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| **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 |

A logo for a company

Description automatically generated

**PILE INSTALLATION ITP**

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| **Contract:** | **Maungaturoto Solar Farm** | **ITP Number:** | **ITP-ME-01** |
| **Activity / Item:** | **Piles Installation** |  |  |

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| Contact Details | | Summary of Requirements | | | | Reference Drawings/Manuals/Standards | Records | | |
| Customer |  | Pile Installation | | | | * 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 | |  |
| Construction Manager |  | Deviations/Concessions | |  |
| Project Manager |  | Material Certificates | |  |
| Subcontractors | | Traceability: | | | | Conformance Certificate | |  |
| Design: |  | Material |  | Alloy Verification: |  | Welding Records | |  |
| Drafting: |  | Heat Treatment |  | Pressure Testing: |  | Welder Qual. Register | |  |
| NDT: |  | Consumable: |  | NDT |  | NDT Reports | |  |
| Pressure Test: |  | Welder ID: |  | WPS |  | Report on Repairs | |  |
| Surface Treatment: |  | Electrical: |  | Instrumentation |  | Heat Treatment Records | |  |
| Surveillance / Inspection Key | | Heat Treatment: N/A | | | | Non-Conformance Report | |  |
| **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. | | Pressure Test Records | |  |
| Dimensional Control: N/A | | | | Drawing & Data Sheets | |  |
| Misc. Verification Records | |  |
| **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. | | Testing (NDT): N/A | | | | Dimensional Records | |  |
| Position | | |
| Acceptance Specification: IFC Drawings | | | | Construction Manager | CM | |
| **REVIEW (R):** Verify by examination of documentary evidence that inspection / tests have been satisfactorily conducted. | | Procedures /Reports | Project Manager | PM | |
| Pressure Testing: N/A | | | | Quality Representative | QR | |
| * Piling SWMS * AS-BUILT Pile Stake Out Report | Technician | T | |
| **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. | | Elect. / Instrumentation: N/A | | | | Document Controller | DC | |
| Subcontractor | SC | |
| Notes: | | | | Elect. / Instrumentation | E/I | |
| **VISUAL (V):** 100% Visual inspection of work / item to ensure compliance with code / spec | |  |  | |
|  |  | |
| **DIMENSIONAL (D):** Measurement of critical dimensions to ensure work/item is within  tolerance | |  |  | |
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| **Contract:** | | **Maungaturoto Solar Farm** | | | | **ITP Number:** | | **ITP-ME-01** | | | | |
| **Activity / Item:** | | **Piles Installation** | | | |  | |
|  | |  | | |  | | | |
| **ITEM NO:** | **PROCESS ACTIVITY** | | **PROCEDURE / INSTRUCTION** | **ACCEPTANCE CRITERIA** | | | **VERIFYING DOCUMENT** | | | **VERIFICATION** | | **REMARKS** | |
| **EPC** | **CLIENT** |  | |
| 1.1 | Permits and Approvals | | Ensure Permits are in place including, but not limited to:   * 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 | * Visual as per Schletter pile location spreadsheet. | | | * 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 | * Visual. Piles distributed as per Schletter drawings i.e., correct colour code, dimensions, and length. * Pile location CSV file | | | * Survey As Constructed record | | | R | S |  | |

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| **Activity / Item:** | | **Piles Installation** | | |  | |  | | | |
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| 2.3 | Pile refusal | | Drive piles to depth until it reached point of refusal. | * 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 | | * Survey record * Pile marked on the drawing * 1. Schletter - ITC – Piling * ITC Data Tracker Excel Pile Monitoring Sheet   + Embedment Depth   + Reveal Height * Pile test result documentation | | S | S |  | |
| 2.4 | Piles installation | | * 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 | Tolerances as per Schletter Installation Manual Section 7.2 Installation Tolerances:   * North-South 3° * East-West ± 3° * Pile Twisting from axis:± 5° * Distance E/W: ±100mm * N/S: ±50mm   Reveal Height: ±100mm   * Height difference foundation posts within one row: ±50mm * Piles have no damage deformation and in correct orientation. | | * 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 | * Galvanising repaired as per manufacturer’s recommendation and procedure. * Visual | | * 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:** |