Specifications - AS2124

LG314/1211/18/071

Pimpama to Coombabah STP Recycled Water Main Augmentation (Stage Two)
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Part A: General

1. Interpretation

Except where the context otherwise requires, the following are applicable:

- ‘apply’, ‘carry out’, ‘rectify’, ‘ensure’, ‘supply’, ‘install’, ‘reinstate’ and similar expressions means by the Contractor and included in the Contract Sum unless specified otherwise
- ‘approved’, ‘directed’, ‘required’, ‘rejected’ and similar expressions means approved, directed, required, rejected and the like by the Superintendent
- ‘environmental laws’ means in respect of the land and buildings the subject of Contract and the use to be conducted by the Contractor in accordance with the Contract, any Legislative Requirements, orders, notices and authorisations or any authority relating to or dealing with the following:
  - Planning and land use.
  - The environment.
  - Health.
  - Any contaminant or hazardous substance or material.
  - The use, storage or transportation of a contaminant or hazardous substance.
  - The disposal, discharge or treatment of a contaminant or hazardous substance.
  - The spill or leakage of a contaminant or hazardous substance.
  - The treatment, containment or removal of a contaminant or hazardous substance; and
  - The remediation of land.
- ‘give notice’, ‘submit’, ‘furnish’ and similar expressions means give notice, submit, furnish and the like to the Principal or the Superintendent (as the case may be)
- ‘responsible authority’ means a local government or any government (state or federal) department or other agency charged with the responsibility of administering or enforcing a Legislative Requirement; and
- ‘Works Inspector’, ‘Principal’s Inspector’ and ‘Job Inspector’ means a duly authorised person required to enter onto the Site to inspect and/or measure some aspect associated with or effected by the Works on behalf of a government or statutory authority or organisation approved by the Superintendent.

The purpose of this document is to establish the performance requirements and associated technical criteria to be achieved by the Contractor in the delivery of the project.

The requirements and criteria in this document are minimum criteria and requirements, including technical, management, operational and performance requirements for the Works, which the Contractor must satisfy to fulfil its obligations under the Contract. Unless and to the extent that this document expressly nominates the Principal to carry out any Work, the requirements and criteria set out in this document must be fulfilled by the Contractor as part of the Work under the Contract.

Where there is an inconsistency, ambiguity, or discrepancy between the required qualities or standards in different Parts of this document, the Contractor shall comply with the highest quality or standard or perform the more onerous obligation.

If more than one criterion applies in respect of any part of the Work under the Contract then all criteria must be satisfied. If there are criteria which are mutually exclusive, then the criterion which delivers the greatest level of service, or is the highest standard, must apply, unless otherwise agreed by the Principal.

Reference to any Work includes any additional activities necessary for the satisfactory completion and performance of that Work and full compliance with these criteria.

2. Definitions

In this document, except where the context otherwise requires:

AC: Asbestos Cement.

ADAC: Asset Design As-constructed.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>AHD</td>
<td>Australian Height Datum.</td>
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<tr>
<td>ARMP</td>
<td>Approved Risk Management Plan.</td>
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<tr>
<td>ASS</td>
<td>Acid Sulphate Soils.</td>
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<tr>
<td>ASSMP</td>
<td>ASS Management Plan.</td>
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<tr>
<td>AQF</td>
<td>Australian Qualification Framework</td>
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<tr>
<td>BAC</td>
<td>Blood Alcohol Concentration.</td>
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<tr>
<td>CH</td>
<td>Chainage.</td>
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<tr>
<td>CCR</td>
<td>the Principal’s Contract Representative, being the person nominated by the Principal to exercise the functions of the Principal relating to the Contract, or other person nominated from time to time by the Principal.</td>
</tr>
<tr>
<td>CEMP</td>
<td>Construction Environmental Management Plan.</td>
</tr>
<tr>
<td>DBYD</td>
<td>Dial Before You Dig.</td>
</tr>
<tr>
<td>DEHP</td>
<td>Department of Environment and Heritage Protection.</td>
</tr>
<tr>
<td>DN</td>
<td>Diameter - Nominal.</td>
</tr>
<tr>
<td>draft</td>
<td>the stage where a task has been completed and the results submitted for approval (not for checking or verification) by the Principal or the Superintendent (as the case may be), and where the originator is satisfied that it is a fair representation of the intended outcome.</td>
</tr>
<tr>
<td>ESCP</td>
<td>Erosion and Sediment Control Plan</td>
</tr>
<tr>
<td>equipment</td>
<td>any tools, items of plant, apparatus or machinery used to carry out and complete the scope of work</td>
</tr>
<tr>
<td>experienced</td>
<td>trained, competent, and having a minimum of 1000 hours of on-the-job current industry experience</td>
</tr>
<tr>
<td>Hold Point</td>
<td>the stage that the Works has reached, such that it requires a review, comments, action or instruction from the Principal or the Superintendent (as the case may be) prior to work continuing.</td>
</tr>
<tr>
<td>ITP</td>
<td>Inspection and Test Plan.</td>
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<tr>
<td>maintenance</td>
<td>is the repair, replacement and upkeep of existing assets. Maintenance work keeps an asset functioning in its current operational state and does not enhance or change the initial design or function of the asset without extending its useful life.</td>
</tr>
<tr>
<td>materials</td>
<td>any consumables used to carry out and complete the scope of work.</td>
</tr>
<tr>
<td>MSCL</td>
<td>Mild Steel Cement Lined.</td>
</tr>
<tr>
<td>NAMU</td>
<td>Natural Areas Management Unit (Principal)</td>
</tr>
<tr>
<td>NATA</td>
<td>National Association of Testing Authorities.</td>
</tr>
<tr>
<td>OD</td>
<td>Outside Diameter.</td>
</tr>
<tr>
<td>PASS</td>
<td>Potential Acid Sulphate Soils.</td>
</tr>
<tr>
<td>PE</td>
<td>Polyethylene.</td>
</tr>
<tr>
<td>PPE</td>
<td>personal protection equipment.</td>
</tr>
<tr>
<td>preliminary</td>
<td>the stage where a task has been partially or wholly completed, but the results have not been fully checked / verified, and the desired outcome has not been achieved or determined.</td>
</tr>
</tbody>
</table>
3. Plant, equipment and materials

Ensure that all items of plant, equipment, materials, machinery, vehicles and tools used in the performance of the services or additional services comply with all Legislative Requirements, relevant Australian Standards and the manufacturer’s specification.

The Superintendent may prohibit the use of any item that, in the Superintendent’s opinion, may cause danger, nuisance and environmental harm or does not produce satisfactory results. This will not relieve the Contractor from the responsibility to carry out and complete the work under the Contract in accordance with the Contract (including this document).

Do not use items in a manner that causes debris or substances to be projected in a dangerous manner, where it may cause property damage or personal injury.

Allow the Superintendent to inspect any maintenance record of any item. When an inspection is required, the Superintendent will notify the Contractor in writing. Within one Business Day of receiving such notice, make the requested records available for inspection by the Superintendent at the Site or the Contractor’s business premises.

Ensure PPE is supplied to those persons actually performing the Works, as required by any Work Health and Safety Law.

Provide copies of materials safety data sheets to the Superintendent.

Ensure that only individuals with the appropriate licences necessary to operate an item of Contractor’s plant and equipment, operate that item in accordance with any Legislative Requirements and any relevant Australian Standards.

Any item (whether owned, hired, leased or supplied by the Contractor) which is used in the performance of the Works will be considered to be the Contractor’s equipment for the purposes of the Contract.

All Digital City projects must comply with the Digital City Data Policy standards and procedures.
Part A: General

4. Relations with others

The Contractor must work on the Site while other contractors/workers (whether engaged by the Principal or others) are present on the Site, but not directly involved with the Works. In addition, the Contractor must work while members of the public are in the same general location.

Ensure that the other contractors’/workers’ works are not affected in any way by the Works being performed by the Contractor.

5. Continued operation of existing facilities

Whilst every attempt will be made to roster ongoing operations and functions such that they will be independent of the Works, some unavoidable overlap or interference may result. Report these to the Superintendent, and work around these situations until the potential for conflict has been resolved. Ensure that minimal disruption to existing services and to the operation of the Site occurs. Liaise with the Superintendent to be proactive in avoiding disruption, and reactive in attending to conflict situations.

6. Notification of proposed Works or disruption to service

Liaise with the Superintendent in relation to public relations prior to commencement of the Works and prior to commencement of any specific activities likely to involve a disruption of service to the Principal’s customers or the general public.

All residents and businesses in the vicinity of the Works who will be, or have the potential to be, affected by the Works, including being affected by the noise of the Works, must be notified by a ‘Notification of Proposed Works Notice’.

Pursuant to Part B: Project Specific, where the Superintendent permits works to be undertaken involving a disruption to the provision of a service to the Principal’s customers or the general public, all residents and businesses who will be affected by the Works must be notified by a ‘Shutdown Notice’.

Through the Superintendent, the form and content of the proposed notice must be approved by the Principal. Details of the Works and format of the proposed notice must be forwarded in writing to the Superintendent no less than 14 Business Days in advance of the intended date for commencement of the relevant Works. The draft notice must as a minimum include details of the following:

- description of work to be done
- expected date(s) and times for the work to be undertaken
- details of service expected to be disrupted, and duration of disruption
- access requirements to site if interfacing with public or private areas
- Contractor’s contact name and telephone number.

The proposed notice must be finalised no less than 10 Business Days prior to the commencement of the relevant work, together with agreement on the distribution area, number of copies and proposed distribution date, prior to delivery of the notice.

The Superintendent will arrange for the production of letters on the Principal’s letterhead and will advise when the copies of the notice are available for pick-up, at least three days prior to the proposed notice distribution date.

Notices are required to be distributed not less than 48 hours prior to the proposed commencement of the Works referred to within the notice.

Within 24 hours of the completion of the distribution of the notices submit to the Superintendent, a statement confirming:

- the date and time of completion of the distribution of the notice
- the date or dates upon which the notices were distributed
- the number of notices issued and distribution area
- any issues arising during the process of the distribution of notices and processes proposed to improve distribution of any future notices.
Do not change any of the details within the notice without the prior agreement of the Superintendent. Should the proposed Works be rescheduled for any reason and the rescheduled date of Works be agreed by the Superintendent, a new notice will be required and the process and associated timelines as described above will recommence.

7. Supervision

Provide a full time competent and experienced technical site representative (Supervisor) and project manager, for the duration of the Contract. Full details, including name and telephone numbers, of the proposed site representative and project manager must be supplied in writing to the Superintendent prior to commencement of the Works.

The above requirements do not prejudice or otherwise affect the Contractor's obligations under Clause 25 of the General Conditions of Contract.

8. Inspection

Further to Clause 31 of the General Conditions of Contract, no claim for delay will arise from the giving of insufficient or unreasonably short notice in respect of inspections. The minimum notice considered to be reasonable by the Superintendent to undertake an inspection is two Business Days.

9. Daywork records

Further to Clause 41 of the General Conditions of Contract, records of daywork must be kept that include the following:

- date of work and location
- plant used - description, fleet or registration number, ownership, hours worked (also on ‘stand by’, under maintenance, in transit, or in any other mode)
- labour used - names and classification of personnel, and hours worked
- materials used - type, size manufacturer/supplier, quantity, intended use, and any other relevant details
- general - notes concerning weather, operating conditions, constraints, progress and any other relevant details.

10. Status program

Status Contractor’s Programs must be submitted in accordance with Clause 33.2(m) of the General Conditions of Contract.

Status Programs are to contain the following information:

- reporting period
- major activities achieved during the report period
- actual progress versus scheduled progress
- health, safety and environmental issues/incidents
- non-conformances addressed
- complaints
- arising issues and/or outstanding actions, including requests for information from:
  - the Contractor
  - the Principal
  - authorities
  - others

Develop a Status Contractor’s Program template to include each section above for the Status Contractor’s Program which is required to be completed and is not to be left blank. Status Contractor’s Programs are to be issued by email, or otherwise as agreed to by the Superintendent.

Status Contractor’s Program meetings involving the Superintendent, the Contractor and appropriate subcontractors are required to occur monthly, or as required by the Superintendent. The updated Status
Contractor’s Program is required to be submitted at least two Business Days prior to the progress meeting. Minute the progress meeting and forward to the Superintendent for confirmation. The agenda framework for the project meeting may be subject to change and be along the lines of:

- actual progress versus scheduled progress
- scope changes/variations
- non-conformances
- construction related issues
- complaints/incidents (safety, environmental, and/or otherwise)
- other business.

At the first progress meeting submit the names and telephone numbers of all responsible persons who may be contacted after hours during the course of the Contract.

