| **WORK AREA:**  **Gillingham Road** | **CONTRACT NAME:**  **CON23041 Gillingham Road Bridge Replacement** | **DESCRIPTION OF ACTIVITY:**  **Roadings and Pavement Construction** | **Rev** | **Originator** | **Date** | **Approved** | **Date** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **0** | **Akash Nada** | **07/04/2025** | **GvdLinde** |  |
| **ITP No: 004** | **1** |  |  |  |  |
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| **Item No.** | **Item** | **Activity TASK** | **Acceptance Criteria** | **FREQUENCY** | **CERTIFYING DOCUMENTATION, RECORD OR CHECKSHEET** | **VERIFICATION SIGN OFFS** | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **INTERNAL VERIFICATION AUTHORITY OR RESPONSIBILITY** | **CRITICAL HOLD POINT**  **AUTHORITY** |
| **1.** | **Site Preparation** | Site Clearance | Site clear of debris and vegetation | Once | Visual Inspection | R | R |
|  |  | Survey Set-Out | As per drawings and design model provided. | As required | Visual Inspection | H | H |
| **2.** | **Material** | Geotextile and Geogrid | Engineer approved geotextile and geogrid | Prior to order | Suppliers’ documentation | H | H |
|  |  | Granular subbase metal | Granular Subbase metal shall be AP65 complies with either TNZ M/03 or ES 2022 Section 3.3.2 Pavement Materials. | Prior to commencing works | Suppliers’ documentation | H | H |
|  |  | Modified Basecourse metal | M4AP40 WITH 1.5 - 2.0% CEMENT subject to the confirmation of mix design | Prior to commencing works | Suppliers’ documentation | H | H |
|  |  | Two coat Chipseal | First coat - Grade 2 chip followed with Grade 4 chip  Second coat – in accordance with WDC ES 2022 Clause 3.3.5.4 Second Coat Chip Seal and Resealing.  Binder shall comply with TNZ M/1 | Prior to commencing works | Suppliers’ documentation | H | H |
|  |  | Dense Graded Asphalt | AC14 Asphalt Concrete mix design is subjected to approval from Engineer at least 5 working days prior to asphalt paving. | Prior to asphalt paving | Suppliers’ documentation according to NZTA M10:2020 Clause 3.6.1 or M27:2020 | H | H |
|  |  | Raised Platform Concrete | 40MPa concrete compressive strength at 28 days | Prior to ordering concrete | Suppliers’ documentation | H | R |
|  |  | Traffic Signs | Fabricated in Aluminium grade 5251-H34 or similar and shall be a minimum thickness of 2.5mm stiffened.  As per WSP site specification - PROFESSIONAL SERVICES PAVEMENT AND SURFACING SPECIFICATION section 2.2 pg 4-6 | Prior to ordering material | Suppliers’ documentation | H | R |
| **3.** | **Pavement Construction** | Trim and Prepare Subgrade | Visual Inspection,  CBR 3.0%,  SCALA testing as required by the engineer  Level = +0mm – 20mm | As directed by the Engineer | Test record sheet,  String record sheet | H | H |
|  |  | 200mm AP65 Sub-grade improvement layer | A layer of Geogrid and Geotextile placed at the base of the excavation.  A 200mm thick layer of AP65 will then be carted to site and spread in required locations. | As directed by the Engineer | String record sheet | H | H |
|  |  | 250mm AP65 Sub-base course | Level = +10mm – 0mm  NDM = mean value ≥ 95% of MDD with no single value less than 92%  Proof Roll | No less than 24 hrs prior to placement of the subsequent pavement layer | Lab test report – NDM  String record sheet | H | H |
|  |  | 180mm M4AP40 Basecourse stab with max. 2% cement. | Level = ± 5mm  NDM = mean value ≥ 98% of MDD with no single value less than 95%  Benkelman Beam = 15 m staggered by wheel path for each lane – As per WDC EES 2022  Degree of Saturation (DOS) = less than 80%  Proof Roll | No less than 24 hrs prior to placement of the subsequent pavement layer | Lab test report – NDM, Beam, DOS  String record sheet | H | H |
| **4.** | **Pre-seal inspection** | Prepare Basecourse for sealing | Swept basecourse to produce a tight mosaic surface and sweepings removed. | Prior to surfacing | Pre-seal Inspection checksheet  String record sheet | H | H |
| **5.** | **Surfacing** | Chipseal Surfacing Grade 2/4 | Tie-ins to match ex. Surface.  First coat grade 2 chip followed with grade 4. | As directed by the Engineer | Construction photos, checksheet | H | H |
|  |  | 50mm AC14 Asphalt Concrete | As per NZTA M10:2020  No Water Ponding on finished surface | As directed by the Engineer | Suppliers’ Documentation | H | H |
| **6.** | **Raised Safety Platform** | Prepare subgrade | Visual Inspections  50mm thick AP20 layer  0.25mm polythene placed on top of ap20 | Prior to placing formwork and reinforcement | Pre-pour inspection checksheet | H | W |
