Specifications - AS2124

LG314/1211/19/097

Augmentation of drinking water filling stations at various locations
**Table of Contents**

<table>
<thead>
<tr>
<th>Part A</th>
<th></th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Interpretation</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>1.1 Definitions</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>2. Scope of the Works</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>2.1 Work Milestones</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>2.2 Specific/Ancillary Work</td>
<td></td>
<td>21</td>
</tr>
<tr>
<td>2.3 Design Deliverable</td>
<td></td>
<td>21</td>
</tr>
<tr>
<td>2.4 Project Deliverables</td>
<td></td>
<td>21</td>
</tr>
<tr>
<td>3. Site location and limits</td>
<td></td>
<td>22</td>
</tr>
<tr>
<td>4. Order of Work</td>
<td></td>
<td>22</td>
</tr>
<tr>
<td>4.1 Work to be undertaken prior to the Contract Works</td>
<td></td>
<td>22</td>
</tr>
<tr>
<td>4.2 Work to be undertaken during the Works</td>
<td></td>
<td>22</td>
</tr>
<tr>
<td>4.3 Work to be undertaken after Practical Completion of the Works</td>
<td></td>
<td>22</td>
</tr>
<tr>
<td>5. Coordination with other Works</td>
<td></td>
<td>22</td>
</tr>
<tr>
<td>5.1 Work to be undertaken prior to the Contract Works</td>
<td></td>
<td>22</td>
</tr>
<tr>
<td>5.2 Work to be undertaken during the Works</td>
<td></td>
<td>23</td>
</tr>
<tr>
<td>5.3 Work to be undertaken after Practical Completion of the Works</td>
<td></td>
<td>23</td>
</tr>
<tr>
<td>6. Contract specific requirements/constraints</td>
<td></td>
<td>23</td>
</tr>
<tr>
<td>7. Salvaged Items</td>
<td></td>
<td>23</td>
</tr>
<tr>
<td>8. Statutory requirements/approvals</td>
<td></td>
<td>23</td>
</tr>
<tr>
<td>9. General Requirements</td>
<td></td>
<td>24</td>
</tr>
<tr>
<td>9.1 Specification Precedence</td>
<td></td>
<td>24</td>
</tr>
<tr>
<td>9.2 Cadastral Information</td>
<td></td>
<td>24</td>
</tr>
<tr>
<td>9.3 Proprietary Items</td>
<td></td>
<td>24</td>
</tr>
<tr>
<td>9.4 Access to Private Property</td>
<td></td>
<td>24</td>
</tr>
<tr>
<td>9.5 Work within easements</td>
<td></td>
<td>25</td>
</tr>
<tr>
<td>9.6 Impact on Properties from Works</td>
<td></td>
<td>25</td>
</tr>
<tr>
<td>9.7 Dilapidation survey - Applicable</td>
<td></td>
<td>25</td>
</tr>
<tr>
<td>9.8 Encroachments</td>
<td></td>
<td>25</td>
</tr>
<tr>
<td>9.9 Notification of proposed works or disruption to service</td>
<td></td>
<td>25</td>
</tr>
<tr>
<td>9.10 Continued Operation of Existing Facilities</td>
<td></td>
<td>26</td>
</tr>
<tr>
<td>9.11 Examination and Testing</td>
<td></td>
<td>26</td>
</tr>
<tr>
<td>10. Contract Administration</td>
<td></td>
<td>27</td>
</tr>
<tr>
<td>10.1 Status Program, Report and Contract Status Meeting</td>
<td></td>
<td>27</td>
</tr>
<tr>
<td>10.2 Construction Methodology Report</td>
<td></td>
<td>27</td>
</tr>
<tr>
<td>10.3 Supervision</td>
<td></td>
<td>27</td>
</tr>
<tr>
<td>10.4 Working Hours</td>
<td></td>
<td>28</td>
</tr>
</tbody>
</table>
11. Materials and Work .................................................................................................................................... 28

11.1 Quality Assurance 28

11.2 Testing 28

12. Certification of the Design ........................................................................................................................ 28

13. Construction Requirements ..................................................................................................................... 28

13.1 Existing services and public utilities 28

13.2 Contractor’s Site Area 29

13.3 Superintendent Site Office 29

13.4 Temporary Services 29

13.4.1 Temporary power supply ......................................................................................................................... 29

13.4.2 Temporary water supply .......................................................................................................................... 30

13.5 Temporary fences and hoardings 30

13.6 Interruption and/or diversion of services 30

13.7 Work with the Principal 30

13.7.1 Shutdown and Commissioning ................................................................................................................ 30

13.7.2 Decommissioning of Existing Infrastructure ............................................................................................. 30

13.7.3 Security of Infrastructure .......................................................................................................................... 31

13.8 Vehicle Detection Units 31

13.9 Signage 31

13.10 Pedestrian and Traffic Management 31

13.10.1 Interfaces with Department of Transport and Main Roads (TMR) ................................................... 31

13.10.2 Interfaces with City of Gold Coast controlled roads and footpaths .................................................. 32

13.10.3 Interfaces with City of Gold Coast controlled parks and reserves ................................................... 32

13.11 Interfaces with GCRT 32

14. Work Health and Safety ............................................................................................................................ 32

14.1 Safe Work 32

14.2 Communication, consultation and coordination 33

14.3 Principal inductions 33

14.3.1 Water and Waste facilities ....................................................................................................................... 33

14.3.2 Transport and Infrastructure .................................................................................................................... 34

14.4 High Risk Construction Work 34

14.5 Known Hazards 35

14.6 Personal Protective Equipment 35

14.7 Asbestos and other hazardous material 35

14.8 Alcohol and Other Drugs 35

14.9 Reporting and Incident Investigation 36

15. Environmental Management ..................................................................................................................... 36

15.1 Environmental Management Plan 36

15.2 Environmental Management - water based impacts 38

15.3 Red Fire Ants 39
## Specifications - AS2124

<table>
<thead>
<tr>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.4 Acid Sulphate Soils (ASS) and Potential Acid Sulphate Soils (PASS)</td>
</tr>
<tr>
<td>15.5 Transport of Materials</td>
</tr>
<tr>
<td>15.6 Disposal of spoil</td>
</tr>
<tr>
<td>15.7 Noise</td>
</tr>
<tr>
<td>15.8 Vibration control</td>
</tr>
<tr>
<td>15.9 Incident Reporting and Investigation</td>
</tr>
<tr>
<td>15.10 Indemnity - Environmental Harm</td>
</tr>
<tr>
<td><strong>16. Cultural Heritage</strong></td>
</tr>
<tr>
<td>16.1 Indigenous cultural heritage</td>
</tr>
<tr>
<td><strong>17. Completion</strong></td>
</tr>
<tr>
<td>17.1 Commissioning Equipment</td>
</tr>
<tr>
<td>17.2 Progressive recording of As-Built Documentation</td>
</tr>
<tr>
<td>17.3 Format and content of As-Built Documentation</td>
</tr>
<tr>
<td>17.4 As-Built survey information and certification</td>
</tr>
<tr>
<td>17.5 Operations and maintenance manuals</td>
</tr>
<tr>
<td>17.6 Warranties and Manufacturer’s Guarantees</td>
</tr>
<tr>
<td><strong>Part B: Use of Specifications from TMR</strong></td>
</tr>
<tr>
<td><strong>Part C:</strong></td>
</tr>
</tbody>
</table>
Part A

1. Interpretation

Further to Clause 2 of the General Conditions of Contract and except where the context otherwise requires, the following are applicable:


‘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).

‘inspection’ and similar expressions have the same meaning as examination and testing.

‘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.

1.1 Definitions

In this document, except where the context otherwise requires:

**ADAC:** Asset Design As-constructed.

**AHD:** Australian Height Datum.

**ARMP:** Approved Risk Management Plan.

**ASSMP:** Acid Sulfate Soil Management Plan.

**BAC:** Blood Alcohol Concentration.

**CBD:** Central Business District.

**CCR:** 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.

**City:** City of Gold Coast.

**DBYD:** Dial Before you Dig

**DEHP:** Department of Environment and Heritage Protection.

**Division**

Division A is Part A of the Pricing Schedule and Division B is Part B of the Pricing Schedule

**DWFS:** Drinking Water Filling Stations.

**draft:** 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.

equipment: any tools, items of plant, apparatus or machinery used to carry out and complete the scope of work.

EMP: Environmental Management Plan (inclusive of Construction and Environmental Management Plan (CEMP)). A site or project specific plan developed to ensure the appropriate environmental management practices are followed during the construction and/or operation of a project.

experienced: trained, competent, and having a minimum of 1000 hours of on-the-job current industry experience.

