

Inspection and test plan – Bulk Earthworks

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| **Project no.** | CC0399 | **Project name** | MREH BESS | |  | **Date** | **SGJV Approval** |
| **ITP no.** | CC0399-ITP-003 | **Revision no.** | A | **Revision date** | 15.01.2024 | **Layer thickness** |  |
| **Plant and equipment used** | | Excavator, Dozer, Moxy, Stabiliser, Grader, Roller, Tandems, Trucks & Trailers, Dozer | | | | |  |
| **Lot no.** |  | **Location (chainages, detailed description or marked up plan)** | | | | |  |

Attach Dockets, Certificates and QA Documents to ITP

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|  | | | | | | **Verify of acceptance by** | | | | | **Remarks / record (eg. test reports, certificates, checklist etc)** |
| **Symal Infrastructure** | | | **SGJV** | |
| **Item no.** | **Activity** | **Ref docs** | **Acceptance criteria** | **Acceptance** | **Freq** | **Key** | **Resp** | **Sign Date** | **Key** | **Sign date** |
|  | **1.0 Preliminaries** | | | | | | | | | | |
| **1.1** | Determine lot size | N/A | What is the lot size? | … m2 | Prior to start of Works | S | SE |  | S |  | * Lot Map |
| **1.2** | Survey set-out | IFC Dwgs | Is the most current survey file what the team is working to and has the work area been set out for line and level? | * Yes ☐ No ☐ N/A | Each lot &  Each possession | W | **SE** |  | S |  | Photos |
| **1.3** | Water management | EMP | Where necessary, have batters been rounded and catch drains constructed to allow for potential surface runoff during the course  of excavation? | * Yes ☐ No ☐ N/A | Each lot &  Each possession | S | SE |  | S |  | Photos |
| **1.4** | Clearing | CC0399- ITP-002 | Has the area been cleared and grubbed in accordance with ITP-  002? | * Yes ☐ No ☐ N/A | Prior to start of Works | W | SE |  | S |  | Photos |
| Is the area in **cut / fill / both?**  If in **cut** proceed to step 2.0 and strike out section 3.0.  If in **fill** please strike out section 2.0 and proceed to section 3.0 If in **both** proceed to step 2.0 as well as section 3.0 | | | | | | | | | | | |
|  | **2.0 Bulk earthworks – Cut** | | | | | | | | | | |
| **2.1** | Excavation material classification | MRH/00/P/0 0- PM/SPC/00  03 rev 3  page 53 | Has the material being excavated been inspected with category agreed upon by Superintendent?  Tick category below: | * Yes ☐ No ☐ N/A | Prior to start of Works | W | SE |  | S |  | Test reports |

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|  |  |  | * Topsoil * Unsuitable material * Fill material * Other: |  |  |  |  |  |  |  |  |
| 2.2 | Stockpile | N/A | Has the stockpile location been approved by SGJV. | * Yes ☐ No ☐ N/A | Prior to start of Works | H | SE |  | H |  | SGJV approved stockpile plan |
| **2.3** | Subgrade preparation | MRH/A0/B/ 00- CV/DWG/00 40 | Has the cut surface been trimmed to an even surface free from lose material?  Have surface levels been checked to avoid over  excavation? | * Yes ☐ No ☐ N/A | Each lot &  Each possession | S | SE |  | S |  | Test reports/as- built survey |
| **2.4** | Lime mix | MRH/A0/B/ 00- CV/DWG/00 40 | Has lime demand testing been completed and submitted? | * Yes ☐ No ☐ N/A | Prior to starting | H | SE |  | H |  | * Test reports |
| **2.5** | Lime stabilisation | MRH/A0/B/ 00- CV/DWG/00 40 | Has the prepared subgrade been lime stabilised as per the IFC design? | * Yes ☐ No ☐ N/A | Each lot &  Each possession | S | SE |  | W |  | Photos/As-built report |
| **2.6** | Compaction | IFC drawing MRH/A0/B0 0- CV/DWG/00 08 | Compaction Scale: minimum 3 tests per lot, or 1 test per 1000m2  Has the stabilised subgrade been adequately compacted achieving 100 SDD for subgrade.  Is the subgrade material within  +/- 2% of the optimum moisture content.  Has a minimum 3% CBR been achieved? | * Yes ☐ No ☐ N/A | Each lot &  Each possession | W | SE |  | S |  | * Test reports |

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| **2.7** | Test Rolling | MRH/A0/B/ 00- CV/DWG/00 40 | Does the layer withstand test rolling without visible deformation or springing?  List Attendees: | * Yes ☐ No ☐ N/A If ‘no’ please see below.   If ‘yes’ please proceed. | Each lot &  Each possession | H | SE |  | H |  | * Proof Roll Inspection Checklist |
| Identification of soft wet or unstable material | | IFC Dwg | What quantity of soft, wet, or unstable material is present? | … m2  … m3 | As required | W | SE |  | S |  | Photos |
| Treatment of unsuitable material | | N/A | Has rectification process been submitted to SGJV for review. What was the rectification  process used. | * Yes ☐ No ☐ N/A | As required | W | SE |  | S |  | Acconex Correspondence |
|  | **3.0 Bulk earthworks - Fill** | | | | | | | | | | |
| **3.1** | Fill material classification | MRH/00/P/0 0- PM/SPC/00  03 page 53 | Has the material to be used as fill been approved for use? | * Yes ☐ No ☐ N/A | Prior to start of Works | S | SE |  | H |  | Material Acceptance correspondence/C  ertificate |
| **3.2** | Stripped surface - test rolling (If applicable) | MRH/A0/B/ 00- CV/DWG/00 40 | Does the stripped surface to be filled withstand test rolling without visible deformation or springing?  List Attendees: | * Yes ☐ No ☐ N/A If ‘no’ please see below.   If ‘yes’ please proceed to item 3.2 | Each lot &  Each possession | H | SE |  | H |  | * Proof roll checklist |