**11. Dimensions and levels**

Do not rely on dimensions and levels undertaken by the Principal. Obtain or check all measurements before commencing the Works. Verify details of existing work before altering or adding to it. Report any discrepancies to the Superintendent. If individual (spot) levels are shown on any drawings, these take precedence over contour lines and ground profile lines.

**12. Traffic control**

Provide for continuous operation of normal traffic along all public and private roads, walkways and pedestrian and vehicular access to properties or intersected by roads or drains included in the Contract. Be entirely responsible for the control and safety of all pedestrian and vehicular traffic at or near the worksite.

All signs, barriers, lights and other devices used must, as a minimum, conform to the requirements of the current MUTCD. Engage licensed traffic controllers to manage and provide temporary traffic sign posting to ensure the safety of the Works, pedestrians and traffic.

Obtain and comply with the requirements of all Legislative Requirements necessary for traffic control.

For works located within any of the Principal’s sites or property, arrange and ensure safe and controlled use of any plant access roads where necessary for the Works within the relevant sites or property.

**13. Traffic and Pedestrian Management**

13.1 Any proposed closure of a City of Gold Coast controlled road and/or footpath, either in total or any part thereof, is subject to approval following lodging all appropriate road closure application forms, and arranging the preparation and lodgement of any supplementary information requested by each department within City to support the proposed footpath or road closure.

The application must be supported by a site specific Traffic Guidance Scheme (TGS). Do not commence the Works which may impact pedestrian and traffic flow until the approval to proceed has been issued. A copy of this approval and the TGS must be kept on Site.

All fees associated with the administration of road closure applications must be paid by the Contractor.

13.2 Submit a Temporary Road Closure Application to councilroadclosures@goldcoast.qld.gov.au and a copy submitted to the Superintendent and the Principal for any partial or full road closure including footpaths in urban areas (e.g. Surfers Paradise, Broadbeach, Southport etc.). City car parks or City contract works that will impact on traffic causing:

- delays to traffic
- diversions from the travelled path e.g. lane closure on a single or multi-lane road
- detours
- reduction in available parking (CBD areas).
<table>
<thead>
<tr>
<th>Type of closure</th>
<th>Description of closure type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lane</td>
<td>Closure of a single traffic lane on a multi-lane road</td>
</tr>
<tr>
<td>Half road/hold and release</td>
<td>Closure of one direction of traffic flow on a two-way road</td>
</tr>
<tr>
<td>Full road</td>
<td>Closure of a road to all vehicular traffic (detour required)</td>
</tr>
<tr>
<td>Footpath</td>
<td>Closure of a footpath to pedestrian/cyclists</td>
</tr>
<tr>
<td>Parking</td>
<td>Closure of off street car park/on street marked parking bay or parking lane</td>
</tr>
</tbody>
</table>

Temporary Road Closure Application form is provided in Attachment 7: Temporary Road Closure Application.

13.3 Submit a site specific TGS to the Superintendent and a copy to Principal, for short term low impact works where the proposed work:

- is limited to a single work shift or less
- an acceptable level of service and convenience is maintained for road users e.g. minimal disruption to traffic and pedestrian flows with no build-up of traffic.

14. Access to private property

Further to Clause 27.5A of the General Conditions of Contract, some of the Works under the Contract may require access to private property. Do not enter the private property unless:

- the Superintendent has been given four Business Days’ notice of the requirement to access the private property
- the person proposing to enter onto private property has been appointed by the Principal as an authorised person in accordance with the Local Government Act 2009 (Qld)
- entry is necessary in order to undertake work on that property.

Make every effort to minimise obstruction to private property. Vehicular access may only be denied for a maximum of 12 hours. Provide temporary access if permanent access cannot be provided within this time.

Maintain safe and reasonable personal access to properties at all times.

15. Access to site

If access to the Site is required outside normal business hours, provide reasonable notification to the Superintendent.

The Contractor may be required to undertake Site specific inductions prior to being granted access to the Site if set out in Part B: Project Specific.

The inductions assist in informing potential hazards that may be encountered when undertaking the Works and outline specific safety requirements when on the Site.

16. Impact on properties from Works

Ensure minimal disruption and protect private or public property from potential damage during the Works.

Where relevant, arrange a joint inspection with the Superintendent of the adjoining/potentially affected properties. Arrange this for prior to commencement of the Works.

17. Encroachments

Do not demolish or damage adjoining property shown on any drawings as encroachments on to the Site.

Should the Works reveal encroachments of adjoining property on the Site or encroachments of existing Site structures on adjoining property, and should such encroachments not be referred to in the Contract, obtain instructions from the Superintendent immediately when such encroachments are revealed.
18. Contractor’s site area

Access onto and around the Site, and the use of the Site, for Temporary Works and Construction Plant, including working and storage areas, locations of offices, workshops, sheds, roads, parking and the like, must be restricted to those areas shown on any drawings or approved by the Superintendent and subject to such conditions as are stated in the Contract or may be imposed by the Superintendent.

19. Environmental control

Comply with all environmental laws and protection provisions.

Do not form new tracks, alter existing tracks, erect camps, remove trees or shrubs, cut fences, water, sewerage or power lines or any other such things without the written approval of the Superintendent.

Restrict dust caused by the Works to a minimum. Take all practical steps to minimise noise resulting from the Works.

Dispose of litter and debris at an appropriately licensed waste disposal facility.

20. Construction and environmental management

The Principal has AS/NZS ISO 14001 accreditation and requires the Works to meet the aims and objectives of the standard in minimising the impact of the Works on the environment.

Undertake the Works in accordance with a CEMP. The Construction Environmental Management Plan must demonstrate ongoing compliance and align in accordance with Clause 14H and 27.1(d) of the General Conditions of Contract including any amendments made to the particular clauses during the course of the Works.

A draft CEMP is provided in Attachment 2: Detailed Design Report - Appendix C. Engage a suitably qualified environmental consultant to prepare a CEMP based on the draft CEMP as minimum requirements. The intention of the draft CEMP is to only provide a broad overview of issues identified by the Principal, it should not be considered as fully comprehensive. CEMP prepared by Contractor must align with site conditions, work activities and proposed work methodologies.

The Construction Environmental Management Plan must comply with all environmental protection agency requirements for the Site, including the conditions and requirements set forth in the following approvals:

- Approvals relating to the impact to Marine Plants and Regulated Vegetation.
- Approval relating to Species management program for tempering with animal breeding places (low risk impacts).

Refer to the draft CEMP for the above approvals.

It must also demonstrate that all reasonable and practicable measures have been taken to prevent or minimise environmental harm during the course of the Contract in compliance with the Environmental Protection Act 1994 and other applicable environmental matters.

Do not lop the branches of any trees or shrubs, either located on a public road, public area or privately owned land except with the approval of the Superintendent, and then only in accordance with such conditions as stipulated by the relevant approval or the Superintendent.

Any unauthorised damage to foliage outside the Site will be subject to full restoration by the Contractor and at the Contractor’s cost, and be subject to the associated penalties of the relevant Local Government Authority and DEHP requirements.

All equipment and machinery (including generators, pumps and compressors) used outside normal working hours must be driven by electric power. If this requirement is considered not reasonable for a particular instance, apply to the Superintendent for permission to use other means of power. The Superintendent will grant such permission only if satisfied that it is not reasonable to insist on electric power and that all reasonable steps to minimise noise is taken.

No vehicles will be driven or parked on grassed areas, resident’s lawns or driveways, unless it is within a construction area identified and approved by the Superintendent.
21. Storage on site

Do not use roads, driveways, paths, hardstandings and the like forming part of the Works for access or storage unless prior written acceptance has been given by the Superintendent. Such acceptance will not be withheld unreasonably.

Store materials and equipment on the Site so as to prevent deterioration of materials and equipment, prevent damage to the Site and to minimise hazards to persons, materials and equipment. Keep storage areas neat and tidy.

22. Asbestos

Unless otherwise stated, if asbestos in any form is found on the Site, stop operations affected by the discovery immediately. Seek direction from the Superintendent and await instructions.

23. Disposal of refuse

Further to Clause 38 of the General Conditions of Contract, remove from the Site refuse (including food scraps and the like) resulting from the Works. Handle refuse in a manner so as to confine the material completely and prevent any emission or spillage.

Store all food scraps and the like in suitable containers with a close fitting lid. The container is to be vermin proof and resistant to disturbance by dogs, cats and birds.

24. Disposal of spoil

Unless otherwise specified, remove all spoil not required as part of the Works from the Site. Pay all tipping fees at the waste disposal facilities. These fees are not refundable.

25. Transport of materials

Convey soils, earth, sand, loose debris and similar loose materials to or from the Site in a manner that will prevent dropping of materials on streets. Cover all loads with taut heavy-duty purpose fitted tarpaulins to ensure no loss of load or dust. Ensure that the wheels, tracks and body surfaces of all vehicles and plant leaving the Site are free of mud, and that mud is not carried on to adjacent paved streets or other areas. This may require a wash bay on the Site.

Be aware of legal obligations if moving restricted items from or within fire ant restricted areas. Refer [https://www.daf.qld.gov.au/__data/assets/pdf_file/0007/167812/Fire_Ant_Biosecurity_Zone_Map_1_July_2016.pdf](https://www.daf.qld.gov.au/__data/assets/pdf_file/0007/167812/Fire_Ant_Biosecurity_Zone_Map_1_July_2016.pdf). This includes understanding the risks of spreading fire ants and developing strategies to address these risks. Refer [https://www.daf.qld.gov.au/plants/weeds-pest-animals-ants/invasive-ants/fire-ants](https://www.daf.qld.gov.au/plants/weeds-pest-animals-ants/invasive-ants/fire-ants). Strategies to address risks must be included in a fire ant risk management plan which must be approved by a Biosecurity Queensland Inspector. Follow the ARMP to prevent the spread of fire ants. A copy of the ARMP must be provided to the Superintendent prior to commencement of the Works.

26. Existing services and public utilities

Where services, public utilities or other Principal facilities, whether overhead, at the surface, underground or in conduits, exist at or in the vicinity of the Site, take all care necessary to protect such facilities from damage.

Consult with and manage all interfaces with service authorities controlling facilities in the vicinity of the Works. These authorities include but are not limited to communications, gas and power.

Prepare a Service Plan and submit to the Superintendent for their information prior to commencing the Works on the Site. The plan must include level and location of the services and proposed measures to ensure its integrity and not be damaged during construction.

In the case of any damage occurring to such utilities, the matter must be immediately reported to the department, public authority or company concerned and to the Superintendent. The cost of any necessary repairs and/or renewals will be borne entirely by the Contractor. Any PUP damaged or interfered with during the
Works is to be restored to its previous condition at the earliest possible opportunity, in accordance with the requirements of the respective asset owner. If the Contractor fails to arrange/undertake such repairs as required by the asset owner, then the Superintendent (on behalf of the Principal) may arrange for the repairs and the Superintendent has the right to deduct the costs incurred from monies or securities otherwise owing or held by the Principal.

Unless instructed otherwise, deal with existing services (such as drains, watercourses, public utility and other services) encountered or obstructed in the course of performing the Works, as follows:

- if the service is to be continued, repair, divert, and relocate as required
- if the service is to be abandoned, cut and seal, or disconnect and make safe.

In the event of any discrepancy between location drawing information and physical location of the existing underground services, the service provider must be asked to attend the Site to confirm the accuracy of the location drawing information. Work with the service provider to locate/confirm the existing underground services. Under boring or excavation must not commence until approval documents and sign off is received from the service provider that work can continue.

27. Temporary Works

Alter, adapt and maintain Temporary Works as necessary and remove them in accordance with Clause 38 of the General Conditions of Contract or progressively as the work proceeds, unless otherwise specified or instructed.

Obtain the written approval of the Superintendent for the inclusion in the Works of any Temporary Works which it is proposed to leave in position at the completion of the Contract.

28. Stormwater drainage

In addition to precautions and measures required in respect of erosion and sedimentation control, be responsible for the proper drainage of the Site and of all the Works before Practical Completion. Provide sufficient materials, labour, pumps, equipment, cut-off drains and any other necessary facilities to protect the Works.

Any delays, repair of damage or restoration work resulting from flooding occurring as a result of normal rainfall, or from drainage inadequacies relative to such rainfall, will not be grounds for extension of time or for any other claim. Normal rainfall is defined as the average monthly total for each month and the average storm event occurring in that month, as recorded (over the past ten years prior to the closing of tenders) at the nearest rainfall station to the Site.

29. Joining up

Where required, carry out the joining of new work to existing work and any consequent cutting away, in a manner appropriate to the materials, and make good to existing work.

