

Document Information					
Document Title:		Pile Installation ITP			
Document Title:		ITP-ME-01			
Subcontractor:		K&T Construction Australia/United Civil			
Client:		Chint			
Project:		Maungaturoto Solar Farm			
Revision History					
Rev	Date	Description	Originator	Checked	Approved
1	25/10/2024	For Approval	GS	ML	ML

PILE INSTALLATION ITP

Contract: Maungaturoto Solar Farm

ITP Number: ITP-ME-01

Activity / Item: Piles Installation

Contact Details		Summary of Requirements				Reference Drawings/Manuals/Standards	Records		
Customer		Pile Installation				<ul style="list-style-type: none"> 520_02_01_Maungaturoto_FS2V-23°-12_DUO_EX 520_02_02_Maungaturoto_FS2V-23°-24_DUO_EX DD-2412.011-REP-C1 Maungaturoto SF NZ_Layout Schletter_30.07.24 MSF-EN-GEN-DRG-001_1.2 MSF-EN-GEN-DRG-001_1.3 	(MDR Insert as marked 3)		
Client PM							Inspect Release Cert		<input type="checkbox"/>
Construction Manager							Deviations/Concessions		<input type="checkbox"/>
Project Manager							Material Certificates		<input type="checkbox"/>
Subcontractors		Traceability:					Conformance Certificate		<input type="checkbox"/>
Design:		Material	<input type="checkbox"/>	Alloy Verification:	<input type="checkbox"/>		Welding Records		<input type="checkbox"/>
Drafting:		Heat Treatment	<input type="checkbox"/>	Pressure Testing:	<input type="checkbox"/>		Welder Qual. Register		<input type="checkbox"/>
NDT:		Consumable:	<input type="checkbox"/>	NDT	<input type="checkbox"/>		NDT Reports		<input type="checkbox"/>
Pressure Test:		Welder ID:	<input type="checkbox"/>	WPS	<input type="checkbox"/>		Report on Repairs		<input type="checkbox"/>
Surface Treatment:		Electrical:	<input type="checkbox"/>	Instrumentation	<input type="checkbox"/>		Heat Treatment Records		<input type="checkbox"/>
Surveillance / Inspection Key		Heat Treatment: N/A				Non-Conformance Report		<input type="checkbox"/>	
HOLD POINT (H): Nominated point beyond which work shall not proceed without verified acceptance by nominee. 48 hours of notice must be provided prior to commencement of works.		Dimensional Control: N/A				Pressure Test Records		<input type="checkbox"/>	
		Testing (NDT): N/A				Drawing & Data Sheets		<input type="checkbox"/>	
WITNESS POINT (W): Points at which the nominee shall be notified and invited to witness an activity, but further work may proceed without the presence of the nominee.		Acceptance Specification: IFC Drawings				Misc. Verification Records		<input type="checkbox"/>	
		Pressure Testing: N/A				Dimensional Records		<input type="checkbox"/>	
REVIEW (R): Verify by examination of documentary evidence that inspection / tests have been satisfactorily conducted.		Elect. / Instrumentation: N/A				Position			
		Notes:				Construction Manager		CM	
SURVEILLANCE (S): Continuing evaluation of the status of methods, analysis of records and monitoring of activities on a random basis to ensure quality of requirements will be met.		PROCEDURES /REPORTS <ul style="list-style-type: none"> Piling SWMS AS-BUILT Pile Stake Out Report 				Project Manager		PM	
						Quality Representative		QR	
VISUAL (V): 100% Visual inspection of work / item to ensure compliance with code / spec						Technician		T	
						Document Controller		DC	
DIMENSIONAL (D): Measurement of critical dimensions to ensure work/item is within tolerance						Subcontractor		SC	
						Elect. / Instrumentation		E/I	

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					EPC	CLIENT	
1.1	Permits and Approvals	Ensure Permits are in place including, but not limited to: <ul style="list-style-type: none"> Excavation Permits 	Excavation Permit	Working Party to have access and sign onto permits where required.	H	R	
1.2	Identification of underground services	Use of DBYD and other methods to positively identify underground services.	Engineer to verify DBYD	DBYD / Excavation Permit Survey (if required)	H	R	
1.3	Approval of SWMS	Submission, review, and approval of all SWMS for the works	SWMS Approved		H	NA	
1.4	Conformance of Materials	All delivered materials and procured items conform to project specifications and IFC drawings.	As per Drawings and specifications	Delivery Docket	R	S	
1.5	Inspection Measuring and Test Equipment (IMTE) Registers	Supply of all calibration certificates to the engineer including but not limited to: Survey Equipment	Visual	Calibration Certificates	R	S	
2.1	Survey and set out of piles	Mark the ground in accordance with Schletter pile location	<ul style="list-style-type: none"> Visual as per Schletter pile location spreadsheet. 	<ul style="list-style-type: none"> Survey As Constructed record Pile location spreadsheet 	H	S	
2.2	Pile distribution to respective blocks	Distribute colour coded piles, dimensions, and length into allocated location	<ul style="list-style-type: none"> Visual. Piles distributed as per Schletter drawings i.e., correct colour code, dimensions, and length. Pile location CSV file 	<ul style="list-style-type: none"> Survey As Constructed record 	R	S	

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2.3	Pile refusal	Drive piles to depth until it reached point of refusal.	<ul style="list-style-type: none"> Record pile location and mark on the drawing Record actual pile embedment depth Pile refusal in accordance with Pile Refusal Procedure Pile Testing Procedure Piles cut and holes drilled as per Schletter documentation 	<ul style="list-style-type: none"> Survey record Pile marked on the drawing 1. Schletter - ITC – Piling ITC Data Tracker Excel Pile Monitoring Sheet <ul style="list-style-type: none"> Embedment Depth Reveal Height Pile test result documentation 	S	S	
2.4	Piles installation	<ul style="list-style-type: none"> Install pile on correct location as per Schletter drawing Install pile within the design tolerances Piles should have no damage or deformation and in correct orientation 	<p>Tolerances as per Schletter Installation Manual Section 7.2 Installation Tolerances:</p> <ul style="list-style-type: none"> North-South 3° East-West $\pm 3^\circ$ Pile Twisting from axis: $\pm 5^\circ$ Distance E/W: $\pm 100\text{mm}$ N/S: $\pm 50\text{mm}$ Reveal Height: $\pm 100\text{mm}$ Height difference foundation posts within one row: $\pm 50\text{mm}$ <p>Piles have no damage deformation and in correct orientation.</p>	<ul style="list-style-type: none"> Schletter - ITC – Piling Surveyset-out data ITC Data Tracker Excel Pile Monitoring Sheet Pile(s) marked on the As- Constructed drawing/Red Line Mark-up Punchlist Survey record 	R	S	

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2.5	Cold Galvanising Repair, if required	Use two coats of zinc rich galvanising paint on damage, deform, and top of piles	<ul style="list-style-type: none">Galvanising repaired as per manufacturer's recommendation and procedure.Visual	<ul style="list-style-type: none">Schletter - ITC – Piling	R	S	
2.6	As Constructed records – Red Line Mark-Up (RLMU) Drawings.	Engineer to compile and record changes on IFC Drawings, to be issued to Client .	Visual	RLMU Drawings	R	S	
2.7	Develop Punchlist	Development of punch list with PM/CM and/or Supervisor	Punchlist closed in a timely manner	Punchlist	R	S	
2.8	Final Walk Down	100% visual verification required for each pile upon ITP sign off	Visual	Punchlist, if required	H	H	

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Sub-Contractor Representative	Client Representative
Name:	Name:
Signature:	Signature:
Date:	Date: