Nucon
North MacLean (Greenbank) Concrete Plant

DESIGN CRITERIA -BATCH WATER

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PF24-06-RP-112

Revision: B

Pentral Fultum

DOCUMENT CONTROL

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Rev	Description	Reviewed/Approved	Signature	Date
A	Draft for comment			
B	Water connection size added			

1 GENERAL

1.1 PURPOSE

This document discusses the use of bore water for batching water. The discussion includes a review of:

- Demand – daily and annual;
- Cost – bore vs. mains water; and
- Quality requirements.

Revision B documents the minimum mains water supply required for the batch plant.

1.2 SCOPE

The scope is restricted to the new concrete plant to be located at 914 Greenbank Road, North MacLean (the "Site") as shown in *Figure 1* and *Figure 2*. Only water used in the production of concrete is considered. The amenities (ablutions and lunchroom) and any firewater are assumed to be supplied with mains water from an extension to the current water main supplying the neighbouring service station.

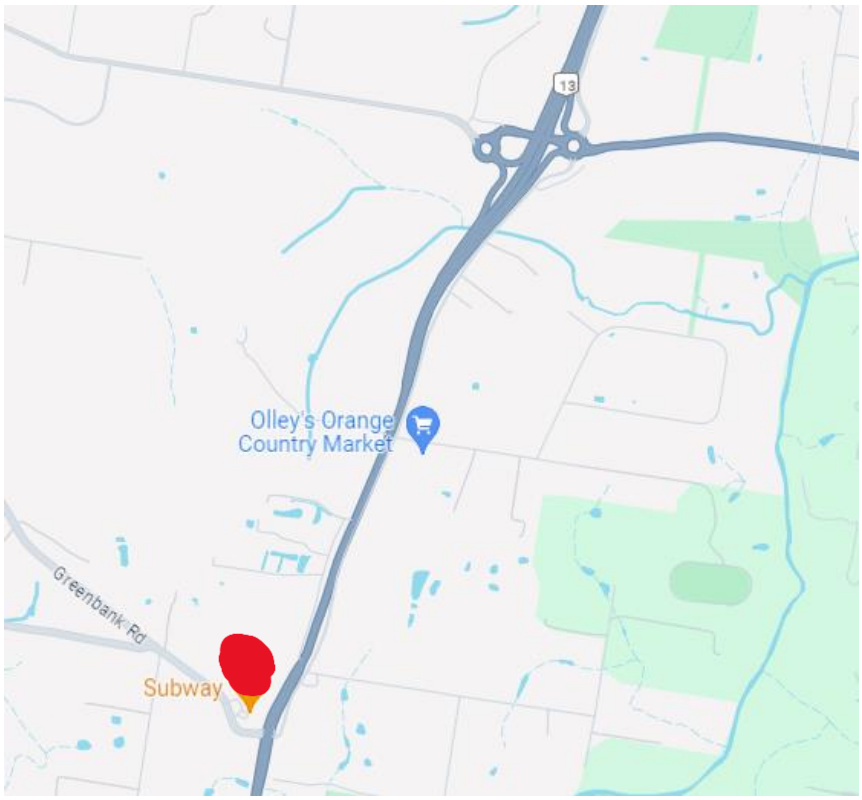

Figure 1. Location of site on Greenbank Road, North MacLean.

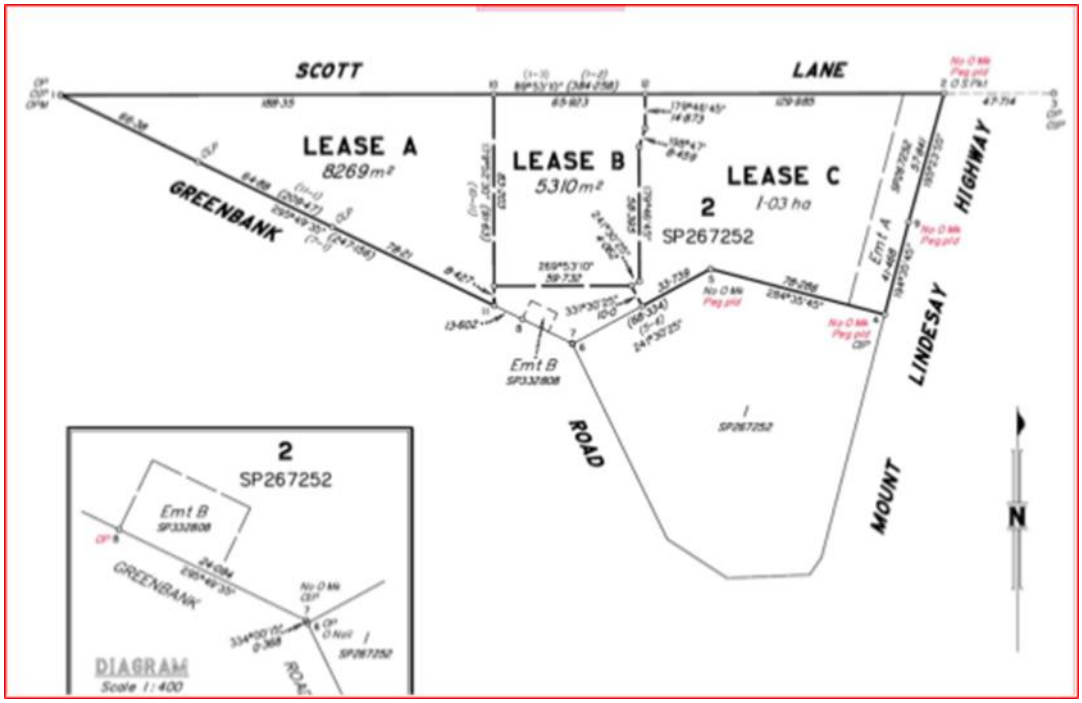

Figure 2. Site is to be located on Lease C.