Provide a smooth, uniform and suitable grading of pavements and the like between existing and new work where level or alignment differences occur as the result of unavoidable mismatches. Seek directions from the Superintendent as to the limits of such gradings and the like.

30. Temporary fence

Where a temporary fence is required for safety or security, enclose the area with a fence with secure gates. Remove on completion and reinstate the Site.

31. Temporary services

Provide and maintain temporary services, including telecommunications, necessary for the execution of the Works. Install such services in accordance with the requirements of the relevant authorities. Connect to existing services if these are present and available for use. Make all arrangements for such connections and disconnections including full reinstatement of the site affected by these connections. Pay charges in connection
Part A: General

with the installation and use of such services. On completion, disconnect temporary services and clear away all traces.

If available, water for construction purposes may be drawn from the existing metered supply. If in the opinion of the Superintendent, water is being wasted or more water than is necessary is being used, the Superintendent, in its absolute discretion, may curtail supply or impose a water charge.

If there is a water reticulation system, but no existing metered connection, arrange for a metered standpipe from the Principal. Phone the Customer Service Centre on 1300 000 928 for information on security deposits, hire charges, cost of water, payment arrangements, and to arrange for standpipe(s) as required.

Pay for water used from the Principal’s supply reticulation system for the Works at the current rate stipulated in the register of general charges. Be responsible for the adequacy of quality and flow quantities for the intended use.

Supply may be drawn from the existing supply at locations as/if indicated on any drawings. Otherwise determine the location and delivery method for water required for the Works direct from the Principal.

Comply with requirements of the Principal for taking of water from fire hydrants.

32. Communications

Supply and maintain a method of communications between the office and Site crews that is acceptable to the Superintendent.

Provide mobile telephones or equivalent modes of communication for on Site communications with the Superintendent.

Supply and maintain an email address, which must be contactable by the Superintendent at all times.

33. Trades and Best Practice

Undertake all specialised work in accordance with Legislative Requirements and the requirements of the relevant trade involved, and in accordance with accepted best practice.

Liaise with the Superintendent should any doubts arise as to the standard of equipment or installation required.

34. Standards

Current Editions: An Australian Standard or other standard applicable to the Works will be the edition last published not later than one month prior to the closing date for tenders.

Site Copies: Keep on the Site a copy of each standard referred to in this document which specifies Site operations or Site codes of practice.

35. Worker’s compensation insurance

In cases where the Workers’ Compensation and Rehabilitation Act 2003 (Qld) does not require the Contractor to effect a policy of insurance (by virtue of all work being carried out by sub-contractor for any other reason), effect a minimum premium Queensland Workers’ Compensation Policy nevertheless.

36. Site meetings

Site meetings attended by the Contractor, appropriate subcontractors and the Superintendent, will be held throughout the duration of the Contract at a frequency determined by the Superintendent.

Keep minutes of such meetings and provide copies to each party within three Business Days after each meeting.

At the first site meeting, submit the names and telephone numbers of all responsible persons who may be contacted after hours during the course of the Contract.
37. **Quality Assurance**

If a quality system elements category is specified for any part of the Works, implement the procedures necessary to satisfy the requirements of that category.

38. **Commissioning equipment**

Ensure that all equipment and features are commissioned and tested with the knowledge of the Superintendent. Give the Superintendent at least two Business Days’ notice of any inspection or commissioning requirements.

Ensure that qualified personnel (preferably from the supplier or manufacturer) are present at the commissioning stage, so that the Superintendent and/or operating staff may receive thorough knowledge of the operating system, including the maintenance requirements.

39. **Manufacturer’s recommendations**

Use manufactured items in the Works in accordance with the current published recommendations of the manufacturer relevant to such use.

40. **Samples**

Items in respect of which samples are specified must be in accordance with an approved sample, or within a range defined by approved samples. Keep approved samples in good condition on the Site until the issue of the Certificate of Practical Completion.

Where the Contract requires the Contractor to provide samples, be solely responsible for any delay resulting from a failure to allow reasonable time for the assessment and approval of the samples, or from the rejection of samples which do not comply with the specification.

41. **Sealed containers**

Materials and products supplied by the manufacturer in closed, sealed containers or packages must be brought to the point of use in the Works in the original unbroken container or package, otherwise they will be liable to rejection.

42. **Testing**

Any sampling and testing required to be by an independent testing authority must be carried out by an authority registered with the NATA to perform the specified sampling and testing. Arrange and pay for such testing as required.

43. **Maintenance**

Before applying for a Certificate of Practical Completion, provide instructions and a recommended maintenance schedule for all items supplied and installed, along with details of model (reference numbers or similar), manufacturer and/or supplier.

44. **Information supplied by the Principal**

Subject to Clause 8.3A of the General Conditions of Contract, where information is supplied by the Principal, the following is applicable:

- the provision is on a one-time basis only, and does not imply or infer maintenance or the issue of updates/addendum
- do not supply, use or on-sell this to any third party, either in part or in total
- allow the information to be used for internal use for the Contract only, by an employee in any location in any appropriate manner
- take all responsible steps to maintain and safeguard the confidentiality of the information.
Part A: General

Where cadastral information is supplied in digital form, the following is applicable:

- Negotiate direct with DEHP to facilitate the execution of the licence.

45. Proprietary items

A proprietary item is any item identified by graphic representation on any drawings, or by naming one or more of the following: manufacturer, supplier, installer, trade name, brand name, catalogue or reference number and the like.

The identification of a proprietary item must not necessarily imply exclusive preference for the item so identified, but must be deemed to indicate the required properties of the item. An alternative item with the required properties may be considered for acceptance at the Superintendent’s discretion.

When submitting an alternative item for approval, submit sufficient information to permit evaluation of the proposed alternatives, including evidence that the performance is equal to or greater than that specified. If requested, obtain and submit reports on relevant tests by an independent testing authority. State whether the use of the alternative will require alteration to any other part of the Works.

All Digital City projects must comply with the Digital City Data Policy standards and procedures.

46. Use of Specifications from TMR

When Standard Specifications from TMR are included in this document, references in MRS01 are to be deleted and replaced as follows:

- Delete references to ‘Conditions of Contract’ and replace with ‘General Conditions of Contract’: and
- In Clause 2.1.7 (Provisional Quantities and Provisional Items) of MRS01, delete the entire 4th, 5th and 6th paragraphs and replace with ‘The provisions of Clause 11 of the General Conditions of Contract will apply to Provisional Items’.

The Annexure(s) and Supplementary Specifications to TMR Standard Specifications do not form part of this document unless specifically provided by the Principal in Part B: Project Specific.

When the Standard Specifications from TMR are included in this document, the Standard Specifications are to be amended as per the list of amendments provided in Part D: Attachments, if applicable.

47. Energex electrical inspections – lighting and power supplies

If metering or power supply changes are made, complete ‘Form 2’, obtainable from Energex direct or online (www.energex.com.au). Submit this form to Energex to arrange an inspection.

48. Certification of the design

Where the Contract requires design to be carried out which would require the designer to be registered under the Professional Engineers Act 2002 (Qld), the following is applicable:

- ensure that the design of the Works is supervised at all relevant times by a designer who is a RPEQ and experienced in work similar to the Works; and
- provide RPEQ certification in a form acceptable to the Principal in respect of the adequacy and suitability of the design of the specified parts of the Works.

The Contractor:

- warrants that the designer must in carrying out its obligations under the Contract perform the design services to a standard of care, skill, judgement and diligence commensurate with that which would be expected of an experienced professional engineer with expertise in the provision of similar services for projects of the nature of the Works; and
Indemnifies the Principal for any damage, loss, cost, expense or liability (whether direct, indirect or consequential, present or future, fixed or unascertained, actual or contingent) arising out of a breach of obligations under this Clause.

If the Contractor proposes to appoint an external consultant to act as designer, rather than a suitably qualified employee of the Contractor, the following is applicable:

- Obtain the Principal's prior written approval of the nominated person
- Do not replace the nominated person without the Principal's prior written approval
- Ensure that the terms of engagement include that the designer provides:
- A duly executed written deed of warranty and indemnity in favour of the Principal in a form acceptable to the Principal on the same terms as set out in this Clause; and
- Evidence to the Principal of the existence and currency of a policy of professional indemnity insurance as required by the Contract
- Accept vicarious liability for the acts and omissions of the external designer as if they were acts or omissions of the Contractor
- Accept that no payment under this Contract will be made until you have complied with your obligations.

49. Survey

Standard AHD and Geocentric Datum of Australia (GDA94) is the basis of all levels and coordinates associated with the Works unless otherwise indicated.

Be responsible for setting out of the Works from the PSM’s and a qualified Surveyor is to be engaged to do the set out.

Rely on set out points placed by the Principal.
Part B: Project Specific

1. Scope of the Works

The Contract is for the augmentation of an existing recycled water main at a section between Pimpama STP and Coombabah STP. The Work involves installing OD660 and OD800 diameter pipeline, approximately 1.65 km in total length, between a point along the existing main adjacent to the Gold Coast Highway and ending at the Coombabah Sewage Treatment Plant as detailed in Attachment 1: Design Drawings.

The general scope of the Works includes, but is not limited to the following:

- Project management and supervision of the Works by a full time Project Manager and Work Supervisor.
- Temporary fencing along perimeter of construction corridor.
- Management of acid sulphate soils, dewatering and other environmental impacts.
- Provision of all materials, labour, equipment and any other resources required for the installation of recycled water main and its associated fittings, removal and disposal of AC main and all other Works as detailed in Attachment 1: Design Drawings.
- Connections, testing and commissioning of new recycled water main.
- Reinstatement, including surface treatment and revegetation.

The detailed scope of Works, including Temporary Works, is detailed elsewhere in this Specification document and its attachments.

1.1 Work Milestones and Provisional Items

The Works will be based on Work Milestones as described below. The Superintendent will determine the progress of the Works and Milestones achieved in respect to the claims made under the Contract, with progress payments only made for the Works performed and Milestones achieved.

For progress payment purposes, each pay item is initially claimable for 80% of its value unless specified otherwise. The remaining 20% of each pay item will be payable when all pay items within the overall Milestone have been 100 percent completed.

Where a Milestone requires supply and installation of pipework, this item comprises:

- Provision and maintenance of traffic management.
- Provision of temporary fencing to demark construction limits and any other work exclusion zones.
- Provision of safety signages.
- Protection of existing buried services at the vicinity of the pipe alignment.
- Supply of all equipment, labour and material including pipes, bends, reducers/tapers, couplings and all other fittings,
- Excavation/trenching in all soil conditions including design and implementation of temporary Works (benching, battering, shoring, etc.).
- Disposal of excavated material that is unsuitable for re-use as trench fill material.
- Treating and disposal of acid sulphate soil, if not to be used as trench fill, to an approved disposal centre.
- Treating of excavated acid sulphate soil for use as trench fill material.
- Laying and joining of pipes and its fittings.
- Installation of thrust blocks
- Backfilling of trench
- Reinstatement of ground including turf or re-vegetation and its subsequent maintenance.
Part B: Project Specific

Work Milestone One – Preliminaries and Site Establishment

This Milestone must include the following aspects of the Works for the full length of the pipeline (including section traversing the Golf Club) including but not limited to:

- Submission and approval of Site specific documentation including but not limited to:
  - Work Health and Safety Management Plan (WHSMP)
  - Construction Management Plan, encompassing:
    1. Works program - to be updated as and when required.
    2. Construction Sequencing Plan
    3. Pipeline Commissioning Plan.
  - Detailed Construction Methodology. Must encompass all types of work at the various locations along the construction corridor including but not limited to: Site clearance works, pipeline installation on the piers, west of the golf course, within the golf course, east of the golf course up to Shelter Road, along Shelter Road and within the Coombabah STP, removal of asbestos pipeline, end capping of AC main, grout filling of AC main, connections to existing main. A SWMS must accompany the detailed method statement for each type of work at the various locations. Ensure SWMS meet the minimum requirements as listed within the information sheet issued by Safe Work Australia: https://www.safeworkaustralia.gov.au/system/files/documents/1703/information-sheet-safe-work-method-statement.pdf
  - Quality Management Plan including ITP’s. ITP must be based minimum on the format and information provided in Attachment 6: Draft Inspection and Test Plan.
  - Traffic Management Plans including provision of a parking plan agreeable with the Superintendent for the area along west of Shelter Road area fronting the Animal League and its ancillary facilities.
- Submission of Pre-construction Dilapidation Survey report of entire construction Site limits along pipeline route. Dilapidations survey within the golf course only on approval by the Superintendent.
- Submission of tidal land profile survey drawing showing areas that are to be temporarily disturbed by the development Works. Figure 2-3 in the draft CEMP shows the location of the tidal lands (i.e. all areas mapped as supporting marine plant communities and all land seaward of these mapped communities)
- Provision of temporary Site office.
- Pegging of pipeline with distinct coloured pegs every 40m, with the exception between CH 715.35 and CH 886.76 (i.e. boundary of Golf Club). Peg 715.35 and CH 886.76 inclusive. Write chainage number on all pegs. Mark with corner pages, and/or buoys, the boundary of the approved tidal and marine plant component of the development footprint as per required in the Marine Plant and Regulated Vegetation Approvals in the draft CEMP, refer Attachment 2: Detailed Design Report - Appendix C
- Pre-construction investigation, Site survey and setting out Works including determination to identify the proposed tie-in connection points and its material type. Obtain DBYD information and liaise with PUP service authorities/providers for identification of buried and overhead services. Incorporate information into a Service Plan as per Part A: Clause 26.
- Review Design Drawings, Specifications and information following pre-construction investigation and Site survey Works, and prior to ordering pipe materials. Prior to commencement of any physical work, notify Superintendent of any additional requirements determined following design and specification review, and, Site investigation and survey Works.
- Site clearing Works.

