoe / Stabilisation Depth (mm)
1	6740	6900	450	Geotextile Strength Class C	250	AP 65	5	250	200	TNZ M/4	2	200
2 NB	6900	6970	100	NA	NA				100	TNZ M/4	2	200
2 SB	6900	6970	450	Geotextile Strength Class C	250	AP 65	5	250	200	TNZ M/4	2	200
3 NB	6970	7030	150	NA	NA				150	TNZ M/4	2	200
3 SB	6970	7030	500	Geotextile Strength Class C	250	AP 65	5	250	200	TNZ M/4	2	200
2 NB	7030	7150	100	NA	NA				100	TNZ M/4	2	200
2 SB	7030	7150	450	Geotextile Strength Class C	250	AP 65	5	250	200	TNZ M/4	2	200

NB - North Bond till the edge of flush median & SB South Bond ; Type 3 SB needs to be merged with Rotokawa RD for smotth Tie in



A SUBSOIL DRAIN DETAIL
1:20