Member of the Surbana Jurong Group

Technical Memorandum

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Subject	Public Utilities and Plants (PUP) Assessment	Discipline	Civil
Project Title	Bundaberg East Levee	Project No.	30034151
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Attachments	Appendix A – PUP Conflicts Register; Appendix B – PUP Conflict Plans		

1. Purpose

SMEC Australia Pty Ltd (SMEC) has been commissioned by the Queensland Department of Housing, Local Government Planning and Public Works (DHLGPPW) to undertake the Preliminary design of a flood levee wall, large flood gates and pump stations to protect East Bundaberg from flooding. As part of the Preliminary Design phase, SMEC is required to undertake an assessment of the existing services impacted by the levee. This will determine the assets in conflict and that require potential relocation, which will be developed through the upcoming design stages and into construction of the flood levee.

2. Project Background

In January 2013 ex-Tropical Cyclone Oswald caused devastating flooding to Bundaberg and surrounding regions. The Burnett River peaked at +9.53m (AHD) at the Targo Street gauge in the Bundaberg CBD. This was a record level for Bundaberg. Significant inundation of commercial and residential property in Bundaberg North, Bundaberg South (including the CBD) and Bundaberg East occurred. Following the flood event, Bundaberg Regional Council (BRC) and the State Government undertook consultation with the Bundaberg community and independent experts to identify potential works that could provide flood mitigation solutions for the people of Bundaberg, their homes, businesses and the local economy.

In 2019, a Business Case was finalised for the BEL project. This included a concept design, founded on flood studies (hydrological and hydraulic), geotechnical investigations, desktop studies and community engagement. The primary aim of the levee is to reduce the impacts of flooding from the Burnett River on Bundaberg East and Bundaberg South.

The Bundaberg East Levee (BEL) design will feature a flood gate and pump station at the outlets of both Saltwater Creek and the unnamed “Distillery Creek.” These floodgates will be closed during regional flood events to prevent backwater flooding from the Burnett River, safeguarding the Bundaberg CBD and East/South Bundaberg areas. This system is designed to protect against a flood event comparable to the 2013 event, with approximately 150mm of freeboard.

2.1 Scope

SMEC have developed a conflict register and conflict plans for the current levee wall alignment, to consider the relevant aspects of the function specification including:

- Obtain the latest PUP service information from DBYD and associated data sources for the recommended option.
- Identify existing active and abandoned utility assets and the data quality level.

- Identify all PUP assets potentially impacted by approved recommended option.
- Prepare register for the PUP conflicts.
- Prepare register for the PUP authorities contact details.
- Initialise the consultation with PUP authorities by undertake the following activities:
  - Submit online applications to Telstra, Ergon and NBN.
  - Contact TPG, Optus, APA gas, Nextgen and CoGC by emails and/or telephone calls.
- Complete a PUP services CAD X-Ref, to be maintained as design advances.
- Prepare a set PUP conflict plans to be read in conjunction with the PUP conflict register.
- If contact is started with PUP asset owners, liaison and meeting to be completed.
- Identify options for the relocation of all assets.

This Technical Memo summarises the identified Public Utility Plant (PUP) conflicts for the proposed Bundaberg Levee Wall. The findings in this report are based on information supplied by PUP authorities and/or TMR, including Dial Before You Dig (DBYD) search, GIS mapping and survey.

A complete list of PUP conflicts identified during the Business Case development is provided in Appendix A.

3. Identification of PUP

The summary Public Utility Plant Conflict Register is provided in Appendix A. This register details the PUP identified to conflict with the proposed Levee design.

A summary of the contact details for the PUP asset owners with assets in the project extents provided in Table 3-1.

Table 3-1: PUP Asset Authorities

Asset Owner	Contact Details
APA Gas	• Contact to be confirmed. • Spoke to Zac on 16th of April.
Bundaberg Regional Council	
Ergon	• Contact to be confirmed. • Spoke to Ellie on 16th of May.
Telstra	• Contact to be confirmed. • Spoke to Anthony on 16th of April.
NBN	• Contact to be confirmed. • Spoke to Brad on 16th of April.
Powerlink	• Contact to be confirmed. • Spoke to Bruce on 16th of April. • Bruce refused to provide an email address until he could seek confirmation of the project and who we were from his manager.
Optus	• No assets affected.
TPG	• No assets affected.

4. PUP Conflicts with the Business Case Design

4.1 APA Gas

4.1.1 APA Gas Conflicts

Table 4-1 summarise the gas conflicts within the project vicinity. A complete list of all conflicts and their proposed mitigation strategies is provided in Appendix A.

