

**Queensland
Government**

Enquiries Steve Smith
Telephone (07) 4046 6754
Your reference FN0555
Our reference CNS3917

✓ **CARMS**

Environmental Protection Agency

Incorporating the
Queensland Parks and Wildlife Service

25-OCT-2006

Mrs Lily Ahmat
Chief Executive Officer
Badu Island Council
BADU ISLAND
Via THURSDAY ISLAND QLD 4875

Dear Mrs Ahmat

Audit of Environmental Authority FN0096DA and FN0555

Agency officers conducted a compliance inspection on 11-OCT-2006 at the sewage treatment plant, waste disposal facility, quarry site and motor vehicle workshop on Badu Island to assess compliance with Environmental Authorities FN0096DA and FN0555 issued under the *Environmental Protection Act 1994*.

This letter addresses a number of issues relating to the aforementioned council operations on Badu Island:

- Non-compliances arising from the compliance audit; and
- Other areas of concern arising from the compliance audit.

Compliance issues

At the time of the inspection there were three areas of non-compliance with the council operated Environmentally Relevant Activities. Specifically, the following conditions were found to be in non-compliance.

Condition	Details of non-compliance
G2 (Waste Disposal)	<p>General</p> <p>The holder of this environmental authority must not:</p> <ul style="list-style-type: none"> (a) burn waste at or on any waste disposal facility covered by this environmental authority unless otherwise authorised by this administering authority; nor (b) allow waste to burn or be burnt at or on any waste disposal facility covered by this environmental authority unless otherwise authorised by the administering authority; nor

	<p>(c) remove waste from any waste disposal facility covered by this environmental authority and burn such waste elsewhere except in accordance with the requirements of the Environmental Protection Act 1994.</p> <p>Waste was being burnt at the tipping face of the waste disposal facility. Waste should be consolidated, compacted and covered with soil. Fires in landfill sites produce airborne toxic residues that can affect the health and well being of both the environment and the community's residents.</p>
(3.G22) Waste Disposal	<p>s.73 irrelevant information</p>
(3.G25) Waste Disposal	

Please be aware that it is an offence to contravene a condition of the environmental authority s430 (3) *Environmental Protection Act 1994*, and that a maximum penalty of \$124,875 may apply.

In this instance the Environmental Protection Agency has chosen not to take enforcement action. However should a reinspection of your site identify further recurrence of non-compliance, the same level of discretion may not be exercised.

Areas of Concern

Areas of concern are areas or issues noted which might not technically form a contravention of license conditions, however rectification of these issues is recommended to ensure compliance with your general environmental duty. Those identified during the site inspection are as follows:

1. Quarry Site – There is a stockpile of extracted rock material on the land adjacent to the beach. The potential exists for contaminated sediment to be washed off-site and into surface waters in the next rain event. It is strongly recommended that the council construct a bund wall along the seaward boundary of the quarry and creating a settlement pond to collect any sediment laden stormwater from the rock stockpile.
2. Quarry Site - There are four 200 litre drums containing tar or pitch stored on the quarry site. The drums are in a severely corroded state and are starting to leak. These drums

need to be removed immediately and stored in a secure, bunded location in containers that will not leak. The contaminated soil must also be scraped off and disposed of at the Badu Island landfill site.

In conclusion, I would request that you advise this Agency in writing by **13 November 2006**, of the actions that you intend to take to address the above mentioned issues and to ensure that you achieve full compliance with Environmental Authority FN0096DA and FN0555 .

Should you require any further information regarding this matter please contact Steve Smith on (07) 4046 6754.

Yours faithfully

sch4p3(3) Prejudice the protection of an

Lyn Wallace
Principal Environmental Officer

Published on DES
Disclosure Log
RTI Act 2009

Form 1 Development Application

idas
INTEGRATED DEVELOPMENT
ASSESSMENT SYSTEM

PART

A

Common details
for all applications

The completion of all questions on Part A is mandatory for all applications. For further information refer to the guide for completing the application form available from the assessment manager or on the IPA website at www.ipa.qld.gov.au

1. Description of land

The description must identify all land subject of the application including land/easements over which access is to be obtained.

The lot & plan details (eg. SP / RP) are shown on title documents or a rates notice.

If the plan is not registered by title, provide previous lot and plan details.

Street address (Include no., street, suburb / locality & postcode)

BADU ISLAND, QUEENSLAND, AUSTRALIA

Postcode 4875

Lot & plan details (Attach list if necessary)

LOT 7 ON CROWN PLAN TS 158

Shop / tenancy no. (If applicable)

Storey / level (If applicable)

Total area of land (m²/ha)2.67 ha (+ PUMP STATIONS
300m²)

In which local government area is the land situated?

TORRES SHIRE

2. Proposal

Provide details of the proposal (eg. new house / apartment building etc, demolition / removal of a house, extension to existing shop, new carport etc).

Details of the existing use of the land (Attach proposal report if necessary)

SITE WAS PREVIOUSLY A SAND QUARRY. CURRENTLY VACANT

Details of the proposal (Attach proposal report if necessary)

SEWERAGE SYSTEM - OXIDATION LAGOON STP

3. Other parts of the form completed

Complete all other parts of the form applicable to your application.

What other parts of the form are attached (E.g. Part B: if the application involves assessment against the Building Act, Part D — if the application involves assessment against the planning scheme for material change of use, Part F — if the application involves reconfiguring a lot)

PART G

4. Applicant details

Clearly identify who is making the application. The applicant need not be the owner of the land.

In signing and lodging this application, the applicant is responsible for ensuring the information provided is true. The assessment manager, any referral agency and the Chief Executive (where applicable) will rely on this information when assessing the application.

If the applicant is a company, a contact person must be shown.

All correspondence will be mailed to this address.

Name

BADU ISLAND COUNCIL

Signature

*

Date

Contact person

SEAN LAWLER /o GHD

Phone no.

(07) 4044 2233

Mobile no.

Fax no.

Email address

(07) 4051 1428

pstuck@ghd.com.au

Postal address

/o GHD - PO Box 819, CAIRNS, QLD

Postcode 4870

5. Consent of land owner/s

Completion of this question is only required if the applicant is not the owner or the person authorised to sign as the owner.

Completion of this section provides the owner's consent to the lodgement of this application. If there are multiple owners, the consent of each owner is required. If the owner is a company refer to Guide 1.

Name (In full) (Attach list if necessary)

BADU ISLAND COUNCIL

Signature/s (Or if a company, the ACN plus signature/s or company seal & signatures)

*

Date

Contact details (Optional)

OFFICE USE ONLY (applicable to assessment manager, alternative assessment manager and private certifier)

FEE (\$)	DATE RECEIVED	RECEIVING OFFICER'S NAME/S	REFERENCE NUMBER/S
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Notification of Engagement of Private Certifier (Optional format for private certifiers)

To _____ Council, I have been engaged as a private certifier for the building work referred to in this application.

Date of engagement: / / Accreditation Number _____

Name: _____ Signature: _____

Integrated Planning Act 1997

5 March 2001 Version 1.1

Form 1 Development Application

IPA

Integrated Planning Act 1997
Form 1 Development Application**A****Common details
for all applications**

The completion of all questions on Part A is mandatory for all applications. For further information refer to the guide for completing the application form available from the assessment manager or on the IPA website at www.ipa.qld.gov.au

1. Description of site

The description must include the subject of the application, the land, the proposed development and the site to be developed.

The lot & plan details must be shown on the diagram or map notes.

If the lot & plan details are not shown on the diagram or map notes, provide details of the lot & plan.

Street address (include no., street, suburb, locality & postcode)

BAOV ISLAND QUEENSLAND, AUSTRALIA

Postcode 4845

Lot & plan details (attach if necessary)

LOT 7 ON CROWN PLAN T3158

Shop / tenancy no. (if applicable)

Storey / level (if applicable)

Total area of land (m²/ha)2.67 ha (+ PUMP STATION 300m²)

In which local government area is the land situated?

TORRES SHIRE

2. Proposals

Provide details of the proposed development, including the nature of the development, the proposed use of the land, and the proposed development.

Details of the existing use of the land (attach if necessary)

SITE WAS PREVIOUSLY A SAND QUARRY. CURRENTLY VACANT

Details of the proposal (attach proposal report if necessary)

SEWERAGE SYSTEM - DRAINAGE LAGOON STP

3. Other parts of the proposal

Complete this section if the proposal includes any other parts of the proposal, such as the proposed use of the land, the proposed development, and the proposed development.

Other parts of the proposal (attach if necessary) (If the application includes any other parts of the proposal, such as the proposed use of the land, the proposed development, and the proposed development, complete this section.)

PART C

4. Applicant details

Provide details of the applicant, including the name of the applicant, the address of the applicant, and the contact details of the applicant.

Name

BAOV ISLAND COUNCIL

Signature

sch4p3(3) Prejudice the protection of

24/7/02

Printed name

SEAN LAWLER 1/0 GHD

Phone no.

(07) 4044 2233

Mobile no.

(07) 4051 1428

Email address

sean.lawler@ghd.com.au

Postal address

1/0 GHD .. PO Box 819 CAIRNS QLD

Postcode 4840

5. Certifications

Complete this section if the proposal includes any other parts of the proposal, such as the proposed use of the land, the proposed development, and the proposed development.

Name (in full) (attach if necessary)

BAOV ISLAND COUNCIL

Signature (If it is a company, the ACP plus signature or company seal is required)

sch4p3(3) Prejudice the protection of

24/7/02

Signature (if person)

SEAN LAWLER

OFFICE USE ONLY (applicable to assessment manager, alternative assessment manager and private certifier)

To

Notification of Engagement of Private Certifier (Optional form for private certifiers)

Date of engagement

/ /

Accreditation Number

Name

Signature

Role of Sean Lawler?

Form 1 Development Application

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INTEGRATED DEVELOPMENT
ASSESSMENT SYSTEMPART
GComplete if this application involves **assessment for an**
Environmentally Relevant
Activity (ERA)

The completion of all questions on Part G of this form is mandatory for all development applications for a material change of use of premises for an ERA.

Nature of the ERA

To assist in completing this section, refer to the Environmental Protection Agency's (EPAs) Guideline No 1 IPA/EPA available on the EPAs website at <http://www.env.qld.gov.au> under Business and Industry / Environmental Guidelines / Integrated Planning Act, or contact the local government.

To identify who the administering authority is for each ERA, refer to Schedule 1 of the *Environmental Protection Regulation 1998* or contact the EPA or local government.

If the proposed ERA is a Level 1 activity, an application for an environmental authority under the *Environmental Protection Act 1994* is also required before the use starts. A fee saving is available if the applications are lodged together.

1. Identify each existing (if any) & proposed ERA(s) (eg. ERA 15) & its description (Attach list if necessary)

(1) ERA 15

Existing Level (If applicable)☐ Level 1 ☐ Level 2**Existing Threshold** (If applicable)**Proposed Level** (Tick applicable box)☒ Level 1 ☐ Level 2**Proposed Threshold**

1500 - 4000 EP

(2) ERA

Existing Level (If applicable)☐ Level 1 ☐ Level 2**Existing Threshold** (If applicable)**Proposed Level** (Tick applicable box)☐ Level 1 ☐ Level 2**Proposed Threshold****Referral triggers**

If this application is for a material change of use for an ERA and clearing vegetation on freehold land only, it may trigger referral to an IDAS referral agency.

2. Does the application trigger referral to an IDAS referral agency? (Tick applicable box) (Use the Referrals Checklist to determine any possible referrals for this application).

☒ NO☐ YES If yes, attach Referrals Checklist**Details of the land**

For further details regarding preparing a Proposal Report refer to Guide 7.

3. Plans and written information are required to accompany applications for ERAs. These plans & information are required to address the following matters regarding the land (Tick if accompanying this application) —

☒ A description of the existing environment (ie. maps of the land and surrounding area, zoning of the land and surrounding areas)☒ Details of the distance to any watercourse, dam, bore etc on or adjoining the land.NA ☒ Details of any of the following types of materials currently stored on the land (i.e. flammable & combustible materials, chemicals, other hazardous substances)☒ Details of the location of any acid sulphate soils within or adjoining the land**Details of the activity**

An application for an environmental relevant activity must be supported by enough information to enable the administering authority to decide the application, including, for example, relevant information about the likely risks to the environment, details of waste to be generated and any waste minimisation strategy.

4. Plans and written information are required to accompany applications for ERAs. These plans & information are required to address the following matters regarding the proposal (Tick if accompanying this application) —

☒ A description of the activity (i.e. proposed operation and activities, discharge points, process details)☒ Details of stormwater generation & disposal (i.e. stormwater management plans)☒ Details of waste produced, including solid and liquid waste (i.e. waste management, waste minimisation plan, trade waste permit)☒ Details of contaminant releases and their impacts on the receiving environment (i.e. discharge to waters, air, land; generation of noise, discharge of other contaminants)☒ Details of any of the following types of materials proposed to be stored on the land (i.e. flammable & combustible materials, chemicals, other hazardous substances)☒ Details of proposed hours of operation☒ Details of business trading name.**Fee payable**

5. Provide details of the fee payable for each scheduled ERA(s) listed in Question 1 (Attach additional details if necessary)

\$ 1980 + \$200 (assessment fee) = \$2180.00

Plans and documents

6. Is the application accompanied by: (Tick applicable box/es)

☒ Plans☒ Proposal report☐ Other (Specify) AERIAL PHOTOGRAPHY, WATER QUALITY DATA

This application cannot be accepted by the assessment manager unless accompanied by Part A of the Development Application

OFFICE USE ONLY (applicable to assessment manager and alternative assessment manager)

DATE RECEIVED

REFERENCE NUMBER/S

Form 1 Development Application

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INTEGRATED DEVELOPMENT
ASSESSMENT SYSTEMPART
DComplete if this application involves **assessment against the****Planning Scheme**

For material change of use of premises

Completion of all questions on Part D of this form is **mandatory** for all applications for a material change of use of premises including conceptual design for any associated works that require approval under the planning scheme.

Nature of the application

A development permit authorises development to occur, while a preliminary approval is a step in the approval process and does not authorise development to occur.

1. This application is for: *(Tick one or more if applicable)*

- ☐ **Preliminary approval** for a material change of use of premises including conceptual design for any associated works that require approval under the planning scheme *(ie consideration of the proposal concept)*

AND / OR

- ☒ **Development permit** for a material change of use of premises including conceptual design for any associated works that require approval under the planning scheme.

Referral triggers

This application may trigger referral to an IDAS referral agency. These questions help identify whether referral is required.

Referral coordination occurs - when an application involves 3 or more concurrence agencies; or under transitional arrangements. Referral coordination is further explained in the Referrals Checklist.

2. Does the application trigger referral to an IDAS referral agency? *(Tick applicable box) (Use the Referrals Checklist to determine any possible referrals for this application).*☒ NO☐ YES *If yes, attach Referrals Checklist*3. Does the application trigger referral coordination? *(Tick applicable box) (Use the Referrals Checklist to determine if this application triggers referral coordination).*☒ NO☐ YES *If yes, attach Referrals Checklist***Details of the land**

For the definition of "gross floor area" refer to the planning scheme against which the application will be assessed.

4. How is the subject land identified in the planning scheme? *(Name the zone, precinct etc.)*

N/A

5. Existing gross floor area *(If applicable)*

N/A

6. Are there any existing easements on the land? *(Tick applicable box)*☒ NO☐ YES *Attach plans of the location & purpose***Proposal details**

For the definition of "site cover" refer to the planning scheme against which the application will be assessed.

7. If the application is for preliminary approval for the use of the land, provide conceptual plans and other details / reports in support of the proposal.

8. If the application is for development permit for a material change of use of premises, including conceptual design for any associated works that require approval under the planning scheme, provide the following particulars on this application form, or alternatively clearly indicate on plans or in documents accompanying this application.

Site cover

Proposed gross floor area

Number of on-site car parking spaces

Number of storeys / maximum height above natural ground

Number of employees

Hours and days the use will operate

N/A

Plans and documents9. Is the application accompanied by: *(Tick applicable box/es)*☒ Plans☒ Proposal Report☐ Other *(Specify)****This application cannot be accepted by the assessment manager unless accompanied by Part A of the Development Application*****OFFICE USE ONLY** *(applicable to assessment manager)*

DATE RECEIVED

REFERENCE NUMBER/S

Form 1 Development Application

*Checklist for determining
referrals under IDAS*

Only complete this checklist if you have completed parts D, E, F, G, H, I, K or L of Form 1 Development Application. Complete the questions relevant to the application, as indicated.

It is the responsibility of the applicant to work with the assessment manager to identify if an application involves —

- Referral to a referral agency for their assessment and determination, or comment;
- The coordination of any information request through the referral coordination process.

This checklist contains a number of questions to aid in this determination.

If your application **does** involve referral, the assessment manager will confirm in the acknowledgement notice the referral actions required.

To assist you in answering the questions below a series of guides are available. These guides are detailed below and are available from local governments or on the IPA website at www.ipa.qld.gov.au

Applications involving material change of use or operational works (for filling or excavation not associated with a material change of use, reconfiguring a lot or building work), assessable under the local government's planning scheme and/or reconfiguring a lot, may trigger this referral.

Guide 3 entitled "Does my application trigger a referral in relation to State-controlled road matters?" will assist in answering this question.

1. Does the application trigger referral to the Department of Main Roads (DMR) in relation to a **State-controlled road**?

☒ NO ☐ YES Detail the trigger/s below. (If trigger E is identified, also detail the threshold)

Guide 4 entitled "Does my application involve an Environmentally Relevant Activity (ERA)?" will assist in answering this question.

2. Does the application trigger referral in relation to a material change of use for an **Environmentally Relevant Activity**?

☒ NO ☒ YES Provide all relevant details on Part G of Form 1 Development Application

Applications involving material change of use assessable under the local government's planning scheme and/or reconfiguring a lot may trigger this referral.

Guide 5 entitled "Does my application trigger referral for consideration of contaminated land matters?" will assist in answering this question.

3. Does the application trigger referral to the Environmental Protection Agency (EPA) for consideration of **contaminated land** matters?

☒ NO ☐ YES Provide details of the matters below

All applications for a material change of use on strategic port land that is inconsistent with the approved land use plan trigger referral to the Minister for Transport.

4. Does the application trigger referral to the Minister for Transport in relation to **development on strategic port land that is inconsistent with the approved land use plan**?

☒ NO ☐ YES Provide all relevant details on Part I of Form 1 Development Application

Guide 12 entitled "Does my application involve vegetation clearing assessable under Schedule 8 of IPA?" will assist in answering this question.

5. Does the application trigger referral to the Department of Natural Resources and Mines (NR&M) in relation to operational works involving **the clearing of native vegetation on freehold land assessable under Schedule 8 of IPA**?

☒ NO ☐ YES Provide all relevant details on Part J of Form 1 Development Application

Applications which impact assessable under a local government's planning scheme may trigger this referral.

Guide 10 entitled "Does my application trigger referral for acid sulfate soils?" will assist in answering this question.

6. Does the application trigger referral to the Department of Natural Resources and Mines (NR&M) in relation to **acid sulfate soils**?

☒ NO ☐ YES

Guide 13 entitled "Does my application trigger referral in relation to development in a declared catchment area?" will assist in answering this question.

7. Does the application trigger referral to the Department of Natural Resources and Mines (NR&M) in relation to development in a **declared catchment area** under the *Water Act 2000*?

☒ NO ☐ YES

<p>Guide 14 entitled "Does my application involve assessment of a referable dam?" will assist in answering this question.</p>	<p>8. Does the application trigger referral to the Department of Natural Resources and Mines (NR&M) for assessment of operational work for a referable dam under the <i>Water Act 2000</i>?</p> <p>☒ NO ☐ YES</p>
<p>Guide 15 entitled "Does my application involve assessment of a water related development?" will assist in answering this question.</p>	<p>9. Does the application trigger referral to the Department of Natural Resources and Mines (NR&M) for assessment of operational work to take or interfere with water under the <i>Water Act 2000</i>?</p> <p>☒ NO ☐ YES</p>
<p>Guide 16 entitled "Does my application involve the removal of quarry material from a watercourse?" will assist in answering this and other questions relating to development approval of riverine quarry material operations.</p>	<p>10. Does the application trigger referral to the Department of Natural Resources and Mines (NR&M) for assessment of development for the removal of quarry material from a watercourse under an allocation notice given under the <i>Water Act 2000</i>?</p> <p>☒ NO ☐ YES</p>
<p>Guide 17 entitled "Does my application involve a material change of use for a Major Hazard Facility or Possible Major Hazard Facility?" will assist in answering this question.</p>	<p>1. Does the application trigger referral to the Department of Emergency Services (DES) for material change of use for a Major Hazard Facility or Possible Major Hazard Facility as defined under the <i>Dangerous Goods Safety Management Act 2000</i>?</p> <p>☒ NO ☐ YES</p>
<p>Guide 6 entitled "Does my application trigger the referral coordination process?" will assist in answering this question.</p>	<p>2. Does the application trigger <u>referral coordination</u> because the application involves 3 or more concurrence agencies?</p> <p>☒ NO ☐ YES</p>
<p>Applications involving material change of use assessable under the local government's planning scheme and/or reconfiguring a lot may trigger this referral</p> <p>Guide 6 entitled "Does my application trigger the referral coordination process?" will assist in answering this question.</p>	<p>3. Does the application trigger <u>referral coordination</u> because the application involves a facility or area prescribed under schedule 6 or 7 of the Integrated Planning Regulation 1998?</p> <p>☒ NO ☐ YES Detail the trigger below</p> <div style="border: 1px solid black; height: 60px; width: 100%;"></div>
<p>Referral agency responses prior to lodgement Under s 3.3.2 of IPA a referral agency may give a referral agency response on a matter within its jurisdiction about a proposal before an application for the proposal is made to the assessment manager.</p>	<p>4. Did a referral agency give a referral agency response under s 3.3.2 of IPA before the application was made to the assessment manager?</p> <p>☒ NO ☐ YES Attach a copy of the referral agency/s response/s</p> <div style="border: 1px solid black; height: 60px; width: 100%;"></div>



MANAGEMENT
ENGINEERING
ENVIRONMENT

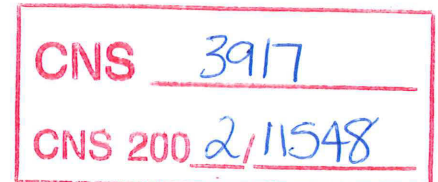


30 October 2002

Environmental Protection Agency
PO Box 2066
CAIRNS QLD 4870

Our ref: 42/10940/63920
Your ref:

Attn: Brynn Mathews



Dear Brynn,

**Badu Island Sewerage Scheme
Additional Information - Application Development Approval ERA 15(c)**

✓ CARMS

Please find below the additional information requested for complete assessment of the development application for Badu Island Sewerage Scheme. The information is in response to a letter of 26 September 2002(CNS3917) sent to Badu Island Council.

1. Details of the source of any material for pond construction.

The material allocated for construction of the sewage treatment lagoons comes from an established quarry on Badu Island. The quarry has been in use for many years and is operated by the Badu Island Council and has been used for many projects throughout the Torres Strait during this period. The location of the quarry is illustrated in Attachment A.

2. Specific information on the impacts of the proposed effluent on the environmental values and water quality of the receiving waters including both estuarine and adjacent marine waters.

a/ Discussions with Mark Cavicchiolo from the Cairns EPA (25/07/02) identified that additional water quality data was required to obtain better understanding of the background water quality of the estuary to contain the proposed outfall. It was recommended that the following parameters be assessed:

- ▶ Faecal Coliforms;
- ▶ Total Nitrogen;
- ▶ Total Phosphorus; and
- ▶ Ammonia.

GHD has undertaken a monitoring investigation to characterise background water quality over a range of tidal conditions.

Monitoring included parameters listed above and other physical parameters such as Salinity, pH, Turbidity and conductivity were measured in-situ using a Horiba U10 Water Quality meter.

Samples were collected for laboratory analysis and in-situ measurements recorded over a 24 hour period for three tide cycles - neap, average and spring. A total of 19 samples were collected and analysed. The results of this sampling program are included as Attachment B of this letter.



For the purpose of assessing effluent discharges and dilution rates, the area surrounding the outfall was surveyed. GHD surveyed the mouth of the outfall creek at the low tide (0830-1000 on 17/10/02) and a sketch of this is included as Attachment C to this letter. The survey found the creek to be isolated from the ocean for tide heights below 1.2m. (Based on the assumption that mean sea level (0m AHD) is approximately 1.7m above the Lowest Astronomical Tide (LAT) for the area.)

Field observations at the outfall site indicate that the 'ponded' water level inside the creek typically falls to 200 mm below the highest point of the reef flat (the cut-off point -0.539m AHD).

The effluent outfall would have the greatest impact on water quality in the estuary system when it is 'blocked off' from the ocean. Assuming that the water level falls to -0.70m AHD during this time, the volume of standing water can be approximated from the survey as 525m³. This figure is based on a 75m long pond with an average width of 14m. Note that this volume calculation is conservative as the creek in fact extends for a distance upstream of the stretch surveyed.

During a typical 12 hour tidal cycle the creek would be below 1.0m (tide height not AHD) for 1/3 of the time (ie. bottom 2 hours of the outgoing tide, and first 2 hours of the incoming tide).

During this time effluent would typically be discharged into the 525 kL at 7.2L/s (ADWF). This equates to 103.68 kL or approximately 20% of the initial body of water.

Based on the background water quality of the estuary and the predicted effluent quality, the increase in biological parameters can be estimated as follows:

Table 1 Estimated Impacts of Effluent Discharge at Low Tide

Parameter	Calculated Water Quality		Predicted Water Quality	Background Water Quality
	Effluent (20%)	Estuary (80%)	Total (100%)	
Total Nitrogen	0.2 x 20 mg/L	0.8 x 0.2 mg/L	4 mg/L	0.2 mg/L
Total Phosphorus	0.2 x 10 mg/L	0.8 x 0.05 mg/L	2 mg/L	0.05 mg/L
Ammonia	0.2 x 5 mg/L	0.8 x <0.5 mg/L	1 mg/ L	<0.5 mg/L
Faecal Coliforms	0.2 x 150 CFU/100mL	0.8 x 33 CFU/100mL	56 CFU/100mL	0-49 CFU/100mL

Comparison of the *Estuary* data (background) and the *Predicted* data indicates that the concentration of each parameter would increase substantially with the discharge of effluent into the system based on discharging continuously throughout the tidal cycle. Given that this impact would appear to be unacceptable, the following discusses an alternative option whereby effluent is only discharged during part of the tidal cycle.



Assuming that the discharge is limited to the outgoing tide (for the period when the creek is hydraulically connected to the ocean), the impact of the effluent on the estuary system would be greatly reduced, as the effluent would be dispersed into a larger body of water and would predominantly be carried out to sea and into the ocean currents. It can be assumed that minimal effluent residual would remain in the estuary as flushing occurs with the high tide and following outgoing tide. GHD has investigated the option of incorporating a solar powered, programmable logic controller (PLC) into the STP effluent discharge system to achieve this arrangement.

The PLC could permit effluent discharge on the outgoing tide for tide heights above 1.3m (-0.4m AHD), which is 10 cm higher than the highest point on the reef. Times for discharge would be based on data from the National Tidal Facility. Based on the assumption that MSL corresponds to a tide height of 1.7m, it is estimated that on average, effluent discharge can occur for a total of 8 hours a day. Assuming an ADWF of 625 kL/day, the flow effluent flow rate equates to 21.7L/s, which is less than the outfall design capacity 38L/s.

- b/ Effluent leaving the creek on the outgoing tide would be dispersed by the fast ocean currents that exist past the reef shelf. It is unlikely that effluent in this marine zone will be at a concentration likely to have significant environmental impacts. The substrate seaward of the creek mouth consists of coral rubble, which is not expected to be affected by the effluent.
- c/ The option of continuous release of effluent into the estuary may have an impact on the biodiversity of the creek. However if effluent release is restricted to the outgoing tide for periods when the creek is hydraulically connected to the ocean, it is unlikely that pollutants from the effluent will impact on the creek. During this scenario, effluent will be swept out of the estuary and into the ocean currents. Experience with other effluent outfalls in the Torres Strait has shown that the dilution rates with the fast ocean currents are such that no significant environmental impacts occur.
- d/ The proposed total volume of the lagoons is 17 852 m³ and based on the current population of 950 EP, it would take approximately 75 days from plant commissioning before the effluent was discharged. In addition to biological treatment, the nature of the proposed STP is such that U.V disinfection also occurs. As such, it is not expected that the quality of effluent at the start-up will significantly differ from the standard effluent.

Plant overload is only likely to occur during extreme rainfall events, in which the increased volume of sewage will be primarily water. During this situation, the sewage still passes through the STP, however the detention time is reduced. The effluent will be released to the outfall as normal. Any effects of decreased detention time would be mitigated by the diluted nature of the sewage and the likelihood that the creek would be in flood, aiding the dilution/mixing of the effluent.

The plant operates under gravity flow and has no major mechanical components. Consequently it is not expected that plant bypass will need to occur. It should also be noted that lagoon type STP's have the capacity to absorb higher flows and attenuate sudden increases in flow.



3. Effluent Discharge Management Plan

The effluent outfall pipe is located at the mouth of a small tidal estuary on Badu Island. It is proposed that the effluent be released from the treatment lagoons on the outgoing tide for the period when tide height is greater than 1.3m. This would result in effluent being discharged from the estuary system and into the ocean currents offshore. This will result in minimal effluent remaining in the actual creek and maximum tidal flushing.

4. Background water quality data.

GHD has completed a background water quality monitoring program of the estuary of the proposed effluent outfall. The results of this additional water quality monitoring are included as Attachment B to this letter, however a summary is provided in Table 2.