Work Milestone Two – CEMP

This Milestone is for the preparation and implementation of the CEMP for the full length of the pipeline (i.e. including section traversing the Golf Club). It must include the following associated aspects of the Works including but not limited to:

- Preparation of Site specific CEMP by appropriately qualified environmental consultant, CEMP to incorporate Fauna Management Plan, ESCP, Stormwater Management Plan, ASS Management Plan, Dewatering Management Plan, Asbestos Removal Control Plan, Communication Plan and any other environmental plans as required.
Part B: Project Specific

- Undertake surface water testing at dewatering discharge locations and submit risk assessment to confirm viability of the proposed discharge points.
- Provision of an appropriately qualified geotechnical or environmental engineer for supervision and implementation of CEMP during duration of construction Works.
- Provision of a full-time fauna spotter for the duration of the construction Works. Approved firms are: (One) Australia Wildlife and Feral Management Tel: 5598 5844 and (Two) DDWFAUNA Tel: 0414 696 290.
- Provision of an AQF Level 5 arborist for the duration of the construction Works.
- Provision of person trained by Biosecurity Queensland in the identification of fire ants.
- Provision and installation of signages as required by the CEMP and other requirements of the projects.
- Environmental inductions for all Personnel entering Site.
- Record keeping
- Supply and install exclusion fencing around perimeter of retained marine vegetation.
- Supply and install wildlife exclusion fencing.

Work Milestone Three – Recycled water main between connection point at existing DN450 MSCL and CH 158.00

This Milestone must include the following aspects of the Works including but not limited to:

- Supply and installation of pipework between connection point at existing DN450 MSCL and new OD660 MSCL pipe.
- Construction of thrust restraint for DN300 inline isolation gate valve.
- Supply and installation of one DN300 isolation gate valve.
- Supply and installation of DN450 Double Hinged Expansion Joint (DHEJ).
- Supply and installation of one DN450 butterfly valve.
- Supply and installation of OD660 6mm wall thickness MSCL pipework above ground.
- Construction of pipe support saddles and brackets.
- Supply and installation of one DN100 Type 1 air valve and associated DN100 gate valve.
- Construction of 1000 SQ X 100 thick concrete slab on ground.
- Design, supply and installation of new aluminium handrail and gate at two pipe support piers.
- Modifications to existing reinforced concrete pit along decommissioned DN450 AC pressure main.
- Submission of updated ‘as-constructed drawings-records’.

Work Milestone Four – Recycled water main between CH 158.00 and CH 713.00

This Milestone must include the following aspects of the Works including but not limited to:

- Excavate, remove and dispose existing decommissioned DN450 AC main, including remove and dispose air-valve pit. Plug end of AC main left in ground at CH200.00 (approximate).
- Supply and installation of OD660 6mm wall thickness MSCL pipework above and below ground including details of connection to PE main and section encased in concrete.
- Supply and installation of OD800 PE100 SDR11 pipework including details of connection to MSCL main and section encased in concrete.
- Protection of existing DN750 sewer rising main including installing compressible material between recycled water pipe and DN750 sewer pressure main.
- Supply and installation of one DN150 scour valve including pipework, fittings and construction of pit.
- Supply and installation of one DN100 Type 2 air valve including pipework, fittings and construction of pit.
- Submission of updated ‘as-constructed drawings-records’.
Part B: Project Specific

Work Milestone Five – Recycled water main between CH 713.000 and CH 890.000

Option One: Installation by open trench method.

This item must include the following aspects of the Works including but not limited to:

- Temporary diversion of irrigation services.
- Excavate, remove and dispose section of existing decommissioned DN450 AC main.
- Grout-fill sections of existing decommissioned DN450 AC main.
- Supply and installation of OD800 PE100 SDR11 pipework including DN100 offtake.
- Supply and installation of one DN150 scour valve including pipework, fittings and construction of pit.
- Submission of updated ‘as-constructed drawings-records’
- Refer to Clause 4.8 for specific conditions applicable for working within Lakeside Country Club.

Work Milestone Six – Recycled water main between CH 890.000 and CH 1140.000

This Milestone must include the following aspects of the Works including but not limited to:

- Plug end of AC main left in ground at CH890.00 (approximate).
- Supply and installation of OD800 PE100 SDR11 pipework.
- Supply and installation of one DN100 Type 2 air valve including pipework, fittings and construction of pit.
- Removal and disposal of existing top 100 mm asphalt surface at access road to Bird Hide Car Park and Boardwalk at limits shown on drawings.
- Construction of two meter wide bitumen access to Bird Hide Carpark at approximately CH 1052. Location must be re-confirmed with Principal [Principal must re-confirm with NAMU]
- Submission of updated ‘as-constructed drawings-records’.

Work Milestone Seven – Recycled water main between CH 1140.000 and CH 1666.000 (partly within Coombabah STP premises)

This Milestone must include the following aspects of the Works including but not limited to:

- Design (by RPEQ) trenchless pipe installation including launch and retrieval shafts and any additional Site investigation and geotechnical Works as necessary. Design must include the designers safety report. Submit RPEQ endorsed design to Superintendent.
- Supply and installation of OD800 PE100 SDR11 pipework including trenchless section between approximate CH1488 and CH 1536 under the Coombabah Liquid Waste Receiving Facility driveways and retaining wall.
- Supply and installation of pipework between connection point at new OD800 PE100 SDR 11 pipe and existing DN300 DICL/ DN375 PVC pipe.
- Construction of 450 mm and 300mm wide thrust restraints.
- Supply and installation of one DN375 gate valve.
- Supply and installation of one DN300 gate valve.
- Supply and installation of one DN150 scour valve including pipework, fittings and construction of pit.
- Supply and installation of one DN100 Type 2 air valve including pipework, fittings and construction of pit.
- Submission of updated ‘as-constructed drawings-records’.

Work Milestone Eight – Pipeline testing, Site restoration and Practical Completion

This Milestone must include the following aspects of the Works including but not limited to:

- Hydraulic testing of full length of pipeline as per Pipeline Commissioning Plan.
- Submitting a Commissioning Report upon completion of pipeline testing along full length.
- Clean-up of Site, including removal of project and other signage, removal of temporary Site fencing and Site demobilisation.
Part B: Project Specific

- Weed removal from re-vegetated, mulched and turfed areas. Re-vegetated and turfed area must achieve growth establishment at time of Practical Completion.
- Post-construction Dilapidation Survey Report.

Work Milestone Nine – QA records and as-constructed drawings

- Prepare and submit signed quality assurance records.
- Prepare and submit final RPEQ certified as-constructed drawings.

Provisional Item One – Recycled water main between CH 713.000 and CH 890.000 (within Lakeside Country Club)

Option Two: Installation by trenchless method for the Works within Lakeside Country Club.

- Design (by RPEQ) trenchless pipe installation including launch and retrieval shafts. Design must include the designer’s safety report. Submit RPEQ endorsed design to Superintendent.
- Supply and installation of OD800 PE100 SDR11 pipework by trenchless method.
- Submission of updated ‘as-constructed drawings-records’.

Provisional Item Two – Trenchless pipeline installation

This Item, when directed by the Superintendent, is for undertaking installation of OD800 PE100 SDR11 pipeline by trenchless installation, including pipe jacking and/or other boring installation techniques, along certain sections along the pipeline route if directed by the Superintendent. This item is payable for only the actual number of launch and retrieval shafts constructed and for the actual length of trenchless pipeline installed. The item is inclusive of all aspects of the work including but not limited to RPEQ design, temporary works, treatment of contaminated soils before disposal, pipe installation and reinstatement works.

Provisional Item Three – Site attendance by PUP service providers/authorities

This item is to be used in the event ‘stand-over’ by PUP service providers/authorities is required during excavation or installation of pipeline. Obtain approval from the Superintendent before engaging. Fees will be reimbursed by Principal at cost. Evidence of payment must be provided to support reimbursement of fees.

Provisional Item Four – Imported backfill pipe trench bedding material

This item is to be used in the event foundation material at bottom of pipe trench is unsuitable and incapable of effective compaction in the opinion of the Superintendent. Remove and replace unsuitable material with imported bedding material as specified in Part C: Cl 3.6 Pipework Installed by Open Cut Excavation.

Unsuitable material that cannot be used as foundation bedding material, must not be stockpiled on Site but disposed off-Site immediately. If ASS is present, these must be disposed to a government approved ASS disposal facility.

This item is payable only for the actual used amount of imported backfill.

Provisional Item Five – Imported backfill pipe trench fill material

This item is to be used in the event excavated material cannot be used for backfilling due to its inherent nature, or if there is restriction on space for treating acid sulphate soils along a particular section of pipeline; in the opinion of the Superintendent. Remove and replace unsuitable excavated material with trench fill material as specified in the design drawings, refer Attachment 1: Design Drawings.

This item is payable only for the actual used amount of imported backfill.

Unsuitable material that cannot be used as backfill pipe trench material must not be stockpiled on Site but disposed off-Site immediately. If ASS is present, these must be disposed to a government approved ASS disposal facility.
Part B: Project Specific

1.2 Specific/Ancillary Work
Not Applicable

1.3 Design Deliverable
Submit RPEQ approved design for all trenchless pipe installation including temporary works for launch and retrieval shafts.

2. Site

2.1 Location and Limits
The locality plan of the work Site is shown in the design drawings, refer Attachment 1: Design Drawings.

The site of the Works is restricted to the above locality plan which includes within a privately owned golf club, sewage treatment plant, road reserves and parks managed by the Principal. The construction Site limits is generally a 10 m wide corridor along the pipeline route. These limits may only be altered with the written approval of the Superintendent. Activities including material storage areas are to be agreed with the Superintendent. Do not enter onto the Principal’s workplace other than to undertake the Works.

The commencement of any activities on the Site must not occur without first advising the Superintendent. In particular, no Site excavation will be undertaken without first advising the Superintendent. Submit details outlining the extent of any excavation required.

2.2 Principal's Site inductions
The Contractor must undertake Site specific inductions prior to being granted access to the Site.

The inductions assist in informing potential hazards that may be encountered when undertaking the Works and outline specific safety requirements when on the Site.

To perform work within a Water and Waste (W&W) facility, mandatory completion of the online safety induction and possession of a current induction card is required before presenting to the facility.

To complete the online induction access the following: https://www.onlineinduction.com/goldcoast/

The Contractor and any subcontractors are required to self-register and create their own passwords to complete the required inductions.

Failure to produce a current induction card will result in removal and/or loss of access to a W&W facility.

The following inductions are required for Personnel accessing Site under this Contract:

- General induction to Gold Coast Water.
- Induction - sewage and recycled water spills.
- Induction to itinerant and construction Sites.
- Induction to sewage treatment plants.
- W&W Local Government Worker. On completion of this induction, a Local Government Worker card will be issued by the Principal – allow up to three weeks for the issuance of this card.

3. Site office
Before any major Site operation work commences, provide a temporary office building for the use of the Superintendent and the Contractor’s staff and Personnel. Be responsible for the supply of potable water and waste facilities. Location of this office must be agreed with the Superintendent.
4. Contract specific requirements/constraints

The Principal advice that the following requirements and/or constraints exist with respect to the execution of the Contract. This list should not be read as exhaustive:

4.1 Work Program

Submit an updated detailed work program within the first week after execution of Contract.

For the purpose of this Contract, the Works program is defined as an electronic Gantt chart that details the critical path and a baseline program. The supply of the Works program and its approval by the Superintendent will not relieve the Contractor of any obligations and responsibilities under the Contract.