Table 4-1: Summary of Existing Gas Conflicts

Asset Owner	Conflict Tag	Asset Type	Description of Asset Conflicts
APA Gas	GA-AP-001	TBC	Medium Pressure, sleeved, 63 mm, medium density PE pipe, P11
	GA-AP-002	TBC	Medium Pressure, 63 mm, medium density PE pipe, P12

4.1.2 Consultation with APA Gas

An email enquiry was lodged on the 16th of April. No consultation has taken place with APA Gas. Until liaison commences and a meeting is held with APA, the following assumptions will apply:

- High pressure transmission gas mains are not identified within the project vicinity. All impacted assets are medium pressure gas mains.
- There are no planned assets within project vicinity in the future.
- APA Gas requires 24/7 accesses to valves, pits, access chambers, regulators, and other gas fittings.
- Previous APA gas projects have had long procurement times for construction materials.
- All gas related works are non-contestable works, including design and construction of all gas assets.
- Trenching for gas assets by the principal contractor can be negotiated with APA Gas.
- The following standard shall apply:
  - APA Gas 400-STD-AM-001 Guidelines for Works Near Existing Gas Assets

4.2 Bundaberg Regional Council Water and Sewer

4.2.1 Bundaberg Regional Council Water and Sewer Conflicts

Table 4-2 summarises the water and sewer conflicts within the project vicinity. A complete list of all conflicts and their proposed mitigation strategies is provided in the conflict register in Appendix A.

Table 4-2: Summary of Existing Water and Sewer

Asset Owner	Conflict Tag	Asset Type	Description of Asset Conflicts
BRC	WA-BR-001	DN100 AC	DN100 AC water main running east / west along Quay Street.
	WA-BR-002	DN100 mPVC	DN100 mPVC water main running east / west along Quay Street.
	WA-BR-003	DN100 AC	DN100 AC water main running south / north from Quay Street and crossing Scotland Street.
	WA-BR-004	DN100 oPVC	DN100 AC water main running southeast / northwest along Scotland Street.
	WA-BR-005	DN100 oPVC	DN100 AC water main running east / west along Scotland Street.
	WA-BR-006	DN100 oPVC	DN100 AC water main running north / south along Petersen Street, along with a property connection.

Asset Owner	Conflict Tag	Asset Type	Description of Asset Conflicts
	SE-BR-001	DN150 VC	DN150 VC gravity sewer main runs from north to south under Quay Street near Daph Geddes Park
	SE-BR-002	DN525 VC	DN525 VC gravity sewer main runs from west to east under the southern side of Quay Street
	SE-BR-003	DN150 VC	DN150 VC gravity sewer main runs from north to south under Scotland Street and Quay Street
	SE-BR-004	DN150 VC	DN150 VC gravity sewer main runs from north to south under Scotland Street and along Peterson Street.

4.2.2 Consultation with BRC

No consultation meeting has taken place with BRC. BRC have provided initial advice on its existing water and sewer infrastructure along the area of works. The below data was provided by the council:

- Scotland/Petersen Street
  - 140m of water main
  - 2 x hydrants
  - 3 x water valves
  - 7 x water connections
- South Side of Quay Street
  - 250m of sewer main
  - 4 x manholes
  - 11 x sewer connections
  - 10 x water connections
- North Side of Quay Street
  - 450m of water main
  - 4 x hydrants
  - 25 x water connections
  - 2 x sewer main crossing points
  - 6 x sewer connections

4.3 Electrical

4.3.1 Ergon Electrical Conflicts

Table 4-3 summarises the electrical conflicts within the project vicinity. A complete list of all conflicts and their proposed mitigation strategies is provided in Appendix A.

Table 4-3: Summary of Existing Electrical Conflicts

Asset Owner	Conflict Tag	Asset Type	Description of Asset Conflicts
Ergon	EL-ER-001	240V & 415V & 11kV	Pole (2109855) / Substation (15888) situated on the southern side of the corner of Quay St and Toonburra St.
	EL-ER-002	240V	OH LV main attached to pole 6017522 & 2109871, crossing the wall north to south to provide street lighting.

