| **Item**  **No.** | **Task/Activity Description** | **Inspection/Test** | | | | | | **HP/ WP/ AP/ IP/ TP/ SCP** | | **Responsibility** | |  | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Frequency** | **Acceptance Criteria** | **Reference Documents** | **Inspection/ Test Method** | **Record of conformity** |  | | Project Engineer  Principal’s Rep.  Surveyor  Foreman | |  | |  |  |
| **1.0** | **Preliminary Activities – Permits, Documentation, Approvals, Survey Documentation** | | | | | | | | | | | | | | | |
| 1.1 | Check for correct documentation | Prior to commencing activity | Ensure that all employees and subcontractors are: - using the correct and complete set of drawings. - all drawings are the latest revision. | Drawings / Aconex Register | Verify | Drawings and drawing registers | HP\* | | Project Engineer / Site Engineer | |  | |  |  |
| 1.2 | Implementation of all measures and controls | Prior to commencing activity | All necessary measures and controls being implemented, that is PSP, EMP, TMP, SWMS & WP. | PSP, EMP, TMP, JSEA, SWMS, WP | Visual inspection | This ITP signed | HP\* | | Project Engineer / Site Engineer | |  | |  |  |
| 1.3 | Survey Checks | Prior to commencing activity | Check survey to be completed of all footing positions prior to placing any of the panels. | Drawings | Verify | This ITP signed  Survey Report | HP\* | | Project Engineer / Site Engineer / Surveyor | |  | |  |  |
| 1.4 | Submission & approval of shop drawings | Prior to commencing activity | **HOLD POINT**  Submit shop drawings to the principal’s representative for approval prior to fabrication commencement.  Items to include but not limited to:   * HV Kiosk * ATS * DB-GEN * 400 KW Load Bank | ZULU-BECA-001-SPC-00005  Drawings | Verify | Aconex Reference | **HP** | | Project Engineer / Site Engineer **/ Principals Representative** | |  | |  |  |
| 1.5 | Material Submissions | Prior to commencing activity | **HOLD POINT** Items to include but not limited to:   * Bonding Conductors * Copper Conductor Connections * Earth Backfill Slurry Mixture * Earth Rod Inspection Box * Grid Conductor * Permanent Earth Cable Elbow Connection * Sub 164 Retention Barrier * V90 PVC Insulated Un-stranded Class 2 Copper Conductor | ZULU-BECA-001-SPC-00005  Drawings  AS/NZS 1252.2 | Verify | Aconex Reference | **HP** | | Project Engineer / Site Engineer **/ Principals Representative** | |  | |  |  |
| 1.6 | Temporary Works | Prior to commencing activity | Submission and approval of the following documentation based on the Temporary Works Design Process Matrix. | ZULU-BECA-001-SPC-00005  Drawings | Verify | As defined by the Temporary Works Design Process Matrix (where applicable) | HP\* | | Project Engineer / Site Engineer | |  | |  |  |
| 1.7 | Off-site Inspections | Each Lot | **WITNESS POINT**  Inspection and attendance on site for Factory Acceptance Testing for:   * HV Kiosk * ATS * DB-GEN   Following these inspections FAT testing shall be submitted and associated certificates. | ZULU-BECA-001-SPC-00005  Drawings | Verify | This ITP Signed  Factory Acceptance Tests | **WP**  **TP** | | Project Engineer / Site Engineer **/ Principals Representative** | |  | |  |  |
| **2.0** | **Construction** | | | | | | | | | | | | | | | |
| 2.1 | Delivery of Materials to site | Each item | Inspection of materials whilst still loaded on the truck prior to accepting the delivery on site.  Identify any damage/defects prior to unloading of the material. | ZULU-BECA-001-SPC-00005  Drawings | Visual Inspection | This ITP Signed  Materials Inspection Checklist on ConQA | IP | | Project Engineer / Site Engineer | |  | |  |  |
| 2.2 | Inspection of installed Pits, Conduits, Slabs and Structure | Each Lot | HV contractor to inspect the builder’s installation to confirm suitability and as per design | Drawings | Visual Inspection | This ITP Signed | IP | | Project Engineer / Site Engineer | |  | |  |  |
