| Client | | RMS | | | | | **INSPECTION AND TEST PLAN FOR:**  **Manufacture and Installation of Bridge Bearings (B284)** | | | | | | Inspection and Test Plan Number / Lot No: | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Project No. / Name | | A174 – Mandagery Bridge, Manildra | | | | | ITP005 | | | | |
| ITP prepared by | | Dhruv Patel | | | | | Work Area: | | | | |
| ITP approved by | | William Coady | | | | |  | | | | |
| Lot no. | |  | | | | | Lot Description. | | | | | |  | | | | |
| Lot Owner. | |  | | | | | Lot commencement date. | | | | | |  | | | | |
| **Legend:** | | | | W = Witness | | H = Hold | | S = Surveillance | | | ACPL = Abergeldie | | | | | | S/C = Subcontractor |
| Activity No.# | Description | | Requirements / Reference | | Acceptance Criteria | | | | Frequency | Inspection – Sign & Date | | | | | | Comments / Attachments / Records | |
| S/C | | ACPL | | Client | Date |
| A | **Safety Review** | | Project Safety Plan | | * All site personnel inducted (includes environmental and cultural) * Required Safe Work method statement completed and signed * Subcontractors safety plan/procedure approved | | | |  |  | |  | |  |  |  | |
| B | **Environment** | | Project Environ Plan  R44 CL1.7 | | * Ensure controls in place around the grout mixer prior to commencing mixing works | | | |  |  | |  | |  |  |  | |
| 1 | Material | | B284 cl 2 | | * 2 sets of 3 cubes per abutment and 4 sets of 3 cubes for headstocks for testing of grout used to construct the pads. | | | |  |  | |  | |  |  |  | |
| 2 | Construction of pad | | B284 cl 4.1 | | * HOLD POINT: * Submit to principal details of materials and procedures for construction of mortar pads and (if applicable) manufacturer’s recommendations for surface preparation, bonding, placement and curing of the mortar pad material. * Certificate must also verify that the location and level of all permanent and temporary supports comply with the Drawings | | | |  |  | | H | |  |  |  | |
| 3 | Setout of bearing pads and fixing of bearings | | B284 Cl 5.3 | | * HOLD POINT: * Submit a certificate from an engineer confirming the that the proposed method of installation complies with the specification and drawings. * Certificate to include a survey report verifying that the position and level of all temporary supports are in accordance. | | | |  |  | | H | |  |  |  | |
| 5 | Test for drumminess | | B284 Cl 4.4 | | * WITNESS POINT: * For each constructed pad do not transfer loads onto bearings until the pads have been successfully tested for drumminess. * Notify RMS of the time and date for drumminess test of each completed grout pad after the grout has developed its specified design strength and formwork has been removed at least on working day prior to conducting test. | | | |  |  | | W | |  |  |  | |
| 6 | Tolerances | | B284 cl 6.1.1 and Cl 6.1.2 | | * For plain elastomeric strips and pads or laminated elastomeric bearings, the tolerances in Table B284.1 apply. | | | |  |  | |  | |  |  |  | |
| 7 | Testing and Compliance | | B281 cl 2.2 | | Provide evidence to principal to verify the elastomer used in manufacture of strips has been tested in a laboratory with appropriate NATA registration, and that it complies with AS5100.4  Test the bearing in accordance with AS5100.4 using equipment and personnel with NATA registration  Testing equipment to be capable of measuring to an accuracy of +/-3% or better for compressive and shear loads, and +/-1% or better for deflection. Test temperature must be between 15 and 30 degrees.  Reject bearings represented by sample tested which have compressive stiffness exceeding +-15% of the mean compressive stiffness of the samples.  Test each strip sample in shear in accordance with AS5100.4, reject strips represented by sample tested which have shear stiffness exceeding a tolerance of +-20% of the shear stiffness given in Appendix A of AS5100.4 | | | |  |  | | S | |  |  | Material compliance, testing and certification documents | |
| 8 | Bearing test report | | B281 cl2.2 | | Provide a report to the Principal verifying that all bearings conform to the requirements of the specification B281. The report must include a summary of all test results with clear identification of the bearings tested. Reject all non-conforming bearings  A bearing is considered conforming, if it does not exhibit any sign of damage. During and after the tests described in clauses 4.4 and 4.5 of B281, all bearings to be observed and reported for any visible fault or damage including   1. Tearing of elastomer or splitting between elastomer and steel plates 2. Permanent deformations 3. Significant irregular or unsymmetrical surface bulging. | | | |  |  | |  | |  |  | Bearing test report | |
| 9 | Delivery of bearings to site | | B281 CL5.2 | | * HOLD POINT: * Protect bearings from dust, moisture and damage until their installation. * Submit to principal elastomer conformity evidence (Clause 2.2.2) bearings report (clause 4.7) and traceability documentation (clause 5.1) at least five working days before the proposed date of delivery of bearings to the site. | | | |  |  | | H | |  |  |  | |
| 10 | Certification | | B284 cl 6.3 | | * After installation of the bearings and removal of temporary supports submit a certificate from an engineer stating that the bearing installation , including their final positions and levels, complies with the specification B284 and the drawings. | | | |  |  | |  | |  |  | Certificate of compliance for bearing installation | |

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| **QA ENGINEER / SPE / PE SIGN OFF** | | |
| Name | Signature | Date |

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