Asset Owner	Conflict Tag	Asset Type	Description of Asset Conflicts
	EL-ER-003	240V & 415V	"Pole 2109871, providing power for street lighting and likely a connection for the building.
	EL-ER-004	415V	Building currently closed. Investigate need for current connection or future connection."
	EL-ER-005	415V	O/HH LV main attached to pole 2109854 & 2109871, crossing the wall south to north to provide street lighting and property connection.
	EL-ER-006	415V & 11kV	O/H LV main attached to pole 2109854, crossing the wall south to north to provide property connection.
	EL-ER-007	415V	Pole 3002191 situated on the southern side of Quay St East, crossing the wall south to north to provide property connections.
	EL-ER-008	415V	O/H LV mains attached to pole 3002191, crossing the wall south to north to provide property connections.
	EL-ER-009	240V	O/H LV mains attached to pole 3002191, crossing the wall south to north to provide property connections.
	EL-ER-010	240V & 415V & 11kV	O/H LV mains attached to pole 3002199, crossing the wall north to south to provide property connections.
	EL-ER-011	415V & 11kV	Pole 3002199 situated on the south side of Quay St East, connected to LV & 11kV in conflict with wall location.
	EL-ER-012	415V & 11kV	Pole (3002198) / Substation (6704) situated on the southern side of Quay St East.
	EL-ER-013	415V & 11kV	O/H LV mains attached to pole 3002199, crossing the wall north to south to provide property connections.
	EL-ER-014	240V & 415V & 11kV	Pole 3002186 situated on the south side of Quay St East, connected to LV & 11kV in conflict with wall location.
	EL-ER-015	240V	Pole 3002185 situated on the south side of Quay St East, connected to LV & 11kV in conflict with wall location.
	EL-ER-016	240V	O/H LV mains attached to pole 3002185, crossing the wall south to north to provide property connections.
	EL-ER-017	240V & 415V	O/H LV mains attached to pole 3002182, crossing the wall south to north to provide property connections.
	EL-ER-018	415V	O/H LV mains attached to pole 3002197, crossing the wall south to north to provide property connections.
	EL-ER-019	415V & 11kV	O/H LV mains attached to pole 3002179, crossing the wall south to north to provide property connections.
	EL-ER-020	415V	O/H LV & 11kV mains attached to poles 3002173 & 3002170 with ground stay, crossing the wall south to north to provide property connections and ongoing mains.
	EL-ER-021	415V	O/H LV mains attached to pole 3002170, crossing the wall south to north to provide property connections.
	EL-ER-022	240V	O/H LV mains attached to pole 3002170, crossing the wall south to north to provide property connections.

4.3.2 Consultation with Ergon

An email enquiry was lodged on the 16th of April. Ergon have requested an online form is completed. BRC have provided details of their contacts at Ergon to assist in the liaison process and contact has been made with Ellie who will assess the impacts and assign an additional or different contact as required for the project.

4.4 Telecommunications

4.4.1 Telecommunications Conflicts

Table 4-4 summarises the electrical conflicts within the project vicinity. A complete list of all conflicts and their proposed mitigation strategies is provided in Appendix A.

Table 4-4: Summary of Existing Telecommunication Conflicts

Asset Owner	Conflict Tag	Description of Asset Conflicts
Powerlink	TE-PL-001	Optic Fibre assets runs west to east within the zone of influence of the retaining wall, crossing at multiple locations.
Telstra / NBN	TE-TL-001	1 x PN35 conduit contains: - 1 x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)
	TE-TL-002	1 x PN35 conduit contains: - 1 x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)
	TE-TL-003	1 x PN20 conduit contains: - 1 x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)
	TE-TL-004	1 x A100 asbestos conduit contains: - TBC x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)
	TE-TL-005	1 x A100 asbestos conduit contains: - TBC x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)
	TE-TL-006	1 x A100 asbestos conduit contains: - TBC x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)
	TE-TL-007	1 x A100 asbestos conduit contains: - TBC x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)
	TE-TL-008	1 x A100 asbestos conduit contains: - TBC x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)
	TE-TL-009	2 x Main Cable ducts - TBC Telstra cable size [XXmm] (XXm) - Other carrier TBC (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)
	TE-TL-010	3 x House Connection - TBC x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)
	TE-TL-011	1 x PN35 conduit contains: - 1 x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)
	TE-TL-012	2 x House Connection - TBC x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)
	TE-TL-013	1 x direct buried cable - TBC x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)
	TE-TL-014	1 x PN35 conduit contains: - 1 x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)

Asset Owner	Conflict Tag	Description of Asset Conflicts
	TE-TL-015	1 x PN35 conduit contains: - 1 x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)
	TE-TL-016	2 x House Connection, 1 x pit - TBC x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm) - TBC pit type
	TE-TL-017	1 x House Connection - TBC x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)
	TE-TL-018	1 x PN35 conduit contains: - 1 x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)
	TE-TL-019	3 x Main Cable ducts - TBC Telstra cable size [XXmm] (XXm) - Other carrier TBC (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)
	TE-TL-020	1 x House Connection, 1 x pit, 1 x Telstra Cable - TBC x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm) - TBC Telstra cable size [XXmm] (XXm) - TBC pit type

4.4.2 Consultation with Telstra / NBN

An email enquiry was lodged on the 16th of April. NBN have requested an online form is completed. Until liaison commences and a meeting is held with NBN, the following assumptions will apply:

- That future assets are not planned within the project vicinity, however, as Telstra is a customer-driven organisation, assets may be requested by their customer in future.
- That all Telstra access chambers, pits, pillars etc. require 24/7 accesses.
- That all Telstra related works are non-contestable works, including design and construction of all Telstra assets.
- Trenching for Telstra assets by the principal contractor can be negotiated with Telstra.