1.3 REFERENCED DOCUMENTS

PF24-06-RP-101_A Material logistics spreadsheet

2 DESIGN CRITERIA - BATCH WATER

2.1 WATER DEMAND

The typical daily production profile is shown in Figure 3 and is consistent with other project documents. Assuming that the average water use is 173.5 L/m^3 then *Figure 3* also shows water use through the day. This gives a water use of 143 kL/day.

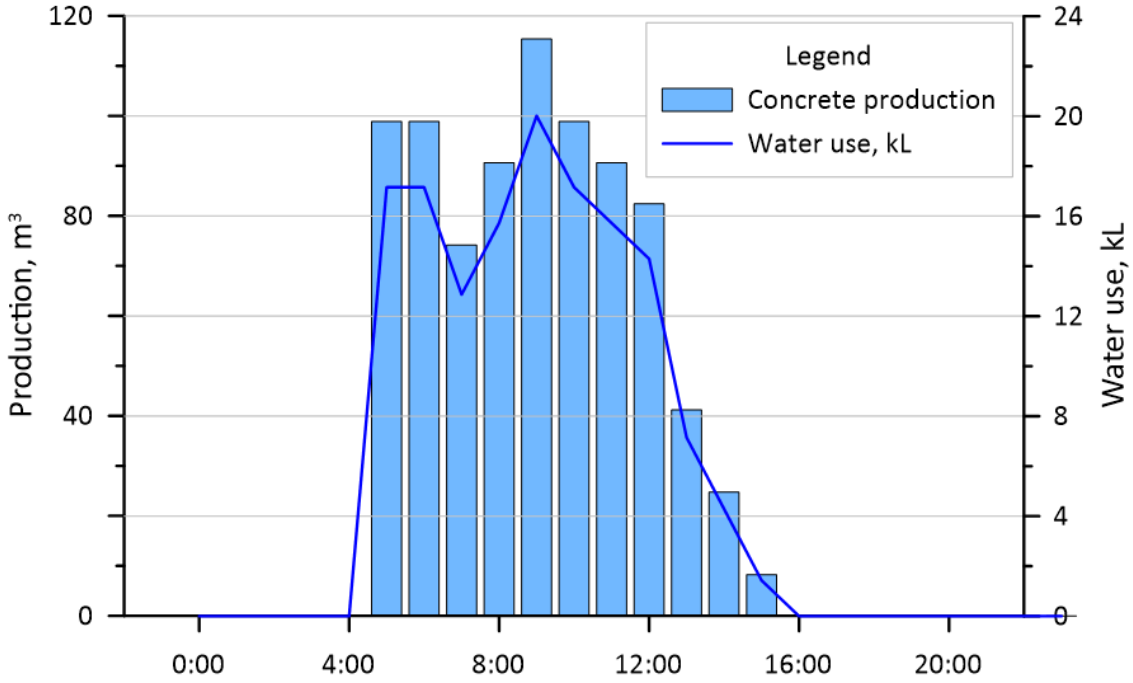

Figure 3. Typical daily production profile.

The business case considers three sales scenarios, these are shown in *Figure 4*. Assuming the same average water usage gives a maximum annual water consumption of 23,000 kL, 21,000 kL, and 18,000 kL for these scenarios.

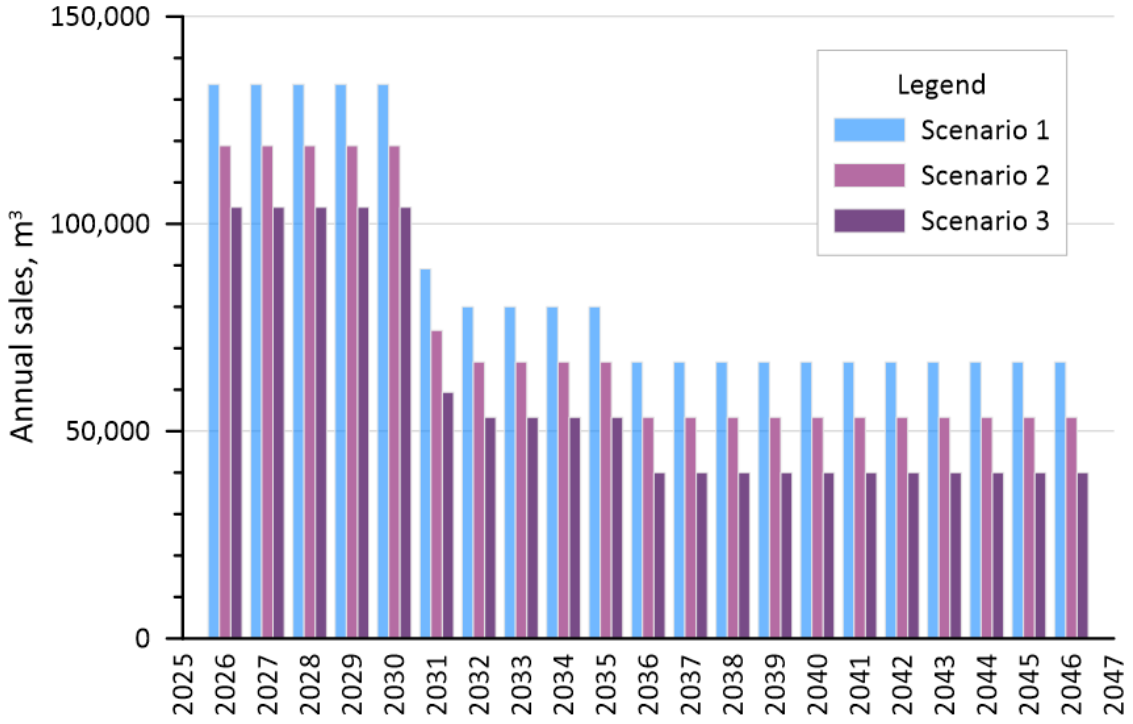

Figure 4. Annual production for the three (3) scenarios considered in the business case.

