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| **Civil - Benches** |
| **Inspection and Test Plan - ITP** |



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| **SECTION 1 - GENERAL** | | | | | |
| **Client:** | **Asset** | | | **ITP Template No.:** | **Revision:** |
|  |  | | | ZENT-ITP-7016 | 0 |
| **Project Name:** | **Area** | | | **Prepared By:** | **Prepared Date:** |
|  |  | | | S.Stegic | 17/10/2023 |
| **Project Number:** | **Discipline** | **Component** | **Location** | **Approved By:** | **Approved Date:** |
|  | Civil | Benches |  |  |  |

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| **SECTION 2 - CLOSE OUT SIGNATURE (ZENVIRON ONLY)** | | | |
| **Name:** | **Position:** | **Signature:** | **Data:** |
|  |  |  |  |
| **Comments:** | | | |
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| **SECTION 3 - LEGEND** | |
| **Term** | **Description** |
| **REVIEW** | An Activity which is verified by examination of documentary evidence that inspection/tests have been satisfactorily conducted |
| **WITNES** | Activity is to be witnessed by Zenviron | Advance notification mandatory | Activity can proceed once the minimum notification period has elapsed |
| **HOLD POINT** | Activity is to be witnessed by Zenviron | Advance notification mandatory | Hold point can only be waivered formally in writing |

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| **SECTION 4 - PRELIMINARY** | | | | | | | | | | |
| **ITEM** | **ACTIVITY/ TASK DESCRIPTION** | **INSPECTION FREQUENCY** | **REQUIREMENT/ STANDARD / SPECIFICATION** | **ACCEPTANCE CRITERIA** | **VERIFYING DOCUMENT (RECORDS/EVIDENCE)** | **SUPERVISION TYPE** | **RECEIVED AND ANALYSED BY: ZENVIRON** | | | |
| **NAME** | **SIGNED** | **DATE** | **COMMENTS** |
| 4.1 | Design drawings, project specifications |  |  | Documents controlled through document  management system. | N/A | WITNESS |  |  |  |  |
| 4.2 | Survey and Setout |  |  | Control point survey by registered surveyor. Visual inspection of control point/s.  Survey equipment spot checked for calibration. | N/A | WITNESS |  |  |  |  |

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| **SECTION 5 - MATERIAL APPROVALS** | | | | | | | | | | |
| **ITEM** | **ACTIVITY/ TASK DESCRIPTION** | **INSPECTION FREQUENCY** | **REQUIREMENT/ STANDARD / SPECIFICATION** | **ACCEPTANCE CRITERIA** | **VERIFYING DOCUMENT (RECORDS/EVIDENCE)** | **SUPERVISION TYPE** | **RECEIVED AND ANALYSED BY: ZENVIRON** | | | |
| **NAME** | **SIGNED** | **DATE** | **COMMENTS** |
| 5.1 | Subgrade Material Conformance  - Import Fill |  |  | ZX118-REP-0201 Earthworks, Roads and Drainage Specification,  Section XXXX ; | NATA Test Reports | REVIEW |  |  |  |  |
| 5.2 | Pavement Base Course Material Conformance |  |  | ZX115-REP-0201 Earthworks, Roads and Drainage Specification;   * Particle Size Distribution * CBR * Atterberg Limits * Wet/Dry Strength Variation | NATA Test Reports | REVIEW |  |  |  |  |

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| **SECTION 6 - CONSTRUCTION PROCESS - BENCH STRIP SOIL** | | | | | | | | | | |
| **ITEM** | **ACTIVITY/ TASK DESCRIPTION** | **INSPECTION FREQUENCY** | **REQUIREMENT/ STANDARD / SPECIFICATION** | **ACCEPTANCE CRITERIA** | **VERIFYING DOCUMENT (RECORDS/EVIDENCE)** | **SUPERVISION TYPE** | **RECEIVED AND ANALYSED BY: ZENVIRON** | | | |
| **NAME** | **SIGNED** | **DATE** | **COMMENTS** |
| 6.1 | Clear and Grub |  |  | Area cleared of all refuse, artificial and deleterious materials.  Consult with landowner prior to removing any fencing or gates  Ensure CEMP is adhered too | N/A | WITNESS |  |  |  |  |
| 6.2 | Topsoil Stripping |  |  | Strip topsoil to a depth required to remove all topsoil from the footprint area  Ensure the area is self draining Ensure CEMP is adhered too | N/A | WITNESS |  |  |  |  |

