

Item No.	Inspection and Test Point	Acceptance / Conformance Criteria	Standard / Specification	Verifying Document	Frequency	Verification Activity		Downer Conformance of Compliance Signoff				
						Activity	By	Downer Signature	Date	MSQA signature (Blank as Req.)	Engineer Rep Signature (Blank as req.)	Comments / Closeout Details
SECTION 3 – PRE-CONSTRUCTION (P&G / ESTABLISHMENT)												
3.01 Site Requirements												
3.01.01	Construction Pack	Submit a Construction Pack including a Methodology and JSEA to the Engineer before works	Downer	Construction Pack	Submit 5 days prior to commencement of works	H	PE				R	
3.02.02	Survey Setout	Survey Set out as per contract drawings and specification, capturing pre-construction levels where needed.	Downer	Survey Records	Prior to Works	H	SV					
3.01.02	Service Location	Complete the Excavation permit process to identify, locate and protect all services.	Downer	Excavation Permit	Prior to Excavation	H	SE					
3.02.03	Internal Permits	Complete internal Permits as required to complete works including but not limited to: Hot works, concrete saw, lift, confined space, working at height etc.	Downer	Internal Permits	Prior to Excavation	H	SE					
3.01.03	External Permits	Obtain External Permits as required to complete works including but not limited to: Close approach, Worksafe Notice etc.	Downer	External Permits	Prior to Excavation	H	PE				R	
3.02.04	Approved Construction Drawings	Prior to starting works, Ensure that the construction drawings are both IFC and the Current Version.	Downer	IFC Drawings	Prior to works start	H	PE					
SECTION 4 – MATERIAL, PERSONNEL & THIRD PARTY APPROVAL												
4.01 General Material Approval												
4.01.01	Mix Design	Typical structures -Confirm supply of 'high grade' 20MPa concrete; 19mm max aggregate size. General site concrete - 10MPa Where specified on drawings, use marine grade concrete -30MPa The Contractor shall ensure that the ready mix supplier can provide mix design information and strength testing records on request.	Aurecon Civil Spec Section 14.6	Mix Design Report Approval	Upon Request / prior to Use	H	PE			R	R	
4.01.02	Mortar	Consisting of two parts fine, sharp, well graded sand to one part dry cement Mix by hand or mixer in small quantities, use within 30 minutes	Aurecon Civil Spec Section 14.6.5	In process check	Prior to each pour	I	PE					
4.01.03	Reinforcement	Reinforcement and embedded items cut, bent (cold) and accurately placed as shown on design drawings. At least 30mm cover to all reinforcing +5mm/-0mm Bar spacing as per drawings +/- 10mm Bend locations as per drawings +/-5mm	Aurecon Civil Spec Section 14.6.7 AS/NZS 4671	In process check	Prior to each pour	I	PE			R		
SECTION 5 – CONSTRUCTION ACTIVITY – CONCRETE INSTALLATION												
5.01 Construction												
5.01.01	Pre Pour Inspection Concret Placement	Notify Engineer for inspection of formwork 24 hours prior to pour for inspection	–	QA Sheet	Prior to each pour	H	SE			I	I	

Item No.	Inspection and Test Point	Acceptance / Conformance Criteria	Standard / Specification	Verifying Document	Frequency	Verification Activity		Downer Conformance of Compliance Signoff				
						Activity	By	Downer Signature	Date	MSQA signature (Blank as Req.)	Engineer Rep Signature (Blank as req.)	Comments / Closeout Details
5.01.02	Pour Plan	Place concrete and construction joints as per design drawings Exposed surfaces: F4 formed finish (or F5 if specified), U2 screeded finish Slabs: U3 trowel finish for internal slabs, U5 textured foreexternal slabs Delivery dockets dated and showing the concrete supplier and design strength shall be collected and held for every pour. Record location and date of each pour	NZS 3124	QA Sheet Delivery Dockets	For Each Pour	W	SE			R	R	
5.01.03	Testing	Slump test during pour to check workability of concrete or as directed by Engineer 3 cylinder tests taken for each pour. Slump target as per mix design 120 mm when measured at the point of delivery to site.	Aurecon Civil Spec; Section 14.7.12, NZS 3112	QA Sheet UCS Test Report	Each pour / every 75m3 (one sample for pours less than 75m3)	H	SE	H		R	R	
5.01.04	Independent Testing	The Engineer's Rep may request site samples/cores for independent testing of fresh or cured concrete to review the grading, mix design, strength and thickness.	–	IANZ Lab Report	Upon Request	W	SE			R	R	
SECTION 6 – POST CONSTRUCTION (FINAL INSPECTION AND HANDOVER)												
6.01 Site Post Construction Activities												
6.01.01	Construction Record Compilation	Compile construction records for final submission ensuring defects (NCRs) / Snags / missing records are captured or closed out, all tests have been received and passed, and changes / omissions have been noted.	Downer	Records	Post construction	H	SE			R	R	
6.01.02	Survey Records	Ensure all items have been surveyed and records are assembled for asbuilding	Downer	Records	Post construction	H	SV			R	R	
6.01.03	Redline Drawings	Create a set of Redline Drawings for Asbuilt creation noting all changes and departures in red pen/RFI reference	Downer	Redlines	Post construction	H	PE			R	R	
6.01.04	Defect, Snag and Punch List	Update the project Defect, Snag and Punch List Register	Downer	Register	Post construction	H	PE			R	R	