It may be argued that these figures do not include water recycled from housekeeping activities (agitator washout, yard cleaning, *etc.*), however a simple consideration of the water mass balance shows that water must be brought onto site whatever the end use (*i.e.* housekeeping water is brought onto site, is captured, and then used in batching). One source of water not considered is water harvested from rain falling on buildings and pavements. Bureau of Meteorology data shows that the mean annual rainfall for Station No. 40542 (Maclean Bridge, 22.79°S, 153.02°N) is 932.8mm. Assuming that 100% is captured across the 10,000 m^2 site, then this gives 9,328 kL falling on the site over one (1) year. This volume is insufficient to meet the annual water requirements for batching.

2.2 WATER SUPPLY & SECURITY OF SUPPLY

At peak production (115 m^3/h) the plant requires a minimum of 20 kL/h. Without a cycle time chart it is difficult to estimate the instantaneous demand, however it will be appreciated that a pipe size of at least 50mm is required (at a pipe velocity of 3 m/s).

If a minimum of 20 kL of water must be stored for supply security, then 75 kL of tank storage with a water infeed of 9.0 kL/h (equivalent to a pipe size of 40mm and a pipe velocity of 2m/s) is required as shown in *Figure 5*. This is the minimum storage required for a 40mm pipe. Storage capacity can be reduced by increasing the water infeed, however 25 kL tanks are relatively low cost.

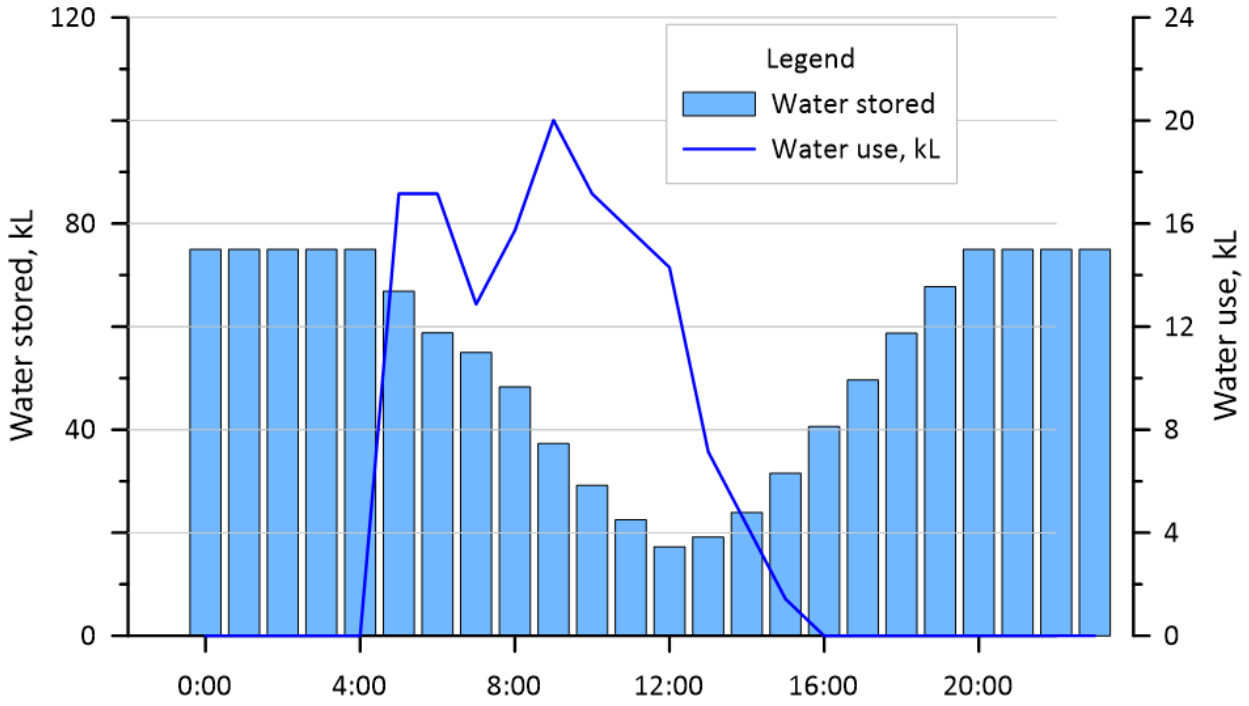

Figure 5. Water stored with 75kL of storage and 9.0kL/h inflow.

2.3 MAINS WATER COST

The current (September 2024) water cost is $4.4868 /kL from Logan City Council.

Water and wastewater (sewerage) account – Logan City Council

Logan City Council use a relatively simple model compared to other water suppliers. For example, City of Gold Coast uses a "Water access charge" which is dependent upon the meter size – see *Table 1*. On top of this, Gold Coast water charge $4.824 /kL. It is likely that Logan City will move to a similar model.

Water access charge | City of Gold Coast

Table 1. City of Gold Coast base water access charges.

