**INSPECTION AND TEST PLAN (ITP)**

**Kerb and Channel**

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| Document Information | | | | | |
| Title | Inspection and Test Plan (ITP) – Kerb and Channel | | | | |
| Number | HPP-UGL-CIV-GN-GEN-ITP-0007 | | | | |
| Revision | 0 | | | | |
| Revision Information | | | | | |
| Revision | Date | Description | Author | Reviewer | Approver |
| 0 | 8 November 2024 | Issued For Use | G.Nuss | G.Nuss | G.Wilkinson |
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| Contact Details | | Summary of Requirements | | Principle Codes / Standards | | Records |
| **Project Engineer: Quality Representative:** | | **Process Qualifications** | |  | | **(MDR Insert as marked ◻ )**   * Inspect Release Certs. * Deviations/Concessions * Material Certificates * Conformance Certificate * Welding Records * Welder Qual. Register * NDT Reports * Report on Repairs * Heat Treatment Records * Dimensional Records * Non-Conformance Rpts * Pressure Test Records * Drawings & Data Sheets * Misc Verification Records * Electrical Test Sheets |
| Subcontractors | | **Traceability:** | | **Client Specifications** | |
| HPP-AEC-CIV-GN-GEN-SPT-0161\_0 QUALITY (CONSTRUCTION)  HPP-AEC-CIV-DD-SWS-SPT-1121\_0 OPEN DRAINS INCLUDING KERB AND CHANNEL  HPP-AEC-CIV-GN-GEN-SPT-0319\_0 MINOR CONCRETE WORKS | |
| Vadas | | Material: Alloy Verification | |
| Heat Treatment: Pressure Testing | |
| Consumable: NDT: | |
| Welder ID: WPS: | |
| Electrical: Instruments | |
| Surveillance / Inspection Key | |
| **HOLD POINT (H):** Nominated point beyond which work shall not proceed without verified acceptance by nominee. | | **Heat Treatment: Dimensional Control:** | |
| **WITNESS POINT (W):** Points at which the nominee shall be notified and invited to witness an activity, but further work may proceed without the presence of the nominee. | | **Testing (NDT): Acceptance Specification:** | |
| **REVIEW (R): Verify** by examination of documentary evidence that inspection / tests have been satisfactorily conducted. | | **Pressure Testing:**  **Elect. / Instrumentation:** | |
| **SURVEILLANCE (S): Continuing** evaluation of the status of methods, analysis of records and monitoring of activities on a random basis to ensure quality requirements will be met. | |  | |
| Notes: | |
| **VISUAL (V): 100**% Visual Inspection of work / item to ensure compliance with code / specification. | |  | |
| **Engineering Procedures / WI** | |
| **DIMENSIONAL (D): Measurement** of critical dimensions to ensure work / item is within tolerance | |  | |  | |
| Prepared by: | Graham Nuss | Date: 8/11/2024 | Approved By: Grant Wilkinson | | Date : 8/11/2024 |  |

