| Client | RMS | **INSPECTION AND TEST CHECKLIST FOR:**  **Concrete Structures (B80)** | Inspection and Test Plan Checklist / Lot No: |
| --- | --- | --- | --- |
| Project No. / Name | A174 – Mandagery Bridge, Manildra | ITP003 |
| 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 |
| 1 | **Bridge Concreting Supervisor** | G1.10.7 | | * **HOLD POINT**: Submission of nomination for bridge concreting supervisor (qualification and experience) with a minimum of 15 years demonstrated experience. | | |  |  | | HP |  |  |  | |
| 2 | **Concreting Grey Card – Project Wide** | B80.7.2.3 | | * **HOLD POINT**: Submit to principal the names of the personnel who will be involved in the concreting operations | | |  |  | | HP |  |  |  | |
| 3 | **Mix design - nomination** | B80.3.9.1 | | * **HOLD POINT**: At least 4 weeks prior to the proposed date for use of the concrete mix, submit to the Principal the following   (a) (i) all details in Clause 3.9.3; or  (ii) mix ID and concrete mix design of a nominated mix from the Register of TfNSW Concrete Mixes;  and  (b) a statement stating that the mix conforms to this Specification and is suitable for its intended use. | | |  |  | | HP |  |  |  | |
| 4 | **Concreting of Precast Concrete Members Cast Off Site** | B80 CL7.5.1 | | * **HOLD POINT:**   submit to the Principal checklists for verifying conformity of the nominated concrete mix, formwork, reinforcement, embedments and other relevant details. | | |  |  | | H |  |  |  | |
| 5 | **Formwork documentation & certification** | B80.5.2.3  Table B80.11 | | * The requirements for the submission of formwork documentation, design certification and erected formwork certification for Bridge components incl abutments, pile caps, footings, piers, columns and walls are divided in three Risk Categories (shown in Table B80.9) * **HOLD POINT**: For Categories B and C, formwork documentation and Engineer’s design certification in accordance with clause 5.2 | | |  |  | | H |  |  |  | |
| 6 | **Transport prefabricated Reinforcement Cages** | B80 CL6.6.2 | | * Submit to the Principal one copy of all prefabricated reinforcement cage shop drawings showing the size, type and location of load bearing welds, lifting and support points and lifting requirements. * **WITNESS POINT**   Assembly, lifting and transport of cages  Prior to the proposed transport date, submit to the Principal a Certificate of Conformity in respect of load bearing weld sizes and locations, and conformity of finished welds, together with drawings and checklists. | | |  |  | | W |  |  |  | |
| 7 | **Concreting Grey Card – Pour Specific** | B80.7.2.3 | | * **HOLD POINT**: Submit to principal the names of the personnel who will be involved in each of concrete pour | | |  |  | | H |  |  |  | |
| 8 | **Test members** | B80 CL5.3 | | * **WITNESS POINT:**   Placement of concrete for the test member. | | |  |  | | W |  |  |  | |
| 9 | **Placing concrete on site** | B80.7.5.2 | | * **HOLD POINT**: Provide notification on the intended method of delivery rate, placement method, and equipment on standby 2 working days prior to each intention to place concrete * Complete and submit to the Principal a pre-pour Certificate of Conformity, endorsed by the Concrete Supervisor, in respect of formwork, reinforcement, embedment and screeding guide rails or height pins. This certificate must be accompanied by verification checklists and other details showing conformity Specification B80. | | |  |  | | H |  |  | Concrete supply checklist and pre-pour Certificate of Conformity | |
| 10 | **Delivery** | B80 4.4  B80 4.5 | | * Before discharge from a truck mounted drum mixer, agitate the concrete on-site for a minimum of 3 minutes at the mixer’s rated mixing speed * Unless a hydration admixture is added, place & compact the concrete within 1.5 hours from the time of batching * Check & record the slump within 45 mins of batching or immediately prior to discharge if haul time exceed 45 mins or when water is added. * If the measured slump is not within the specified limits, carry out one repeat test immediately from another portion of the same sample. Reject the concrete if this test does not conform to the specifications. * Concrete temperature at discharge must be between 10-32°C, except for precast concrete members and cast-in-place piles where the temperature must be between 5-35°C. | | |  |  | | S |  |  | Concrete dockets and test results | |
| 11 | **Early trafficking of concrete bridge deck** | B80 CL9.9 | | * Strictly control trafficking of bridge decks to prevent damage to new and curing concrete. Non-essential traffic must not access the deck until the specified 28-day compressive strength of the concrete is reached. See B80 CL9.9 for further details. * **HOLD POINT**: Submit to the Principal Strength versus age relationship of concrete and evidence of completion of curing, with supporting test results | | |  |  | | H |  |  |  | |

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