FAT: Factory Acceptance Test.

GCRT: Gold Coast Rapid Transit.

Hold Point: 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.


IFC: Issued For Construction (Contract Drawings).

ITP: Inspection and Test Plan.

materials: any consumables used to carry out and complete the scope of work.


NATA: National Association of Testing Authorities.

O&M: Operational and Maintenance Manuals.

PPE: Personal Protection Equipment.

preliminary: 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.

PSM: Permanent Survey Marks.

PUP: Public Utility Plant.

qualified: having undergone formal training.

RPEQ: Registered Professional Engineer of Queensland.

RPZD: Reduced Pressure Zone Device.

Specifications - AS2124

SAT: Site Acceptance Test.
TCP: Traffic Control Plan.
TMR: Queensland Department of Transport and Main Roads.
QA: Quality Assurance.
QAS: Quality Assurance System.
2. Scope of the Works

2.1 Work Milestones

The deliverables as described in Section 2.4 will be based on Work Milestones as described in this Section. They are to be read in conjunction with the Scope of Services as described below.

Introduction

The Principal requires an experienced and competent multidiscipline engineering Contractor to prepare construction documentation, and to undertake site investigations and civil construction to augment (upgrade) 12 DWFS sites in various locations across City of Gold Coast (City).

Background

The Principal currently operates a number of designated DWFS throughout the Gold Coast. These DWFS are utilised to provide access to drinking water to supply domestic customers outside the Principal's drinking water reticulation supply network.

The Principal engaged consultants Calibre Consulting in August 2016 to undertake a detailed planning report to investigate, assess risk, identify, and recommend a number of DWFS sites to be upgraded. The report provided concept design drawings, capital expenditure budgets, and typical filling station design including raising the hydrants, new lighting and provision for future works.

The Principal engaged consultants SMEC in November 2017 to detail design 12 DWFS sites. The drawings primarily comprise of earthworks, pavement works, concrete works, water and electrical conduit reticulation, site delineation, and additional road furniture. The typical drawings describe sample taps, hydrant assembly, reduced pressure zone assembly, and solar lighting (Refer ATTACHMENT A: Final IFC Drawings and Design Report).

Scope of Services

Project Delivery and Management

For each Contract, Directorates must appoint a CCR. The CCR is responsible for all aspects of the operational delivery and management of the Contract. The CCR assigned to this Contract is the Principal’s Project Manager.

Mandatory Notice

Hydrants at DWFS provide Queensland Fire and Emergency Services (QFES) access to potable water in order to fight a potential fire at any time. For sites as described in the Work Milestones of this Contract, the Contractor must at all times allow QFES access to any hydrant in operation at DWFS.

For sites as described in the Work Milestones of this Contract, the Principal may at any time require access to DWFS for emergency purposes. The Contractor must allow the Principal access and assist where possible.

Project Management

Project management activities as described in Section 10 include but are not limited to the following aspects of the works:

(i) Management, administration, communication, supervision and similar project controls.

(ii) Confirm all quantities, dimensions, elevations, notations, and similar of all issued Contract information prior to pricing, procuring or undertaking works.

(iii) Attend site meetings as well as Contract meetings at the Principal’s office.

(iv) Assist the Principal with stakeholder management.

(v) Weekly reporting of the status of the Program.

(vi) Daily reporting of scheduled and scheduling activities.

Required Key Project Personnel
(i) 100% Allocation of a Contractor Project Manager (CPM)
(ii) 100% Allocation of a Contractor Construction Supervisor (CCS)
(iii) 100% Allocation of a Contractor Project Engineer / Contractor Project Technical Support (CPE)
(iv) If sub-contracting, 100% Allocation of Sub-Contractor Site Supervisor (SS)

‘100% allocation’ means full-time representative for the duration of this Contract.

Changes, additions or deletion to key project personnel, including sub-contractors, must be approved by the Principal in writing. New personnel must have the same or greater experience and qualification to those with equal position or of those they are replacing.

Work Milestones – (Milestones 2 to 13) General Information

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.

All work milestones must include but are not limited to the following aspects of the works:

Site establishment including;
(i) All key project personnel must review all relevant Codes, Standards, Regulations and Contract information prior to mobilisation and must attend site establishment meetings.
(ii) Provide all labour, plant, equipment, tools, materials, accessories and incidentals to safety to complete the works.

Removal of existing assets including;
(i) Assets for removal are considered obsolete and in some circumstances are non-compliant to the current SEQ Code. They are not intended for reuse, refurbishment, resale or donation.
(ii) Allow provision for traffic control, positive location of assets by non-destructive means, remove and recycle, undertake disconnection of asset to relevant standards, and reinstatement to existing ground level with similar materials and reinstatement effort.

Solar Lighting Arrangement and Future Electrical Services including;
(i) Provide design and certified information (as noted below) to the Superintendent prior to commencement of procuring the solar lighting arrangement.
(ii) Solar poles are to be specifically engineered (designed and certified by an Australian Registered Engineer) to support solar panels, battery and box, and outrigger light.
(iii) The 6m pole must be mid-hinged with built-in counter weight engineered to counter the swinging weight of the panel, battery and box, and outrigger light.
(iv) The battery and all internal components must be firmly secured and housed in a box that can be padlocked below the solar panel. The box must be positioned along the pole for ease of access to the battery in maintenance mode.
(v) The pole must be hot dip galvanised and powder coated olive green or black in colour.
(vi) Solar pole must be GM Poles http://www.gmpoles.com.au/ or similar design (pole) company.
(vii) For all Sites where alignment for electrical conduits cross roads, a DN150 enveloper must be installed by under bore method (bored and jacked encasing pipe method) in accordance to SEQ-WAT-1212-1 (http://www.seqcode.com.au/seq-water-supply-code/) and AS3000 Wiring Rules 2018. Open trench or similar destructive trenching is not permitted for Sites requiring road crossings.

Finalisation including;
(i) Site disestablishment & restoration, as well as provision of As-Built documentation, ITPs, photos, and any other supporting documents.
(ii) Restoration Works in accordance with the Specification (Refer ATTACHMENT A - Drawing 50289.002 – General Notes and Legend) and Section 2.4.
(iii) Complete all draft reports, described in Work Milestone Number One, with finalised information and provide Final Report.
Work Milestone Number One - Preliminaries

For payment purposes this milestone is claimable for 100% of its value on completion. The Contractor’s value for Milestone 1 must not exceed 10% of the total Lump Sum.

This milestone must include the following aspects of the works including but not limited to:

1.1 General

   (i) Provide draft template titled ‘Site Approvals Report’ containing each sites approval process and requirement in line with the program. Further to Section 8 & 13, this includes preparing, obtaining and submitting all complete approvals including but not limited to TMR, Principal's Transport and Infrastructure branch, Principal's Traffic Branch, and other relevant project approvals to the Superintendent when required.

   Some sites have underground pressure gas main reticulation. DBYD information is required. Application and permit information can be accessed from https://www.1100.com.au/.

   The report must include solar lighting arrangement information for Superintendent approval prior to commencement of procuring solar lighting arrangement.

   The report is a living document and must be updated and submitted prior to commencing new group of site works.

   Energex approval is not required. Cabling works (consumer mains installation) does not form part of this Contract. Station lighting is provided by solar energy.

   (ii) Provide draft template titled ‘Project Site Plan’ containing each sites construction method statement, water shutdown plan, and similar project controls, processes and requirements in line with the program.

   Prior to commencing Site S10 Gold Coast Springbrook Road, provide a comprehensive construction method statement clearly phasing pavement works allowing for continuous trafficable access from Gold Coast Springbrook road to the rural fire station up until site disestablishment. This section of the report must be approved by the Superintendent prior to undertaking pavement works. Site investigation and establishment is permitted whilst awaiting approval.

   (iii) Prepare and submit project Gantt chart ‘Program’ in *.PDF and *.MPP. Program to include phasing in group of works in this order;

   - Group 1 – Sites N1, S12, N7, and N8
   - Group 2 – Sites S10, N5, N2, and S8
   - Group 3 – Sites N6, S11, N3, and S9

   Within each group, there are two sites with works undertaken in the north of the Gold Coast and likewise two sites with works undertaken in the south of the Gold Coast. All sites within each group are to be constructed concurrently. Group 1 works precedes Group 2 works. Group 2 works precedes Group 3 works.