|  |  | |  |  |  | **Verify of acceptance by** | | | | | | **Remarks / record (eg. test frequency, reports, certificates, checklist etc)** |
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|  |  | |  |  |  | **HPP Con** | | **HPP QA** | |  | |
| **Item no.** | **Activity** | | **Ref docs** | **Acceptance criteria** | **Acceptance** | **Key** | **Sign date** | **Key** | **Sign date** |  |  |
| **1.0 Preliminaries** | | | | | | | | | | | | |  |  |  |
| 1.1 | Determine lot size | | Spec. 0161 Quality [Cl 7.3] | Lots to be broken up accordingly and outlined on a lot map | Yes  No  N/A | S |  | S |  |  |  |  |
| 1.2 | Concrete Mix Design | | Spec. 1121 Open Drains [Cl 3.1] | Submission of Mix Design and compliance certificates for concrete constituents  HOLD POINT | Yes  No  N/A | H |  | H |  |  |  | Lot map |
| 1.3 | Underlying Lot Conformance | | Underlying Lot ITP | Underlying services and/or assets have been installed prior to commencing works over and/or above.  Refer underlying lot ITP(s) | Yes  No  N/A | S |  | S |  |  |  |  |
| **1.4** | Survey set out | | Drawings | Set out the alignment and level of the kerb | Yes  No  N/A | S |  | S |  |  |  | Material Test Reports |
| **2.0 Kerb and channel placement** | | | | | | | | | | | | |  | Drawings | Set out the alignment and level of the kerb |
| **2.1** | Foundation | | Spec. 1121 Open drain including K&C [Cl 4.3] | Shape and compact foundation material to the requirements of the respective pavement course  **HOLD POINT**  **Notice: 1 working day before forming** | Yes  No  N/A | **H** |  | **H** |  |  |  |  |
| **2.2** | Concrete supply and placement | | Spec. 0319  Minor Concrete Works [Cl 4.8, 4.9, 4.10, 4.11]  Drawings | Check docket to ensure strength and slump is as per design requirements | Yes  No  N/A | **S** |  | **S** |  |  |  |  |
| **2.3** | Finish | | Spec. 1121 Open drain including K&C [Cl 4.3] | **Finish true to line:** The top and face of the finished kerb and channel.  **Top surface:** Uniform width, free from humps, sags and other irregularities.  **Type:** Steel float finish or as otherwise shown on drawings. | Yes  No  N/A | **H** |  | **H** |  |  |  |  |
| **2.4** | Joints - Contraction | | Spec. 1121 Open drain including K&C [Cl 4.3] | Contraction joints to conform to the following:   * **Width:** 5mm min. * **Depth:** 20mm * **Intervals:** every 3m for a min of 50% cross sectional area   **Tooling:**  20mm depth / 5mm width | Yes  No  N/A | **S** |  | **S** |  |  |  | Test reports |
| **2.5** | Joints – Expansion | | Spec. 1121 Open drain including K&C [Cl 4.3] | Expansion joints to conform to the following:   * **Width:** 15mm * **Depth:** Full depth of kerb/channel * **Intervals:** Max interval 15m   *To be provided where channel/gutter abuts against pits, retaining walls, overbridges and both sides of kerb laybacks unless otherwise shown on drawings.* | Yes  No  N/A | **S** |  | **S** |  |  |  |  |
| **2.6** | Backfill | | Spec. 1121 Open drain including K&C [Cl 4.4] | **Timing:** Backfill behind kerb no earlier than 3 days after concreting.  **Material:** Granular material, free of organic material, clay and rock in excess of 50mm or approval material  **Layers:** Compact in layers not greater than150mm  **WITNESS POINT**  **1 Working days before backfilling behind kerb**  **3 Working days before to backfilling gutter pavement** | Yes  No  N/A | **S** |  | **S** |  |  |  | Test reports |
| **3.0 Conformance check** | | | | | | | | | | | | |
| **3.1** | Survey Report | | Spec. 1121 Open drain including K&C [Cl 4.0] | Survey report verifying kerb and gutter has been constructed within tolerance:  **Finish levels of channel/gutter surface:** within ± 10mm of design level  **Surface deviation of kerb face and channel surface:** ±5 mm from edge of a 3m straight edge, except at laybacks, grade changes or curves, or at gully pits requiring channel/gutter depression. | Yes  No  N/A | **S** |  | **S** |  |  |  |  |
| **3.2** | Acceptance and closure of non-conforming items | | Spec. 0161 Quality [Cl 3.8] | NCRs to be opened for non-conforming items and closed prior to closing construction lot. **HOLD POINT** | Yes  No  N/A | **H** |  | **H** |  | | |  |
|  |  | **Comments**: | | | | | | | | | |  |
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| **Acceptance of works:** | | | | | | |  | |
| HPP Construction representative name |  | HPP Quality representative name |  | Date |  | |
| HPP Construction representative signature |  | HPP Quality representative signature |  | Date |  | |