4.2 Working Hours

The hours of work referred to in the Contract Header Annexure Part A to the General Conditions of Contract are:

- Work within the Coombabah Sewage Treatment Plant: Monday to Friday between 7am and 3:30pm excluding public holidays.
- Work within the Lakeside Country Club golf course: Twenty-four hours seven days a week, except for excavation and work that involves operation of heavy machinery, which is permitted between only 7am and 4:30pm.
- All other areas: Monday to Friday between 7am and 4:30pm excluding public holidays.

Should the Superintendent, upon written application to do so, permit work to take place outside of these hours, comply with the clause ‘General Environmental Duty’ as contained in the Environmental Protection Act 1994.

4.3 Dilapidation survey

Undertake surveys along pipeline route and its vicinity. Prepare report including high resolution photographs and video of pre-existing Site conditions before mobilising to Site and at Practical Completion of Works after demobilisation. The photographs must be comprehensive (minimum requirement all photos must be date stamped, colour, file types both jpg and pdf) with a minimum resolution of 8MP to ensure adequate details can be seen of any known issues and have a high level of detail in order to thoroughly survey the existing condition of surrounding features, before and after the Works. The survey must include, but is not limited to the following:

- Every 40m minimum distance along pipeline route within construction corridor, except in the Golf Club, which shall be 30m minimum distance.
- Turfed area within Golf Course
- Fences and landscaping
- Nearby roadway, kerbs and gutters
- Accesses to Trade Waste facility
- Coombabah STP fence and turfed area inside plant
- All nearby existing structures and power poles.

The video must capture the full length of the pipeline.

The dilapidation survey report within the golf course area must be a stand-alone report (i.e. separate from the rest of the report).

Dilapidation survey report of pre-existing Site conditions must be submitted to the Superintendent prior to mobilisation on Site.

A final post construction dilapidation survey report must be submitted to the Superintendent within two days after demobilisation from Site. The final report must include information from the pre-construction dilapidation report and survey information obtained after demobilisation from the Site.

In addition to providing electronically in a USB storage device, all photographs in the report must be identified by the pipeline chainage range, dated and submitted in a bound copy.
Part B: Project Specific

The information included in the survey report, including any other relevant information, will be utilised by the Superintendent in assessing the standard of restoration required. Where sufficient information has not been recorded to allow the Superintendent to determine the pre-existing conditions, the Contractor will be held responsible for full restoration costs resulting from any claims made related to these Works.

4.4 Dewatering Management


Ground water removed will likely require conditioning before disposal.

Potential discharge points and initial surface water quality testing are provided in the draft CEMP – refer to Figure 5.1 for the locations of the potential discharge points and Appendix E for the surface quality testing (baseline) results.

The DMP must include:

- Proposed discharge points
- Additional surface water testing results at proposed discharge points.
- Risk assessment to determine viability of proposed discharge points.
- Action plan for non-compliance with water quality requirements within receiving water.

Ensure adequate provision is made for trench dewatering. Note information in Geotechnical Investigation Report, refer Attachment 2: Detailed Design Report - Appendix E1 shows high level of water table at certain areas which may indicate high probability of trench being inundated with groundwater.

4.5 Setting out of pipeline alignment, construction corridor and marking of exclusion areas and other pre-construction activities.

Prior to any physical works on Site, with the exception of the section of pipeline within the Lakeside Golf Club, set out the pipeline alignment and construction corridor with timber pegs spaced approximately 40 m apart, where the alignment changes direction, and at chainages 713.00 and 890.00. Write chainage number on pegs. Pegs must be painted with colours differentiating the pipeline alignment (yellow) and the corridor (red).

Install exclusion fencing around perimeter of retained marine vegetation and fauna exclusion fencing around boundary of Works.

Identify all tidal lands outside the clearing area with red/white barricade tape.

Mark with corner pages, and/or buoys, the boundary of the approved tidal and marine plant component of the development footprint as per the Marine Plant and Regulated Vegetation Approvals in the draft CEMP, refer Attachment 2: Detailed Design Report - Appendix C.

Inform the Superintendent when above work and when all pre-construction activities (as detailed in the CEMP) are completed and arrange for inspection with geotechnical/environmental engineer, arborist and Principal’s representative.

Site clearing work can commence only on approval by the Superintendent following the Site inspection exercise.

4.6 Excavation for Pipeline Installation

The maximum allowable length of trench opening ahead of pipe laying must not exceed 40 m, unless approved otherwise by the Superintendent.

Tidal land profiles that are temporarily disturbed by the Works must be promptly restored to pre-work profiles as required in the Marine Plant and Regulated Vegetation Approvals in the draft CEMP. Refer Attachment 2: Detailed Design Report - Appendix C.
4.7 Works within the Lakeside Country Club.

The Principal will consider one of the following two options of pipe installation.

4.8.1 Option One: Installation by open trench method (Milestone Five):

The Works include installation of an OD800 PE100 SDR11 pipeline between approximate CH713 and CH890. [Note Golf Club boundaries along the pipeline are at CH 715.35 and CH886.76].

Certificate of Currency for the Public Liability insurance policy must include PCGKJD Pty Ltd t/a Lakeside Country Club as an ‘Interested Party’.

Maintain all reasonable measures to mitigate the impacts of the Works on Lakeside Country Club. Prior to commencement of Works prepare a Detailed Construction Methodology that ensures the following:

- All works to be completed within 14 days including pipe testing and full restoration and removal of construction materials and equipment. Working seven days a week for twenty four hours is permitted – refer to Clause 4.2 for further details.
- Methods of investigation to determine buried services. Refer Attachment 9: Golf Course Irrigation Plans for some information on possible location of irrigation network, which may assist during the Site investigation and construction works.
- Methods of installing pipeline without disrupting operation of irrigation system. In the event the irrigation system is damaged, it must be repaired not later than 5pm on the same day to allow for night watering of the course.
- Contingency plans to ensure the construction program can be achieved on or ahead of schedule.

Note the following:

- The golf course will cease operation during the 14 days construction period to facilitate the construction works. The construction period must occur at a time yet to be determined, but within the months of June to August 2019.
- The Superintendent will provide specific direction within three weeks after Contract execution date, informing the date allowing access to the Lakeside Country Club premises to commence work.
- Install mesh type temporary fencing 2m high along both sides of construction corridor. Provide 3m wide gap along fencing to facilitate Club’s vehicular movement through fencing. Gap must be maintained through-out construction period to enable easy access of Club’s vehicles.
- Maintain all Works within the construction corridor.
- Do not enter within 3m of golf course green area at any time.
- Access the Works from the construction corridors’ eastern and western ends only.
- Do not access areas external to the construction corridor (i.e. fenced area of works) or use Lakeside Country Club amenities.
- All communication with the Lakeside Country Club must be through the Superintendent.

4.8.1 Option Two: Installation by trenchless method (Provisional Item One):

The Principal will consider trenchless pipe installation to further minimise disruption to the operation of the golf club.

The Principal will have the sole discretion to choose between Option One and Option Two.

4.8 Removal of DN450 AC Pipeline

Provide Detailed Construction Methodology and SWMS. In addition to the removal of the DN450 AC pipeline, the methodology must address potential of soil adjacent to pipeline being contaminated with damaged fragments of the AC pipeline.

Refer to draft CEMP for further information and requirements.
4.9 New two metre wide Bitumen Access Road

Peg the two metre wide bitumen access road at approximate CH 1055m. Its location shown on the drawing is indicative and may be subject to changes up to approximately three meters either way along the pipeline alignment.

Inform Superintendent when above exercise is completed. Principal will arrange for inspection with NAMU to finalise location of access road.

Construction of road must be in accordance with City Plan Land Development Guidelines (https://cityplan.goldcoast.qld.gov.au/Pages/Plan/Book.aspx?exhibit=GCCC_CityPlanV2&hid=21603&sS), drawing 02-602. Refer item 10 in the drawing ‘Notes’ and note that flowable fill leanmix concrete to benching is (not ‘if’, as noted on the drawing) required.

4.10 Works along Shelter Road shoulder.

Maintain all reasonable measures to mitigate the impact of the Works on the operation of the businesses along the southern side of Shelter Road. Provide Detailed Construction Methodology and SWMS that addresses/note the following:

- The shoulder north of Shelter Road is currently used as a temporary car parking area, this car parking area must be retained during the construction Works.
- Egress/ingress into the construction Site limits must be discreet and not disruptive to the parking area and traffic flow along Shelter Road.
- Specific safety measures and temporary works at areas where pipeline is close to power poles and its stays.
- Traffic Management Plan, including construction safety signage, Site access/ingress signage, and signage to indicate closure of access road into Bird Hide car park area.
- Install mesh type temporary fencing 2m high along the pipeline construction corridor. Principal will provide free shade cloth for Contractor to secure on fencing fronting Shelter Road.
- Temporary fencing must be retained until such a time when the pipe installation is completed, the area restored and turf weed free and achieved growth establishment. Shade cloth must be returned to principal’s facility at Molendinar on removal of temporary fencing.
- The three road accesses into the Coombabah Liquid Waste Receiving Facility (located between approximate CH1405 and CH1525) must remain accessible between 6:00 and 6:00 pm seven days a week.
- Design management of trenchless pipe installation including receival and launch pits.

4.11 Work within Coombabah STP.

Maintain all reasonable measures to mitigate the impact of the Works to the operation of the treatment plant.

Afford access at all times to the Principal’s operational staff and work with the Principal through the Superintendent to facilitate the requirements of each party.

Do not impede vehicles or Personnel access to the STP. Do not venture outside the areas of the construction limits unless it is required for work related matters. Obtain agreement with the Superintendent (who will discuss with the STP operators) if access to areas outside the construction Site limits is required.

Prior to commencement submit a Detailed Construction Methodology and SWMS that addresses the following:

- Work limited strictly to between 7:00am to 3:30pm. All Personnel must be out of the STP premises by 3:30pm.
- Security of STP if temporary removal of perimeter security fence is required.

4.12 Hydraulic Testing of Pipeline.

Undertake pipeline hydraulic testing in sections progressively, with a final test of the full pipeline length at completion of installation.
Pipeline Commissioning Plan must be based minimum on the information provided in Attachment 5: Draft Commissioning Plan. Provide methodology for testing, including commentary on use of temporary pipe-end thrust blocks, and, nominating section lengths for progressive testing.

Upon completion of commissioning, submit Commissioning Report as noted in the Draft Commissioning Plan.

4.13 Supply of Turf and Plants.

Refer to Attachment 1: Design Drawings for turf and planting requirements. All areas that are disturbed by construction activities must be reinstated according to the details provided in the drawings.

Note:

4.14.1 Area between CH 713.00 and CH890.00.

Finished ground profile must be similar to profile at time before excavation. Laser levelling must be undertaken prior to commencement of any Works, and prior to placement of turf on completion of construction Works. Turf must be of type ‘green couch’.

Remove weed from turfed areas before handing over area on completion of Works. On handing over of area for golf play, area must be free of ruts or other imperfections and suitable for play. Maintenance period extends through the Defects Liability Period.

4.14.2 Areas other than between CH 713.00 and CH890.00

Re-vegetated and turfed areas must achieve growth establishment and free from weed and ruts at time of Practical Completion. With the exception of ruts, no further maintenance is required during the Defects Liability period.

5. Temporary Fencing

Install and maintain temporary fencing throughout construction corridor - fencing must conform to AS4687-2007.

Carry out any modification or extension of the fencing which may be necessary for the proper performance of the Works. Modifications or extensions will be subject to the approval of the Superintendent and must match existing in form and construction.

Maintain the fencing in a good state of repair throughout the duration of the Contract.

6. Signage and Publicity

The Principal will provide project signages for installation at each worksite area. The signages will be in the form of 600mm X 900mm or 900mm X 1200mm aluminium sheets attached to two steel posts. Do not erect any project signages at the work Site area other than the project signages provided by the Principal.

Collect signages from the Principal’s collection point and erect at locations directed by the Principal.

Be responsible for maintenance and regular inspection until a Certificate of Practical Completion is issued. Undertake repairs to any damage of the signboard and notify the Superintendent immediately in the event vandalism or theft of any signboards.

Undertake dismantling and removal of signboards and associated fittings prior to demobilisation, or as directed by the Superintendent. Signages will remain the property of the Principal and must be returned to the Principal’s nominated return point as directed by the Superintendent.

Do not issue any information, publication document or article for publication concerning the project in any media without prior approval of the Principal. Refer any media queries concerning the project to the Superintendent.

