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| Logo Fulton Hogan AUS_CMYK_150dpi | | **Inspection and Test Plan - Control and Supervision of the Works** | | | | | | | | | **Document #**  **FHC-ITP-004** | | |
| Revision : 1 | Date : 23/01/2024 | |
|  | | | | | | | | | | | | | |
| **Client:** | **MRPA** |  | **Construction Process:** |  | Prepared by: |  | Reviewed by : | |  | Approved by : |  |  |  |
| **Project** | **: FITZGERALD ROAD CARPARK** | | ***Type A Fill Placement*** |  | Name: **Fynn Riddick** | | Name: Justin Sciacca | | | Name: |  |  |
| **Job No:** |  | | **Specifications:** VicRoads Specification Sections 173, 204 | |  |  |  | |  |  |  |  |
|  |  | | **Structure / Component:** Pavement |  | Signed : |  | Signed : | |  | Signed : |  |  |
|  |  | | **Location: Fitzgerald Road Level Crossing Removal Project** | | Date : 18/01/2024 | | Date : 25/01/24 | |  | Date : |  |  |
|  | | | | | | | | | | | | | |
| **Lot No:** |  | **Lot Details:** |  |  |  |  |  | **Lot Size/ Quantity:** | | |  |  |  |
|  | | | | | | | | | | | | | |
| **Item** | **Task/Activity Description** | **Inspection / Controls and Verification Detail** | | | | | **HP/ WP/ AP/ IP/ TP/ SCP** | **Scale** | **Responsibility** | **Checked by:** | | | |
| **No.** | **Frequency** | **Acceptance Criteria** | **Reference Documents** | **Inspection / Test Method** | **Record of conformity** | **A or B** | Project Engineer Site Engineer Superintendent Surveyor Foreman | **Client** | **Fulton Hogan** | **FH's Sub- contractor** | **Date** |
| **1** | **Preliminary Works** | | | | | | | | | | | | |
| 1.1 | The current revision drawings/documents are being used including subcontractors copy. | Prior to commencing | Current revision drawing/documents are being used including the subcontractors copy. | Drawings and drawing registers | Visual Inspection | This ITP Signed Off | **HP\*** |  | Site Engineer / Site Foreman | N/A |  | N/A |  |
| 1.2 | Implementation of all measures and controls | Prior to Placement/ Each Lot | All necessary measures and controls are being implemented, that is: OHSCP, PHSCP, PCMP, EMP, ECP, CEMP, ERA, QMP, CHMP, SWMS | OHSCP, PHSCP, PCMP, EMP, ECP, CEMP, ERA, QMP, CHMP,  SWMS | Visual Inspection | This ITP Signed Off | **HP\*** |  | Site Engineer / Site Foreman | N/A |  | N/A |  |
| 1.3 | Verify Material | Prior to Placement | Assigned CBR to be greater than 6% (<10%), swell is to be less than 1.5%, unless approved as expansive. Soil is to be graded such that 100% passes through a 75mm sieve, 40-80% passes through 4.75mm and 10-40% passes 0.075. PI between 6 and 25. Permeability of less than 5X10^-9 for capping and verge material | VicRoads Spec. Cl. 204.04(b)  Cl. 204.06(c)  Table 204.041 Table 3020.052 | Site Inspection | Test Record  (If silt is observed) | **HP** |  | Site Engineer & Superintendent |  |  | N/A |  |
| 1.4 | Excavation Permit | Each lot | An excavation permit must be issued prior to any excavation commencing including removal of unsuitable material.  Plant and equipment shall be appropriate for the task.  Excavation operations shall not disturb areas outside the limit of excavation | Excavation permit | Verify | This ITP Signed Off | **HP\*** |  | Site Engineer | N/A |  | N/A |  |