4.4.3 Consultation with NBN Co.

An email enquiry was lodged on the 16th of April. NBN have requested an online form is completed. Until liaison commences and a meeting is held with NBN, the following assumptions will apply:

- NBN are likely to advise that any Telstra or Ergon relocation works will need to occur before NBN relocation. NBN will also require IFC designs from Telstra or Ergon in terms of any relocation work.
- NBN are likely to advise that all NBN related works are non-contestable works, including design and construction of all NBN assets.
- Trenching for NBN assets will be managed by NBN and any NBN assets are within Telstra trench will be managed by Telstra.

5. Design Description

This will be updated in a future phase of the design delivery.

6. Design Integration

This will be updated in a future phase of the design delivery.

7. Potholing investigations

This will be updated in a future phase of the design delivery.

8. Timeframe

Timeframes have not been considered at this stage of design.

Appendix A PUP Conflict Register

Asset ID	Existing Asset Information													
	Road/Rail Authority	Alignment	Position	KP	Asset Type	Asset Sub- Type	Asset Owner	Size	Material	Description	Treatment Type	Treatment Details	Alignment	Indicative Qty
SE-BR-001	BRC	UG	Diagonal	46.5	Sewer	Gravity	BRC	150	VC	DN150 VC gravity sewer main runs from north to south under Quay Street near Daph Geddes Park. Alignment runs through wall alignment. Connects to 2x manholes	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC
SE-BR-002	BRC	UG	Diagonal	52	Sewer	Gravity	BRC	525	VC	DN525 VC gravity sewer main runs from west to east under the southern side of Quay Street Connects to 2x manholes This will likely have a knock on impact on upstream/downstream mains	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC
SE-BR-003	BRC	UG	Diagonal	72	Sewer	Gravity	BRC	150	VC	DN150 VC gravity sewer main runs from north to south under Scotland Street and Quay Street. Alignment runs through wall alignment. Connects to 2x manholes	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC
SE-BR-004	BRC	UG	Diagonal	89.5	Sewer	Gravity	BRC	150	VC	DN150 VC gravity sewer main runs from north to south under Scotland Street and along Peterson Street. Connects to 2x manholes	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC
WA-BR-001	BRC	UG	Diagonal	35.5	Water	Reticulation	BRC	100	AC	DN100 AC water main running east / west along Quay Street. Runs through location of gate on Quay St East.	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC
WA-BR-002	BRC	UG	Perpendicular / Parallel	65	Water	Reticulation	BRC	100	mPVC	DN100 mPVC water main running east / west along Quay Street. Runs through location of gate on Quay St East.	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC
WA-BR-003	BRC	UG	Diagonal	77	Water	Reticulation	BRC	100	AC	DN100 AC water main running south / north from Quay Street and crossing Scotland Street. Runs through wall alignment.	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC
WA-BR-004	BRC	UG	Parallel	80.75	Water	Reticulation	BRC	100	AC	DN100 AC water main running south east / north west along Scotland Street. Runs parallel to wall alignment. Crosses through gate location.	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC
WA-BR-005	BRC	UG	Diagonal	88	Water	Reticulation	BRC	100	AC	DN100 AC water main running east / west along Scotland Street.	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC
WA-BR-006	BRC	UG	Diagonal	90.5	Water	Reticulation	BRC	100	AC	DN100 AC water main running north / south along Petersen Street, along with a property connection. Runs along alignment of temporary wall section.	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC
DR-BR-001	BRC	UG	Parallel	6.25	Drainage	-	BRC	375 / 525	Reinforced concrete	DN375 and 525 reinforced concrete pipes in conflict with proposed levee wall on the corner of Quay St and Toonburra St	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC
DR-BR-002	BRC	UG	diagonal	38	Drainage	-	BRC	300	Reinforced concrete	2x DN300 reinforced concrete pipes in conflict with proposed levee wall, crossing and running along Quay St East	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC
DR-BR-003	BRC	UG	Parallel	45	Drainage	-	BRC	300	Reinforced concrete	2x DN300 reinforced concrete pipes in conflict with proposed levee wall, crossing and running along Quay St East	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC
DR-BR-004	BRC	UG	Parallel	51.5	Drainage	-	BRC	300	Reinforced concrete	2x DN300 reinforced concrete pipes in conflict with proposed levee wall, crossing and running along Quay St East	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC
DR-BR-005	BRC	UG	Parallel	68	Drainage	-	BRC	300	Reinforced concrete	DN300 reinforced concrete pipes in conflict with proposed levee wall, crossing Quay St East	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC

EL-ER-001	BRC	OH	Parallel	2	Electrical	Pole Sub	Ergon	240V & 415V & 11kV	-	Pole (2109855) / Substation (15888) situated on the southern side of the corner of Quay St and Toonburra St.	To be confirmed during detailed design.	To be confirmed during detailed design.	TBC	TBC
EL-ER-002	BRC	OH	Diagonal	7.25	Electrical	SL	Ergon	240V	-	OH LV main attached to pole 6017522 & 2109871, crossing the wall north to south to provide street lighting.	To be confirmed during detailed design.	To be confirmed during detailed design.	TBC	TBC
EL-ER-003	BRC	OH	Parallel	7.5	Electrical	Pole	Ergon	240V & 415V	-	Pole 2109871, providing power for street lighting and likely a connection for the building. Building currently closed. Investigate need for current connection or future connection.	To be confirmed during detailed design.	To be confirmed during detailed design.	TBC	TBC
EL-ER-004	BRC	OH	Diagonal	7.75	Electrical	LV	Ergon	415V	-	OH LV main attached to pole 2109854 & 2109871, crossing the wall south to north to provide street lighting and property connection.	To be confirmed during detailed design.	To be confirmed during detailed design.	TBC	TBC
EL-ER-005	BRC	OH	Perpendicular	9	Electrical	LV	Ergon	415V	-	OH LV main attached to pole 2109854, crossing the wall south to north to provide property connection.	To be confirmed during detailed design.	To be confirmed during detailed design.	TBC	TBC
EL-ER-006	BRC	OH	Parallel	37	Electrical	Pole	Ergon	415V & 11kV	-	Pole 3002191 situated on the southern side of Quay St East, crossing the wall south to north to provide property connections.	To be confirmed during detailed design.	To be confirmed during detailed design.	TBC	TBC
EL-ER-007	BRC	OH	Diagonal	37	Electrical	LV	Ergon	415V	-	OH LV mains attached to pole 3002191, crossing the wall south to north to provide property connections.	To be confirmed during detailed design.	To be confirmed during detailed design.	TBC	TBC
EL-ER-008	BRC	OH	Diagonal	37	Electrical	LV	Ergon	415V	-	OH LV mains attached to pole 3002191, crossing the wall south to north to provide property connections.	To be confirmed during detailed design.	To be confirmed during detailed design.	TBC	TBC
EL-ER-009	BRC	OH	Diagonal	42.5	Electrical	LV	Ergon	240V	-	OH LV mains attached to pole 3002199, crossing the wall north to south to provide property connections.	To be confirmed during detailed design.	To be confirmed during detailed design.	TBC	TBC
EL-ER-010	BRC	OH	Parallel	42.75	Electrical	Pole	Ergon	240V & 415V & 11kV	-	Pole 3002199 situated on the south side of Quay St East, connected to LV & 11kV in conflict with wall location.	To be confirmed during detailed design.	To be confirmed during detailed design.	TBC	TBC
EL-ER-011	BRC	OH	Parallel	46.5	Electrical	Pole Sub	Ergon	415V & 11kV	-	Pole (3002198) / Substation (6704) situated on the southern side of Quay St East.	To be confirmed during detailed design.	To be confirmed during detailed design.	TBC	TBC
EL-ER-012	BRC	OH	Parallel	37-60	Electrical	LV	Ergon	415V & 11kV	-	OH LV mains attached to pole 3002199, crossing the wall north to south to provide property connections.	To be confirmed during detailed design.	To be confirmed during detailed design.	TBC	TBC
EL-ER-013	BRC	OH	Parallel	51	Electrical	Pole	Ergon	415V & 11kV	-	Pole 3002186 situated on the south side of Quay St East, connected to LV & 11kV in conflict with wall location.	To be confirmed during detailed design.	To be confirmed during detailed design.	TBC	TBC
EL-ER-014	BRC	OH	Parallel	54.5	Electrical	Pole w Ground Stay	Ergon	240V & 415V & 11kV	-	Pole 3002185 situated on the south side of Quay St East, connected to LV & 11kV in conflict with wall location.	To be confirmed during detailed design.	To be confirmed during detailed design.	TBC	TBC
EL-ER-015	BRC	OH	Diagonal	54.5	Electrical	LV	Ergon	240V	-	OH LV mains attached to pole 3002185, crossing the wall south to north to provide property connections.	To be confirmed during detailed design.	To be confirmed during detailed design.	TBC	TBC
EL-ER-016	BRC	OH	Diagonal	59.5	Electrical	LV	Ergon	240V	-	OH LV mains attached to pole 3002182, crossing the wall south to north to provide property connections.	To be confirmed during detailed design.	To be confirmed during detailed design.	TBC	TBC
EL-ER-017	BRC	OH	Diagonal	64	Electrical	LV	Ergon	240V & 415V	-	OH LV mains attached to pole 3002197, crossing the wall south to north to provide property connections.	To be confirmed during detailed design.	To be confirmed during detailed design.	TBC	TBC
EL-ER-018	BRC	OH	Diagonal	69.5	Electrical	LV	Ergon	415V	-	OH LV mains attached to pole 3002179, crossing the wall south to north to provide property connections.	To be confirmed during detailed design.	To be confirmed during detailed design.	TBC	TBC
EL-ER-019	BRC	OH	Diagonal	80	Electrical	LV	Ergon	415V & 11kV	-	OH LV & 11kV mains attached to poles 3002173 & 3002170 with ground stay, crossing the wall south to north to provide property connections and ongoing mains.	To be confirmed during detailed design.	To be confirmed during detailed design.	TBC	TBC
EL-ER-020	BRC	OH	Perpendicular	83	Electrical	LV	Ergon	415V	-	OH LV mains attached to pole 3002170, crossing the wall south to north to provide property connections.	To be confirmed during detailed design.	To be confirmed during detailed design.	TBC	TBC
EL-ER-021	BRC	OH	Perpendicular	83.25	Electrical	LV	Ergon	415V	-	OH LV mains attached to pole 3002170, crossing the wall south to north to provide property connections.	To be confirmed during detailed design.	To be confirmed during detailed design.	TBC	TBC
EL-ER-022	BRC	OH	Diagonal	92.5	Electrical	LV	Ergon	240V	-	OH LV mains attached to pole 3009998, crossing the wall south to north to provide property connections.	To be confirmed during detailed design.	To be confirmed during detailed design.	TBC	TBC