7. Site climate conditions

Not Applicable

All equipment supplied and installed as part of the Works must be designed to suit the following Site conditions:
Location: Gold Coast, Queensland
Altitude: RL 1m
Environment: RW Main

<table>
<thead>
<tr>
<th>Ambient temperature:</th>
<th>Minimum</th>
<th>0°C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Maximum</td>
<td>45°C</td>
</tr>
<tr>
<td>Relative humidity:</td>
<td>Average maximum</td>
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<tr>
<td></td>
<td>Average minimum</td>
<td>50%</td>
</tr>
<tr>
<td></td>
<td>Design maximum</td>
<td>95% non-condensing</td>
</tr>
</tbody>
</table>

All materials must be suitable for installation and operation in the environment and conditions as described above and must meet the Site climatic condition requirements.

8. Geotechnical Report

A Geotechnical Report is provided in Attachment 2: Detailed Design Report - Appendix E1. The report is for information only and to only to provide a broad overview of the soil conditions along the proposed recycled water main’s route.

9. Acid sulphate soils

Initial investigation indicates ASS and/or PASS are present along the pipeline alignment. Additional testing must be completed in areas of excavation and/or where fill material is to be obtained to fully determine the extent of ASS and PASS within the Site boundary. Testing must be carried out not less than three weeks before excavation commences.

An initial ASS Management Plan (ASSMP) is provided in the Acid Sulphate Soils Investigation Report, refer Attachment 2: Detailed Design Report - Appendix E2. Prepare a Site and work method specific ASSMP. Refer to draft CEMP Attachment 2: Detailed Design Report - Appendix C for further information and requirements.

10. Salvaged items

Not Applicable

11. Work Health and Safety

11.1 Safe Work

Ensure that all Work Health and Safety Requirements are met and all workers and subcontractors are supervised at all times while performing the Works. Ensure systems for monitoring of documented work practices (including subcontractors documented work practices) are implemented and maintained throughout the course of the Work. Prior to commencement of Works, ensure all workers (including workers employed by Subcontractors) receive training in Work Health and Safety (WHS) and risk management specific to the Site and Work activities.

Provide the below documents to the Superintendent, in accordance with Clause 14H and 27.1(d) of the General Conditions of Contract, when any amendments are made and at any time during the course of the Works:

- SWMS and/or safe systems of work incorporating Site specific workplace hazards risks and controls.
Part B: Project Specific

- Designer’s safety report identifying hazards incorporated in any aspect of any design, including temporary Works.
- the Contractor’s WHSMP relative to Site construction activities being undertaken, addressing at least the following aspects of the Works:
  - the names, positions and health and safety responsibilities of all persons whose positions or roles involve specific health and safety responsibilities
  - arrangements in place for managing any work health and safety incidents that occur at the Site
  - Site specific health and safety rules, and the arrangements for ensuring that all persons at the Site are informed of these rules
  - arrangements for the collection and any assessment, monitoring and review of SWMS
  - arrangements for consultation, cooperation and coordination
  - process for management of subcontractors
  - workers have appropriate licences and training
  - the safe use and storage of plant
  - the development of a construction project traffic management plan TMP
  - obtaining and providing essential services information
  - compliance with this Clause.

11.2 Communication, consultation and coordination

Before commencing Works and then on an ongoing basis, consult, cooperate and coordinate with:

- the Superintendent;
- workers (including workers employed by Subcontractors) who are or are likely to be directly affected;
- relevant suppliers, Contractors and other third parties; and
- all other duty holders as defined within Work Health and Safety Law.

in relation to any WHS matters arising out of or in connection with Works under the Contract.

11.3 Known Hazards

The known hazards and risks at/or in the vicinity of the Site identified by the Principal are listed below. Prior to the commencement of the Works identify all hazards and risks that are present.

Animals including insects, snakes and spiders that bite or sting.

- Extremes of heat, or cold (extreme in temperature caused by operating machinery or artificial environments such as cold rooms).
- UV radiation exposure longer than 15 minutes.
- The assets may overflow and surcharge causing safety risks and environmental damage if the construction and shutdown Works are not properly managed and controlled.
- Serious personal injuries may transpire if equipment is not installed in accordance with the specific manufacturer’s installation procedures.
- There may be physical injury and microbiological contamination of persons coming into contact with wastewater if the Works are not properly managed or controlled, or if personal hygiene procedures are not followed.
- Risks associated working within a sewage treatment plant facility, including biological contamination and falling into aerated sewage.
- Working within an operational golf course, including risk of golf balls striking work Site area.
- Working within sewage treatment plant, including close to aerated water.
- Working with asbestos.
- There may be electric shock/burn injuries if organisational/statutory requirements for the Works are not observed.
- Physical injury if excavated trench not shored properly or dewatering not carried out appropriately.
- There may be manual handling injuries if the Work Health and Safety Law and any specific manufacturer’s installation procedures are not followed.
Part B: Project Specific

- There may be risk of asphyxiation or other serious injuries if Safe Entry to Confined Spaces Regulations and standard operating procedures are not adhered to.
- Site contamination may exist
- PUP and other services may exist at or adjacent to the Site. The existence, location, alignment, depth, size or type of PUP or service must be confirmed by the Contractor. There may be risk of disruption to PUP and users of the PUP or service if the Contractor does not adequately undertake responsibility to locate existing PUP and other services in advance of construction.
- The Works are located in an area identified where ground water in soils of low stability may be present and specific safety precautions must be undertaken.
- The Works, removing section of pipeline, and grouting another section pipeline, involve pipe material being AC. Appropriate handling and compliance to legislation must be adhered to.
- Electrical and/or mechanical services safety including working close to power poles.
- Working with live utilities.
- Construction safety including confined spaces.
- Biological hazards (substances which consist of, or which may contain micro-organisms or non-viable products of living matter, which can create a risk to health e.g. virus, bacteria. Examples – HIV, Hepatitis (A, B and C), Avian Influenza (Bird Flu), tetanus, typhoid fever, Q fever, Hendra Virus, dermatitis etc.).
- Fall from heights (by a person from one level to another that is reasonably likely to cause injury to the person or any other person).
- Hazardous atmospheres (e.g. confined spaces where gases, vapours or mist may be hazardous).
- Use, handling and storage of hazardous chemical/dangerous goods.
- Inadequate lighting (including work completed at night as well as inadequate task lighting, inadequate access and stair lighting and inadequate emergency lighting).
- Excessive noise for long periods (e.g. machinery).
- Hot work including heat, sparks, radiation from welding, grinding, oxy cutting, etc.
- Presence of hazardous airborne contaminants (e.g. gases and vapours or dusts like lead, silica or pesticides).
- Restricted walkways and working platforms (temporary structure specifically erected to support access or working platforms).
- Rigging work (e.g. structural steel erection, hoists, pre-cast concrete members of a structure and safety nets and static lines, mast climbing work platforms, perimeter safety screens and shutters).
- Scaffolding work including modular or pre-fabricated scaffolds, barrow ramps and sloping platforms.
- Slips, trips and falls (e.g. unstable, wet, slippery surfaces, excavation, exposed reo bars and posts/pegs).
- Tunnelling work
- Under ground or overhead utilities (gas, water, electricity etc.)
- Use of explosives or explosive tools (e.g. explosive charged power tools used to fasten construction materials to brick, steel or concrete).
- Violence and aggression (verbal/physical abuse from members of the general public).
- Work completed outside of normal operational hours (work extending or scheduled outside core business hours that may lead to fatigue).
- Working in excavation or trenching.
- Work involving structural alterations or repairs that require temporary support to prevent collapse.
- Work on or near chemical, fuel or refrigerant lines.
- Working near or over water or liquid that poses a risk of drowning.
- Working on or adjacent to moving traffic.
- Work in remote or isolated areas.
- Work within or adjacent to waterway recreational areas and the navigational channels within them.

11.4 Personal Protective Equipment

Ensure the following minimum PPE is provided and worn at all times:
Part B: Project Specific

- Long sleeved high visibility shirt, or a long sleeved shirt with a high visibility vest
- Full length trousers
- Safety helmet with broad brim
- Ankle length lace up or zip up boots
- Safety glasses
- Gloves when conducting manual tasks

Inclusive of the above, during low light and night time Works, fluorescent and/or reflective PPE must also be worn.

All PPE must meet minimum standards nominated within applicable Legislative Requirements.

Ensure risk controls are implemented for all Works and where identified, additional PPE is provided and worn as required.

11.5 High Risk Construction Works

The high risk construction activities identified by the Principal are listed below. This assessment is not exhaustive and excludes activities generated by individual work process. Prepare SWMS for all high risk constructions activities prior to the execution of the Works. Ensure SWMS address all relevant aspects of the activities and all high risk construction work is carried out in accordance with the SWMS.

- involves a risk of a person falling more than 2m.
- is carried out in or near—a shaft or trench with an excavated depth greater than 1.5m; or a tunnel.
- is carried out in an area that may have a contaminated or flammable atmosphere.
- is carried out on, in or adjacent to a road or other traffic corridor that is in use by traffic other than pedestrians.
- is carried out in an area at a workplace in which there is any movement of powered mobile plant.
- is carried out in or near water or other liquid that involves a risk of drowning.

11.6 Alcohol and Other Drugs

The Contractors workers (including workers employed by Subcontractors), whilst engaged in the Works, must not be under the influence of any alcohol and/or other drugs (AOD).

All workers must maintain a Breath Alcohol Concentration (BrAC) reading of 0.000% and in respect of drugs including but not limited to opiates, THC, cocaine, amphetamine and benzodiazepines, maintain levels not in excess of those prescribed by AS 4760.

The Principal may arrange for random AOD testing at any time. The Contractors workers must participate in testing through a random selection process.

The Contractor must:

- ensure all its workers are aware that they must participate in a random AOD test when requested
- ensure that its workers comply and participate in the random AOD test
- ensure that its workers cease work and leave the Site if:
  - refusing to submit a sample for testing purposes;
  - a non-negative drug test result is returned; or
  - a positive alcohol test is returned.

A worker may only return to the Site subject to the Contractor providing evidence of a confirmed negative test result.

11.7 Working with Asbestos

Working with asbestos is required at various locations at the work Site, refer Section 4.9 above. Working with asbestos must be carried out by a suitably qualified and licensed asbestos Contractor in compliance with the Code of Practice for the Management and Control of Asbestos in the Workplace, Environmental Protection Act 1994 and AS 1940-2004.
Asbestos Removal Control Plan (ARCP) must be provided, as a minimum, the ARCP must identify:

- The responsible person present during the AC pipe’s removal.
- Timing of removal work.
- Removal Method.
- Competencies and certifications of Personnel completing the removal.
- Emergency plan.
- Location and nature of boundaries and barricades.
- Required PPE.
- Requirements of Air Monitoring (if needed)
- Disposal Site location.
- Disposal method, including preparation of Regulated Waster Transport Certificate.

Provide evidence of the above to the Superintendent / Principal prior to any asbestos being removed from Site and again once the asbestos has been disposed of at an approved facility and in accordance with the requirements of relevant legislations. Refer draft CEMP Section 5.8 in Attachment 2: Detailed Design Report – Appendix C for further details.

11.8 Reporting and Incident Investigation

Notify the Superintendent immediately after becoming aware of any of the following:

- a failure to comply with any requirement of this Clause
- any accident, incident or near-miss incident;

The initial notification required relating to the above may be verbal or in writing it must contain the full details of:

- the location and nature of the event;
- the nature and extent of any harm and any other impacts that have occurred or may occur;
- how the Contractor is managing the event; and
- any other information required by any Regulatory Authority.

If the initial notification is verbal, it must be followed by written notification as soon as practicable.

Further to the requirement of the WHSMP, investigate the root cause any accident, incident or near-hit incident as soon as practical and must provide the results, any learning or recommendations and any progress reports on corrective actions taken to the Superintendent.

In the event that the Contractor has a Lost Time Injury, Medical Treatment Injury or High Potential near miss during work on this Contract, the Principal shall be notified of this as soon as possible but no later than close of business on the same day that it has occurred. Where First Aid Injuries are recorded, the Principal shall be notified of this no later than close of business on the day after the incident has occurred.

The Principal may by notice in writing to the Contractor, participate in any investigation or review the Contractor undertakes.

Failure to comply with this Clause, the Principal may by notice in writing to the Contractor conduct its own investigation in to any accident or incident in relation to the Works.

12. Environmental Protection

12.1 Environmental control

Comply with the provisions of all environmental protection provisions in this Contract and with the requirements of any Legislative Requirements related to environmental protection.

Do not form new tracks, alter existing tracks, erect camps, remove trees or shrubs, cut fences, water, sewerage or power lines or any other such things without the written approval of the Superintendent.

Restrict dust caused by work under the Contract to a minimum. Take all practical steps to minimise noise resulting from work performed under the Contract.
Dispose of litter and debris at an appropriately licensed waste disposal facility.