Meter size (non-residential)	Annual charge
20mm	$294.50
25mm	$294.50
32mm	$753.92
40mm	$1,178.00
50mm	$1,840.62
100mm	$7,362.50
150mm	$16,565.62
200mm	$29,450.00
250mm	$46,015.62
300mm	$66,262.50

Based on the three scenarios shown in *Figure 4*, the maximum annual water cost based on 2024 pricing is shown in *Table* 2.

Table 2. Forecast annual water usage and cost.

Scenario	Maximum sales volume, m^3	Maximum annual water use, kL	Cost based on $4.4868 /kL
1	133,707	23,198	$104,086
2	118,851	20,621	$92,521
3	103,994	18,043	$80,955

2.4 BORE WATER

Access to groundwater is regulated and requires approval – see:

Access to groundwater | Business Queensland

Reports are available for private registered bores and Queensland Government groundwater investigation and monitoring bores. Registered bores in the vicinity of the Site are shown in *Figure* 6 taken from

Queensland Globe (information.qld.gov.au)

A summary of these bores is provided in *Table 3* whilst the reports are provided in Appendix A. Terminology can be found at:

Terminology: Australian Groundwater Explorer: Water Information: Groundwater information: Bureau of Meteorology (bom.gov.au)

Table 3. Summary of neighbouring bores.

Bore	Role	Depth, m	Yield, L/s	Quality	Comment
RN 169071	Sub-artesian monitoring				Located in adjacent service centre
RN 169072	Sub-artesian monitoring				Located in adjacent service centre
RN 138799	Water supply	60	0.40		Other side of Mt. Lindesay Highway to Site
RN 124912	Water supply	15	0.90	585ppm Note 1	To the south of the Site
RN 194541	Water supply	22		Brackish	To the west of the Site – see RN 194551
RN 194551	Water supply	24		Brackish	To the west of the Site – see RN 194541
RN 194594	Water supply	78	0.03		To the north of the Site

Bore	Role	Depth, m	Yield, L/s	Quality	Comment
RN 124803	Water supply	48	0.19	3500µS/cm	To the north of the Site
RN 206683	Abandoned	70			To the west of the Site
RN 124706	Water supply	40	1.34	Brackish	South-west of Site

Note:

1. Approximately 1200 µS/cm

Assuming 24 h/day extraction, then to meet the maximum demand of 143 kL/day, a flow rate (yield) of 1.7 L/s is required. None of the bores summarised in *Table 3* meet this requirement.

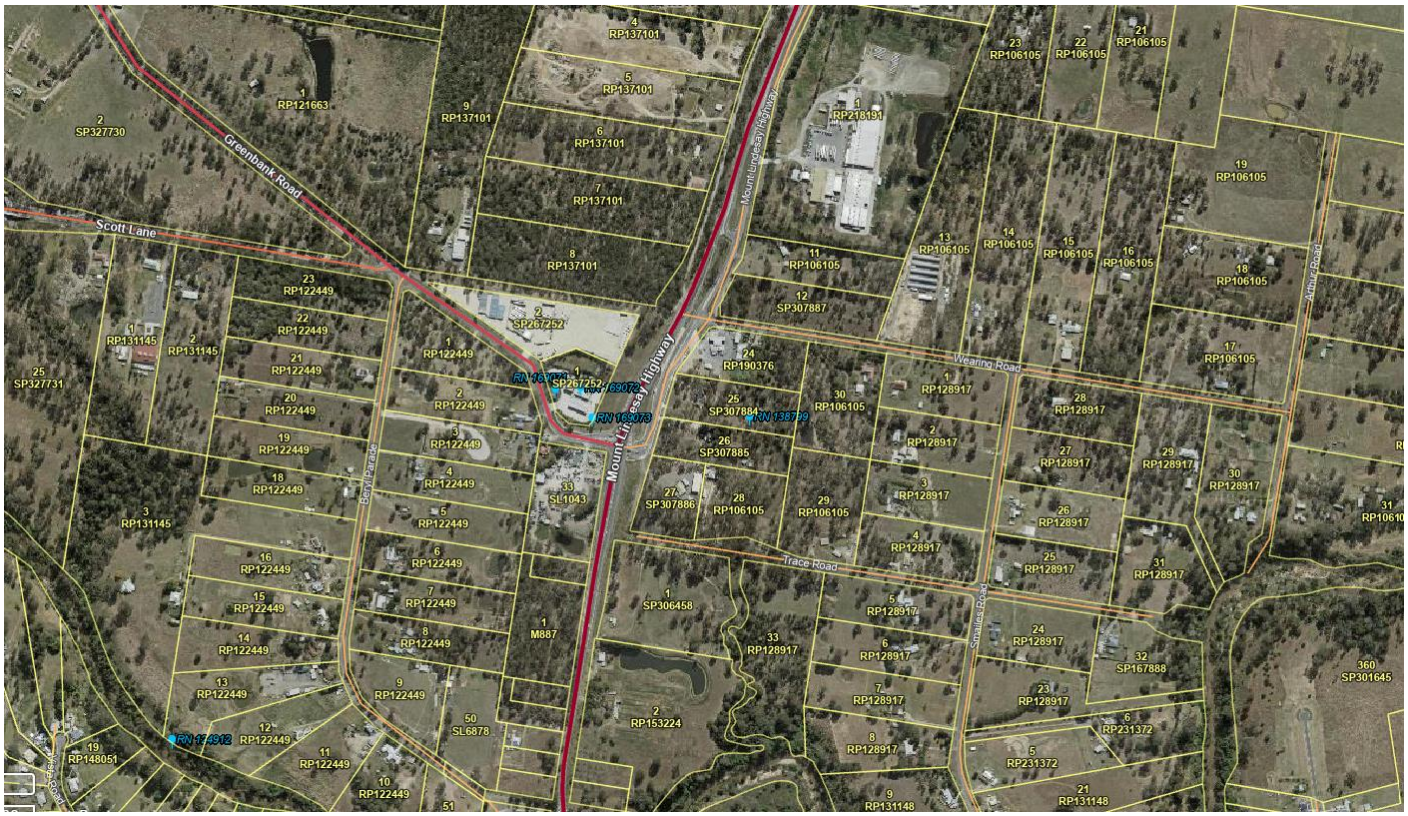

Figure 6. Registered bores in the vicinity of the Site.

