Building our Regions

Submitted on 24/04/2017 14:32

Building our Regions

Round 3

Application - BoR R03 GLAD 0026 - Agnes Water Waste Transfer Station Project

All Applications must be received by the department in full by **5pm, 7 April 2017.**

Please refer to the Building our Regions Program Guidelines when completing this form.

Please ensure all sections of this form are completed.

All figures in this form must exclude GST.

Following the assessment process, applicants will be notified in writing of the outcome of their submissions for funding.

Should you have any questions or require any assistance, please contact the Building our Regions program team on (07) 3452 7377 or 13 QGOV (13 74 68).

APPLICANT DETAILS

Council	Gladstone Regional Council

PROJECT DETAILS

Project title:	Agnes Water Waste Transfer Station Project
Project description:	Due to environmental, space and licensing constraints the long-term waste landfill located at Agnes Water was fully decommissioned in 2014. A temporary Waste Transfer Station has operated on the former landfill site while a new fit for purpose facility was planned and designed. The project aims to provide Agnes Water and the surrounding area with a Waste Transfer Station facility that provides to the community, best practice general waste, materials recycling, and a sustainable waste environment into the future, as well as having capacity to accommodate future growth. The project is close to being shovel ready with full design, cost estimates, and draft tender documentation complete. The projects consists of civil works including provision of weatherproof access / egress to site, construction of six saw tooth bays, amenity building, weighbridge [access and egress], stormwater including stormwater quality provisions, and provision of on- site services [water, electricity and telephone].
Indicate which best describes the project:	Water/Sewerage/Waste Infrastructure
Is this Project:	New Infrastructure
Specify other infrastructure type:	

The following information is to be provided for Road projects:

Why was TIDS funding not allocated to this project? Why is the project still considered a priority for the region?	
Chainage:	
Road Classification:	
Crash History:	
AADT (% of Heavy Vehicles):	
Deficiencies:	
Future safety assessment:	
Other information:	

PROJECT CONTACT

Please provide a contact person from the council for correspondence and enquiries regarding this project and application for funding.

Title:	Mr				
First name:	Mark	Last name:	Cochrane		
Position:	Senior Technical Officer				
Phone:	07 4977 6830	Mobile:		Fax:	
Email:	markc@gladstone.qld.gov.au				
Project manager's name:	Mark Cochrane				

Other Contacts

Full Name	Position	Business Phone	Email
Mark Frost	Manager Waste Services	49758433	markf@gladstone.qld.gov.au

ESTIMATED PROJECT TIMEFRAME

Project start date:	03/07/2017	Project completion date:	22/12/2017
Construction commencement date:	18/09/2017		

To be eligible for Building our Regions funding, projects must be ready to commence construction by 30 April 2018.

Project Readiness

Please indicate which of the following documents have been attached as evidence that construction can be expected to commence during the required period.

Gantt chart showing the project's delivery:	Yes
Detailed project delivery/works schedule:	No

Please indicate if any additional documentation is attached to demonstrate the project's readiness.

Tender documents:	Yes
Professional designs (for tender or construction):	Yes
Other Documents:	No
Other (please specify):	

What stage has the project reached at the time of application:	Tender documentation has been prepared

If the project is not ready to proceed to construction, please describe what action is being taken to ensure the project will be able to commence construction within the required timeframe:

Tender documentation has been prepared and is ready for finalisation. Once this occurs the tender procurement process can commence. Council will undertake an open tender process and it is anticipated that the tender return, appraisal, recommendation, and full Council award and mobilisation of selected contractor can occur within ten weeks of issuing tender documentation. Design drawings are included in Attachment G with further draft Tender Documentation included in the Project Plan (refer Attachment C).

PROJECT COSTINGS

Total estimated project cost (ex GST):	$1,396,000.00
Building our Regions funding sought (ex GST):	$586,320.00
Council's financial contribution (ex GST):	$809,680.00

Funding Category	Funding Contributor	Contribution Description	Amount (ex GST)	Funding Status	Funding Status Details

Total other funding contributions (ex GST):	$0.00

If financial contributions are not being made by other organisations, please describe any actions taken to attract financial contributions and any reasons why they are not available:

It is Councilâ€™s opinion that there are no other appropriate funding sources available to assist with the delivery of the Agnes Water Waste Transfer Station project. We have considered a variety of other funding sources, however consider that these works should be provided by Council as part of upgrading critical infrastructure within the region. This infrastructure is a high priority for Council and we are therefore seeking assistance through the Building our Regions fund to accelerate our infrastructure delivery to create a more liveable community in Agnes Water/Seventeen Seventy and surrounding catchments.

Please detail any funding the Qld Govt has provided for any component of this project,incl earlier stages:

No previous funding has been provided by the Queensland Government for any component of this

project, including earlier stages.

Inkind Contributions

In-Kind Contribution Contributor	Contribution Description	Value (ex GST)	Funding Status	Status Details

Total in kind contributions: $ 0.00

Cost Breakdown

Cost Type	Cost Description	Building our Regions Funding Sought	Council Contribution	Other Funding Contributions	Total Cost
Construction Costs	Driveway and Carparking	$212,500.00	$212,500.00	$0.00	$425,000.00
Construction Costs	Earthworks	$325,000.00	$325,000.00	$0.00	$650,000.00
Construction Costs	Preliminary and general costs	$0.00	$89,000.00	$0.00	$89,000.00
Construction Costs	Stormwater	$45,000.00	$45,000.00	$0.00	$90,000.00
Contingency (allow max 15%)	Contingency	$0.00	$122,000.00	$0.00	$122,000.00
Professional Fees	For construction design items	$3,820.00	$16,180.00	$0.00	$20,000.00

How have the project costs been calculated or determined: A preliminary cost estimate has been prepared by the design consultant, Knobel Consulting. The schedule of rates and cost breakdown has considered site conditions and contract prices for recent similar civil works within the region.

PROJECT SITE DETAILS

Project Site Details

Street number/location name: 233

Street name: Captain Cook Drive

Town/suburb: SEVENTEEN SEVENTY, QLD, 4677

Real Property description of the project site

Title Reference	Lot	County	Parish	Registered Plan
49012078	27	Flinders	Eurimbula	SP178795

Latitude start: -24.194400 Latitude end: -24.194400

Longitude start: 151.892200 Longitude end: -24.194400

State Electorates
Burnett
Federal Electorates
Flynn

LAND OWNERSHIP

Who owns the land where the project will be located?	Queensland Govt
If Crown Land, please specify the agency responsible	Department of Natural Resources and Mines
If other, provide details	

If council does not own the land

(a) Does Council have control over the land? (e.g. crown reserve)	Yes

If yes please provide details and supporting documentation:

Reserve for Local Government Purposes (Waste Management) - Res 16474

(b) Does Council intend to acquire ownership or control over the land? (e.g. purchase, lease, be granted an easement)	No

Please provide details and supporting documentation:

Council already have control over the land. Infrastructure is consistent with the purpose of the land use.

(c) Has the owner approved the development on the proposed project site?	Yes

Please provide details and supporting documentation:

Council already have control over the land. Infrastructure is consistent with the purpose of the land use.

Is there any third party interest in the land?	No

If yes please provide details and supporting documentation:

Are there any land issues (e.g. a road reserve, native title or strategic cropping land etc) that need to be addressed before construction can commence?	No

If yes please provide details and supporting documentation:

REGULATORY REQUIREMENTS

Please list all licences and/or development approvals required to deliver this project and indicate current status.

Licence Required /			

Development Approval Required	Regulatory Agency	Approval Status	Details
Development Approval - Operational Works application	Gladstone Regional Council	Not Approved	3 months from lodgement of the operational works application. Expected to be lodged and approval gained prior to end of July 2017.

RESPONSE TO CRITERIA

What is the critical need or opportunity to be addressed?

The response should explain what the need or opportunity is; who or what is or will be affected by it; whether it is a current need or opportunity or something that will occur in the future; and the potential consequences of not acting to address the need or opportunity.

The Agnes Water Waste Transfer Station is located on Captain Cook Drive, 2.5 km north of the Agnes Water CBD and receives self-haul residential, commercial and green waste (and recovers recyclable materials) prior to removal to the Benaraby Landfill. The Transfer Station is not of an appropriate level of development or capacity to service the rapidly growing Agnes Water and 1770 region. It is a temporary facility located on a former waste landfill site with no contemporary storage and sorting infrastructure.

Councilâ€™s 2016 Site Based Management Plan has identified that a lack of purpose built facilities, including a sealed site and access road, raises material risk from airborne dust and particulate matter, suspended solids, nutrients, heavy metals and other water-borne contaminants and odour and noise from inefficient operations. There are also safety concerns arising from numbers of patrons accessing the site directly from Captain Cook Drive. The current arrangements are therefore sub-optimal from community service provision, safety, waste management, environmental licencing and public health perspectives. There is strong projected population growth of over 30% for the Agnes Water-Miriam Vale corridor to 2036, reinforcing the need for a more permanent solution. The former long term waste landfill was fully decommissioned in 2014 and the temporary Transfer Station has operated for three years while a new fit for purpose facility is planned and designed. Council has identified a design solution which offers a more sustainable and permanent waste transfer and recycling facility commensurate with best practice waste and environmental management for communities of this size. The project aims to address the suite of concerns generated by the temporary facility and provide Agnes Water and the surrounding rural area with a Waste Transfer Station that can better meet community expectations, offering a standard of service to support the regionâ€™s future growth.

How will the proposed project address or respond to the identified need or opportunity?

Describe howthe project will address or respond to the identified need or opportunity.

To meet these challenges, Council has prioritised investment in an integrated package of civil works to procure weatherproof access and egress to the site, six permanent sawtooth collection bays, an amenity building, weighbridge, stormwater runoff improvements, and the supply of on-site services of water, electricity and communications. These works will result in a more efficient, permanent facility, which will streamline disposal practices and reduce waiting times for businesses and residents.

The new facility has been designed on the basis of specialist input to comply with current waste management and operating licencing requirements and to curb the potential for waste contaminants to escape into the coastal environment. The design of the facility has incorporated capacity to accommodate future growth to the region, including peak demand periods during summer when the non-residential population increases. To promote community safety in accessing the site, Council has funded improvements for turning off Captain Cook Drive for patrons accessing the Transfer Station. The creation of hard stand for the access road to the facility itself will prevent mud and dust tracking from the site onto the main carriageway. The inclusion of a weighbridge will allow Council to accurately weigh loads of waste rather than rely on staff estimations, assisting in managing waste service demand and in applying sustainability and recycling principles and practices. Council has funded and completed site design, cost estimates, and tender documentation and anticipates a contractor can be mobilised to site within ten weeks of issuing the tender documentation. All works can be completed by December 2017. This rapid mobilisation will allow Council to immediately secure the community benefits associated with the replacement of the temporary facility. Council is seeking Building our Regions funding of $586,320.00 (ex GST) to complement its financial contribution of $809,680.00 (ex GST).

Why is this project the most appropriate way to address or respond to the need or opportunity?

Discuss howthe project was determined to be the most appropriate way to address the need or opportunity. Detail any specific considerations that were used in making the decision.

The construction of this critical infrastructure will aid in providing long-term, sustainable waste and recycling facilities to meet the future growth needs of the townships of Agnes Water and 1770 and the surrounding region. Each component of the infrastructure works proposed for the site has been designed to address constraints associated with the temporary waste transfer station site, as identified in Councilâ€™s technical and environmental assessments. Principally, the works will address the temporary and ad hoc nature of the site which contributes directly to the environmental and operating challenges faced by Council. The creation of hardstand access and egress from the main road will improve safety for access and egress and reduce mud and dust from the site. Line markings will promote improved circulation for patrons and add better organisational capacity for management. Sawtooth bays and associated retaining walls will replace the current ad-hoc system of dumping of waste, resulting in improved collection processes and containment of waste. They will also facilitate the collection and transfer of the waste by Council to the Benaraby landfill. Combined with improvements to stormwater runoff and quality management, the new bays will significantly reduce risk of loss of airborne or waterborne leakage to surrounding areas, allowing Council to achieve compliance with environmental regulations and licencing conditions. Associated administrative, services and communications improvements will boost operational efficiency and strengthen the Councilâ€™s overall network of waste facilities â€“ in turn boosting regional resilience. The transfer station configuration will also support revenue raising for Council by providing simpler access for customers for depositing recyclable materials. The proposed approach to waste collection and sorting is a cost-effective, efficient solution for the collection and transfer of the materials (54.4 tonnes/month) received at the site.

Have other solutions been considered?

Yes

Please provide details of other options considered or explain why other options were not considered.

Identify the options considered. Explain why the proposed project was chosen and why the other options were not suitable. If other options were not considered, explain why.

Council considered each of the options against a number of criteria including: technical (fit for purpose), environmental regulation, community benefit, capacity to implement, risk management, network balance and cost and value for money. Option (a) - the maintenance of the status quo â€“ was considered to be unsustainable given the anticipated growth, environmental and operational risks identified by the Council and its advisors. Option (b) to construct a new facility on an alternative site has constraints in terms of identifying and procuring a site, engaging in consultation, planning approvals and uncertainty in terms of cost and timing to implement risks. The option would necessitate the ongoing operation of the temporary facility during a longer procurement lead-time, which is not supported by Council. Option (c) to close the Agnes Water facility and require clients to utilise alternative existing sites has limitations in regard to distance to facilities such as Baffle Creek or Bororen and is not supported on the grounds of community cost and Councilâ€™s responsibility to provide services to its communities as directly as possible. Option (d) notes that there are several potential designs for a permanent collection and sorting facility for a transfer station in a regional community. On balance, Council considered that the proposed sawtooth design offered a more technically and operationally feasible, value for money solution, allowing for safer client disposal, sorting and collection and transfer given the current and projected levels of waste for the site. Council determined that each of the alternative options has a prohibitive level of risk, stakeholder opposition, complexity or cost. The recommended project represented the optimal solution to the range of Councilâ€™s financial and non-financial drivers and its early implementation will result in a waste service which is affordable, safe, environmentally sustainable and supportive of this rapidly growing region.

Value for money assessment

A Cost Benefit Analysis is required for this application	Yes
A Benefits Assessment is required for this application	No

How many direct jobs will be supported during construction, and for how long?

Provide an estimate of the number of Full Time Equivalent (FTE) positions directly supported by the construction phase

9

What assumptions have been used to identify the number of direct jobs supported by the construction phase?

Provide details of assumptions and source of information used to estimate direct jobs supported by construction phase. Identify the duration of employment in days or months

The 2011 Queensland Treasuryâ€™s industry-wide average employment to output ratio has been used to estimate the FTE jobs supported by this construction project. The current construction duration for the project is estimated to be approximately 3-3.5 months.

How many direct jobs (if any) will be supported by project facilities on an on-going basis?

Provide an estimate of the number of Full Time Equivalent (FTE) positions that will be directly supported as a result of the project on an ongoing basis

0

What assumptions have been used to identify the number of direct jobs that will be supported by the project on an ongoing basis?

Provide details of assumptions and source of information used to estimate direct jobs supported by project facilities as a result of the project

A temporary waste transfer facility has been operating on site for the past three years. It is not envisaged that the new infrastructure will require any additional staff to operate or maintain.

Project Delivery and Management

How is the Council planning to deliver the project? (e.g. council staff, building contractor etc.)

Identify if council will project manage and construct the project or outsource any or all components of the project. Explain howcouncil will ensure appropriate technical expertise is available?

The delivery of the Agnes Water Waste Transfer Station Project will be managed by an experienced Senior Technical Officer within Council. The Senior Technical Officer will be responsible for monitoring and driving the overall project so that KPIs can be met; managing an external specialist consultant to progress the Tender Design to an 'Issue for Construction' set of documents (the Tender Design has already been produced by Knobel Consulting); preparing and letting tender documentation, and managing the evaluation of tenders and selection of preferred tenderer; acting as Councilâ€™s representative ('agent of the Principal') for this project to all internal and external stakeholders; and ensuring the works are completed on time and budget, safely and with the correct quality assurance process adhered to. The Superintendentâ€™s role will be fulfilled by an experienced manager within the Waste Services Department. The role and responsibilities as a Superintendent will be in accordance with AS4000-1995 and will include ensuring the works are completed to the correct standard, and the integrity of the design process is maintained throughout. In addition to managing the overall project, the Senior Technical Officer will act as the Superintendentâ€™s Representative.

Council will undertake an open market tender process to engage a suitable contractor for the construction of the works. In evaluating tenders, Council will be looking for contractors with proven track records in bulk earthworks and pavement activities, and with specific and relevant experience in construction of projects of similar size and complexity. Reference checks will be performed on preferred tenderers to verify statements and past performance in terms of quality, value for money, ability to construct fit for purpose infrastructure, and overall management capabilities.

Please explain how council will fund the ongoing (whole-of-life) operation, maintenance and replacement costs of the infrastructure?

Applicants are responsible for the ongoing costs and maintenance of the project. Detail how council will fund the whole-of-life costs of the project

Council will continue to fund the operation, maintenance, and whole of life costs of the facility from its existing budget. Councilâ€™s commitment to this is outlined in the Council meeting minutes dated

21 February 2017 contained in Attachment A.

Please provide any further information to support the application.

Include any other information Council considers relevant in support of the application that has not been captured elsewhere in the application or supporting documents

The construction of a permanent waste transfer station is strongly supported by local businesses, waste operators, the general community, and local members of parliament. Letters outlining their support have been submitted to Council and a number of petitions have been received from the local region. Copies of these can be found within the Project Plan (refer Attachment C).

Council would also like to highlight that the current arrangement is a temporary waste transfer facility which is sub-optimal from community service provision, safety, waste management, environmental licencing, and public health perspectives. This infrastructure is a high priority for Council and will provide to the community best practice general waste, materials recycling, and a sustainable waste environment into the future, have capacity to accommodate future growth, and ultimately help to create a more liveable community in the Agnes Water/Seventeen Seventy areas and surrounding catchments.

Please provide relevant details on key personnel below and attach copies of CVs.

Full Name	Date of Birth	Project Role	Key Skills
Mark Cochrane	26/10/1962	Project Manager and Superintendent's Representative	Mark is a Senior Technical Officer with Gladstone Regional Council and has significant experience in: - The design and implementation of projects relating to general civil engineering, sewerage, stormwater, water reticulation, water and sewage treatment facilities, pumping stations, and roads and subdivision engineering; and - Contract administration, project management, and construction supervision.
Mark Frost	02/08/1980	Superintendent, Manager Waste Services	Mark has over 15 yearsâ€™ experience in civil engineering and project management, including skills in: - Leadership in waste services; - In depth knowledge of civil engineering and waste services; and - Expertise is project management and delivery of value for money for clients.

APPLICATION DOCUMENTS

Mandatory attachments

Copy of a Council Resolution indicating that the local government: Yes

- supports submission of the detailed application - please ensure the project name is included
- is committed to delivering the project and approves any applicant financial and/or in-kind contributions; and
- is committed to the management and costs associated with the ongoing operation and maintenance of the infrastructure

Project Gantt Chart or Detailed Delivery/Works Schedule showing timeframes for all project stages up to and including project completion: Yes

If applicable: Letters from other contributors confirming financial or in-kind contributions: No

Detailed Project Plan (refer to template): Yes

Project Cash Flow (refer to template): Yes

Cost Benefit Analysis or Benefits Assessment (one required based on total project cost - refer to templates): Yes

CVs for all key project personnel identified in the application: Yes

Additional / Optional attachments

Additional documentation supporting project readiness such as professional designs ('for tender' or 'for construction'), tender documents, etc	Yes
Mapping files - for GIS spatial mapping purposes, please attach either an ESRI Shape File or MapInfo Tab File for this project site if available - please attach ALL file layers	No
If building on land not owned or controlled by local government: supporting documentation demonstrating the current status of negotiations with the land owner	No
If the local government will not own, operate and maintain the infrastructure: supporting documentation demonstrating the current status of negotiations with the proposed owner/operator	No
Copies of all supporting documents referred to and relied on as evidence in the application form (unless web addresses/hyperlinks have been provided in the relevant response field)	No

AGNES WATER TRANSFER STATION - INTERNAL CIVIL WORKS
CAPTAIN COOK DRIVE, AGNES WATER, QLD, 4677.

GENERAL NOTES

1. 'ALL DIMENSIONS GIVEN ON THESE DRAWINGS ARE IN METRES, UNLESS NOTED OTHERWISE.
2. ALL WORK AND MATERIALS SHALL COMPLY WITH THE PROJECT DRAWINGS, SPECIFICATION AND CURRENT COUNCIL STANDARDS AND SPECIFICATIONS.
3. ALL WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE WORKPLACE HEALTH AND SAFETY ACT.
4. PROVIDE TRAFFIC MANAGEMENT FOR THE DURATION OF CONSTRUCTION IN ACCORDANCE WITH "THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES"
5. THE CONTRACTOR IS TO LOCATE, IDENTIFY AND ESTABLISH THE CONNECTIVITY OF ALL EXISTING SERVICES WITHIN THE LIMITS OF PROPOSED WORKS AND CONFIRM THIS INFORMATION WITH THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
6. PROPERTY BOUNDARIES ARE SUBJECT TO CONFIRMATION BY FIELD SURVEY CARRIED OUT BY A REGISTERED SURVEYOR.
7. ALL WORK SHALL BE JOINED NEATLY TO EXISTING FEATURES.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL MEASURING DEVICES, SAFETY EQUIPMENT AND MACHINERY REQUIRED TO CARRY OUT INSPECTIONS/MEETINGS AS SPECIFIED OR REQUESTED BY THE ENGINEER.
9. PROOF ROLLING NOMINATED SHALL BE CARRIED OUT USING A SINGLE AXLE HIGHWAY TRUCK WITH A REAR AXLE LOAD NOT LESS THAN 8 TONNES AND TYRES INFLATED TO 550kPa OR APPROVED EQUIVALENT. EQUIPMENT LABOUR AND LOADING REQUIRED FOR PROOF ROLLING IS TO BE PROVIDED BY THE CONTRACTOR.
10. THE CONTRACTOR SHALL RESTORE ALL EXISTING AREAS TO BE MAINTAINED, TO THEIR ORIGINAL CONDITION UPON COMPLETION OF THE WORKS.
11. THESE NOTES SHALL APPLY TO ALL PORTIONS OF THE WORKS.
12. FOR SETOUT REFER TO CONSULTING ENGINEER FOR DIGITAL DATA.
13. CONNECTION TO EXISTING SERVICES TO BE CARRIED OUT BY COUNCIL, AT DEVELOPER'S COST.

SCHEDULE OF PROJECT DRAWINGS

DRAWING No.	DRAWING TITLE
000	COVERSHEET, SITE PLAN, LOCALITY PLAN, SCHEDULE OF DRAWINGS AND GENERAL NOTES
SE001	SEDIMENT AND EROSION CONTROL PLAN
SE002	SEDIMENT AND EROSION CONTROL DETAILS
GA001	EXISTING FEATURES AND LAYOUT PLAN
GA002	TYPICAL SECTIONS AND PAVEMENT DETAILS
R001	ACCESS ROAD AND RETAINING WALL SETOUT
R002	ACCESS ROAD LONGITUNDINAL SECTION
R003	ACCESS ROAD CROSS SECTIONS - SHEET 1 OF 2
R004	ACCESS ROAD CROSS SECTIONS - SHEET 2 OF 2
R005	KERB RETURN SETOUT
SW001	DIVERSION DRAINS SETOUT AND TYPICAL CROSS SECTIONS
SW002	STORMWATER BASIN DETAILS
SL001	SIGNS AND LINEMARKING PLAN
C001	STORMWATER CATCHMENT PLAN

GLADSTONE REGIONAL COUNCIL STANDARD DRAWINGS TO BE USED IN THIS PROJECT

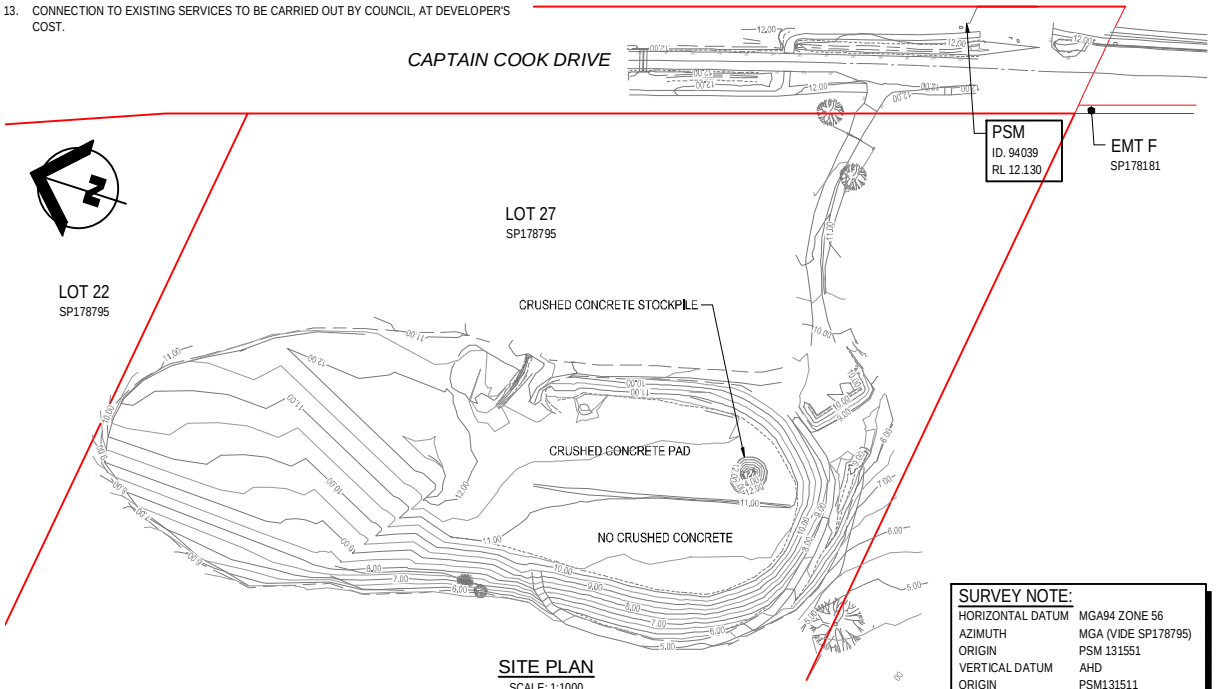
CURRENT ISSUES APPLY ONLY

ROADWORKS INDEX

CMDG-R-060	STANDARD KERB AND CHANNEL PROFILES

DRAINAGE INDEX

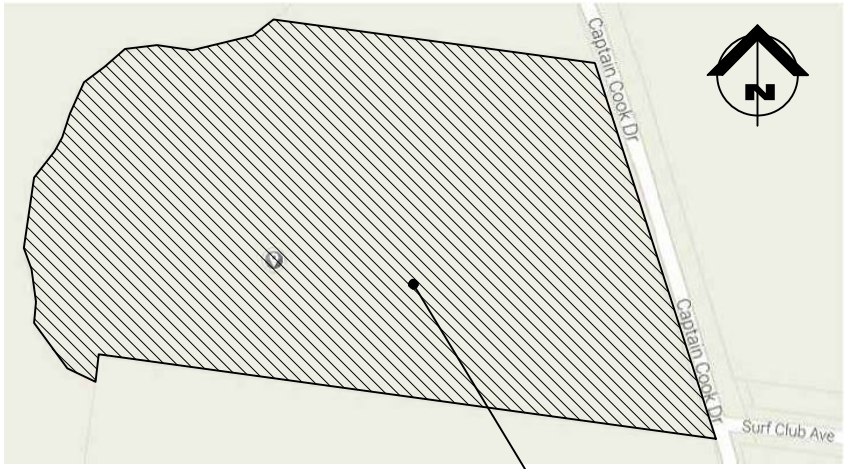
CMDG-D-010	EXCAVATION, BEDDING AND BACKFILLING OF CONCRETE/ REINFORCED FIBRE DRAINAGE PIPES



SITE PLAN
SCALE: 1:1000

SURVEY NOTE:

HORIZONTAL DATUM	MGA94 ZONE 56
AZIMUTH	MGA (VIDE SP178795)
ORIGIN	PSM 131551
VERTICAL DATUM	AHD
ORIGIN	PSM131511
RL	RL 10.091m



LOCALITY PLAN
N.T.S.

ISSUE No.	DATE	AMENDMENT
C	26-08-16	ISSUED FOR APPROVAL
B	15-06-16	REVISED LAYOUT. ISSUED FOR APPROVAL
A	18-03-16	ISSUED FOR APPROVAL

KNOBEL CONSULTING
CIVIL ENGINEERS + HYDRAULIC ENGINEERS + PROJECT MANAGERS
Level 6, 34 East Street
North Rockhampton Q 4701
Phone: 07 4922 5019
Fax: 07 5580 9133
Email: admincq@knobelconsulting.com.au
PO Box 5364 Red Hill,
Rockhampton Q 4701
ABN: 33 071 435 202
W: www.knobelconsulting.com.au

CLIENT: GLADSTONE REGIONAL COUNCIL

PROJECT: AGNES WATER TRANSFER STATION
INTERNAL CIVIL WORKS
CAPTAIN COOK DRIVE, AGNES WATERS, QLD, 4677

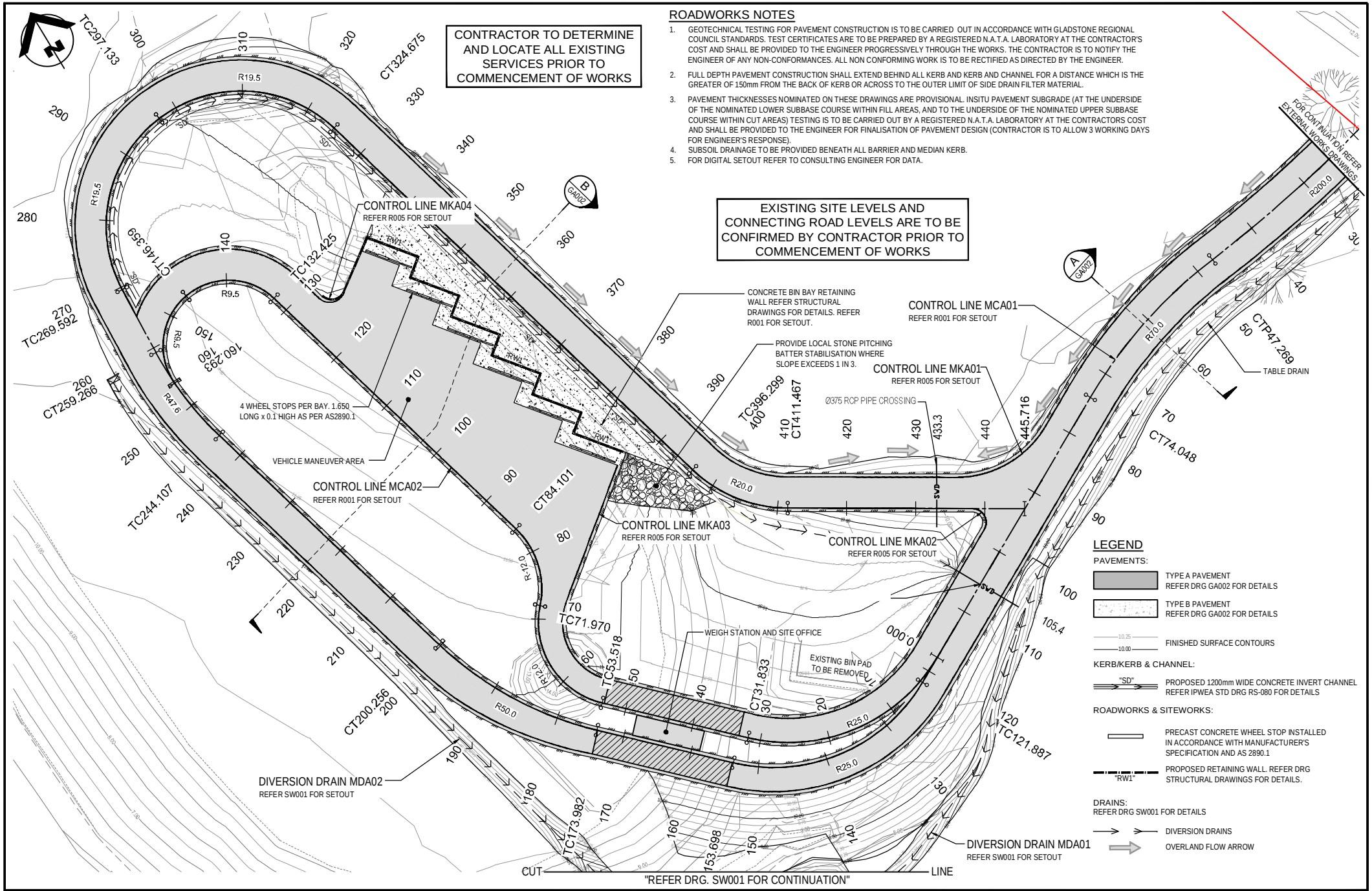
DESIGN	DRAWN	APPROVED
JH	JP	AP

A.R.PIANTA - R.P.E.Q. NUMBER 10423
SIGNED
26-08-16
DATE

TITLE: COVERSHEET, SITE PLAN, LOCALITY PLAN SCHEDULE OF DRAWINGS AND GENERAL NOTES

SCALE: 1:1000 AT A1, 1:2000 AT A3 (0, 20, 40, 60, 80, 100m)

PROJECT NO.: K3563
DWG NO.: 000
ISSUE: C



ROADWORKS NOTES

1. GEOTECHNICAL TESTING FOR PAVEMENT CONSTRUCTION IS TO BE CARRIED OUT IN ACCORDANCE WITH GLADSTONE REGIONAL COUNCIL STANDARDS. TEST CERTIFICATES ARE TO BE PREPARED BY A REGISTERED N.A.T.A. LABORATORY AT THE CONTRACTOR'S COST AND SHALL BE PROVIDED TO THE ENGINEER PROGRESSIVELY THROUGH THE WORKS. THE CONTRACTOR IS TO NOTIFY THE ENGINEER OF ANY NON-CONFORMANCES. ALL NON CONFORMING WORK IS TO BE RECTIFIED AS DIRECTED BY THE ENGINEER.
2. FULL DEPTH PAVEMENT CONSTRUCTION SHALL EXTEND BEHIND ALL KERB AND KERB AND CHANNEL FOR A DISTANCE WHICH IS THE GREATER OF 150mm FROM THE BACK OF KERB OR ACROSS TO THE OUTER LIMIT OF SIDE DRAIN FILTER MATERIAL.
3. PAVEMENT THICKNESSES NOMINATED ON THESE DRAWINGS ARE PROVISIONAL. INSITU PAVEMENT SUBGRADE (AT THE UNDERSIDE OF THE NOMINATED LOWER SUBBASE COURSE WITHIN FILL AREAS, AND TO THE UNDERSIDE OF THE NOMINATED UPPER SUBBASE COURSE WITHIN CUT AREAS) TESTING IS TO BE CARRIED OUT BY A REGISTERED N.A.T.A. LABORATORY AT THE CONTRACTORS COST AND SHALL BE PROVIDED TO THE ENGINEER FOR FINALISATION OF PAVEMENT DESIGN (CONTRACTOR IS TO ALLOW 3 WORKING DAYS FOR ENGINEER'S RESPONSE).
4. SUBSOIL DRAINAGE TO BE PROVIDED BENEATH ALL BARRIER AND MEDIAN KERB.
5. FOR DIGITAL SETOUT REFER TO CONSULTING ENGINEER FOR DATA.

LEGEND

PAVEMENTS:

- TYPE A PAVEMENT REFER DRG GA002 FOR DETAILS
- TYPE B PAVEMENT REFER DRG GA002 FOR DETAILS
- FINISHED SURFACE CONTOURS

KERB/KERB & CHANNEL:

- "SD" PROPOSED 1200mm WIDE CONCRETE INVERT CHANNEL REFER IPWEA STD DRG RS-080 FOR DETAILS

ROADWORKS & SITEWORKS:

- PRECAST CONCRETE WHEEL STOP INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATION AND AS 2890.1
- "RW1" PROPOSED RETAINING WALL. REFER DRG STRUCTURAL DRAWINGS FOR DETAILS.

DRAINS:
REFER DRG SW001 FOR DETAILS

- DIVERSION DRAINS
- OVERLAND FLOW ARROW

ISSUE No.	DATE	AMENDMENT
C	16-08-25	FOR APPROVAL
B	15-06-16	REVISED LAYOUT. ISSUED FOR APPROVAL
A	18-03-16	PRELIMINARY ISSUE

KNOBEL CONSULTING
CIVIL ENGINEERS + HYDRAULIC ENGINEERS + PROJECT MANAGERS
Level 6, 34 East Street
North Rockhampton Q 4701
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CLIENT: GLADSTONE REGIONAL COUNCIL

PROJECT: AGNES WATER TRANSFER STATION
INTERNAL CIVIL WORKS
CAPTAIN COOK DRIVE, AGNES WATERS, QLD, 4677

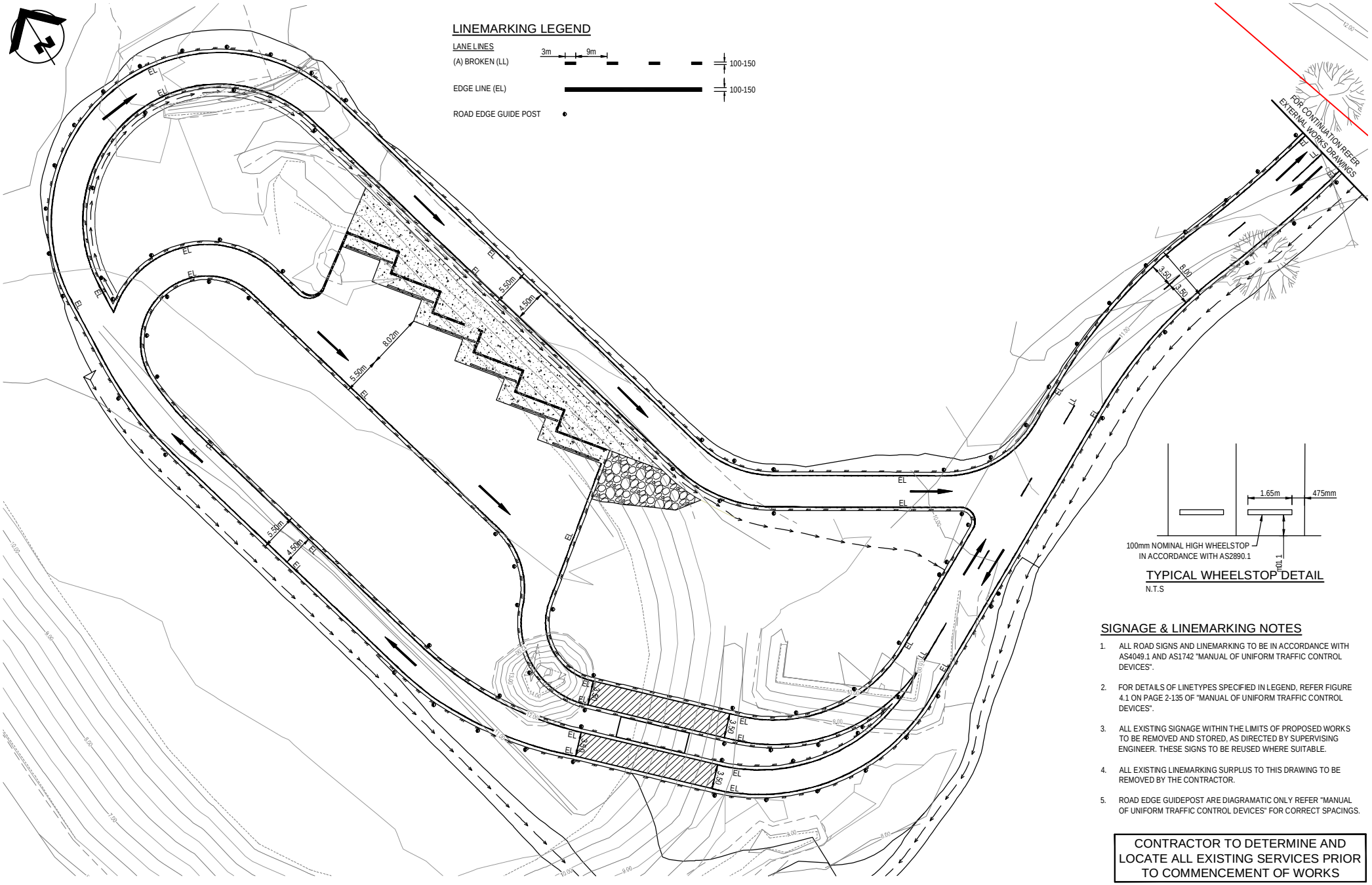
DESIGN	DRAWN	APPROVED
JH	JP	AP

A.R.PIANTA - R.P.E.Q. NUMBER 10423
SIGNED
26-08-16
DATE

TITLE: EXISTING FEATURES AND LAYOUT PLAN

SCALE: 1:250 AT A1, 1:500 AT A3 (0 5 10 15 20m)

PROJECT NO.: K3563
DWG NO.: GA001
ISSUE: C



SIGNAGE & LINEMARKING NOTES

1. ALL ROAD SIGNS AND LINEMARKING TO BE IN ACCORDANCE WITH AS4049.1 AND AS1742 "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".
2. FOR DETAILS OF LINETYPES SPECIFIED IN LEGEND, REFER FIGURE 4.1 ON PAGE 2-135 OF "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".
3. ALL EXISTING SIGNAGE WITHIN THE LIMITS OF PROPOSED WORKS TO BE REMOVED AND STORED, AS DIRECTED BY SUPERVISING ENGINEER. THESE SIGNS TO BE REUSED WHERE SUITABLE.
4. ALL EXISTING LINEMARKING SURPLUS TO THIS DRAWING TO BE REMOVED BY THE CONTRACTOR.
5. ROAD EDGE GUIDEPOST ARE DIAGRAMATIC ONLY REFER "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" FOR CORRECT SPACINGS.

CONTRACTOR TO DETERMINE AND LOCATE ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF WORKS

ISSUE No.	DATE	AMENDMENT
C	26-08-16	ISSUED FOR APPROVAL
B	15-06-16	REVISED LAYOUT. ISSUED FOR APPROVAL
A	18-03-16	PRELIMINARY ISSUE

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TITLE: SIGNS AND LINEMARKING PLAN

SCALE: 1:250 AT A1, 1:500 AT A3 (0 5 10 15 20m)

PROJECT NO. K3563
DWG NO. SL001
ISSUE C