12.2 Protection of flora

Protect from damage all trees and other plants which:

- are shown or specified to be retained
- are beyond the limits allowed to the Contractor
- need not be removed or damaged for construction operations
- Obtain the written approval of the Superintendent prior to removal of any tree or plant.

12.3 Erosion and sediment control

Prevent erosion of soil from lands used or occupied in the execution of the work under the Contract. Use methods to control flow velocity of stormwater run-off, to reduce erodibility of the underlying material, to reduce effects of winds, and to reduce the volume of run-off water.

Control sediment-laden run-off water from discharging direct to streams, ponds or any outfall system. Consider the use of silt fences, sedimentation ponds, silt traps or similar.

12.4 Disposal of contaminants or hazardous materials

Dispose of solid, liquid and gaseous contaminants or hazardous materials in accordance with Legislative Requirements, as follows:

- Solids - remove from Site to a recognised/approved location, or as approved or directed by the Superintendent.
- Liquid - subject to statutory and local requirements, dilute with water until an acceptable level of quality is achieved for discharge into the public sewer (wastewater) system. Provide the Superintendent with evidence that the key criteria for discharge have been met. Alternatively, store in approved vessels for disposal at approved locations.
- Gaseous - discharge to atmosphere such that they will be diluted with fresh air to reduce its toxicity to an acceptable and safe level.

12.5 Status of Contractor in terms of Environmental Protection Act

For this Contract, the Contractor will be considered independent, and not a servant or agent of the Principal, for the purposes of complying with the Environmental Protection Act 1994 (Qld).

12.6 Environmentally relevant activity

Not Applicable.

12.7 Environmental performance conditions

Compliance with environmental Legislative Requirements

- In addition to any other Clause of this Contract requiring compliance, comply with the requirements of all environmental Legislative Requirements relating to the Works.

Notification of Incidents and Compliance with orders and directions

- Notify the relevant administering agency immediately of any non-compliance with any environmental authority or other permit, licence or approval applying to the Works or any environmental Legislative Requirements relating to the Works or the Site.

- Notify the relevant administering agency immediately of any incident involving actual or potential serious or material environmental harm or environmental nuisance associated with the conduct of the Works. Provide such details of the incident as the Superintendent or CCR where applicable reasonably requires. In this Clause 'serious or material environmental harm' and 'environmental nuisance' have the same meanings they have in the Environmental Protection Act 1994 (Qld).
Part B: Project Specific

- Notify the Superintendent or the CCR where applicable immediately of any direction order or requirement being imposed on it by any agency responsible for administering environmental Legislative Requirements in respect of the Works or any aspect of the Contractor's conduct in respect of the Works.

Indemnity - Environmental Harm

- Indemnify the Principal against all liability, loss arising from, and any costs, fines, charges or expenses incurred in connection with a breach by you of:
  - the conditions of any environmental authority or other approval or permit whatsoever pertaining to the Works
  - any relevant environmental Legislative Requirement arising out of or as a consequence of the carrying out by you of the Work under this Contract.

The Principal may inquire about compliance. The Contractor must:

- answer any reasonable request by the Superintendent or the CCR where applicable concerning your compliance with any environmental authority, or other approval, or any environmental Legislative Requirements concerning the Works
- respond to any reasonable direction of the Superintendent or the CCR where applicable concerning compliance with any environmental authority or other approval concerning the Works, in the case of you being an independent Contractor working under the Principal's environmental authority, or in the case of you being a dependent Contractor.

The Contractor is aware of approvals obtained by Principal.

- The Principal will provide copies of the following environmental authorities and other approvals relating to the Works or provision of services which have been obtained by the Principal:
  Refer to draft CEMP Attachment 2: Detailed Design Report - Appendix C:
  - Sub Appendix B1 - Marine Plant and Regulated Vegetation Approvals.
  - Sub Appendix B2 - Species management program for tempering with animal breeding places (low risk impacts).
- Accept that the terms and conditions of the above approvals have been read and understood and agree to be bound by them.

13. Quality Assurance System

Maintain a Quality Assurance System (QAS) for the duration of the Contract and ensure that appropriate Site conditions (both on-Site and off-Site as applicable) and plant requirements are provided and maintained to ensure that prescribed quality outcomes are achieved throughout the Contract period in accordance with AS/NZS ISO 9001.

Be responsible for the quality of all products and services supplied under the Contract, and provide all necessary facilities and resources to perform the inspection and tests required to achieve the specified quality.

The QAS must include ITPs and procedures and identify Hold Points appropriate to the deliverables specified in the Contract.

All inspection and test procedures must be submitted to the Superintendent within 21 days of the Date Acceptance of Tender, or not less than 14 days prior to any proposed testing whichever is the earlier, to allow the Superintendent to comment. Any additional testing required will, as a result of the Superintendent's comments, be reflected in the testing and at no additional cost to the Principal. All laboratory tests must be undertaken in an independent NATA accredited laboratory.

The Principal specifies that the items identified in the Draft Inspection and Test Plan are the minimum Hold Points that are required to be inspected by the Superintendent with respect to the execution of this Contract, refer to Attachment 6: Draft Inspection and Test Plan. Discuss and agree with Superintendent when preparing final ITP and use information in the draft ITP as a reference.
Inspection, testing and commissioning must include, but not be limited to, the satisfactory completion of the following activities:

- Visual inspections and physical testing of all materials and workmanship, during the execution of the Works and at their completion to ensure that the Works are to the specified standards and 'fit' for purpose.
- Test results
- Submission of as-constructed drawings.

Tests undertaken throughout the duration of the Contract must be submitted to the Superintendent not more than two Business Days following the date of testing. In the event that test results indicate non-compliance with quality targets, notification of non-compliances are to be notified to the Superintendent within not more than 24 hours of the time of the test.

Prepare and submit all necessary documentation and records as verification that installation, testing and commissioning has been successfully completed. All of the above requirements are to be satisfied before the issue of the Certificate of Practical Completion by the Superintendent for any portion of the Works.

In the event that any part of the Works performed under this Contract fail to meet the specified product or performance requirements, carry out all necessary remedial Works at no further cost.

Give sufficient notice to the Superintendent to enable any materials or workmanship to be examined prior to incorporation into the finalised Works and must give sufficient notice to the Superintendent to enable sighting of any test results required by the Contract or ordering of any test results prior to incorporation of materials or workmanship into the finalised Works.

Unless otherwise specified, all testing to be carried out must be performed by an approved member of the NATA.

In the event that any part of the Works performed under this Contract are found to be defective following the issue of a Certificate of Practical Completion and during the Defects Liability Period, carry out all necessary remedial Works at no further cost. Following completion of the remedial Works all works are subject to a 12 month Defects Liability Period from the date of completion of the remedial Works.

As part of commissioning and handover, issue the Superintendent three complete copies of the project QAS (i.e. all tests, certifications, signed ITP’s, etc.). All costs associated with the provision of a Quality Assurance System must be included in the total Contract amount.

14. Waste tracking

Legislative Requirements requires all handlers (being generators, transporters, and receivers) of trackable waste, as defined in Schedule 1 of the Environmental Protection (Waste Management) Regulation 2000, to record prescribed information about the waste.

Record the prescribed information about the trackable waste as detailed in Schedule 2 of the Regulation. Provide this information to DEHP on the approved form, or in any other prescribed manner.

DEHP’s approved form is available from all DEHP offices. Obtain approval from the Chief Executive of DEHP before using any other method to record and report the trackable waste.

Some examples of trackable waste are given below:

- Acidic solutions, or acids in solid form e.g. battery acid, hydrochloric acid
- Basic (alkaline) solutions, or bases (alkalis) in solid form e.g. caustic soda, ammonia
- Clinical and related wastes e.g. sharps (exemptions apply for sharps collected in public areas)
- Organic solvents e.g. white spirit, methyl ethyl ketone
- Grease trap waste e.g. interceptor waste
- Lead and lead compounds e.g. used lead/acid batteries
- Mineral oils e.g. waste oil, oil filters, brake fluid, oily rags
- Oil and water mixtures or emulsions, or hydrocarbon and water mixtures or emulsions.
- Sewerage sludge and residues including nightsoil and septic tank sludge.
Surface active agents (surfactants) containing principally constituents and which may contain metals and inorganic material.
Tyres
Waste from the manufacture, formulation or use of inks, dyes and pigments.
Removal of asbestos.

The Contractor is to record and report all trackable waste to DEHP including the following as identified by the Principal.
Removal of asbestos pipe.

15. Interruption and/or diversion of services

The Principal discloses that aspects of these Works may impact on its ability to maintain required levels of service to the public and may impact adversely in respect to critical issues such as safety, environmental or other outcomes not acceptable to the Principal if not addressed adequately or if not appropriately coordinated with the Principal's resources where they also need to be involved.

During the Works and further to the general information provided in the draft Pipeline Commissioning Plan for the Works (refer to Clause 2.2 in Attachment 5: Draft Pipeline Commissioning Plan), the Principal requires detailed disclosure of draft proposals for the following stages associated with interruptions and/or diversions of services or other critical Works:

Detailed Construction Methodology:
- Live connections to existing recycled water pipe
- Contingency plan to successfully complete the live connection within an allocated 10 hour period.
- A narrative of the Work and how the Work will be carried out with nominated staff roles and responsibilities (including any Principal roles), critical times nominated and a schedule of labour, materials, plant and sundries for each activity along with evidence of any possible preliminary work (e.g. location and levels for existing services, materials sourcing, prefabrication) in order to minimise service interruptions to less than five hours
- Proposals for Principal's in-house consultation arrangements
- Evidence of the competence and experience of the nominated key staff and/or sub-Contractors proposed
- Contingency plans based on risk assessment including relevant standby resources

Details of the draft proposals are to be provided to the Superintendent for information and coordination aspects and until the Principal advises that it has no objection to the proposal, then this is a nominated Hold Point for the relevant Works.

These nominated Works then require the Superintendent's direction permitting the Works to proceed in accordance with the Principal endorsement of the Contractor's proposal (as modified where necessary to meet the Principal's project objectives).

Allow for a minimum 10 Business Day consideration by the Principal for each proposal and for the costs of any reasonable requirements for the Works in the Contract Sum and Date for Practical Completion. Other requirements of the Principal, as determined by the Superintendent, may be claimed as a variation in accordance with the terms of the Contract or be valued as dayworks under the terms of the Contract where so directed by the Superintendent.

The costs of providing any known diversion/interruption/temporary services must be included in the Contract.
Submit the final proposal, incorporating any comments from the Principal on the draft proposal, not less than 10 days prior to the planned commencement of the Works.
16. Work with the Principal

16.1 Security of infrastructure

When there is a requirement to remove or alter any security infrastructure to enable delivery of the Works, supply to the Superintendent a detailed security/Site management plan for review not less than 14 days prior to commencement of the Works. The plan must detail how the implemented temporary security works ensure that the Site is rendered secure and how it interacts with the existing Principal’s 24 hour centre for the duration of the Works.

The temporary Site security must be in place for the duration of the Works or until such time that the proposed final security works has been implemented and accepted by the Superintendent.

17. Temporary power supply

Do not use private services, irrespective of whether approval to the use of such services.

Where portable power generation devices are used, such devices will be fitted with emission control devices to comply with local and/or statutory regulations and Legislative Requirements. The permitted times of use of such equipment may also be restricted by local and/or statutory regulations, comply with all such regulations and Statutory Requirements.

Upon request to the Superintendent and where available, the Principal may provide a limited power supply from existing facilities. The cost of providing this power will be to the account of the Contractor. Provide fused and earth leakage protected distribution board as the interface to the Principal’s power supply and the board will be installed by the Principal’s electricians who will establish the current load. Any costs associated with the installation and later disconnection of the board by the Principal’s electricians will be to the Contractor’s account.

The provision of this power is not guaranteed. Any inadequacy in supply e.g. interruptions, voltage, current does not relieve the Contractor of their responsibilities under this Contract.

18. Temporary water supply

Recycled water is available within the existing recycled water pipe for all uses, except for potable or ancillary applications. Use of recycled water is the preferred source of water for pressure testing of mains, provided the Contractor has assessed and considered that the quality of the recycled water is acceptable and suitable for its proposed use and application. Use of recycled water must comply in all regards with statutory requirements and in accordance with policies and procedures of the Principal.

Disposal of recycled water used for pressure testing can be made into the filtrate return pump station or the stormflow lagoons of the Coombabah STP. Ensure that the water is not contaminated before its disposal. Method of disposal must be agreed with the STP operators through the Superintendent first and be addressed in the detailed Pipeline Commissioning Plan. Refer to Attachment 8: Coombabah STP – Location of Filtrate Return Pump Station and Stormflow Lagoon.