| 2.3 | Isolation of existing cables | Each Lot | Cable to be isolated and earthed at both ends. Ensure correct cable is being isolated as per information on hand. Check Isolation by testing at a suitable point. HV cable to be disconnected and taken out of cable compartment.  Existing HV Cables shall have Seath IR testing completed prior to modification to the cable to provide a baseline final testing as per MAS-ELC-002 | ZULU-BECA-001-SPC-00005  Drawings | Verify | This ITP Signed  Test results.  Nilsen ITC | IP / **TP** | | Project Engineer / Site Engineer | |  | |  |  |
| 2.4 | Cabling – Mains, Submains & Earthing | Each Lot | New cables to be pulled through pre-laid conduits using the provided pull strings.  Cables to be sufficiently secured out of the way prior to component installation. | ZULU-BECA-001-SPC-00005  Drawings | Visual Inspection | This ITP Signed  Nilsen ITC | IP | | Project Engineer / Site Engineer | |  | |  |  |
| 2.5 | Lifting Preparation (Kiosk) | Each Lot | Lift Study available and approved.  Temporary Works for Crane Pad approved and constructed.  Complete Pre-Lift/s Commencement Checklist prior to each component being lifted.  Ensure relevant drawings, lifting & fixing plans available to the crew. | ZULU-BECA-001-SPC-00005  Drawings  Lifting Plan | Visual Inspection | Pre-Lift/s Commencement Checklist  This ITP Signed | IP, SCP | | Site Engineer / Foreman / Surveyor | |  | |  |  |
| 2.6 | Component Placement (Kiosk) | Each Lot | Survey to confirm component placement as per the design.  Install all fixings as per the drawings & engineers plan and suppliers’ specification. | ZULU-BECA-001-SPC-00005  Drawings  Lifting Plan | Verify | This ITP Signed | IP / SCP | | Project Engineer / Site Engineer / Surveyor | |  | |  |  |
| 2.7 | Installation of Earthing Grid | Each Lot | Installation of Earth Grid as defined by IFC Drawings and MAS-ELC-002 (Section 5.7.3). | ZULU-BECA-001-SPC-00005  Drawings  AS/NZS 3000 | Verify | This ITP Signed  Nilsen ITC | **WP** | | Project Engineer / Site Engineer | |  | |  |  |
| 2.8 | Earthing Grid Testing | Each Lot | Earthing system to be tested as per MAS-ELC-002 HV Standard – Appendix B, including:   * Continuity testing (earthing and bonding conductors) * Earth resistivity testing * Earth potential rise measurement * Current distribution measurement * Transfer voltage testing * Touch voltage testing * Step voltage testing | ZULU-BECA-001-SPC-00005  Drawings   AS 2067  MAS-ELEC-002 | Verify | This ITP is signed  Test results | **WP**  **IP** | | Project Engineer / Site Engineer / **Principals Representative** | |  | |  |  |
| 2.9 | HV Cable Terminations | Each Lot | Relevant cabling can be installed into allocated cubicle.  Terminate HV cables in the final position.  Confirm cables are installed into correct cubicles.  Confirm earth ring cables terminated to relevant earth bar/position. | ZULU-BECA-001-SPC-00005  Drawings  HV Access Permit | Verify | This ITP Signed  Test results  HV Access Permit  Nilsen ITC | **WP**  **TP** | | Project Engineer / Site Engineer **/ Principals Representative** | |  | |  |  |
| 2.10 | Testing of New HV Cables (Before Energized) | Each Lot | **HOLD POINT**  Confirm the following items are constructed in accordance with IFC design and specification.   * Type, size, colour, quantities, location * Secure   Verify and confirm the following tests as per AS/NZS 3000 (not limited to):   * Polarity Check * Cable Loop Resistance (Ohms) * Insulation Resistance (Core-Core& Core to Earth)   Ensure HV cable connected are bolted up at both termination ends. Testing to include all testing required as per MAS-ELC-002, including VLF testing etc  Ensure new earth cable connected and torqued at both ends.  Upload and testing of protection settings into HV and LV CBs.  Testing of SCADA Points to EMCS. | ZULU-BECA-001-SPC-00005  Drawings  HV Access Permit  AS/NZS 3000  MAS-ELC-002 | Verify | This ITP Signed  Test results  HV Access Permit  Nilsen ITC | **WP**  **TP** | | Project Engineer / Site Engineer **/ Principals Representative** | |  | |  |  |
| **Final Inspection** The signature below verifies that this ITP has been completed in accordance with the Fulton Hogan’s Quality system Procedures and verifies lot compliance with specifications.  **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 |  |  | |

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| **Notes** |  |  |  |  |