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| Identification of soft wet or unstable material | | N/A | What quantity of soft, wet or unstable material is present? | m2 | As required | H | SE |  | S |  | Photos /Visual check |
| m3 |
|  |  |
| Treatment of unsuitable material | | N/A | What rectification process is to be undertaken | * Yes ☐ No ☐ N/A | As required | S | SE |  | S |  | Acconex Correspondence  /Approval from  SGJV |
| **3.3** | Preparation of surface | MRH/A0/B/ 00- CV/DWG/00 40 | Has adequate water been added to the stripped surface to ensure adhesion to the next layer? | * Yes ☐ No ☐ N/A | Each lot &  Each possession | S | SE |  | S |  | Photos |
| **3.4** | Fill Placement | IFC drawing MRH/A0/B0 0- CV/DWG/00 08 | Has fill been placed in maximum 300mm and minimum 100mm compacted layer thickness?  Rock in the fill should be less than 75 mm.  - Fill should be free of clay and free from organic. | * Yes ☐ No ☐ N/A | Each lot &  Each possession | S | SE |  | S |  | Photos |
| **3.5** | Moisture | MRH/A0/B/ 00- CV/DWG/00 40 | Has the material maintained at optimum moisture content (within +/- 2% of optimum moisture), with additional water being added if required during  compaction? | * Yes ☐ No ☐ N/A | As required | S | SE |  | S |  | Test Reports |
| **3.6** | Lime mix | IFC Dwgs MRH/A0/B/ 00- CV/DWG/00  40 | Has mix demand testing been completed and submitted? | * Yes ☐ No ☐ N/A | Once | H | SE |  | H |  | * Test reports |
| **3.7** | Lime stabilisation | MRH/A0/B/ 00- CV/DWG/00 40 | Has the prepared subgrade been lime stabilised as per the IFC design? | * Yes ☐ No ☐ N/A | Each lot &  Each possession | S | SE |  | W |  | Photos/As-built report |

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| **3.8** | Compaction | IFC drawing MRH/A0/B0 0- CV/DWG/00 08 | Compaction Scale: minimum 3 tests per lot, or 1 test per 1000m2  Has the stabilised subgrade been adequately compacted achieving 100% SDD for subgrade.  Is the subgrade material within  +/- 2% of the optimum moisture content.  Has a minimum 3% CBR been achieved? | * Yes ☐ No ☐ N/A | Each lot &  Each possession | W | SE |  | S |  | * Test reports |
| **3.9** | Test Rolling | MRH/A0/B/ 00- CV/DWG/00 40 | Does the layer withstand test rolling without visible deformation or springing?  List Attendees: | * Yes ☐ No ☐ N/A   If ‘no’ please see below. If ‘yes’ please proceed | Each lot &  Each possession | H | SE |  | H |  | * Proof Roll Inspection Checklist |
| Identification of soft wet or unstable material | | IFC Dwgs | What quantity of soft, wet or unstable material is present? | … m2  … m3 | As required | S | SE |  | S |  | Photos |

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| Treatment of unsuitable material | | IFC Dwgs | Has rectification process been submitted to SGJV for Review? What was the rectification process used? | * Yes ☐ No ☐ N/A | As required | H | SE |  | S |  | Photos |
|  | **4.0 Conformance check** | | | | | | | | | | |
| **4.1** | Width and alignment | IFC Dwgs | Has the pavement been constructed at the correct width  and alignment as detailed in the construction drawings? | * Yes ☐ No ☐ N/A | Once | W | SE |  | H |  | * As built report |
| **4.2** | Subgrade level and shape | IFC Dwgs | Has the prepared subgrade been surveyed in accordance with and verifying specified requirements?  Is the subgrade within +/- 20mm of design surface. | * Yes ☐ No ☐ N/A | As required | W | SE |  | H |  | * As built report |
| **Comments**: | | | | | | | | | | | |

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| **Works complete (signer SS)** | **Date works complete** | |  |
| **Lot conforms (signer SE)** | **Date lot closed** | **NCR/s no. raised** | **Date NCR closed for this lot** |

Responsibility (Resp.) Key: **PM** - Project Manager, **PE**-Project Engineer, **SE**- Site Engineer, **CS**-Civil Superintendent, **SS**-Site Supervisor, **SV**-Surveyor, **CR**-Client Representative

**Inspection key: W –** Witness, H **–** Hold Point, **S -** Surveillance