| **Client** | | Wollongong City Council | | | **ITP CHECKLIST FOR:**  **Stormwater & Trench Drains Installation** | **Work Area:** | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Contract No. #** | |  | | | Stormwater | |
| **Contract** | | West Dapto Road Upgrade (Stage 1) | | | ITC002 (ITP002) | |
| **Lot Details & No** | |  | | | **Underlying Lots:** | |
| Activity No.# | Description | | Requirements / Reference | Acceptance Criteria | |  | Comments / Attachments |
| 1 | **Preparation Works** | | Project Safety Plan, Project Environment Plan | * **All site personnel inducted, required SWMS completed and signed, Safety Plan approved** * **ERSED controls installed on site, air quality visually monitored for dust etc due to construction activities, Environment Plan approved** * **Contact DBYD and complete excavation permit, extent of works set out with survey pegs** | |  |  |
| 2 | **Materials – Flexible Plastic Pipes (1)** | | AS/NZS 5065  WCC 1352 Cl 2.3  WCC 1352 Cl 1.4 | * **HOLD POINT: Submit certificate of conformance for all pipes and fittings used (if required)** | |  | * **HP: \_\_\_** |
| 3 | **Materials – Flexible Plastic Pipes (2)** | | WCC 1352 Cl 1.4 | * **HOLD POINT: Submit sample of pipes and fittings to principal (if required)** | |  | * **HP: \_\_\_** |
| 4 | **Materials – Precast Concrete Drainage Structures** | | WCC 1354 Cl 1.5 | * **HOLD POINT: Submission of all quality documents specified in clause 1.5 at least 5 days prior to date of delivery (if required)** | |  | * **HP: \_\_\_** |
| 5 | **Setting Out (1)** | | WCC 1351 Annex 4.1 | * **HOLD POINT: Details of any proposed changes to designed system 5 days before commencement (if required)** | |  | * **HP: \_\_\_** |
| 6 | **Setting Out (2)** | | WCC 1351 Cl 3.1  WCC 1351 Annex 4.1  WCC 1121 Cl 3.1 | * **WITNESS POINT: Notify principal that set-out of location design levels and design cover will be completed 3 days prior to set-out** | |  | * **WP: \_\_\_** |
| 7 | **Soil Conditions (1)** | | WCC 1351 Annex 4.1 | * **HOLD POINT: 5 days prior to commencement of site activities, submit soil durability test results to the principal** | |  | * **HP: \_\_\_** |
| 8 | **Soil Conditions (2)** | | WCC 1351 Annex 4.1 | * **HOLD POINT: Submit a notification confirming soil type conforms to soil type used for stormwater system design** | |  | * **HP: \_\_\_** |
| 9 | **ERSED Controls, Temporary Drainage** | |  | * **HOLD POINT: Submit to the Principal details of procedures / devices for temporary bypass drainage during construction** | |  | * **HP: \_\_\_** |
| 10 | **Excavation (1)** | | WCC 1351 Cl 3.3 | * **WITNESS POINT: Provide notification 3 days prior to excavation of drainage structures (other than pipes) for an inspection of the drainage pit such that clear width of excavation is either: One third of excavation face height or a minimum of 300mm** | |  | * **WP: \_\_\_** |
| 11 | **Excavation (2)** | | WCC 1351 Cl 3.3 | * **WITNESS POINT: Provide notice of completed excavation and compaction of foundation 1 day prior to commencement of drainage structure and foundation construction** | |  | * **WP: \_\_\_** |
| 12 | **Inadequate Foundation Material** | | WCC 1351 Cl 3.3  WCC 1351 Annex 4.1  WCC 1112 Cl 4.3 | * **WITNESS POINT: Provide notification to the Principal of the area containing unsuitable material to support the drainage system** | |  | * **WP: \_\_\_** |
| 13 | **Foundation Inspection** | | WCC 1354 Annex 4.2 | * **HOLD POINT: Provide notice of completed excavation and compaction of foundations 1 day prior to the commencement of drainage structures and foundations** | |  | * **HP: \_\_\_** |
| 14 | **Compaction of Subgrade - Culverts** | | WCC 1351 Cl 1.4 | * **WITNESS POINT: Provide notice to the Principal of an upcoming inspection 1 day prior to the compaction and suitability of subgrade under the culverts** | |  | * **WP: \_\_\_** |
| 15 | **Rock Foundation (1)** | | WCC 1351 Cl 3.3 | * **WITNESS POINT: If rock is encountered at foundation level, provide notice to Principal prior to proceeding, then excavate to a depth requiring by the pipe type and backfill with compacted selected fill (if required)** | |  | * **WP: \_\_\_** |