TE-PL-001	BRC	UG	Diagonal	37-59	Telecom	Fibre	Powerlink	TBC	TBC	Optic Fibre assets runs west to east within the zone of influence of the retaining wall, crossing at multiple locations.	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC
TE-TL-001	BRC	UG	Parallel	1-6	Telecom	TBC	Telstra - Other carrier	1*P35	PVC	1 x PN35 conduit contains: - 1 x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC
TE-TL-002	BRC	UG	Diagonal	7	Telecom	TBC	Telstra - Other carrier	1*P35	PVC	1 x PN35 conduit contains: - 1 x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC
TE-TL-003	BRC	UG	Diagonal	8	Telecom	TBC	Telstra - Other carrier	1*P20	PVC	1 x PN20 conduit contains: - 1 x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC
TE-TL-004	BRC	UG	Diagonal	28	Telecom	TBC	Telstra - Other carrier	C100	Concrete	1 x A100 asbestos conduit contains: - TBC x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)	Remain	To be confirmed during detailed design.	UG	TBC
TE-TL-005	BRC	UG	Parallel	27.5	Telecom	TBC	Telstra - Other carrier	C100	Concrete	1 x A100 asbestos conduit contains: - TBC x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)	Remain	To be confirmed during detailed design.	UG	TBC
TE-TL-006	BRC	UG	Diagonal	30	Telecom	TBC	Telstra - Other carrier	C100	Concrete	1 x A100 asbestos conduit contains: - TBC x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)	Remain	To be confirmed during detailed design.	UG	TBC
TE-TL-007	BRC	UG	Diagonal	31.75	Telecom	TBC	Telstra - Other carrier	C100	Concrete	1 x A100 asbestos conduit contains: - TBC x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)	Remain	To be confirmed during detailed design.	UG	TBC
TE-TL-008	BRC	UG	Diagonal	33	Telecom	TBC	Telstra - Other carrier	C100	Concrete	1 x A100 asbestos conduit contains: - TBC x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)	Remain	To be confirmed during detailed design.	UG	TBC
TE-TL-009	BRC	UG	Diagonal	36	Telecom	TBC	Telstra - Other carrier	2 x TBC (MC)	TBC	2 x Main Cable ducts - TBC Telstra cable size [XXmm] (XXm) - Other carrier TBC (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC
TE-TL-010	BRC	UG/Pit	Diagonal / parallel	38	Telecom	TBC	Telstra - Other carrier	3 x TBC house connections	TBC	3 x House Connection - TBC x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC
TE-TL-011	BRC	UG	Diagonal	38.5	Telecom	TBC	Telstra - Other carrier	1*P35	PVC	1 x PN35 conduit contains: - 1 x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC
TE-TL-012	BRC	UG	Diagonal	44.5	Telecom	TBC	Telstra - Other carrier	2 x house connection	TBC	2 x House Connection - TBC x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC
TE-TL-013	BRC	UG	Parallel	52-63	Telecom	TBC	Telstra - Other carrier	Direct Buried	-	1 x direct buried cable - TBC x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC
TE-TL-014	BRC	UG	Diagonal	59.5	Telecom	TBC	Telstra - Other carrier	P35	PVC	1 x PN35 conduit contains: - 1 x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC
TE-TL-015	BRC	UG	Diagonal	63.25	Telecom	TBC	Telstra - Other carrier	P35	PVC	1 x PN35 conduit contains: - 1 x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC
TE-TL-016	BRC	UG	Parallel	76.5	Telecom	TBC	Telstra - Other carrier	Comms pit and house connections	-	2 x House Connection, 1 x pit - TBC x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm) - TBC pit type	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC
TE-TL-017	BRC	UG	TBC	76	Telecom	TBC	Telstra - Other carrier	House connection	-	1 x House Connection - TBC x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC
TE-TL-018	BRC	UG	Perpendicular	80.75	Telecom	TBC	Telstra - Other carrier	P35	PVC	1 x PN35 conduit contains: - 1 x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC
TE-TL-019	BRC	UG	Parallel	81-89.5	Telecom	TBC	Telstra - Other carrier	3 x OC - MC	TBC	3 x Main Cable ducts - TBC Telstra cable size [XXmm] (XXm) - Other carrier TBC (likely NBN according to the work done during the previous design stage) [XXmm] (XXm)	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC
TE-TL-020	BRC	UG	Parallel	93.5	Telecom	TBC	Telstra - Other carrier	1 x pit 1 x House connection 1 X cable	-/PVC	1 x House Connection, 1 x pit, 1 x Telstra Cable - TBC x Other Conduit (likely NBN according to the work done during the previous design stage) [XXmm] (XXm) - TBC Telstra cable size [XXmm] (XXm) - TBC pit type	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC
GA-AP-001	BRC	UG	Parallel	8.5	Gas	TBC	APA	TBC		Medium Pressure, sleeved, 63 mm, medium density PE pipe, P11	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC
GA-AP-002	BRC	UG	Perpendicular	36	Gas	TBC	APA	TBC		Medium Pressure, 63 mm, medium density PE pipe, P12	To be confirmed during detailed design.	To be confirmed during detailed design.	UG	TBC