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| **SECTION 7 - CONSTRUCTION PROCESS - BENCH SUBGRADE AND CONDITIONING** | | | | | | | | | | |
| **ITEM** | **ACTIVITY/ TASK DESCRIPTION** | **INSPECTION FREQUENCY** | **REQUIREMENT/ STANDARD / SPECIFICATION** | **ACCEPTANCE CRITERIA** | **VERIFYING DOCUMENT (RECORDS/EVIDENCE)** | **SUPERVISION TYPE** | **RECEIVED AND ANALYSED BY: ZENVIRON** | | | |
| **NAME** | **SIGNED** | **DATE** | **COMMENTS** |
| 7.1 | Earthworks Foundation |  |  | Test results on founding layer compliant to ZX118-REP-0201 Earthworks, Roads and Drainage Specification  - Conforming DCP Results to designer approval | ZX118-ITR-7103 - ITR  DCP Field Data Result - If applicable Include; Location plan of soft, wet or unsuitable materialand the applied replacement methodology. | HOLD POINT |  |  |  |  |
| 7.2 | Structural Fill/ Rock Fill Embankment (Where Required) |  |  | Test results and/ or proof roll records obtained for the fill layers compliant to ZX118-REP-0201 Earthworks, Roads and Drainage Specification, Section XXXX   * Compaction * Density * OMC | NATA Test Report ZX118-ITR-7108 - Proof  Roll Inspection per tested layer | HOLD POINT |  |  |  |  |
| 7.3 | Rock Subgrade (Where Required) |  |  | Proof roll records obtained Inspection by Geotechnical/ Design Engineer | ZX118-ITR-7108 - Proof  Roll Inspection  If applicable Include; Location plan of soft, wet or unsuitable material and the applied replacement | HOLD POINT |  |  |  |  |
| 7.5 | Finished Subgrade |  |  | Test results and proof roll records obtained for the finished layer compliant to ZX118- REP-0201 Earthworks, Roads and Drainage Specification, Section XXXX   * Compaction * Density * OMC | NATA Test Report ZX118-ITR-7108 - Proof  Roll Inspection Geotechnical Testing Register - Specifying number of layers and testing compliance to  Specification | HOLD POINT |  |  |  |  |

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| **SECTION 8 - CONSTRUCTION PROCESS - BENCH BASE COURSE PLACEMENT** | | | | | | | | | | |
| **ITEM** | **ACTIVITY/ TASK DESCRIPTION** | **INSPECTION FREQUENCY** | **REQUIREMENT/ STANDARD / SPECIFICATION** | **ACCEPTANCE CRITERIA** | **VERIFYING DOCUMENT (RECORDS/EVIDENCE)** | **SUPERVISION TYPE** | **RECEIVED AND ANALYSED BY: ZENVIRON** | | | |
| **NAME** | **SIGNED** | **DATE** | **COMMENTS** |

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| 8.1 | Base Course Pavement Placement |  |  | Material placement compliance test results in accordance with ZX118-REP-0201 Earthworks, Roads and Drainage Specification, Section XXXX   * Compaction * Density * OMC * Plate Load | NATA Test Report ZX118-ITR-7108 - Proof  Roll Inspection | HOLD POINT |  |  |  |  |

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| **SECTION 9 - CONSTRUCTION PROCESS - LONGITUDINAL DRAINAGE** | | | | | | | | | | |
| **ITEM** | **ACTIVITY/ TASK DESCRIPTION** | **INSPECTION FREQUENCY** | **REQUIREMENT/ STANDARD / SPECIFICATION** | **ACCEPTANCE CRITERIA** | **VERIFYING DOCUMENT (RECORDS/EVIDENCE)** | **SUPERVISION TYPE** | **RECEIVED AND ANALYSED BY: ZENVIRON** | | | |
| **NAME** | **SIGNED** | **DATE** | **COMMENTS** |
| 9.1 | Excavation |  |  | Finished levels as required in IFC Model | N/A | WITNESS |  |  |  |  |
| 9.2 | Erosion Controls |  |  | Visual Inspection of scour protection for compliance to Erosion and Sediment Control Drawing ZX118-DWG-1001 | N/A | WITNESS |  |  |  |  |

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| **SECTION 10 - COMPLETION AND HANDOVER** | | | | | | | | | | |
| **ITEM** | **ACTIVITY/ TASK DESCRIPTION** | **INSPECTION FREQUENCY** | **REQUIREMENT/ STANDARD / SPECIFICATION** | **ACCEPTANCE CRITERIA** | **VERIFYING DOCUMENT (RECORDS/EVIDENCE)** | **SUPERVISION TYPE** | **RECEIVED AND ANALYSED BY: ZENVIRON** | | | |
| **NAME** | **SIGNED** | **DATE** | **COMMENTS** |
| 10.2 | Redline markup of Construction Drawings |  |  | In line with ZX118-REP-0201 Earthworks, Roads and Drainage Specification and BMS- WIN-1024 - Document Red-Line Markup | Redline Markup in Master Drawing Folder | REVIEW |  |  |  |  |
| 10.3 | Generate Punch List |  |  | Generate specific area/scope Punch List and transfer the open items to the Punch List  Master Register | BMS-TMP-0044 Punch  List record | REVIEW |  |  |  |  |