   Program must be for a work week excluding weekend days and Queensland registered public holidays. Day shift is as follows;
   - Site works commence at 7:00am
   - Site works finish at 5:30pm

   Program must include lead times for the design, certification, fabrication, painting and delivery of each sites Solar Lighting Arrangement and Future Electrical Services.

   Program is to be up-to-date (weekly) and descriptive noting all key activities and its relevant steps. This includes the approvals process, submitting project control information and relevant project delivery requirements.

1.2 Pre-construction Investigations

   WARNING NOTE: Gas service has been shown on drawings. Contractor is responsible for avoiding conflicts with services and must carry out checks with relevant service providers before commencing work.

   (i) Provide a comprehensive dilapidation report. The report must include a condition assessment of existing assets (such as kerbing or barriers) associated with the Works that is proposed to be retained. Provide photos and/or videos for each site within the report.
(ii) Carry out site investigation and survey works including location of all surface fittings and underground and/or overhead services. Provide report titled ‘Site Investigation and Survey Report’ containing each sites pothole plan, Class A feature survey information and notation, project controls, processes and requirements to support construction methods. Prior to commencement of any physical work, notify the Superintendent of any additional requirements determined as a result of the pre-construction site investigation activities.

The report must contain relevant site information including current DBYD information, traffic management, temporary construction fencing and signage.

1.3 Project Administration
(i) Undertake project management

(ii) Provide a comprehensive ‘Site Safety and Quality Report’ including current mandatory and relevant inductions to the Superintendent with required site specific information including but are not limited to the following documents:

- Induction, Licence and Permit Information,
- Construction, Environmental and Management Plan (CEMP)
- Safety Management Plan (SMP);
- QMP, including ITP’s;
- Traffic Management Plan (TMP);
- Stakeholder Management Plan; and
- Project Acid Sulfate Soil Management Plan.

All the above documents are to be included as separate sections within one Report. Provide draft version to the Superintendent for review by the Principal followed by final versions incorporating the reviewed comments by the Principal.

For Induction, Licence and Permit Information requirement, provide a copy of all ‘construction site staff’ that clearly details all particulars of the information provided.

CEMP is provided in ATTACHMENT A. Update and/or amend accordingly.


For QMP, provide the Contractor’s QMP with site specific ITP and similar quality control information.

The Traffic and Stakeholder Management Plan’s purpose is to define and communicate to the Principal the methods and controls the Contractor will apply during construction for engaging with and assisting stakeholders (drinking water carriers, the public and the Principal’s personnel) based on site conditions and progress under the program.

For Project Acid Sulfate Soil Management Plan, Contractor to review the project ASSMP as provided in ATTACHMENT A.
Work Milestone Number Two – Site N1 – Angel Road, Stapylton

For payment purposes this milestone is claimable for 80% of its value on completion of construction activities and 20% after finalisation and review of the works by the Superintendent.

Construction works as per drawings in ATTACHMENT A, detailing the following indicative information;

2.1 Site establishment
   - Site establishment (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)

2.2 Signs, Lines, and Road Furniture
   - Signs (5) including sign provided by the Principal (Drinking water filling station)
   - Line marking
   - Bollards (7)

2.3 Pipework and Fittings
   - Removal of existing assets (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)
   - Pipework (13m)
   - Hydrants (2)
   - Sampling Tap (1)
   - RPZD (1)

2.4 Solar Lighting Arrangement and Future Electrical Services
   - Solar Lighting, Pole and Footing (2)
   - Conduits (24m)
   - Pits (3)

2.5 Drainage
   - Reshape existing stormwater channel to suit new RPZD arrangement
   - Supply and installation of soil and turf within stormwater channel

2.6 Finalisation (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)
   - Testing and Commissioning
   - Supply of As-Constructed and QA Documentation

Work Milestone Number Three – Site N2 – Tillyroen Road, Ormeau Hills

For payment purposes this milestone is claimable for 80% of its value on completion of construction activities and 20% after finalisation and review of the works by the Superintendent.

Construction works per the drawings in ATTACHMENT A, detailing the following indicative information;

3.1 Site establishment
   - Site establishment (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)

3.2 Pavement and Civil Works
   - Pavement (720m2)
   - Footpath (96m2)
   - Remove/trim vegetation within footpath corridor
   - Reinstate or replace retaining wall (landscaping retaining structure) within new footpath corridor

3.3 Signs, Lines, and Road Furniture
   - Signs (6) including sign provided by the Principal (Drinking water filling station)
   - Line marking
3.4 Pipework and Fittings
  o Removal of existing assets (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)
  o Pipework (28m)
  o Hydrants (2)
  o Sampling Tap (1)
  o RPZD (1)

3.5 Drainage
  o Extension of existing culverts
  o Supply and installation of drainage headwall (2)

3.6 Solar Lighting Arrangement and Future Electrical Services
  o Solar Lighting, Pole and Footing (2)
  o Conduits (38m)
  o Pits (4)

3.7 Finalisation (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)
  o Testing and Commissioning
  o Supply of As-Constructed and QA Documentation

Work Milestone Number Four – Site N3 – Kerkin Road North, Pimpama
For payment purposes this milestone is claimable for 80% of its value on completion of construction activities and 20% after finalisation and review of the works by the Superintendent.

Construction works per the drawings in ATTACHMENT A, detailing the following indicative information;

  4.1 Site establishment
  o Site establishment (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)

  4.2 Signs, Lines, and Road Furniture
  o Signs (6) including sign provided by the Principal (Drinking water filling station)
  o Line marking
  o Bollards (4)

  4.3 Pipework and Fittings
  o Removal of existing assets (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)
  o Pipework (8m)
  o Hydrants (2)
  o Sampling Tap (1)
  o RPZD (1)

  4.4 Solar Lighting Arrangement and Future Electrical Services
  o Solar Lighting, Pole and Footing (2)
  o Conduits (13m)
  o Pits (2)

  4.5 Finalisation (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)
Specifications - AS2124

- Testing and Commissioning
- Supply of As-Constructed and QA Documentation

Work Milestone Number Five – Site N5 – Entertainment Road, Oxenford
For payment purposes this milestone is claimable for 80% of its value on completion of construction activities and 20% after finalisation and review of the works by the Superintendent.

Construction works per the drawings in ATTACHMENT A, detailing the following indicative information:

5.1 Site establishment
- Site establishment (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)

5.2 Pavement and Civil Works
- Pavement (824m²)

5.3 Signs, Lines, and Road Furniture
- Signs (7) including sign provided by the Principal (Drinking water filling station)
- Line marking
- Bollards (7)

5.4 Pipework and Fittings
- Removal of existing assets (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)
- Pipework (49m)
- Hydrants (2)
- Sampling Tap (1)
- RPZD (1)

5.5 Solar Lighting Arrangement and Future Electrical Services
- Solar Lighting, Pole and Footing (2)
- Conduits (59m)
- Pits (3)

5.6 Finalisation (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)
- Testing and Commissioning
- Supply of As-Constructed and QA Documentation

Work Milestone Number Six – Site N6 – Tamborine-Oxenford Road, Upper Coomera
For payment purposes this milestone is claimable for 80% of its value on completion of construction activities and 20% after finalisation and review of the works by the Superintendent.

Construction works as per drawings in ATTACHMENT A, detailing the following indicative information:

6.1 Site establishment
- Site establishment (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)

6.2 Pavement and Civil Works
- Pavement (R521m² / F61m²)

6.3 Signs, Lines, and Road Furniture
- Signs (3) including sign provided by the Principal (Drinking water filling station)
- Line marking
- Bollards (5)
6.4 Pipework and Fittings
- Removal of existing assets (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)
- Pipework (42m)
- Hydrants (1)
- Sampling Tap (1)
- RPZD (1)

6.5 Solar Lighting Arrangement and Future Electrical Services
- Solar Lighting, Pole and Footing (2)
- Conduits (34m)
- Pits (3)

6.6 Finalisation (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)
- Testing and Commissioning
- Supply of As-Constructed and QA Documentation

Work Milestone Number Seven – Site N7 – Maudsland Road, Maudsland

For payment purposes this milestone is claimable for 80% of its value on completion of construction activities and 20% after finalisation and review of the works by the Superintendent.