|  |  | Pre-Pour Inspection | As per drawings and site specification | Prior to placing concrete | Pre-pour inspection checksheet  Concrete Dockets | H | H |
|  |  | Tactile Paving | Installed as per drawings and manufactures guide | As directed by the Engineer | Suppliers’ documentation  Visual Inspections | H | R |
| **7.** | **Concrete Footpath** | 50mm Compacted GAP20 Basecourse | As per drawings and site specification | Prior to placing concrete | Pre-pour inspection checksheet | H | W |
|  |  | Pre-Pour Inspection | As per drawings and site specification  100mm 20MPa concrete | Prior to placing concrete | Pre-pour inspection checksheet  Concrete Dockets | H | H |
| **8.** | **Vehicle Crossing** | Trim to subgrade | Scala CBR = 10 | Prior to placing basecourse | Scala test record sheet | H | W |
|  |  | 100mm compacted GAP40 Basecourse | Clegg test  WDC Engineering Standards for residential vehicle crossing. | Prior to placing formwork and reinforcement | Clegg record checksheet | H | W |
|  |  | Pre-pour inspection | 125mm thick 30 MPa concrete with 668 mesh placed centrally on basecourse | Prior to placing concrete | Pre-pour inspection checksheet  Concrete Dockets | H | H |
| **9.** | **Pavement Marking and Delineation** | Raised Reflective Pavement Markes, Hazard Markers | As per drawings and site specification | As directed by the Engineer | Suppliers’ documentation  Visual Inspections | H | R |
|  |  | Road marking | As per drawings and site specification | As directed by the Engineer | Suppliers’ documentation  Visual Inspections | H | R |
| **10.** | **Traffic Signage** | Installation of Traffic signage | As per drawings and site specification | As directed by the Engineer | Suppliers’ documentation  Visual Inspections | H | R |
| **11.** | **Roadside Safety Barriers** | Survey Setout | As per drawings and site specification | As directed by the Engineer | Design set-out model  Visual Inspections | H | H |
|  |  | Install W-Beam Guardrail | As per drawings, site specification and manufacturer guide | As directed by the Engineer | Design set-out model  Visual Inspections  Suppliers’ documentation | H | R |
|  |  | Install Precast concrete TL4 Barrier & Steel Handrail | As per drawings, site specification and manufacturer guide | As directed by the Engineer | Design set-out model  Visual Inspections  Suppliers’ documentation | H | R |
|  |  | Install Cyclist / Pedestrian Handrail | As per drawings, site specification and manufacturer guide | As directed by the Engineer | Design set-out model  Visual Inspections  Suppliers’ documentation | H | R |
| **12.** | **As-Built plans** | Final As-built Drawings | As reviewed and approved by the Engineer | At the completion of the works | As-Built plan | H | H |
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# INSPECTION & TEST PLAN (ITP)

The ITP defines the required inspections during various stages of fabrication, construction and installation work. It is also a method of communicating these requirements to those doing the work and a verifying record that they have been carried out.

The ITP defines 2 different levels of inspection according to the following criteria:

* **Internal Verification:** This inspection or verification activity is required internally by United Civil. A Designated Internal Authority- Project Manager, Supervisor, Foreman or other authorised person is determined for the given inspection point or verification activity. Where a signature required verification is notified by signing the designated check sheet.
* **Critical Hold Points:** These are ONLY inspections required by the contract. It requires the Foreman/ Supervisor or Subcontractors Representative to notify the United Civil Project Manager that the hold point stage of inspection has been reached. Fabrication shall not proceed past this point unless the inspection has been carried out or approval to proceed is given in writing & signed by the Engineer’s Representative.

The Engineer’s Representative shall sign the Check sheet.

A Contract Hold Point is a contractual requirement. Where the Engineer’s Rep has not signed or for whatever reason cannot sign the Hold Point off the Project Manager must signify verification by the Engineer by other means such email sign off or other formal correspondence and note as such on the ITP.