2.5 CONCRETE WATER QUALITY

AS 1379 "Specification and supply of concrete" requires that water is "*drawn from a source of acceptable quality*". International standards limit chloride as Cl^- to a maximum of 500mg/L - CCAA publication "A guide to concrete construction 2020".

Given that:

salinity (ppm) = 1.80665 Cl^- (mg/L)

then the limit is approximately 900 ppm or 1,800 µS/cm.

Bore RN 124912 is below this limit, whilst Bore RN 124803 is above and therefore unsuitable for use in concrete as are all the bores reported as having "brackish" quality.

2.6 BORE INSTALLATION COST

Discussions with drillers indicate that the cost of installing a 70 deep bore with pump will be in the range of $40k to $50k. The likely drilling method (auger and rotary air) should allow the yield and water quality to be determined before any pump is installed. Payback on this investment is less than one (1) year based on the volumes shown in *Table 2*.

3 DESIGN CRITERIA - MAINS WATER SUPPLY

3.1 WATER DEMAND

From *Section 2.1*, water use for the production of concrete is 143 kL/day.

Unity Water (serving Moreton Bay, Sunshine Coast and Noosa) show (Daily water usage activities) water use at 165L/person/day which includes laundry, cooking, showering, *etc.* 100L/person/day is used here based on lower, water activities. At peak production the Site has the occupancy shown in *Table 4*. Thus the water consumption is approximately 1kL/day.

Total Site water consumption (concrete production and amenities) is thus 143kL/day.

Table 4. Site occupancy.

Role	Number of people	Proportion on site	Equivalent full-time
Agitator driver	12	50%	6
Batcher (process controllers)	1	100%	1
Plant Manager	1	25%	0.25
Front End Loader driver	1	100%	1
Services supervisor	1	100%	1
TOTAL			**9.25**

3.2 MAINS WATER DEMAND

The water used by the amenities is negligible compared with that required for concrete production. Therefore *Section 2.2* remains valid: minimum of 75 kL of storage and 40mm connection.

The minimum size of the water meter is 50mm, however it is recommended that the next size up (80mm) is installed to ensure security of supply.

4 CONCLUSIONS & RECOMMENDATIONS

4.1 CONCLUSIONS

1. A typical high production day (825m^3) will require approximately 143 kL based on an average water demand of 173.5 L/m^3.
2. Based on the three (3) scenarios considered in the business case, annual water usage ranges from 18,000 kL to 23,000 kL.
3. Logan City uses a relatively unsophisticated water charging model which includes water access charges in the water usage charges. Current charges are $4.4868 /kL which gives an annual water cost of approximately $90 k/year (depending upon sales scenario).
4. There are several bore in the immediate area, however these bores are characterised by low water flow, and high salinity and there is a high likelihood that any bore will not meet production (flow rate and quality) requirements.
5. A typical 70m bore is expected to cost approximately $50k with ongoing maintenance and power costs. If the bore yields quality water at the required flow rate, then the payback will be less than one (1) year.

4.2 RECOMMENDATIONS

1. Minimum of 75 kL of storage is provided for batch water.
2. Minimum water main size of 40mm for batch water.
3. Mains water is supplied to the amenities.
4. An 80mm water meter is installed for the Site.
5. Engage licenced driller to install a bore. There is, however a high risk associated with this approach as the bore may not yield the desired flow rate and water quality and the bore may need to be abandoned.

APPENDIX A. BORE REPORTS

Report Date: 25/09/2024 09:19

Queensland Government
Groundwater Information
Bore Report

Page: 1 of 4
GWDB8250

From Year:

Registered Number	Facility Type	Facility Status	Drilled Date	Office	Shire
169071	Sub-Artesian Facility	Existing	19/11/2014	Brisbane	4590 - LOGAN CITY

Details

Description			
Parish	2977 - MACLEAN		
Original Name			
Driller Name	BRINTON, PHILIP PAUL		
Drill Company	PROACTIVE DRILLING		
Const Method	AUGER & ROTARY AIR		
Bore Line			
D/O File No		Polygon	
R/O File No		Equipment	
H/O File No		RN of Bore Replaced	
Log Received Date	16/01/2015	Data Owner	
Roles	Sub-Artesian Monitoring		

Location

Datum	GDA94	Basin	1450
Latitude	27-46-35	Sub-area	
Longitude	153-00-41	Lot	1
GIS Latitude	-27.7765058777	Plan	SP267252
GIS Longitude	153.0114686603		
Easting	501130	Map Scale	253 - 1: 25 000
Northing	6927555	Map Series	M - Metric Series
Zone	56	Map No	9542-34
Accuracy	GPS	Map Name	
GPS Accuracy	10	Prog Section	
Checked	Yes		

Casing — 4 *records for RN* 169071

Pipe	Date	Rec	Top (m)	Bottom (m)	Material Description	Mat Size (mm)	Size Desc	Outside Diameter (mm)
A	19/11/2014	1	0.00	15.50	Polyvinyl Chloride	5.000	WT - Wall Thickness	60
A	19/11/2014	2	15.50	20.00	Screen	0.400	AP - Aperture Size	60
X	19/11/2014	3	0.00	15.00	Grout			150
X	19/11/2014	4	15.00	20.00	Gravel Pack	3.000	GR - Gravel Size	150

Strata Logs — 2 *records for RN* 169071

Report Date: 25/09/2024 09:27

Queensland Government
Groundwater Information
Bore Report

Page: 1 of 4
GWDB8250

From Year:

Registered Number	Facility Type	Facility Status	Drilled Date	Office	Shire
169072	Sub-Artesian Facility	Existing	20/11/2014	Brisbane	4590 - LOGAN CITY

Details

Description			
Parish	2977 - MACLEAN		
Original Name			
Driller Name	BRINTON, PHILIP PAUL		
Drill Company	PROACTIVE DRILLING		
Const Method	AUGER & ROTARY AIR		
Bore Line			
D/O File No		Polygon	
R/O File No		Equipment	
H/O File No		RN of Bore Replaced	
Log Received Date	16/01/2015	Data Owner	
Roles	Sub-Artesian Monitoring		

Location

Datum	GDA94	Basin	1450
Latitude	27-46-35	Sub-area	
Longitude	153-00-43	Lot	1
GIS Latitude	-27.7764799681	Plan	SP267252
GIS Longitude	153.0119314126		
Easting	501176	Map Scale	253 - 1: 25 000
Northing	6927558	Map Series	M - Metric Series
Zone	56	Map No	9542-34
Accuracy	UNKN	Map Name	
GPS Accuracy		Prog Section	
Checked	Yes		

Casing — 4 *records for RN* 169072

Pipe	Date	Rec	Top (m)	Bottom (m)	Material Description	Mat Size (mm)	Size Desc	Outside Diameter (mm)
A	20/11/2014	1	0.00	15.50	Polyvinyl Chloride	5.000	WT - Wall Thickness	60
A	20/11/2014	2	15.50	22.00	Screen	0.400	AP - Aperture Size	60
X	20/11/2014	3	0.00	18.50	Grout			150
X	20/11/2014	4	18.50	22.00	Gravel Pack	3.000	GR - Gravel Size	185

Strata Logs — 2 *records for RN* 169072

Report Date: 25/09/2024 09:30

Queensland Government
Groundwater Information
Bore Report

From Year:

Registered Number	Facility Type	Facility Status	Drilled Date	Office	Shire
138799	Sub-Artesian Facility	Existing	15/06/2007	Brisbane	4590 - LOGAN CITY

Details

Description			
Parish	2977 - MACLEAN		
Original Name	WANLESS WASTE CORPORATION		
Driller Name	STOLZENBERG, DOWELL ROSS		
Drill Company	BURNETT & GLADSTONE DRILLING		
Const Method	ROTARY AIR		
Bore Line			
D/O File No		Polygon	
R/O File No		Equipment	
H/O File No		RN of Bore Replaced	
Log Received Date	11/06/2009	Data Owner	
Roles	Water Supply		

Location

Datum	GDA94	Basin	1450
Latitude	27-46-37	Sub-area	
Longitude	153-00-54	Lot	25
GIS Latitude	-27.7769444	Plan	RP106105
GIS Longitude	153.015		
Easting	501478	Map Scale	253 - 1: 25 000
Northing	6927506	Map Series	M - Metric Series
Zone	56	Map No	9542-34
Accuracy	GPS	Map Name	
GPS Accuracy	10	Prog Section	
Checked	Yes		

Casing

5 records for RN 138799

Pipe	Date	Rec	Top (m)	Bottom (m)	Material Description	Mat Size (mm)	Size Desc	Outside Diameter (mm)
A	15/06/2007	1	0.00	60.00	Polyvinyl Chloride			129
A	15/06/2007	2	12.00	60.00	Perforated or Slotted Casing	1.500	AP - Aperture Size	129
X	15/06/2007	3	0.00	5.00	Grout			185
X	15/06/2007	4	5.00	11.00	Cuttings or other fill between casing and hole wall			185
X	15/06/2007	5	11.00	60.00	Gravel Pack	6.000	GR - Gravel Size	185

Report Date: 25/09/2024 09:44

Queensland Government
Groundwater Information
Bore Report

From Year:

Registered Number	Facility Type	Facility Status	Drilled Date	Office	Shire
194594	Sub-Artesian Facility	Existing	20/10/2021	Brisbane	4590 - LOGAN CITY

Details

Description			
Parish	6000 - NO LONGER USED		
Original Name			
Driller Name	BADIN, ASTON		
Drill Company	CROSS COUNTRY DRILLING PL		
Const Method	ROTARY AIR		
Bore Line			
D/O File No	520/000(111)P17	Polygon	
R/O File No		Equipment	
H/O File No		RN of Bore Replaced	
Log Received Date	24/11/2021	Data Owner	
Roles	Water Supply		

Location

Datum	GDA94	Basin	1450
Latitude	27-45-43	Sub-area	
Longitude	153-00-26	Lot	17
GIS Latitude	-27.7619515411	Plan	RP173739
GIS Longitude	153.0072155092		
Easting	500711	Map Scale	
Northing	6929167	Map Series	
Zone	56	Map No	
Accuracy	GPS	Map Name	
GPS Accuracy	10	Prog Section	
Checked	Yes		

Casing

4 records for RN 194594

Pipe	Date	Rec	Top (m)	Bottom (m)	Material Description	Mat Size (mm)	Size Desc	Outside Diameter (mm)
A	20/10/2021	1	0.00	78.00	Polyvinyl Chloride	6.500	WT - Wall Thickness	140
A	20/10/2021	2	40.00	78.00	Perforated or Slotted Casing	2.500	AP - Aperture Size	140
X	20/10/2021	3	0.00	5.50	Grout			203
X	20/10/2021	4	5.50	78.00	Cuttings or other fill between casing and hole wall			203

Strata Logs

4 records for RN 194594

Report Date: 25/09/2024 09:44

Queensland Government
Groundwater Information
Bore Report

From Year:

Registered Number	Facility Type	Facility Status	Drilled Date	Office	Shire
194594	Sub-Artesian Facility	Existing	20/10/2021	Brisbane	4590 - LOGAN CITY

Details

Description			
Parish	6000 - NO LONGER USED		
Original Name			
Driller Name	BADIN, ASTON		
Drill Company	CROSS COUNTRY DRILLING PL		
Const Method	ROTARY AIR		
Bore Line			
D/O File No	520/000(111)P17	Polygon	
R/O File No		Equipment	
H/O File No		RN of Bore Replaced	
Log Received Date	24/11/2021	Data Owner	
Roles	Water Supply		

Location

Datum	GDA94	Basin	1450
Latitude	27-45-43	Sub-area	
Longitude	153-00-26	Lot	17
GIS Latitude	-27.7619515411	Plan	RP173739
GIS Longitude	153.0072155092		
Easting	500711	Map Scale	
Northing	6929167	Map Series	
Zone	56	Map No	
Accuracy	GPS	Map Name	
GPS Accuracy	10	Prog Section	
Checked	Yes		

Casing

4 records for RN 194594

Pipe	Date	Rec	Top (m)	Bottom (m)	Material Description	Mat Size (mm)	Size Desc	Outside Diameter (mm)
A	20/10/2021	1	0.00	78.00	Polyvinyl Chloride	6.500	WT - Wall Thickness	140
A	20/10/2021	2	40.00	78.00	Perforated or Slotted Casing	2.500	AP - Aperture Size	140
X	20/10/2021	3	0.00	5.50	Grout			203
X	20/10/2021	4	5.50	78.00	Cuttings or other fill between casing and hole wall			203

Strata Logs

4 records for RN 194594

Report Date: 25/09/2024 09:42

Queensland Government
Groundwater Information
Bore Report

From Year:

Registered Number	Facility Type	Facility Status	Drilled Date	Office	Shire
194551	Sub-Artesian Facility	Abandoned and Destroyed	08/10/2021	Brisbane	4590 - LOGAN CITY

Details

Description			
Parish	6000 - NO LONGER USED		
Original Name			
Driller Name	DIPPEL, KENNETH		
Drill Company	KA AND LC DIPPEL		
Const Method	ROTARY AIR		
Bore Line			
D/O File No		Polygon	
R/O File No		Equipment	
H/O File No		RN of Bore Replaced	
Log Received Date	04/11/2021	Data Owner	
Roles	Water Supply		

Location

Datum	GDA94	Basin	1450
Latitude	27-46-31	Sub-area	
Longitude	152-59-52	Lot	94
GIS Latitude	-27.7752777778	Plan	SP327733
GIS Longitude	152.9977777778		
Easting	499781	Map Scale	
Northing	6927690	Map Series	
Zone	56	Map No	
Accuracy		Map Name	
GPS Accuracy		Prog Section	
Checked	Yes		

Casing

3 records for RN 194551

Pipe	Date	Rec	Top (m)	Bottom (m)	Material Description	Mat Size (mm)	Size Desc	Outside Diameter (mm)
X	08/10/2021	1	0.00	1.70	Grout			230
X	08/10/2021	2	1.70	5.00	Grout			190
X	08/10/2021	3	5.00	24.00	Cuttings or other fill between casing and hole wall			190

Strata Logs

3 records for RN 194551

Report Date: 25/09/2024 09:40

Queensland Government
Groundwater Information
Bore Report

From Year:

Registered Number	Facility Type	Facility Status	Drilled Date	Office	Shire
194541	Sub-Artesian Facility	Existing	07/10/2021	Brisbane	4590 - LOGAN CITY

Details

Description			
Parish	6000 - NO LONGER USED		
Original Name			
Driller Name	DIPPEL, KENNETH		
Drill Company	KA AND LC DIPPEL		
Const Method	ROTARY AIR		
Bore Line			
D/O File No	520/000(111)P17	Polygon	
R/O File No		Equipment	
H/O File No		RN of Bore Replaced	
Log Received Date	04/11/2021	Data Owner	
Roles	Water Supply		

Location

Datum	GDA94	Basin	1450
Latitude	27-46-28	Sub-area	
Longitude	152-59-53	Lot	94
GIS Latitude	-27.7744444444	Plan	SP327733
GIS Longitude	152.9980555556		
Easting	499808	Map Scale	
Northing	6927783	Map Series	
Zone	56	Map No	
Accuracy	GPS	Map Name	
GPS Accuracy	10	Prog Section	
Checked	Yes		

Casing

3 *records for RN* 194541

Pipe	Date	Rec	Top (m)	Bottom (m)	Material Description	Mat Size (mm)	Size Desc	Outside Diameter (mm)
X	07/10/2021	1	0.00	1.70	Grout			230
X	07/10/2021	2	1.70	5.00	Grout			190
X	07/10/2021	3	5.00	21.80	Cuttings or other fill between casing and hole wall			190

Strata Logs

3 *records for RN* 194541

Report Date: 25/09/2024 09:35

Queensland Government
Groundwater Information
Bore Report

From Year:

Registered Number	Facility Type	Facility Status	Drilled Date	Office	Shire
124912	Sub-Artesian Facility	Existing	13/11/2009	Brisbane	4590 - LOGAN CITY

Details

Description			
Parish	2977 - MACLEAN		
Original Name	GRABHAM		
Driller Name			
Drill Company	KA & LC DIPPEL		
Const Method	CABLE TOOL		
Bore Line			
D/O File No		Polygon	
R/O File No		Equipment	
H/O File No		RN of Bore Replaced	
Log Received Date	17/03/2010	Data Owner	
Roles	Water Supply		

Location

Datum	GDA94	Basin	1450
Latitude	27-46-56	Sub-area	
Longitude	153-00-16	Lot	13
GIS Latitude	-27.78213736	Plan	RP122449
GIS Longitude	153.0045067		
Easting	500444	Map Scale	253 - 1: 25 000
Northing	6926931	Map Series	M - Metric Series
Zone	56	Map No	9542-34
Accuracy	GPS	Map Name	
GPS Accuracy	10	Prog Section	
Checked	Yes		

Casing

6 *records for RN* 124912

Pipe	Date	Rec	Top (m)	Bottom (m)	Material Description	Mat Size (mm)	Size Desc	Outside Diameter (mm)
A	13/11/2009	1	0.00	13.10	Polyvinyl Chloride	5.900	WT - Wall Thickness	140
A	13/11/2009	2	13.10	14.60	Screen	0.500	AP - Aperture Size	140
X	13/11/2009	3	0.00	1.50	Grout			160
X	13/11/2009	4	1.50	5.00	Grout			152
X	13/11/2009	5	5.00	6.00	Cuttings or other fill between casing and hole wall			152

Report Date: 25/09/2024 09:30

Queensland Government
Groundwater Information
Bore Report

From Year:

Registered Number	Facility Type	Facility Status	Drilled Date	Office	Shire
138799	Sub-Artesian Facility	Existing	15/06/2007	Brisbane	4590 - LOGAN CITY

Details

Description			
Parish	2977 - MACLEAN		
Original Name	WANLESS WASTE CORPORATION		
Driller Name	STOLZENBERG, DOWELL ROSS		
Drill Company	BURNETT & GLADSTONE DRILLING		
Const Method	ROTARY AIR		
Bore Line			
D/O File No		Polygon	
R/O File No		Equipment	
H/O File No		RN of Bore Replaced	
Log Received Date	11/06/2009	Data Owner	
Roles	Water Supply		

Location

Datum	GDA94	Basin	1450
Latitude	27-46-37	Sub-area	
Longitude	153-00-54	Lot	25
GIS Latitude	-27.7769444	Plan	RP106105
GIS Longitude	153.015		
Easting	501478	Map Scale	253 - 1: 25 000
Northing	6927506	Map Series	M - Metric Series
Zone	56	Map No	9542-34
Accuracy	GPS	Map Name	
GPS Accuracy	10	Prog Section	
Checked	Yes		

Casing

5 records for RN 138799

Pipe	Date	Rec	Top (m)	Bottom (m)	Material Description	Mat Size (mm)	Size Desc	Outside Diameter (mm)
A	15/06/2007	1	0.00	60.00	Polyvinyl Chloride			129
A	15/06/2007	2	12.00	60.00	Perforated or Slotted Casing	1.500	AP - Aperture Size	129
X	15/06/2007	3	0.00	5.00	Grout			185
X	15/06/2007	4	5.00	11.00	Cuttings or other fill between casing and hole wall			185
X	15/06/2007	5	11.00	60.00	Gravel Pack	6.000	GR - Gravel Size	185

Report Date: 25/09/2024 09:29

Queensland Government
Groundwater Information
Bore Report

From Year:

Registered Number	Facility Type	Facility Status	Drilled Date	Office	Shire
169073	Sub-Artesian Facility	Existing	21/11/2014	Brisbane	4590 - LOGAN CITY

Details

Description			
Parish	2977 - MACLEAN		
Original Name			
Driller Name	BRINTON, PHILIP PAUL		
Drill Company	PROACTIVE DRILLING		
Const Method	AUGER & ROTARY AIR		
Bore Line			
D/O File No		Polygon	
R/O File No		Equipment	
H/O File No		RN of Bore Replaced	
Log Received Date	16/01/2015	Data Owner	
Roles	Sub-Artesian Monitoring		

Location

Datum	GDA94	Basin	1450
Latitude	27-46-37	Sub-area	
Longitude	153-00-44	Lot	1
GIS Latitude	-27.7769650096	Plan	SP267252
GIS Longitude	153.012140783		
Easting	501196	Map Scale	253 - 1: 25 000
Northing	6927504	Map Series	M - Metric Series
Zone	56	Map No	9542-34
Accuracy	GPS	Map Name	
GPS Accuracy	10	Prog Section	
Checked	Yes		

Casing

4 records for RN 169073

Pipe	Date	Rec	Top (m)	Bottom (m)	Material Description	Mat Size (mm)	Size Desc	Outside Diameter (mm)
A	21/11/2014	1	0.00	15.50	Polyvinyl Chloride	5.000	WT - Wall Thickness	60
A	21/11/2014	2	15.50	20.00	Screen	0.400	AP - Aperture Size	60
X	21/11/2014	3	0.00	14.50	Grout			150
X	21/11/2014	4	14.50	20.00	Gravel Pack	3.000	GR - Gravel Size	150

Strata Logs

2 records for RN 169073

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