Appendix B PUP Conflict Plans

PRELIMINARY

A1									
							DRAWN	DV	17.05.24
	B	17.05.24	ECI	D.VOLPE	C.SWIFT		CHECKED	CS	17.05.24
	A	03.05.24	ECI	D.VOLPE	C.SWIFT		PASSED		
	INDEX	DATE	REVISIONS	DRAWN	CHECKED	PASSED		INITIALS	DATE

PRINCIPAL
Queensland Government
1 WILLIAM STREET, BRISBANE, QLD, 4000, AUSTRALIA

PRINCIPAL CONSULTANT
SMEC
Member of the Surbana Jurong Group
SMEC PROJECT No 30034151

MANAGING CONTRACTOR

30034151

BUNDABERG_EAST_LEVEE
PUP_SITE_LAYOUT

PRINCIPAL	DEPARTMENT OF HOUSING, LOCAL GOVERNMENT, PLANNING AND PUBLIC WORKS
SHEET 1 OF SHEETS 4	SCALE AS_SHOWN
REVISION DATE 17.05.24	REVISION B
DISCIPLINE CODE	CIVIL
DRAWING NO.	30034151-SMC-GPRW-C-DRG-0300

LEGEND

- WATER MAIN
- STORM WATER
- SEWER
- POWERLINK
- ERGON
- NBN
- GAS MAIN
- WALL

N

QUAY STREET WEST

QUAY ST

EL-ER-001
EL-ER-002
EL-ER-003
EL-ER-004
EL-ER-005
EL-ER-006
EL-ER-007
EL-ER-008
EL-ER-009
EL-ER-010
EL-ER-011
EL-ER-012
EL-ER-013
EL-ER-014
EL-ER-015
EL-ER-016
EL-ER-017
TE-TL-001
TE-TL-002
TE-TL-003
TE-TL-004
TE-TL-005
TE-TL-006
TE-TL-007
TE-TL-008
TE-TL-009
TE-TL-010
TE-TL-011
TE-TL-012
TE-TL-013
TE-TL-014
TE-TL-015
TE-PL-001
DR-BR-001
DR-BR-002
DR-BR-003
DR-BR-004
GA-AP-001
GA-AP-002
WA-BR-001
SE-BR-001
SE-BR-002

0 10 20 30 40 50m
SCALE 1:500 @A1

N

QUAY STREET EAST

QUAY ST

0 10 20 30 40 50m
SCALE 1:500 @A1

PRELIMINARY

INDEX	DATE	REVISIONS	DRAWN	CHECKED	PASSED		INITIALS	DATE
						DRAWN	DV	17.05.24
B	17.05.24	ECI	D.VOLPE	C.SWIFT		CHECKED	CS	17.05.24
A	03.05.24	ECI	D.VOLPE	C.SWIFT		PASSED		

A1

PRINCIPAL
Queensland Government
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PRINCIPAL CONSULTANT
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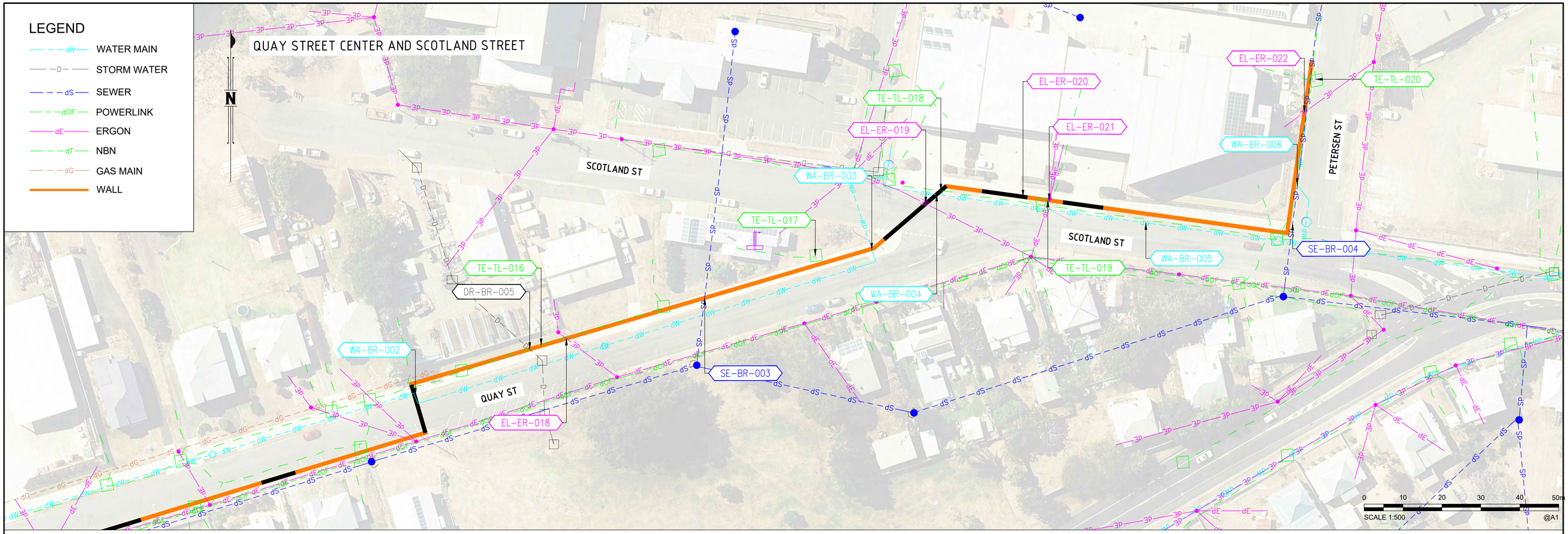
BUNDABERG_EAST_LEVEE
PUP_GA_001

PRINCIPAL	DEPARTMENT OF HOUSING, LOCAL GOVERNMENT, PLANNING AND PUBLIC WORKS
SHEET 2 OF SHEETS 4	SCALE AS_SHOWN
REVISION DATE 17.05.24	REVISION B
DISCIPLINE CODE	CIVIL
DRAWING NO.	30034151-SMC-GPRW-C-DRG-0301

LEGEND

- WATER MAIN (dW)
- STORM WATER (D)
- SEWER (dS)
- POWERLINK (dOF)
- ERGON (dE)
- NBN (dT)
- GAS MAIN (dG)
- WALL

QUAY STREET CENTER AND SCOTLAND STREET



BREWERY A - CRANE ST

PRELIMINARY

INDEX	DATE	REVISIONS	DRAWN	CHECKED	PASSED		INITIALS	DATE
						DRAWN	DV	17.05.24
B	17.05.24	ECI	D.VOLPE	C.SWIFT		CHECKED	CS	17.05.24
A	03.05.24	ECI	D.VOLPE	C.SWIFT		PASSED		

A1

PRINCIPAL: Queensland Government
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PRINCIPAL CONSULTANT: SMEC — Member of the Surbana Jurong Group
SMEC PROJECT No 30034151

MANAGING CONTRACTOR

30034151

BUNDABERG_EAST_LEVEE
PUP_GA_002

PRINCIPAL	DEPARTMENT OF HOUSING, LOCAL GOVERNMENT, PLANNING AND PUBLIC WORKS
SHEET 3 OF SHEETS 4	SCALE AS_SHOWN
REVISION DATE 17.05.24	REVISION B
DISCIPLINE CODE	CIVIL
DRAWING NO.	30034151-SMC-GPRW-C-DRG-0302

PRELIMINARY

INDEX	DATE	REVISIONS	DRAWN	CHECKED	PASSED		INITIALS	DATE
						DRAWN	DV	17.05.24
B	17.05.24	ECI	D.VOLPE	C.SWIFT		CHECKED	CS	17.05.24
A	03.05.24	ECI	D.VOLPE	C.SWIFT		PASSED		

A1

PRINCIPAL

Queensland Government

1 WILLIAM STREET, BRISBANE, QLD, 4000, AUSTRALIA

PRINCIPAL CONSULTANT

SMEC

Member of the Surbana Jurong Group

SMEC PROJECT No 30034151

MANAGING CONTRACTOR

30034151

BUNDABERG_EAST_LEVEE
PUP_GA_003

PRINCIPAL	DEPARTMENT OF HOUSING, LOCAL GOVERNMENT, PLANNING AND PUBLIC WORKS
SHEET 4 OF SHEETS 4	SCALE AS_SHOWN
REVISION DATE 17.05.24	REVISION B
DISCIPLINE CODE	CIVIL
DRAWING NO.	30034151-SMC-GPRW-C-DRG-0303