Construction works as per the drawings in ATTACHMENT A, detailing the following indicative information;

7.1 Site establishment
- Site establishment (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)

7.2 Pavement and Civil Works
- Pavement (133m2)

7.3 Signs, Lines, and Road Furniture
- Signs (8) including sign provided by the Principal (Drinking water filling station)
- Line marking
- Bollards (6)

7.4 Pipework and Fittings
- Removal of existing assets (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)
- Pipework (20m)
- Hydrants (2)
- Sampling Tap (1)
- RPZD (1)

7.5 Solar Lighting Arrangement and Future Electrical Services
- Solar Lighting, Pole and Footing (2)
- Conduits (78m)
- Pits (3)

7.6 Finalisation (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)
- Testing and Commissioning
- Supply of As-Constructed and QA Documentation
Work Milestone Number Eight – Site N8 – Sports Drive, Runaway Bay

For payment purposes this milestone is claimable for 80% of its value on completion of construction activities and 20% after finalisation and review of the works by the Superintendent.

Construction works as per the drawings in ATTACHMENT A, detailing the following indicative information;

8.1 Site establishment
   - Site establishment (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)

8.2 Pavement and Civil Works
   - Pavement (R67m2)
   - Footpath (17m2)
   - Remove existing section of footpath and place soil and turf
   - Remove existing gate (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)
   - Supply and install deflection rails
   - Supply and install new perimeter fence with matching materials
   - Reshape new footpath embankment to not impede stormwater pit

8.3 Signs, Lines, and Road Furniture
   - Signs (7) including sign provided by the Principal (Drinking water filling station)
   - Line marking
   - Bollards (16)

8.4 Pipework and Fittings
   - Removal of existing assets (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)
   - Pipework (35m)
   - Hydrants (1)
   - Sampling Tap (1)
   - RPZD (1)

8.5 Solar Lighting Arrangement and Future Electrical Services
   - Solar Lighting, Pole and Footing (2)
   - Conduits (125m)
   - Pits (4)

8.6 Finalisation (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)
   - Testing and Commissioning
   - Supply of As-Constructed and QA Documentation

Work Milestone Number Nine – Site S8 – Yarrimbah Drive, Nerang

For payment purposes this milestone is claimable for 80% of its value on completion of construction activities and 20% after finalisation and review of the works by the Superintendent.

Construction works as per the drawings in ATTACHMENT A, detailing the following indicative information;

9.1 Site establishment
   - Site establishment (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)

9.2 Pavement and Civil Works
   - Pavement (315m2)
9.3 Signs, Lines, and Road Furniture
- Signs (7) including sign provided by the Principal (Drinking water filling station)
- Line marking
- Bollards (11)

9.4 Pipework and Fittings
- Removal of existing assets (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)
- Pipework (18m)
- Hydrants (2)
- Sampling Tap (1)
- RPZD (1)

9.5 Solar Lighting Arrangement and Future Electrical Services
- Solar Lighting, Pole and Footing (2)
- Conduits (47m)
- Pits (3)

9.6 Finalisation (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)
- Testing and Commissioning
- Supply of As-Constructed and QA Documentation

Work Milestone Number Ten – Site S9 – Worongary Road, Worongary

For payment purposes this milestone is claimable for 80% of its value on completion of construction activities and 20% after finalisation and review of the works by the Superintendent.

Construction works as per the drawings in ATTACHMENT A, detailing the following indicative information;

10.1 Site establishment
- Site establishment (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)

10.2 Pavement and Civil Works
- Pavement (176m2)
- Footpath (80m2)

10.3 Signs, Lines, and Road Furniture
- Signs (7) including sign provided by the Principal (Drinking water filling station)
- Line marking
- Bollards (2)

10.4 Pipework and Fittings
- Removal of existing assets (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)
- Pipework (15m)
- Hydrants (1)
- Sampling Tap (1)
- RPZD (1)
10.5 Solar Lighting Arrangement and Future Electrical Services
   - Solar Lighting, Pole and Footing (2)
   - Conduits (192m)
   - Pits (4)

10.6 Finalisation (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)
   - Testing and Commissioning
   - Supply of As-Constructed and QA Documentation

**Work Milestone Number Eleven – Site S10 – Gold Coast Springbrook Road, Mudgeeraba**

For payment purposes this milestone is claimable for 80% of its value on completion of construction activities and 20% after finalisation and review of the works by the Superintendent.

Construction works as per the drawings in ATTACHMENT A, detailing the following indicative information;

11.1 Site establishment
   - Maintain clear and continuous trafficable access at all times from Gold Coast Springbrook road to the rural fire station until site disestablishment
   - Site establishment (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)

11.2 Pavement and Civil Works
   - pavement (R250m2 / F150m2)

11.3 Signs, Lines, and Road Furniture
   - Signs (7) including sign provided by the Principal (Drinking water filling station)
   - Line marking
   - Bollards (5)

11.4 Pipework and Fittings
   - Removal of existing assets (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)
   - Pipework (22m)
   - Hydrants (2)
   - Sampling Tap (1)
   - RPZD (1)

11.5 Solar Lighting Arrangement and Future Electrical Services
   - Solar Lighting, Pole and Footing (2)
   - Conduits (125m)
   - Pits (4)

11.6 Finalisation (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)
   - Testing and Commissioning
   - Supply of As-Constructed and QA Documentation

**Work Milestone Number Twelve – Site S11 – Hardys Road, Mudgeeraba**

For payment purposes this milestone is claimable for 80% of its value on completion of construction activities and 20% after finalisation and review of the works by the Superintendent.

Construction works as per drawings in ATTACHMENT A, detailing the following indicative information;

12.1 Site establishment
Specifications - AS2124

12.2 Pavement and Civil Works
- Pavement (317m²)

12.3 Signs, Lines, and Road Furniture
- Signs (7) including sign provided by the Principal (Drinking water filling station)
- Line marking
- Bollards (5)

12.4 Pipework and Fittings
- Removal of existing assets (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)
- Pipework (14m)
- Hydrants (1)
- Sampling Tap (1)
- RPZD (1)

12.5 Solar Lighting Arrangement and Future Electrical Services
- Solar Lighting, Pole and Footing (2)
- Conduits (125m)
- Pits (6)

12.6 Finalisation (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)
- Testing and Commissioning
- Supply of As-Constructed and QA Documentation

Work Milestone Number Thirteen – Site S12 – Tallebudgera Connection Road, Tallebudgera

For payment purposes this milestone is claimable for 80% of its value on completion of construction activities and 20% after finalisation and review of the works by the Superintendent.

Construction works as per the drawings in ATTACHMENT A, detailing the following indicative information;

13.1 Site establishment
- Site establishment (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)
- Maintain clear trafficable access at all times for bridge works (by others)

13.2 Pavement and Civil Works
- Pavement (87m²)

13.3 Signs, Lines, and Road Furniture
- Signs (3) including sign provided by the Principal (Drinking water filling station)
- Line marking
- Bollards (5)

13.4 Pipework and Fittings
- Removal of existing assets (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)
- Pipework (8m)
- Hydrants (2)
- Sampling Tap (1)
- RPZD (1)
13.5 Solar Lighting Arrangement and Future Electrical Services
   o Solar Lighting, Pole and Footing (2)
   o Conduits (47m)
   o Pits (3)

13.6 Finalisation (Refer Clause 2.1: Scope of Services: Work Milestones – (Milestones 2 to 13) General Information)
   o Testing and Commissioning
   o Supply of As-Constructed and QA Documentation
2.2 Specific/Ancillary Work

Subject to the requirements of the Contract, the Works must also include the following items:

Any Works as described with written approval of the Superintendent by the Superintendent is claimable under Section 2.4 – Division B.

2.3 Design Deliverable

Changes from Contract Design

Where Contract drawings do not meet site conditions and constraints or Contractor’s construction methodology, a detailed design to the same detail level as the Contract design must be approved by a Queensland registered professional engineer (RPEQ) with exception to any alignment changes to electrical conduit reticulation. Detailed design must be submitted to the Superintendent prior to commencement of works.

Operational and Maintenance Manuals (O&M manual)

For Solar Lighting Arrangement, as described in Section 17.5 for O&M manuals.

2.4 Project Deliverables

The deliverables will be based on Work Milestones as described in Section 2.1. They are to be read in conjunction with the Scope of Services as described in Section 2.1.

Hold Points

Hold Points noted in ATTACHMENT A - Drawing 50289.002 – General Notes and Legend, are the minimum Hold Points that are required to be inspected by the Superintendent with respect to the execution of this contract. The Superintendent may issue further hold point(s) where required.

