**INSPECTION AND TEST PLAN**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Details** | | | | | | | |
| **ITP Activity:** | Embankment Construction | | | **Project:** | EVA Copper | **Date Lot Opened:** |  |
| **ITP Number:** | EVAMP001-THS-4000-QA-ITP-008 | **Rev. No.** | 0 | **Contract Number:** |  | **Date Lot Closed:** |  |
| **Lot Number:** |  | | | **Client:** | Harmony | | |
| **Location or Area:** |  | | | **Client Reference:** |  | **JSA/SWMS Ref:** |  |
| **Chainage / Coordinates:** |  | | | **Contractor / Subcontractor / Supplier:** |  | **SOP Reference:** |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Inspection / Test Point** | **Responsibility** | | **Method** | **Conformance Criteria** | **Specification Clause** | | **Frequency** | **Verification from Thiess / Client (H/W/R/M)** | | | | | **Records or Comments** | | |
| **THIESS (Initial)** | | | **Client (Initial)** | |
| **1** | **Pre-Construction** | | | | | | | | | | | | | | | |
| 1. | Drawings supplied most current IFC | ENG | | Visual | Reviewed drawing register | Reviewed drawing register | | Prior to works | HP |  | | W |  |  | | |
| 2. | Define Lot dimensions | ENG | | Visual | Allocate Lot No to ITP and update Lot register | Lot register.  EVAMP001-THS-CV-SPE-0001  EVAMP001-THS-CV-SPE-0002 | | Prior to works | HP |  | | W |  |  | | |
| 3. | Lot Register/ WBS submitted and approved | ENG | | Visual | Approved WBS | Approved WBS | | Prior to works | WP |  | | W |  |  | | |
| 4. | Underlying lot & ITP signed off and conforming | ENG | | Visual | Topsoil stripping ITP signed off | Approved QMP.  Approved ITP | | Prior to works | HP |  | | W |  |  | | |
| **2** | **Construction** | | | | | | | | | | | | | | | |
| 5. | Ensure Embankment Construction materials have been approved for use and within specification | ENG | | Visual | Embankments (general fill  material)   Less than 30% passing 0.075mm  sieve  Liquid limit 20% to 60%   Soaked CBR = or >3% (STD  compaction @ OMC)  1 test per 5,000 m3 | EVAMP001-THS-CV-SPE-0001 | | As required | HP |  | | W |  |  | | |
| 6. | Construction Layer Thickness (300mm) | SV | | Visual | Depths of such layers shall not exceed the capability of the  proposed plant and in any case shall not exceed 300 mm uncompacted. | EVAMP001-THS-CV-SPE-0001 clause 4.17 | | As required | HP |  | | HP |  | On site verification sheet and survey | | |
| 7. | Place and compact general fill layer – Subgrade | ENG | | Field Test | Material containing a high proportion of large particles may be used in embankments using the  Mechanical interlock method of construction.  Field density standard minimum Dry density test to be 95%, OMC -1%, +2% with a minimum layer thickness of 150mm and maximum 300mm. Material greater than 600mm may be allowed to be used in the Embankment. | EVAMP001-THS-CV-SPE-0001 clause 4.17 | | As required | HP |  | | W |  | On site verification sheet  NATA Test report | | |
| 8 | Subgrade in cut | ENG | | Survey/ Field test | For subgrades under road/rail pavements and buildings/structures, the materials exposed at  The subgrade level of cuttings is to have a minimum CBR of 3. | EVAMP001-THS-CV-SPE-0001 clause 4.16 | | As required | HP |  | | HP |  |  | | |
| 9. | Proof rolling | ENG/ SV | | Field test | The embankment will be proof rolled with either Proof rolling shall be undertaken using a 10,000 L water cart or heavy, self-propelled, smooth  drum vibrating roller capable of operating in variable frequency modes. | EVAMP001-THS-CV-SPE-0001 clause 4.26 | | As required  Each lot | HP |  | | HP |  | On site verification sheet | | |
| 10 | As-built of completed surface | ENG/SURV | | Survey | Survey to be completed of the finished surface to confirm to the levels as shown on the drawings with deviations as per Top of earthworks other than the subgrade and  pad level ± 50,  Road subgrade & building / structure pads +0 -25 | EVAMP001-THS-CV-SPE-0001 Appendix A clause 6 | | Each finished surface | HP |  | | HP |  | Survey report | | |
| **3** | **Post Construction** | | | | | | | | | | | | | | | |
| 11 | Works completed and updated ITP/ Lot Register/ MDR and close out of GDP | ENG | | Visual | ITP closed.  Approved MDR | - EVAMP001-EVA-7340-PE-PRM-0001  - EVA PMP | | As required | HP |  | | HP |  |  | | |
| **Conformance to Specification** | | | **Requires Re-Work:** (Provide Details): | | | |  | | | | **Non-Conformance** | | | | **NCR No:** |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Approved by THIESS QA Representative** | | **Date** |  | **Approved by THIESS Project Manager** | | **Date** |  | **Approved by Client** | | **Date** |
| **Name (print):** |  |  |  | **Name (print):** |  |  |  | **Name (print):** |  |  |
| **Signature:** |  |  | **Signature:** |  |  | **Signature:** |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **RESPONSIBILITY** | | **METHOD** | | **VERIFICATION TYPE** | | **ITP REVISIONS** | | | |
| **Symbol** | **Legend** | **Symbol** | **Legend** | **Symbol** | **Legend** | **Rev No.** | **Amendment Details** | **Date** | **Approver** |
| C | Client | W | Written | HP | Hold |  |  |  |  |
| SV | THIESS Supervisor | A | Application | W | Witness |  |  |  |  |
| Eng | THIESS Engineer | D | Design | R | Review |  |  |  |  |
| Surv | Surveyor | S | Survey Data | M | Monitor |  |  |  |  |
| SC | Subcontractor | V | Visual |  |  |  |  |  |  |
| PM | Project Manager | T | Test |  |  |  |  |  |  |
| CM | Construction Manager | C | Certificate |  |  |  |  |  |  |
| MC | Material Controller | TA | Test / Approval |  |  |  |  |  |  |
| ENV | Enviro officer | M | Measure |  |  |  |  |  |  |

Please transfer information into THIESS Data System ‘Inspection and Test’ Register.