		Inspection and Test Plan - Control and Supervision of the Works		Doc ID: FH-ZU2-QU-ITP004 Rev: A
Client: APAM (MELBOURNE AIRPORT)		Contract No: CP14038		Prepared By: Marianne Sales
Project: Taxiway Zulu 2.0 Project			Reviewed By: Jonathon Rock	Date: 26/03/2024
Construction Process: Select Fill Placement			Approved By: Jonathon Rock	Date: 26/03/2024
Specifications: Taxiway Zulu 2.0 Program Works Specification ZULU-BECA-001-SPC-00002[C01] & ZULU-BECA-001-SPC-00002[C01]				
Structure / Component: Earthworks				

Lot No:	Lot Details:	Lot size/Quantity:	Date:
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		Frequency	Acceptance Criteria	Reference Documents	Inspection/ Test Method	Record of conformity			N / A	Principles Representative	Fulton Hogan	Date																
1.0	Preliminary Activities																											
1.1	Check for correct documentation	Prior to works	Ensure that all employees and subcontractors are: <ul style="list-style-type: none">Using the correct and complete set of drawings.All drawings are the latest revision	Aconex	Verify	This ITP signed	IP	Project/Site Engineer																				
1.2	Implementation of all measures and controls	Prior to works	All necessary measures and controls are being implemented, that is: PSP, EMP, TMP, SWMS and WP.	PSP, EMP, TMP, SWMS, WP	Visual inspection	This ITP signed	IP	Project/Site Engineer																				
1.3	Survey	Prior to works	Area has been surveyed, highlighting any areas where excavations should not occur (e.g. exclusion zone).	PSP, EMP, TMP, SWMS, WP	Visual inspection	This ITP signed	IP	Project/Site Engineer Surveyor																				
1.4	Select Fill Material Source (Under Pavements, Imported)	Prior to works	Material to meet the following the properties: <table><tr><td>Wet strength</td><td>Not less than 125kN wet/dry strength variation less than 40%</td></tr><tr><td>Linear Shrinkage</td><td><6%</td></tr><tr><td>Organic Matter Content</td><td><0.2%</td></tr><tr><td>Maximum Particle Size</td><td>75mm</td></tr><tr><td>% Passing 0.075mm sieve</td><td>0-12%</td></tr><tr><td>Soaked CBR</td><td>>20%</td></tr><tr><td>CBR swell %</td><td>≤1.5%</td></tr><tr><td>Permeability</td><td><5×10-9 m/s</td></tr></table>	Wet strength	Not less than 125kN wet/dry strength variation less than 40%	Linear Shrinkage	<6%	Organic Matter Content	<0.2%	Maximum Particle Size	75mm	% Passing 0.075mm sieve	0-12%	Soaked CBR	>20%	CBR swell %	≤1.5%	Permeability	<5×10-9 m/s	Spec 002 – CI 2.5 CI2.7.5	Test Report	This ITP signed	HP	Project/Site Engineer Principles Rep				
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		Frequency	Acceptance Criteria	Reference Documents	Inspection/ Test Method	Record of conformity			N / A	Principles Representative	Fulton Hogan	Date																							
			Gradings: <table><tr><th>AS1152 Sieve Size (mm)</th><th>Percentage of mass passing sieve size</th></tr><tr><td>75.0</td><td>100 to 100</td></tr><tr><td>37.5</td><td>67 to 100</td></tr><tr><td>26.5</td><td>54 to 100</td></tr><tr><td>19.0</td><td>44 to 85</td></tr><tr><td>9.5</td><td>31 to 65</td></tr><tr><td>4.75</td><td>21 to 50</td></tr><tr><td>2.36</td><td>13 to 38</td></tr><tr><td>1.18</td><td>9 to 30</td></tr><tr><td>0.425</td><td>4 to 23</td></tr><tr><td>0.075</td><td>0 to 12</td></tr></table> Production testing of supplied select fill will be: 1 per 1,000t for first 5000t, increase to 1 per 2000t following conforming 5000t of conforming results	AS1152 Sieve Size (mm)	Percentage of mass passing sieve size	75.0	100 to 100	37.5	67 to 100	26.5	54 to 100	19.0	44 to 85	9.5	31 to 65	4.75	21 to 50	2.36	13 to 38	1.18	9 to 30	0.425	4 to 23	0.075	0 to 12										
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1.4	Select Fill Material Source (Other Locations, Site Won)	Prior to works	Site won or imported material to be chosen based on the assessment that the material is generally free from clay pockets, and rocks that are fractured and/or weathered.	Spec 002 – CI 2.6.2	Test Report	This ITP signed	HP	Project/Site Engineer Principles Rep																											
1.5	Submission of Select Fill Methodology Plan	14-days Prior to works	Principal Contractor to submit a Select Fill Methodology addressing the criteria listed in Spec cl. 2.3.1. Hold Point to be released by Principal's Representative after acceptance of Select Fill Methodology.	Spec cl. 2.3.2	Select Fill methodology & verify	Select Fill methodology & this ITP signed	HP	Project/Site Engineer Principal's Rep																											
1.6	Starting Works	Prior to works	Principles Representative to approve works starting in each Separable Portion	Spec cl. 2.3.1	Verify	This ITP signed	HP	Project/Site Engineer																											