Division A – Work Milestone Number One

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>Claimable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Approvals Report</td>
<td>100% of its value on completion of approved Draft Report</td>
</tr>
<tr>
<td>Project Site Plan</td>
<td>100% of its value on completion of approved Draft Report</td>
</tr>
<tr>
<td>Preliminary (Initial) Program</td>
<td>100% of its value on completion of approved Initial Program</td>
</tr>
<tr>
<td>Dilapidation Report</td>
<td>100% of its value on completion of approved Draft Report</td>
</tr>
<tr>
<td>Site Investigation and Survey Report</td>
<td>100% of its value on completion of approved Draft Report</td>
</tr>
<tr>
<td>Site Safety and Quality Report</td>
<td>100% of its value on completion of approved Draft Report</td>
</tr>
</tbody>
</table>

Division A – Work Milestone Numbers Two – Thirteen

<table>
<thead>
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<th>Deliverable</th>
<th>Claimable</th>
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</thead>
<tbody>
<tr>
<td>Construction works</td>
<td>80% of its value on completion of approved construction activities</td>
</tr>
<tr>
<td>Finalisation</td>
<td>20% of its value on completion of approved records</td>
</tr>
</tbody>
</table>

Division B – Provisional Sum

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>Claimable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction works</td>
<td>80% of its value on completion of approved construction activities</td>
</tr>
<tr>
<td>Finalisation</td>
<td>20% of its value on completion of approved records</td>
</tr>
</tbody>
</table>
3. Site location and limits

The 12 DWFS site location and limits are detailed in ATTACHMENT A - Contract drawings 50289.001 to 50289.066.

These sites are restricted to the above and within developed road reserves as approved by the Superintendent. These limits may only be altered with the written approval of the Superintendent. Activities including material storage areas to be agreed with the Superintendent. Limits of the Site area and the Works area may only be altered with the written approval of 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.

4. Order of Work

The Order of Work is strictly described in Section 2.1 – Work Milestone Number One

Subsequent to written approval by the Superintendent for the agreed initial Program, it is not permitted to change, adjust or reprogram the sequence of work activities as timings from these work activities are communicated to Stakeholders. Only progress amendments to the program are permitted.

4.1 Work to be undertaken prior to the Contract Works

Not Applicable.

4.2 Work to be undertaken during the Works

During the Works, the following activities by the Principal will be in progress;

(i) Site S12 Tallebudgera Connection Road, Tallebudgera.
   Footbridge (Scotty Logan Lane) replacement works.

(ii) Parks and recreation routine and preventative maintenance.

(iii) Water meter reading.

(iv) Mechanical testing of hydrants and valves.

(v) Water quality testing of the network (carried out by other parties).

Allow for and coordinate activities through the Superintendent to minimise conflict.

4.3 Work to be undertaken after Practical Completion of the Works

Following Practical Completion, the Principal will install the future cabling and automatic transaction machines (installed by other parties).

5. Coordination with other Works

5.1 Work to be undertaken prior to the Contract Works

The Principal will undertake communication of project delivery activities with stakeholders including the Queensland Fire and Emergency Services (QFES) and with the Principal’s approved commercial water carriers. This information will be in accordance to the approved Preliminary (Initial) Program, its scheduled activities and target dates, and updates will be communicated as they occur.
5.2 Work to be undertaken during the Works

During the Works, the Principal will continue to report on progress. Allow for and coordinate activities through the Superintendent to minimise conflict.

5.3 Work to be undertaken after Practical Completion of the Works

Following Practical Completion, the Principal is to install future cabling and automatic transaction machines (installed by other parties).

6. Contract specific requirements/constraints

Contractor acknowledges that it has read and understands and has had the opportunity to satisfy itself with the requirements of, and complies with, all Contract documentation under the Contract Header.

The Contractor is to undertake activities as described in Section 2.1 – Work Milestone Number One works but not limited to the following activities;

(i) Working in a road reserve adjacent to traffic.
(ii) Working adjacent to privately-owned properties.
(iii) Working at heights / potential falls during construction.
(iv) Working in the vicinity of live utility services including potable water, sewer, communication lines and electricity.
(v) Having a limited / restricted area available for a construction site (compound) area.
(vi) Having limited / restricted site access.
(vii) Keeping the existing road open during the course of the construction Works.

7. Salvaged Items

Not Applicable.

8. Statutory requirements/approvals

Further to Clause 14 of the General Conditions of Contract, ensure all appropriate statutory approvals are sought and associated fees paid prior to commencing construction activities.

Contractor to obtain approvals as described in Section 2.1 – Work Milestone Number One.
9. General Requirements

9.1 Specification Precedence

Further to Clause 8 of the General Conditions of Contract or unless specified otherwise, the following order of precedence applies:

(i) The project drawings

(ii) The Technical specifications

(iii) The referenced standards

Comply with the highest quality or standard where there is an inconsistency or discrepancy between the required qualities or standards in different parts of the contract documentation.

9.2 Cadastral Information

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

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

(i) Execute a ‘Standard Licence Deed for Consultants Use of Licensed Data Products’ - Schedule E of the Digital Cadastral Data Standard Licence Agreement for Distribution / Value Adding between the State of Queensland and the Principal; and

(ii) Negotiate direct with relevant authority to facilitate the execution of the licence.

9.3 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.

9.4 Access to Private Property

Where access to private property is required do not enter the private property unless:

(i) the Superintendent has been given notice of the requirement to access the private property;

(ii) the person proposing to enter onto private property has been appointed by the Principal as an authorised person (Local Government Worker) in accordance with the Local Government Act 2009 (Qld); and

(iii) 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 vehicular and pedestrian access if permanent access cannot be provided within this time.

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

Further to Clause 29.3A of the General Conditions of Contract, the following information must be recorded on the site personnel register:
Specifications - AS2124

a) The Act applying to the instrument of appointment
b) The commencement date of the appointment
c) The expiry date of the appointment
d) The date the training was completed
e) Reference number for issued documents
f) The issue date of the Identification card
g) The expiry date of the Identification card.
h) The date all documents and Identification cards returned to the Principal.

9.5 Work within easements

Further to pre-construction investigations as described in Section 2.1 – Work Milestone Number One, the Contractor is to protect infrastructure as described in the guidelines for working near water and sewerage infrastructure.


9.6 Impact on Properties from Works

Not Applicable.

9.7 Dilapidation survey - Applicable

Further to Clause 4A of the General Conditions of Contract, undertake a dilapidation survey before commencing Works on site to establish the existing condition of the site. The survey must include but not be limited to:

a) Dilapidation survey information as described in Section 2.1 – Work Milestone Number One

Take a sufficient number of colour photographic records to document all potentially affected areas. Ensure that the photographic records identify the location of the photograph relative to identifiable site features. The photographs must contain some reference measure to allow the scale of the feature to be determined. Include photographs with the dilapidation report.

Record all observed defects, deformations, out of plumb elements, bows, distortions, damage and the like which are not readily captured/identifiable in photographs. Provide also any other notes considered appropriate to assist in the identification of the defect.

Photographs must be taken using a digital camera having a minimum resolution of 12 megapixels. Ensure that the time and date stamps for images and files are set to the correct time and date. Save all photographs at the original resolution (un-compressed) in JPEG format.

The dilapidation survey must be undertaken by a Registered Surveyor under the provisions of the Surveyors Act 2003 (Qld).

9.8 Encroachments

Further to Clause 15 of the General Conditions of Contract, do not demolish or damage adjoining property. Should the Works reveal encroachments of adjoining property on to the site or encroachments of existing site structures on to adjoining property, and should such encroachments not be referred to in the Contract, obtain instructions from the Superintendent immediately.

9.9 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’.

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

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’.

Details of the works and format of the proposed shutdown 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:

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

The proposed shutdown 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.

Shutdown 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:

a) the date and time of completion of the distribution of the notice;
b) the date or dates upon which the notices were distributed;
c) the number of notices issued and distribution area; and
d) 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.

9.10 Continued Operation of Existing Facilities

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.

9.11 Examination and Testing

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, examinations and testing. The minimum notice considered to be reasonable by the Superintendent to undertake an inspection is two Business Days.
10. **Contract Administration**

10.1 **Status Program, Report and Contract Status Meeting**

Further to Clause 33.2 of the General Conditions of Contract, a Status Program and Status Report must be submitted and contain as a minimum the following information:

- a) reporting period
- b) major activities achieved during the report period
- c) actual progress versus scheduled progress
- d) health, safety and environmental issues/incidents
- e) non-conformances addressed
- f) complaints
- g) arising issues and/or outstanding actions, including requests for information from the Contractor, the Principal, authorities; or others.
- h) Progressive As-built
- i) The Site Personnel Register
- j) A copy of all records & reports related to trackable waste

Attend a contract status meeting at least monthly, or as requested by the Superintendent, following delivery of the status program and prior to submission of payment claim.