If through drought, fire or any cause whatever, a delay occurs, due to cessation or temporary failure of the water supply, the Principal will not be held responsible in any way and the Contractor will have no right to compensation or to claim for damages on account of any loss which they may deem to be occasioned thereby.

Under no circumstances should the use of water from private residential water services, irrespective of whether approval is obtained, be used for such services.

19. Water quality testing (water reticulation system)

Not Applicable.

20. Working in tidal areas

- Provide details of any bunding if proposed to work within tidal land.
- Bunding Works must comply with all Legislative Requirements.
Part B: Project Specific

- Ensure full consideration has been given to the behaviour of foundation materials in excavations within such zones.
- Coordinate and program the Works making allowance for the actions of the tides.
- ESCP must ensure consideration has been given to the diversion or treatment of stormwater runoff which may enter the construction area from the existing stormwater flowpaths.
- Ensure consideration has been given to prevention of failure or critical loading situations to bunds and/or retained Works from all tide levels within the Contract period which may be determined from tide charts. The Contractor is not required to consider storm surge actions above the absolute charted tide levels during the Contract period.

21. Marine plants

A permit to disturb and remove marine plants has been obtained by the Principal, copy is included in the draft CEMP, refer Attachment 2: Detailed Design Report - Appendix C: Sub Appendix B1 - Marine Plant and Regulated Vegetation Approvals. Minimise disturbance to vegetation on the Site. Do not remove or disturb vegetation on areas other than approved by the permit.

22. As-Built Documentation

22.1 General

Further to Clauses 8.8 and 37.2 of the General Conditions of Contract regarding timeframes and acceptance of As-Built Documentation, undertake progressive recording of As-Built Documentation as follows: Retain a single set of approved for construction drawings as control drawings (provided by the Principal) onto which As-Built Documentation must be progressively recorded.

- These control drawings must be clearly stamped ‘As-Built Documentation – record’ in red colour. Keep an accurate and reliable record of As-Built Documentation changes made throughout the duration of the Contract by regularly updating documentation using red colour.
- The As-Built Documentation drawings must be stored in a secure location. The As-Built Documentation drawings must be made available for review by the Superintendent at any time.

22.2 Format and content of As-Built Documentation


As-Built Documentation must meet the following minimum criteria:

- Show approved street names and correct lot numbers (current at the time of the Works).
- Must be north facing.
- Show all significant variations from the Contract drawings.
- Where the Contract contains the decommissioning of any of the Principal’s assets, these assets must be clearly marked on the As-Built Documentation drawing by labelling the asset ‘Decommissioned’ and displaying a ‘strike out’ with crosses on the drawing.
- All drawings prepared in addition to the Principal’s supplied drawings, including but not limited to As-Built Documentation associated with or arising from changes, must be prepared using the same layout and format (i.e. titles, logos, drawing numbers, etc.) as that provided in the Principal’s supplied drawings and standard template drawings.
- Incorporate password lock or equivalent security measures preventing opening of the drawing file or files by the Principal will not be accepted.
- The removed and grouted sections of AC pipe must be clearly marked on the As-Built Documentation drawings. As-Built Documentation drawings or information incorporating As-Built Documentation survey data must be endorsed by a Registered Survey. As-Built Documentation drawings or information incorporating As-Built Documentation survey data must be endorsed by an RPEQ.
22.3 As-Built Documentation survey information and certification

As-Built Documentation incorporating the As-Built Documentation survey details must, unless otherwise advised in writing, be prepared based on:

- AHD unless otherwise advised in writing
- Survey coordinate system converted to Mapping Grid of Australia 1994 Zone 56 (MGA 94).

The origin of all levels and details of all survey control points or survey coordination details or notes utilised in compiling the As-Built Documentation survey drawings are to be noted on the As-Built Documentation drawings.

All PSM must be submitted with MGA94 horizontal coordinates, of at least 4th order, Class D accuracy (as defined by the ICSM and Practices for Control Surveys) and 4th Order, Class D heights on AHD.

For all Works, excluding those where the Works are located entirely within the boundaries of existing water and/or sewage treatment plants, As-Built Documentation must include details of survey control comprising as a minimum:

- For Works comprising the construction of new or replacement pipelines (e.g. water mains, reclaimed water pipelines, pressure or gravity sewer mains and access chambers) totalling more than 400 metres in total length:
  - Three or more registered PSM’s
  - Connection to the defined points of cadastre adjacent to the Site of the new infrastructure.

- For Works comprising the construction of new reservoirs, pumping stations and ancillary facilities (water, wastewater or reclaimed water):
  - Three registered PSM’s
  - Connection to the defined points of cadastre for the Site, or adjacent to the Site, of the new infrastructure.

- For all other Works located within or adjacent to road reserves or public areas:
  - A minimum of two (three preferred) registered PSM’s
  - Connection to the defined points of cadastre adjacent to the Site of the new infrastructure.

For all Works located entirely within existing sewage or water treatment property and/or Sites, As-Built Documentation drawings for any new facilities, structures or infrastructure constructed as part of the Works must include details of survey control comprising as a minimum:

- Details of existing or newly constructed permanent reference marks from which the new infrastructure has been, and can be, referenced.
- Connection to the defined points of cadastre for the boundary of the treatment plant Site.

Where agreed by the Superintendent and at the request of the Contractor, the Principal’s survey officers, through the Superintendent, may be available to discuss As-Built Documentation survey data requirements with the Contractor. This may include, but not be limited to, clarification of survey conversion or adjustment factors applicable to the Gold Coast region and to ensure consistency of survey coordination with the Principal’s base data requirements.
As-Built Documentation drawings incorporating As-Built Documentation survey details must be certified by a Registered Surveyor under the provisions of the Surveyors Act 2003 (Qld) (as amended) using the following certification statement (or similar to the satisfaction of the Superintendent):

Registered Surveyors Certification
I, ......................................................... being a Registered Surveyor registered under the provisions of the Surveyor’s Act 2003 (Qld) (as amended) hereby certify that the details, vertical and horizontal locations, measurements and dimensions shown on this drawing are a true and correct record of the As-Built Documentation information, and that this drawing complies with the drafting and format requirements of City of Gold Coast Council.

Signed: ...........................................................................................................................

Registered No:.......................................................... Dated: ..................................................

Certification of As-Constructed documentation
All As-Constructed documentation must be certified by a RPEQ registered under the provision of the Professional Engineers Act 2002 (Qld) using the following certification statement (or similar to the satisfaction of the Superintendent):

Registered Professional Engineer of Queensland Certification
I, ................................................................. being a Registered Professional Engineer registered under the provision of the Professional Engineers Act 2002 (Qld) (as amended) hereby certify that the As-Built Documentation information shown on this drawing is a true and correct record of the Works performed.

Signed: ...........................................................................................................................

RPEQ No:.......................................................... Dated: .....................................................
All As-Built Documentation drawings are to be submitted under cover of a certification sheet as follows:

<table>
<thead>
<tr>
<th>Consulting Engineer’s Certificate and As-Built Documentation certification</th>
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<tbody>
<tr>
<td><strong>Project/Contract Name or Title:</strong></td>
</tr>
<tr>
<td><strong>Contract Number:</strong></td>
</tr>
<tr>
<td><strong>Works to which Certification relates:</strong></td>
</tr>
<tr>
<td><strong>Project Location/Site Details Real property description (if applicable):</strong></td>
</tr>
<tr>
<td><strong>Name of street(s) where Works located (include intersecting streets) at:</strong></td>
</tr>
<tr>
<td><strong>Consultant:</strong></td>
</tr>
<tr>
<td><strong>Company Name:</strong></td>
</tr>
<tr>
<td><strong>Address:</strong></td>
</tr>
<tr>
<td><strong>Phone Number:</strong></td>
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</tbody>
</table>

I, …………………………………………………..being a Registered Professional Engineer registered under the provision of the Professional Engineers Act 2002 (as amended) and a duly authorised representative of …………………………………………………………….. do hereby certify that the information shown on the As-Built Documentation drawings and ancillary documentation as attached and listed in the following table is a true and correct record of the Works performed (including sizes, types, classes, materials etc.), and that we have exercised reasonable skill, care and diligence to ascertain that the Works described have been executed in accordance with:

- The approved Engineering Drawings, Specifications, Development Guidelines and relevant Australian Standard Code of Practice.
- Good engineering practice and to a satisfactory standard of workmanship.
- Relevant Local, State and Federal legislations, regulations and By-Laws.

<table>
<thead>
<tr>
<th>Document Type</th>
<th>Drawing No. or Document No.</th>
<th>Revision</th>
<th>Title of Document or Drawing</th>
<th>Date of Issue</th>
<th>Signature of person authorising issue</th>
</tr>
</thead>
</table>

We further certify that the As-Built Documentation information submitted herewith (including survey information prepared by others) indicates to the best of our knowledge and belief that the completed Works represent a true and accurate record of what has been constructed within the specified tolerances required by the Principal.

We further certify that all significant variations from the approved Engineering Drawings (outside the specified tolerances) have been submitted to the Principal for approval and are incorporated in the ‘As-Built Documentation’ information.
Part B: Project Specific

22.4 Amendment to As-Built Documentation during Defects Liability Period

Refer Clause 8.8 of the Conditions of Contract.

22.5 Operations and maintenance manuals

Draft operations and maintenance manuals are to be submitted to the Superintendent no later than 15 Business days prior to the commissioning of installed equipment (e.g. valves/pipework) associated with each Milestone Separable Portion, or the Works, as applicable.

During commissioning, or modification of the installed equipment as a result of commissioning outcomes, any modifications to the draft operations and maintenance manuals and/or As-Built Documentation must be marked onto three control copies of the draft operations and maintenance manuals and/or As-Built Documentation. Two sets of these marked up versions of the documents must be handed over to the Superintendent on the day of commissioning irrespective of whether or not the facility or item of plant or equipment is immediately put into operation by the Principal. The third set of the marked up versions of the documents be retained by the Contractor, who immediately proceeds to amend the electronic versions of the draft operations and maintenance manuals and/or As-Built Documentation.

Further to clause 8.8, where the Contract comprises Separable Portions, the Superintendent will not grant Practical Completion for each Separable Portion until the final operations and maintenance manuals and As-Built Documentation applicable to that Separable Portion has been accepted by the Superintendent.

Where the nature of the Works required are upgrade of sewerage pump stations, air valves and odour control units etc. provide relevant operational and maintenance information of the new Works that has been undertaken and/or provided. If any new Works has effected, altered, or changed any function or operational procedure of pre-existing equipment (i.e. pump station) or components from its existing presence, provide the entire operational procedure that includes those changes unless the Superintendent instructs otherwise.

22.6 Warranties and Manufacturer's Guarantees

Not Applicable.

23. Cultural Heritage

Refer to draft CEMP Attachment 2: Detailed Design Report – Appendix C.

24. Standard Specifications

Refer to Part C – Technical Specification.
Part C: Technical Specifications


Attachment 1 – Design Drawings

Attachment 4 – Supplementary Mechanical and Electrical Specifications
**Part D: Attachments**

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<td><strong>B3</strong> Letter to Principal on Mapping of Non-Juvenile Koala Habitat Trees. (Self-assessment)</td>
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<td><strong>F</strong> Minimum Fauna Management Requirements.</td>
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<td><strong>D1</strong></td>
<td><strong>30% DESIGN REVIEW MINUTES</strong></td>
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<tr>
<td><strong>D2</strong></td>
<td><strong>85% DESIGN REVIEW MINUTES</strong></td>
</tr>
<tr>
<td><strong>D3</strong></td>
<td><strong>RISK ASSESSMENT</strong></td>
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<td><strong>E1</strong></td>
<td><strong>GEOTECHNICAL INVESTIGATION</strong></td>
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<tr>
<td><strong>E2</strong></td>
<td><strong>ACID SULPHATE SOILS INVESTIGATION</strong></td>
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<tr>
<td><strong>F</strong></td>
<td><strong>ALIGNMENT OPTIONS ASSESSMENT</strong></td>
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<td><strong>GUIDELINES TO DEWATERING MANAGEMENT PLAN</strong></td>
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<td><strong>4</strong></td>
<td><strong>SUPPLEMENTARY MECHANICAL AND ELECTRICAL SPECIFICATIONS</strong></td>
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<td><strong>TEMPORARY ROAD CLOSURE APPLICATION FORM</strong></td>
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<td><strong>COOMBABAH STP – LOCATION OF FILTRATE PUMP STATION AND STORMFLOW LAGOON</strong></td>
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<td><strong>10</strong></td>
<td><strong>TENDER SITE SHOW ROUND MEETING PLACE</strong></td>
</tr>
</tbody>
</table>
For more information

P 1300 GOLDCOAST (1300 465 326)
W cityofgoldcoast.com.au