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| **No.** | **Frequency** | **Acceptance Criteria** | **Reference Documents** | **Inspection / Test Method** | **Record of conformity** | **A or B** | Project Engineer  Site Engineer Superintendent Surveyor Foreman | **Client** | **Fulton Hogan** | **FH's Sub- contractor** | **Date** |
| **2** | **Construction Works** | | | | | | |  |  | | | | |
| 2.1 | Survey set-out | Prior to Commencing Excavation | Survey activities undertaken to ensure and validate that all works meet level and location requirements. The establishment and integrity of the survey network shall be verified before commencing any survey and setout activity. IFC  and latest available revision used | Latest IFC Drawings | Site Inspection | Survey records & pegs on the ground | **SCP** |  | Site Engineer/ Surveyor | N/A |  | N/A |  |
| 2.2 | Inspection of fill area | Each lot | The Contractor shall not commence placing any fill on the prepared areas until the area has been reviewed by the Superintendent. | 204.10 (b) | Visual Inspection | This ITP Signed Off | **HP** |  | Site Engineer / Superintendent |  |  | N/A |  |
| 2.3 | Layer Thickness | During Excavation | Layers placed and spread in uniform compacted layers not thicker than 200mm. | VicRoads Spec. Cl. 204.10(d)(ii) | Visual Inspection | This ITP Signed Off | **IP** |  | Site Engineer | N/A |  | N/A |  |
| 2.4 | Maximum Lot Size | During Excavation | Lot size for testing is to be one day's production or 5,000m2, whichever is lesser. | VicRoads Spec. Table 204.142 | Visual Inspection | This ITP Signed Off | **IP** |  | Site Engineer | N/A |  | N/A |  |
| 2.5 | Type A Placement | Prior to Placement/ Each Lot | * Top of fill must be shaped and compacted to minimise damage due to wet weather   note 12 on Pavement Details 009-0001 "Capping Material can be substituted for (3%) Cement treated Stab Sand in confined areas   * Any rocky material present must be uniform throughout the layer * Each layer shall be kept generally parallel to the surface of subgrade | 204.10 (d) (i).  204.10 (d) (ii).  Table 3020.052 | Visual Inspection | This ITP Signed Off | **IP** |  | Site Engineer / Site Foreman | N/A |  | N/A |  |
| 2.6 | Proof Roll | Each lot | Proof rolls to be conducted in accordance with Section 173 of the VicRoads Standard Specification | 173.03  204.12)  204.10 (b) | Visual Inspection | This ITP Signed Off | **WP** |  | Site Foreman/ Superintendent |  |  | N/A |  |
| **3** | **Testing** | | | | | | | | | | | | |
| 3.1 | Reduced Test Frequency | Each lot | Initial Testing requirements shall satisfy the full requirements as detailed in the specification. Once three consecutive lots have achieved specified requirement, Superintendent can agree to reduce frequency of testing of subsequent lots to the reduced testing frequency specified in Table 204.141. Reduced frequency resets if one  lot fails. | VicRoads Spec. Table 204.131 | Test Record | Test Records | **AP** |  | Project Engineer | N/A |  | N/A |  |
| 3.2 | Compaction Testing | Each Lot | Type A material should be compacted to 98% Characteristic Value of Density Ratio (Scale B). | VicRoads Spec. Table 204.131 | Verify | Compaction Test Records | **TP** |  | Site Engineer | N/A |  | N/A |  |
| 3.3 | Compaction Testing (Small Lots) | Each Lot | Any lot which has a surface area less than 500 m2 may be treated as a small area.  Acceptance of the lot shall be based on the mean  values of 3 individual tests. Minimum Compaction shall be 100% SDD. | 173.04 d | Test Point | Test Records Lot Register | **TP** |  | Site Engineer | N/A |  | N/A |  |
| 3.4 | Maximum Particle Size | Each lot, unless reduced frequency has been approved | Material is to be graded such that 100% passes through a 75mm sieve, 40-80% passes through  4.75mm and 10-40% passes 0.075 | VicRoads Spec. Cl. 204.14(a)(ii)  Table 204.141  Table 204.041 | Verify | Maximum Particle Size Test Records | **TP** |  | Site Engineer | N/A |  | N/A |  |
| 3.5 | CBR/Swell | First lot only | CBR: ≥ 6%, Swell: ≤ 1.5% (Verge material less than 1.0%). | VicRoads Spec. Cl. 204.14(a)(i)  Table 204.141  Table 204.041 | Verify | CBR/Swell Test Records | **TP** |  | Site Engineer | N/A |  | N/A |  |
| 3.6 | Atterberg Limit Tests | Each lot, unless reduced frequency has been approved | PI between 6 and 25, PI x % passing through  0.425 to be less than 1000 | VicRoads Spec. Cl. 204.14(a)(ii)  Table 204.141  Table 204.041 | Verify | PI Test Records | **TP** |  | Site Engineer | N/A |  | N/A |  |
| 3.7 | Permeability | Each lot, unless reduced frequency has been approved | Permeability of less than 5X10^-9 for capping and verge material | VicRoads Spec. Cl. 204.14(a)(ii)  Table 204.141  Table 204.041 | Verify | Permeability Test Records | **TP** |  | Site Engineer | N/A |  | N/A |  |

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| **No.** | **Frequency** | **Acceptance Criteria** | **Reference Documents** | **Inspection / Test Method** | **Record of conformity** | **A or B** | Project Engineer  Site Engineer Superintendent Surveyor Foreman | **Client** | **Fulton Hogan** | **FH's Sub- contractor** | **Date** |
| 3.8 | Material Property Testing (Scale B) | Each lot, unless reduced frequency has been approved | Obtain production testing ITP from the supplier. Materials shall be tested to show compliance with the requirements of Clause 204.04. | Cl 204.04 Cl204.14 | Verify | NATA test report | **TP** |  | Site Engineer | N/A |  | N/A |  |
| 3.9 | Survey Conformance | Each lot | The number of measurements and the tolerances of the mean and standard deviation from the theoretical surface level must comply with Table 204.031  Scale B: Range x = +5,-25  Max S = 15mm 40 measurements per lot | 204.03 | Survey conformance point | Survey report Lot Register | **WP SCP** |  | Site Engineer & Surveyor | N/A |  | N/A |  |
|  | | | | | | | | | | | | | |
|  | **Final Inspection** |  |  |  |  |  |  |  |  |  |  |  |  |
| The signature below verifies that this ITP has been completed in accordance with the FH’s Quality system Procedures and verifies lot compliance with specifications. | | | | | | | | | | | | | |
|  | Print Name: | Position: |  | Signature: |  |  |  |  |  | Date: / / | |  |  |

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| ***Legend*** | | | | | | | | | | | | | | |
| **HP** | Hold Point | Work shall not proceed past the HP until released by the Superintendent | | | **IP** | Inspection point | | Formal Inspection to be done and recorded | | | |  |  |  |
| **HP\*** | FH Hold Point | Work shall not proceed past the HP\* until released by FHDB | | | **TP** | Test Point |  | Product compliance test to be undertaken and recorded/reported | | | | |  |  |
| **WP** | Witness Point | An inspection which must be witnessed by the Superintendent | | | **SCP** | Survey conformance point | | A qualified surveyor to check product/section/structure and report | | | | | |  |
| **AP** | Approval Point | Written or verbal approval given by the Superintendent | | |  | | | | | | | | | |