10.2 **Construction Methodology Report**

Provide a detailed construction methodology report prior to the commencement of any construction activities.

As a minimum, the report must include the following considerations:

- a) mobilisation.
- b) access to utility services and fresh water.
- c) construction site area.
- d) construction access arrangement.
- e) provision of traffic control.
- f) site establishment.
- g) implementation of all necessary management plans (environmental, erosion and sediment control, traffic, safety etc.), systems and controls.
- h) vegetation clearing and grubbing.
- i) demolition works.
- j) construction of the works.
- k) revegetation, landscaping and restorative works.
- l) site demobilisation.

Provide a revised construction methodology report with the status program if any changes to methodology have occurred.

10.3 **Supervision**

Further to Clause 25 of the General Conditions of Contract provide a full time competent and experienced Technical Site Representatives and Project Manager for the duration of the Contract as described in Section 2.1 Work Milestones – Required Key Project Personnel.
Notify the Superintendent of subsequent changes, the Principal will assess the suitability for the purpose of the Contract. New personnel must have the same or greater experience and qualification to those with equal position or of those they are replacing.

10.4 Working Hours

Further to Clause 32 of the General Conditions of Contract the standard working hours are defined in item 23A of the Contract Header. The additional provisions, including night works, apply:

Night works will only be permitted where specified and/or with the prior approval of the Superintendent.

11. Materials and Work

11.1 Quality Assurance

Further to Clause 14H of the General Conditions of Contract, maintain a documented Quality Assurance System (QAS) for the duration of the Contract to ensure that prescribed quality outcomes are achieved.

The QAS must include Inspection and Test Plan and procedures and identify Witness and Hold Points to meet the minimum requirements of the deliverables specified in Clause 2. Modify the QAS to meet any changes to the Works.

Notify the Superintendent prior to testing a minimum of 24hrs or as advised by the Superintendent. Tests results must be submitted within 14 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 24 hours of the time of the test results being available.

11.2 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.

12. Certification of the Design

Where the contract requires design to be carried out the following is applicable:

a) ensure that the design of the Works is certified by a designer who is a RPEQ registered under the provisions of the Professional Engineers Act 2002 (Qld); and

b) 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.

13. Construction Requirements

13.1 Existing services and public utilities

Further to Clause 15 and 16 of the General Conditions of Contract, 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 for the information of the Superintendent prior to commencing the Works on the Site. The plan must include measures to ensure the integrity of all services throughout the duration of the Works. Confirmation of level and location of all services prior to construction commencing within the Site to ensure protection.

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 Public Utility Plant 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 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:

a) if the service is to be continued, repair, divert, and relocate as required; and
b) 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.

13.2 Contractor’s Site Area

Further to Clause 27 of the General Conditions of Contract, 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 access routes, 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.

13.3 Superintendent Site Office

Not Applicable.

13.4 Temporary Services

Provide all temporary services.

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 installation and use of 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.

13.4.1 Temporary power supply

Do not use power supply from the Principal’s facilities. The Contractor must use own portable power generation devices. Such devices will be fitted with emission control devices to comply with local and/or statutory regulations. The permitted times of use of such equipment may also be restricted by local and/or statutory regulations, comply with all such regulations and Legislative Requirements.
13.4.2 Temporary water supply

Recycled water is available within nominated treatment plant sites for all uses, except for potable or ancillary applications. Use of recycled water is therefore 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 waste recycled water used for pressure testing must be in accordance with the Environment Management Plan.

Where water is required from the Principal’s existing reticulation water supply system, obtain such water only at locations agreed by the Superintendent and only via a metered standpipe. Properly manage the use of such water to avoid unnecessary wastage.

A metered standpipe will be made available upon receipt of an application to the Principal. All fees, which the Principal may impose for the use of the standpipe, must be paid by the Contractor.

Any security deposits, rental/fees or water usage charges will be to the account of the Contractor and payable at the rate applicable at the time.

Should the water available from the Principal’s existing reticulation supply system not be at a suitable pressure and/or flow as required, any additional works to boost the pressure and/or flow will be at the Contractor’s expense.

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 use water from private residential water services, irrespective of whether approval is obtained for the use of such services.

13.5 Temporary fences and hoardings

Provide appropriate hoardings and/or temporary fencing to secure the work site parameters from unlawful entry. Confirm the location with the Superintendent prior to installation. Provide lockable gates.

13.6 Interruption and/or diversion of services

Not Applicable.

13.7 Work with the Principal

13.7.1 Shutdown and Commissioning

Shutdown works will be carried out in coordination with the Principal via the Superintendent.

Refer to Work Milestone defined in Clause 2.1 for details of the Works involved.

Proposed construction sequence, shut down and commissioning plan details are included in the Construction Sequence and Commissioning Plan.

Issue a detailed Work methodology of the connections works and timing, and contingency(s) proposed for the Works to be submitted to the Superintendent minimum 28 days prior to the proposed works, with the proposal of timing for shutdown works to be requested two weeks prior.

13.7.2 Decommissioning of Existing Infrastructure

There is a requirement for removal of existing assets also described as decommissioning of existing infrastructure. Refer to Contract drawings and Work Milestone defined in Clause 2.1 for details of the Works involved.
13.7.3 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.

13.8 Vehicle Detection Units

If Work is planned to be undertaken within areas that have numbered parking bays and/or parking sensors, contact the Superintendent immediately to confirm sensor placement and arrange for their removal and correct reinstallation. If any damage to the parking sensors by the Contractor results, all reinstatement costs will be borne by the Contractor.

13.9 Signage

Principal supplied signage must be displayed on Site for the duration of the Contract.

13.10 Pedestrian and Traffic Management

Provide pedestrian and traffic management 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.

TMP and Traffic Guidance Schemes (TGS) must be prepared by persons with Traffic Management Design qualification.

Traffic Guidance Scheme must be implemented by persons with Traffic Management Implementation qualification

Submit a copy of all applications and approvals to the Superintendent prior to commencing work. All fees must be paid by the Contractor.

13.10.1 Interfaces with Department of Transport and Main Roads (TMR)

Obtain TMR approval for any works that impact the public on a TMR road, the following is required prior to commencing works on a TMR Road:

a) Traffic Control Permit (TM04F01) – (allow a minimum 7 working days for fully complied submission)

b) Letter of No Objection - (allow a minimum 20 working days processing for fully complied submission)

c) Pre-Start Meeting (minimum 5 days notice)

d) Compliance to TN163

Allow a minimum 21 days to obtain Translink approval for any works that will affect the public transport network where:

a) a bus stop may need to be closed

b) access to a bus stop may be limited

c) a bus may need to be diverted

d) a bus service may be delayed
13.10.2 Interfaces with City of Gold Coast controlled roads and footpaths

Closure of a Principal’s 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 the Principal to support the proposed footpath or road closure.

The application must be supported by a site specific Traffic Management Plan and Traffic Guidance Scheme.

Do not commence the Works which may impact pedestrian and traffic flow until the approval to proceed has been issued. A copy of the approvals and applicable TGS and the Police Service Permit (if applicable) must be kept on Site.

A Temporary Road Closure Approval is required for any partial or full road closure including footpaths, Principal’s car parks or Principal’s contract works that will impact on pedestrians or traffic, causing:

<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>

Submit a Temporary Road Closure Application via the following link: [https://cogc.cloud.infor.com/ePathway/ePthProd/Web/Applications/ExternalRequestBroker.aspx?Module=EAPLODG&Class=RAA&Type=TRC](https://cogc.cloud.infor.com/ePathway/ePthProd/Web/Applications/ExternalRequestBroker.aspx?Module=EAPLODG&Class=RAA&Type=TRC)

Include in the application (in the ‘Description of works associated with the closure field) the following:

a) Contract Number
b) Name of the Superintendents Representative

Allow a minimum 7 working days for approval following a fully complied submission or allow a minimum 14 working days for approval following a fully complied submission for a full road closure.

Submit a copy of the completed Temporary Road Closure Application reference to the Superintendent.

When a road closure approval is not required, submit a site specific TGS to the Superintendent.

13.10.3 Interfaces with City of Gold Coast controlled parks and reserves

A copy of the Permit for Placement of Infrastructure within a Council Controlled Park / Reserve and Conditions of Approval must be kept on site.

13.11 Interfaces with GCRT

Not Applicable.