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								Principal's Rep				
1.7	Preparation of Underlying Surface Layer	Each lot	All excavation and filling are free draining to low points clear of the working area. Sufficient pumps, well-points, or other equipment for work area are de-watered as required.	Spec cl. 2.8.2 ITP003	Verify	This ITP signed	IP	Project/Site Engineer Foreman				
1.8	Cut Floor Level	Prior to works	Cut floor to be inspected for suitability - compacted, firm and dry	WMS003 cl 3.3.3	Verify	This ITP signed	HP*	Project/Site Engineer Foreman				
2.0	Select Fill Works – Imported Material - Under Pavements											
2.1	Select Fill Placement	Each Lot	Each Lot of fill must: <ul style="list-style-type: none"> Not be greater than 200mm in thickness Material is to maintain within 1% of the optimum moisture content during all steps of placement, compaction, and finishing Placement of material to commence at the crown or the highest side of the pavement, with each lane spread adjacent to the previously placed lane Material to not be contaminated by foreign materials and other contaminants 	Spec cl. 2.8.4	Verify	This ITP signed	HP*	Project/Site Engineer Foreman				

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2.2	Proof Rolling & Compaction	Each Lot	Each layer of select fill under pavements is to be inspected with the Principles Representative. A medium size vibrating roller (or larger) is to be used for all proof rolls. At least 5m of longitudinal Select Fill and 500mm of lateral overlap of proof rolling between adjacent areas is needed. At least one working days' notice is to be provided to schedule the presence of the Principles Representative. Maximum allowable rutting of 25mm. No heaving to be observed.	Spec cl. 2.10	Visual Inspection & Verify	This ITP signed	WP HP HP	Project/Site Engineer Principal's Rep				
2.3	Final Trimming and Surface Finishing	Per lot (final layer only)	Final layer of Select Fill surface to the required level, grade, and shape with a tolerance of +0mm and -25mm. Intermediate layers of select fill do not require a Survey Conformance Report	Spec cl 2.11 WMS003 – cl3.4.5	SCP	This ITP signed	HP	Surveyor Project/Site Engineer				
3.0	Select Fill Works – Site Won Material – Other Areas (Not Under Pavements)											
3.1	Select Fill Placement	Each Lot	Each Lot of fill must: <ul style="list-style-type: none"> Not be greater than 200mm in thickness. If required, material to be lightly watered to aid in compaction. Placement to start on the high side. 	Spec cl. 2.8.4	Verify	This ITP signed	IP	Project/Site Engineer Foreman				

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			<ul style="list-style-type: none"> Material to not be contaminated by foreign materials and other contaminants. 									
3.2	Proof Rolling & Compaction	Each Lot – intermediate layers	Intermediate Layers Each intermediate layer will be visually inspected for conformance to the specification following compaction. No rutting greater than 25mm observed	WMS003 – cl3.4.4.1	Verify	This ITP signed	HP*	Project/Site Engineer Foreman				
3.2	Proof Rolling & Compaction	Each Lot (final layer only)	Final layer Principles Representative to be invited to visually inspect final layer of Select Fill not under pavements. At least 5m of longitudinal Select Fill and 500mm of lateral overlap of proof rolling between adjacent areas is needed. If requested, Proof rolling is carried out in the presence of the Principles Representative If requested, at least one working days' notice is to be provided to schedule the presence of the Contract Administrator. Maximum allowable rutting is 25mm. No heaving to be observed.	Spec cl. 2.10 WMS003 – cl3.4.4.1	Visual Inspection & Verify	This ITP signed	WP HP HP	Project/Site Engineer Principal's Rep				
4.0	Testing & Acceptance											

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4.1	Classification and Testing (imported material, under pavements only)	Each Lot	Imported Material Under Pavements <u>Dry Density as per AS1289.5.3.1</u> <ul style="list-style-type: none"> 4 test per lot to achieve average Minimum average standard dry density ratio of no less than 98.0%. No single standard dry density ratio test result being less than 97.0%. 	Spec cl. 2.9 AS1289 5.3.1 AS1289 5.4.1 AS1289 5.8.1 Spec tab. 2-3	Verify	Test results & This ITP signed	HP	Project/Site Engineer Principles Rep Foreman				
4.2	Lot Acceptance	Each Lot	Principles Representative to review acceptance of lot according to table 2-3. Acceptance of lot will not hold up placing succeeding layer of subbase.	Spec Table 2-3 CI2.12	Verify	Test results & This ITP signed	HP	Project/Site Engineer Principles Rep				

Final Inspection On behalf of Fulton Hogan it is hereby certified that the Works represented by the items of work listed have been tested in accordance with the Project Quality Plan and conform in all respects with the requirements of the Contract.			
Print Name:	Position:	Signature:	Date: / /

Legend:

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HP	Hold Point	Work shall not proceed past the HP until released by the Principal's Representative	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 Principal's Representative	SCP	Survey conformance point	A qualified surveyor to check product/section/structure and report
AP	Approval Point	Written or verbal approval given by the Principal's Representative			

Notes