| 16 | **Rock Foundation (2)** | | WCC 1354 Cl 3.2 | * **WITNESS POINT: If rock is encountered at the bottom of excavations for wingwalls and headwalls, provide notice to Principal at completion of excavation and compaction (if required)** | |  | * **WP: \_\_\_** |
| 17 | **Rock Foundation (3)** | | WCC 1354 Cl 3.2 | * **WITNESS POINT: For gully pits and sumps, if full depth of excavation is in sound rock, construct a neatly formed pit of the required size and omit the concrete lining except to the wall adjacent and parallel to the road. Provide notice to Principal at completion of excavation and compaction of foundation (if required)** | |  | * **WP: \_\_\_** |
| 18 | **Inspection of Pipework Installation** | | WCC 1352 Annex 4.1 | * **WITNESS POINT: Provide notice to the Client for an inspection of each section of the installed and jointed pipework prior to the commencement of trench backfilling** | |  | * **WP: \_\_\_** |
| 19 | **Installation of Precast Units** | | WCC 1354 Cl 1.6 | * **WITNESS POINT: Provide notice to the Client of the anticipated date of precast pit installation(s) 5 days prior to the anticipated date** | |  | * **WP: \_\_\_** |
| 20 | **Backfill of Pipes and Precast Drainage Structures** | | AS/NZS 2566.2,  WCC 1354 Cl 3.6 | * Compact bedding and backfill as per WCC Specifications and requirements stated in the project Drawings * Provide compaction and moisture test results (if required) | |  | * Compaction and moisture test results |
| 21 | **Backfilling of In-Situ Drainage Structures** | | WCC 1354 Cl 3.6  WCC 1351 Cl 3.4 | * **WITNESS POINT: Do not backfill against structures less than 14 days after placing concrete or before the concrete strength is more than 15 MPa. Provide notice of in-situ concrete structure backfill 2 days prior to date of backfill (if required)** | |  | * Concrete test results * **WP: \_\_\_** |
| 22 | **Compaction Adj. to Culverts or Drainage Structures** | | WCC 1351 Annex 4.1 | * **WITNESS POINT: Prior to proceeding with the entire backfilling process, provide notice of an inspection to the Principal to observe the compaction around culverts to check compliance** | |  | * **WP: \_\_\_** |
| 23 | **Compaction of Pipe Drainage Bedding** | | WCC 1351 Annex 4.1 | * **WITNESS POINT: When required to cementitiously stabilise concrete pipe bedding and haunch zones, provide notice to the Principal of the compaction of drainage bedding prior to proceeding (if required)** | |  | * **WP: \_\_\_** |
| 24 | **Construction Traffic** | | WCC 1351 Cl 3.1 | * **HOLD POINT: If proposing to move heavy construction plant or vehicles over pipe or box culvert structures provide protective measures. Submit certificate of verification of protective measures 5 days prior to installation** | |  | * **HP: \_\_\_** |
| 25 | **Completion of Works** | | WCC 1351 Cl 3.9 | * Inspect drainage structures first upon completion of all drainage structures and prior to commencement of pavement construction above, and again no more than 14 days prior to completion. Verify the works are within the specified tolerances, there are no visual signs of structural failure, and there is no obstruction to the flow of water * On completion of the drainage system, flush all pipes clean from end to end and leave in working order | |  | * CCTV / Inspection records (Initial inspection) * CCTV / Inspection records (Final inspection) |
| 26 | **Works As Executed (WAE) Drawings** | |  | * Provide Works As Executed (WAE) Drawings and Survey Reports for the completed works | |  | * WAE Drawings, Survey Report(s) |

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| **REVIEW** | | | | | | |
| Any non-conformances? | YES | NO | Nos: | Closed Out | YES | NO |
| All work has been satisfactorily completed | | | YES | | NO | |
| Name | | | Signature | | Date | |
| **QA ENGINEER / SPE / PE SIGN OFF** | | | | | | |
| Name | | | Signature | | Date | |