14. Work Health and Safety

14.1 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 and when any amendments are made and at any time during the course of the Works:

a) Safe Work Method Statement (SWMS) and/or safe systems of work incorporating site specific workplace hazards risks and controls.

b) Designers safety report identifying hazards incorporated in any aspect of the design, including temporary works.

c) the Contractor’s Safety Management Plan relative to site construction activities being undertaken, addressing at least the following aspects of the Works;

  o names of persons at the workplace whose positions or roles involve specific health and safety responsibilities
  o arrangements for consultation, cooperation and coordination
  o arrangements for managing incidents
  o process for management of subcontractors
  o site-specific health and safety rules and how people will be informed of the rules
  o workers have appropriate licences and training
  o arrangements to collect and assess, monitor and review SWMS
  o the safe use and storage of plant
  o the development of a construction project traffic management plan
  o obtaining and providing essential services information
  o compliance with this Clause.

14.2 Communication, consultation and coordination

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

a) the Superintendent;

a) workers (including workers employed by Subcontractors) who are or are likely to be directly affected;

b) relevant suppliers, contractors and other third parties;

and

c) 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.

14.3 Principal inductions

Undertake site specific inductions at commencement of the Works and/or prior to being granted access to the Site. The inductions inform of potential hazards that may be encountered when undertaking the Works and outline specific safety requirements when on the Site.

14.3.1 Water and Waste facilities

To perform work within a Water and Waste 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 must self-register and create their own passwords to complete the required inductions.

Prior to attending site, all Contractors’ personnel including subcontractors must complete the relevant induction/s as appropriate for the specific work site:

a) General Induction to Water and Waste (Compulsory for all of the Principal’s operational sites).

b) Induction to Sewage Treatment Plants.

c) Induction to Itinerant and Construction Sites (Principal controlled).

d) Induction to Reservoirs, PS and other sites (i.e. re-PS, manholes and valve pits).
Failure to produce a current induction card will result in removal from and/or loss of access to a Water and Waste facility.

In addition to the above requirements, attend a face to face induction at the Helensvale Waste and Recycling Centre to allow access to any of the Waste and Recycling Centres within the Gold Coast region.

Face to face inductions at the Helensvale Waste and Recycling Centre occurs every working Thursday at 8.30am. The address is 70 Helensvale Road, Qld, 4214. Participants must hold a current Water and Waste induction card prior to attending the face to face induction.

14.3.2 Transport and Infrastructure

To perform work within a Transport and Infrastructure controlled construction site, mandatory completion of the online safety induction and possession of a current induction card is required before presenting to the site. To complete the online induction access the following - https://www.onlineinduction.com/goldcoast/

The Contractor and any subcontractors must self-register and create their own passwords to complete the required inductions. Failure to produce a current induction card will result in removal from and/or loss of access to the site.

14.4 High Risk Construction Work

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.

a) involves a risk of a person falling more than 2m
b) is carried out on a telecommunication tower
c) involves demolition of an element of a structure that is load-bearing or otherwise related to the physical integrity of the structure
d) involves, or is likely to involve, the disturbance of asbestos
e) involves structural alterations or repairs that require temporary support to prevent collapse
f) is carried out in or near a confined space
g) is carried out in or near—a shaft or trench with an excavated depth greater than 1.5m; or a tunnel
h) involves the use of explosives
i) is carried out on or near pressurised gas distribution mains or piping
j) is carried out on or near chemical, fuel or refrigerant lines
k) is carried out on or near energised electrical installations or services
l) is carried out in an area that may have a contaminated or flammable atmosphere
m) involves tilt-up or precast concrete
n) is carried out on, in or adjacent to a road, railway, shipping lane or other traffic corridor that is in use by traffic other than pedestrians
o) is carried out in an area at a workplace in which there is any movement of powered mobile plant
p) is carried out in an area in which there are artificial extremes of temperature
q) is carried out in or near water or other liquid that involves a risk of drowning
r) involves diving work
14.5 Known Hazards

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

a) The physical working environment, for example the potential for electric shock, immersion or engulfment, fire or explosion, slips, trips and falls, people being struck by moving plant, exposure to noise, heat, cold, vibration, radiation, static electricity or a contaminated atmosphere.

b) The assets may overflow and surcharge if the interference/isolation is not managed and controlled in accordance with the Principals requirements.

c) Potential of asphyxiation or other serious injuries due to the works requiring entry to Confined Spaces.

d) Underground services traverse through the north east corner of the Site.

e) The Works are located in an area identified where ground water in soils of low stability are present.

f) The potable water main nominated for cut in has been identified as a material containing AC.

g) 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.).

h) Violence and aggression (verbal/physical abuse from members of the general public).

14.6 Personal Protective Equipment

Ensure the following minimum PPE is provided and worn at all times:

- 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.

14.7 Asbestos and other hazardous material

Notwithstanding any other provisions of this document regarding asbestos and other hazardous material, if material that might contain asbestos or other hazardous substances is discovered, the Contractor must:

a) Immediately notify the Superintendent; and

a) Comply with all applicable obligations and restrictions imposed by any applicable Legislative Requirements.

14.8 Alcohol and Other Drugs

The Contractor’s 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 Contractor's workers must participate in testing through a random selection process.

The Contractor must:

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

### 14.9 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.

### 15. Environmental Management

#### 15.1 Environmental Management Plan

Be considered independent, and not a servant or agent of the Principal, for the purposes of complying with the Environmental Protection Act 1994 (Qld).

Engage a suitably qualified environmental consultant to prepare an EMP aligned with site conditions, work activities and work methodologies, and submit in accordance with Clause 14H and 27.1(d) of the General Conditions of Contract and when any amendments are made and at any time during the course of the Works.

The Contractors EMP must 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.

Ensure all Work complies with the EMP; the EMP must include as a minimum the following:
a) Company structure and responsibility for specific actions
b) Assignment of responsibility for environmental controls.
c) Communication and reporting.
d) Compliance with the requirements of all environmental laws.
e) Environmental commitments.
f) Environmental training plan.
g) Appropriate licences and approvals.
h) Site induction training for environmental aspects of the works.
i) Arrangements for consultation, cooperation and coordination.
j) Process for management of subcontractors.
k) Site-specific environmental requirements.
l) Managing the risks posed by fire ants.
m) Manage Acid Sulphate Soil and treatment of Acid Sulphate Soil (if found).
n) Incorporate the Principal’s conditions of all approvals, licences and permits.
o) Locations of environmental controls and environmentally sensitive areas.
p) Identification of environmental issues and potential impacts.
q) Control measures to minimise likelihood of environmental harm.
r) Contingency plans and emergency procedures including response time.
s) Monitoring containment releases.
t) Corrective actions.
u) Periodic review of environmental performance.
v) Record keeping and environmental auditing for continual improvement.
w) Arrangements for managing incidents.
x) Maintain an incident register for non-compliance reporting and provide a copy to the Superintendent following any significant incidents during the Works.

The Principal has supplied a draft Construction and Environmental Management Plan (Refer ATTACHMENT A) detailing the minimum requirements.

In addition to the above, provide details of potential environmental issues, impacts and associated control measures for implementation for issues including but not limited to:

a) Noise controlling and monitoring.
b) Minimise disruption to flora and avoid spread of any noxious weeds and disruption to fauna habitat.
c) Conservation of protected species.
d) Identify fauna species and arrange relocation.
e) Prepare and implement a species management plan as required.
f) Engage a suitably qualified fauna spotter during clearing.
g) Relocate fauna during clearing of vegetation. OR
h) Engage an ecological consultant to undertake appropriate assessment.
i) Restore habitat following works.
j) Manage collect and dispose all waste from the works including regulated waste.

k) Controlled activities and waste management.

l) Manage air quality emissions from all equipment within legal limits.

m) Manage materials handling and store dangerous goods off site and handle safely on site.

n) Manage erosion and sediment control in accordance with the IECA best practice guidelines.

o) Prevent erosion by using appropriate erosion and sediment control devices.

p) Dewatering.

q) Undertake works in such a way to prevent unreasonable amounts of dust and other airborne matter impacting on adjacent properties.

r) Control soil erosion and prevent sediment in run off.

s) Contain and treat any contamination of run off.

t) Assessment of Acid Sulphate Soil.

u) Disposal of Acid Sulphate Soil.

v) preservation of trees and other habitats.

w) Impacts to plant communities.

x) Impacts to individual native plants.

y) Gold Coast City vegetation assets.

z) disturbance to stream bank and bed as a result of rock installation (and reclamation) for access/working platforms.

aa) disturbance to the stream bank and bed resulting in disturbance to aquatic fauna through short term changes to hydrology (e.g. turbidity of water).

bb) conservation of heritage values.

cc) preservation of visual amenity.

dd) Manage record and report the prescribed information about the trackable waste in accordance with the requirements of the Environmental Protection (Waste Management) Regulation 2000.

e) Building waterway barriers.

ff) Riverine Protection.

g) Catchment Management.

hh) National Environmental Significant Sites.

15.2 Environmental Management - water based impacts

Working in Tidal Areas

Provide details of any bunding proposed to allow Works within the tidal range, including material types. Bunding Works must comply with all Legislative Requirements.

Ensure full consideration has been given to the impact of wave actions from vessels passing the Site.

Ensure full consideration has been given to the behaviour of foundation materials in excavations within such zones.

Ensure any floating equipment may operate adequately and legally within the confines of the adjacent harbour.

Coordinate and program the works making allowance for the actions of the tides.

Make allowance for removal of all materials from the site not incorporated in the Works or shown on the drawings.
Ensure consideration has been given to the diversion or treatment of stormwater runoff which may enter the construction area from the existing stormwater flow paths.

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.

Reference Charts

Determine all tide levels from the most recent publication of ‘The Official Tide Tables and Boating Safety Guide’ by TMR (Maritime Safety Queensland). All heights and levels in discussion and correspondence are to be referred to AHD.

15.3 Red Fire Ants

Moving restricted items from or within fire ant restricted areas must be in accordance with all legislative requirements. This includes managing the risks of spreading fire ants. Refer to Department of Agriculture and Fisheries (DAF) for more information. [https://www.daf.qld.gov.au/business-priorities/plants/weeds-pest-animals-ants/invasive-ants/fire-ants](https://www.daf.qld.gov.au/business-priorities/plants/weeds-pest-animals-ants/invasive-ants/fire-ants)

15.4 Acid Sulphate Soils (ASS) and Potential Acid Sulphate Soils (PASS)

Assessment of the potential for presence of acid sulphate soils (ASS) has been undertaken by the Principal.

Manage ASS and PASS, including disposal at appropriate facilities (if applicable) or alternatively treat on site.

15.5 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 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.

15.6 Disposal of spoil

Remove all spoil (inclusive of Acid Sulphate Soil that cannot be treated on site) not required as part of the Works from the Site. Pay all tipping fees at the waste disposal facility.

15.7 Noise

In addition to statutory requirements, adopt noise reduction measures as per following:

a) Use plant and equipment with silences

b) Use acoustic enclosures

c) Use alternative power suppliers

15.8 Vibration control

Engage a qualified surveyor to provide survey services throughout the contract period to establish, continuously monitor and maintain vibration monitoring equipment.

Ensure vibration comply with AS2670.1 and AS 2670.2 and that levels do not exceed levels that are close to the lower level of human perception or may cause structural damage.

Install monitoring equipment to measure vibration levels of the peak particle velocity to AS 2187.2.
15.9 Incident Reporting and Investigation

Notify the relevant administering agency and the Superintendent 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 of any incident involving actual or potential serious or material environmental harm or environmental nuisance associated with the conduct of the Works. In this Clause ‘serious or material environmental harm’ and ‘environmental nuisance’ have the same meanings they have in the Environmental Protection Act 1994 (Qld).

Notify the Superintendent 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.

15.10 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:

a) the conditions of any environmental authority or other approval or permit whatsoever pertaining to the Works; or

b) any relevant environmental Legislative Requirement;

c) 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:

a) answer any reasonable request by the Superintendent where applicable concerning your compliance with any environmental authority, or other approval, or any environmental Legislative Requirements concerning the Works; and

b) respond to any reasonable direction of the Superintendent 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:

Accept that the terms and conditions of the above approvals have been read and understood and agree to be bound by them.

16. Cultural Heritage

16.1 Indigenous cultural heritage

Assess the cultural heritages aspects of the site according to the Aboriginal Cultural Heritage Act 2003 (Qld).

17. Completion

17.1 Commissioning Equipment

All equipment and features are to be commissioned and tested by qualified personnel. Provide the Superintendent at least two Business Days' notice of any inspection or commissioning requirements.
17.2 Progressive recording of As-Built Documentation

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 onto which As-built documentation will be progressively recorded.

These control drawings must be clearly stamped ‘As-Built drawings – record’ in red colour. Keep accurate and reliable records of As-Built documentation throughout the term of the Contract and regularly enter the As-Built documentation onto the As-Built drawings using red colour pens.

The control drawings are to be available for review by the Superintendent at any time.

17.3 Format and content of As-Built Documentation

The Principal’s requirement for the type of file format to be provided for As-Built drawings is outlined in the Principal’s As-Constructed Data Capture Guidelines. Departure from these Guidelines is subject to approval of the Superintendent.

As-Built Documentation must meet the following minimum criteria:


b) Show approved street names and correct lot numbers (current at the time of the works).

c) Must be north facing.

d) Show all significant variations from the contract drawings, including tolerances outside those specified.

e) Where the Contract contains the decommissioning of any of the Principal’s assets, these assets must be clearly marked on the as-Built drawing by labelling the asset ‘Decommissioned’ and displaying a ‘strike out’ with cross(es) on the drawing.

f) 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 in the Contract scope of works, 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. In the event that the format of the standard template drawings and Principal’s supplied drawings differ, all drawings must be prepared using the standard template drawings, unless otherwise approved by the Superintendent.

g) Incorporating password lock or equivalent security measures preventing opening of the drawing file or files will not be accepted.

h) The Superintendent will notify the Contractor of the non-compliance and the Contractor must immediately correct the affected drawing files and within five Business Days of the initial notification by the Superintendent will resubmit a complete set of the revised electronic drawing files.

i) As-Built drawings incorporating As-Built survey details must be certified by a Registered Surveyor under the provisions of the Surveyors Act 2003 (Qld) (as amended).

j) All drawings, including those with As-Built survey data endorsed by a Registered Surveyor, are to be certified by a RPEQ registered under the provision of the Professional Engineers Act 2002 (Qld) if specified in the documentation.

17.4 As-Built survey information and certification

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

a) AHD unless otherwise advised in writing;
b) 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 survey drawings are to be noted on the As-Built 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:

   a) 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:
      o Three or more registered PSM's; and
      o Connection to the defined points of cadastre adjacent to the Site of the new infrastructure.

   b) For Works comprising the construction of new reservoirs, pumping stations and ancillary facilities (water, wastewater or reclaimed water):
      o A minimum of two (three preferred) registered PSM's; and
      o Connection to the defined points of cadastre for the Site, or adjacent to the Site, of the new infrastructure.

   c) For all other Works located within or adjacent to road reserves or public areas:
      o A minimum of two (three preferred) registered PSM's; and
      o 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 drawings for any new facilities, structures or infrastructure constructed as part of the Works must include details of survey control comprising as a minimum:

   o Details of existing or newly constructed permanent reference marks from which the new infrastructure has been, and can be, referenced.
   o 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 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.

### 17.5 Operations and maintenance manuals

Further to Clause 8.8 of the General Conditions of Contract, 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.

Draft operations and maintenance manuals are to be submitted to the Superintendent prior to the commissioning of each infrastructure facility and/or item of installed equipment (e.g. switchboard, pumping equipment, or valves/pipework) associated with each Milestone Separable Portion, or the Works, or prior to applying for a Certificate of Practical Completion as applicable.

Include within the operations and maintenance manuals the following:

- provide instructions and a detailed manufacturers recommended maintenance schedule for all items supplied and installed, along with details of model (reference numbers or similar), manufacturer and/or supplier. This would include but not be limited to:
  o Maintenance tasks to be performed
  o Detailed work instructions
o Frequency of each maintenance task (daily, weekly, monthly etc…)
o Special skills or experience needed to perform each maintenance task
o Any specialist tools required to carry out the maintenance task
o Provide a full list of required spare parts and contact details of local resellers of those parts

- Test results from FAT, SAT and commissioning, including all other test results associated with the Works,
- 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.

17.6 **Warranties and Manufacturer's Guarantees**

Further to Clause 3.1B of the General Conditions of Contract and before applying for a Certificate of Practical Completion, provide the Superintendent with copies of all guarantees and/or manufacturers’ warranties or guarantees in respect of manufactured items of equipment or features.

Ensure the warranties or guaranties give the name of the Principal as the warrantee, and that these are furnished by the warrantor direct to the Principal.
Part B:

1. **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:

- 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 C, if applicable.
Part C:
Attachment A: Drawings and Design Report