Table 2 Summary of Background Water Quality Data

Parameter	Minimum Value	Maximum Value	Std Deviation	Average Value
<i>In-situ Analysis</i>				
Salinity (ppt)	3.36	3.75	0.116	3.54
pH	7.0	8.4	0.4	7.6
Conductivity (ms/cm)	51.0	56.2	1.5	53.5
Turbidity (NTU)	1.0	20.0	4.6	7.7
DO (mg/L)	0.39	2.53	0.87	1.38
Temperature (°C)	25.0	30.6	1.4	27.1
<i>Laboratory Analysis</i>				
Faecal Coliforms (CFU/100mL)	0	49	NA	NA
Ammonia (NH ₃) (mg/L as N)	<0.5	<0.5	0.0	<0.5
Total Nitrogen (TKN+TON) (mg/L as N)	0.13	0.26	0.04	0.17
Total Phosphorus (mg/L)	<0.5	0.06	NA	NA

The data indicates that the system is typical for marine waters and of reasonable quality. One sample from each of the three sampling events registered faecal coliform values. These were 37, 13, and 49 CFU/100mL for Average Tides, Neap Tides and Spring Tides respectively. Each of these three samples was from a morning low tide in the creek. The remaining samples were free of faecal coliforms.



5. *Proposals for managing pump station power and pump failures to minimise the risk of raw sewage release to the environment.*

- 1/ *Power Failure* - GHD has addressed the issue of pump station overflows that may occur during a power failure on the island. The system consists of gravity overflows to pump stations with generator backup, which pump the sewage to the STP for treatment. This minimises the possibility of raw sewage overflowing into the surrounding environment at the pump stations.

GHD has reviewed the potential for overflow from PS 1 into the top of the Catchment 2 system. This option enables the pump station to surcharge through the Pressure Main and allows the Council to concentrate on keeping PS 2 going with the rest of the system operating by gravity.

Pump Station 2 will be provided with a standby generator fixed in place and hardwired into the switchboard. This will start at a predetermined level and to avoid overflows from power outage for both pump stations 1 and 2. Council will manually operate the valve to allow PS 1 to flow over into the PS 2 catchment. Details of this arrangement are provided in Attachment D.

Pump Station 3 has more storage capacity as it is sized for a future catchment. A standby power supply is not proposed for this pump station at this stage due to the small population of the catchment.

A summary of each pump station and its storage capacity in the event of power failure is provided in the following table.

Table 3 Summary of Pump Station Storage Characteristics

Pump Station	Volume	Flow (m ³ /hr)	Time until overflow (hrs) for different flow scenario's		
			1 x ADWF	2.2 x ADWF	5 x ADWF
1 (Initial)	28.81	6.69	4.3	2.0	0.9
1 (Ultimate)	28.81	10.94	2.6	1.2	0.5
2 (Initial)	64.90	13.81	4.7	2.1	0.9
2 (Ultimate)	64.90	21.94	3.0	1.3	0.6
3 (Initial)	30.79	1.50	20.5	9.3	4.1
3 (Ultimate)	30.79	4.19	7.4	3.3	1.5

- 2/ *Pump Failure* - There are three pump stations in the sewerage scheme and each operates on a Duty/Standby arrangement. Hence the failure of any pump is accommodated by simply connecting the spare parallel pump into the system without the need for an operator to manually change over.

6. *A proposal for receiving water quality monitoring program.*

No water quality monitoring is currently proposed after the completion of the 'background' water quality monitoring. It has been assumed by GHD that the requirements for ongoing water quality monitoring following the inception of the plant will be specified in the draft licence conditions of the plant and would be subject to negotiation between EPA and Badu Island Council.

7. *Proposals for additional works to achieve a sustainable environmental outcome if the receiving water quality monitoring program specified above shows unacceptable levels of environmental harm.*

Should the water quality monitoring program specified in the licence conditions identify that the effluent is causing unacceptable impacts on water quality or ecosystem values, it may be necessary to alter the method of treatment or disposal (eg. ocean outfall). It is not anticipated that this will occur, especially if effluent discharge is restricted to the outgoing tide.

Please do not hesitate to contact me directly on (07) 4044 2214 if you have any queries on the matter.

Yours faithfully

GHD Pty Ltd

sch4p3(3) Prejudice the

for

(Martin Brennan)

Chris Salmon

Manager Environmental Services

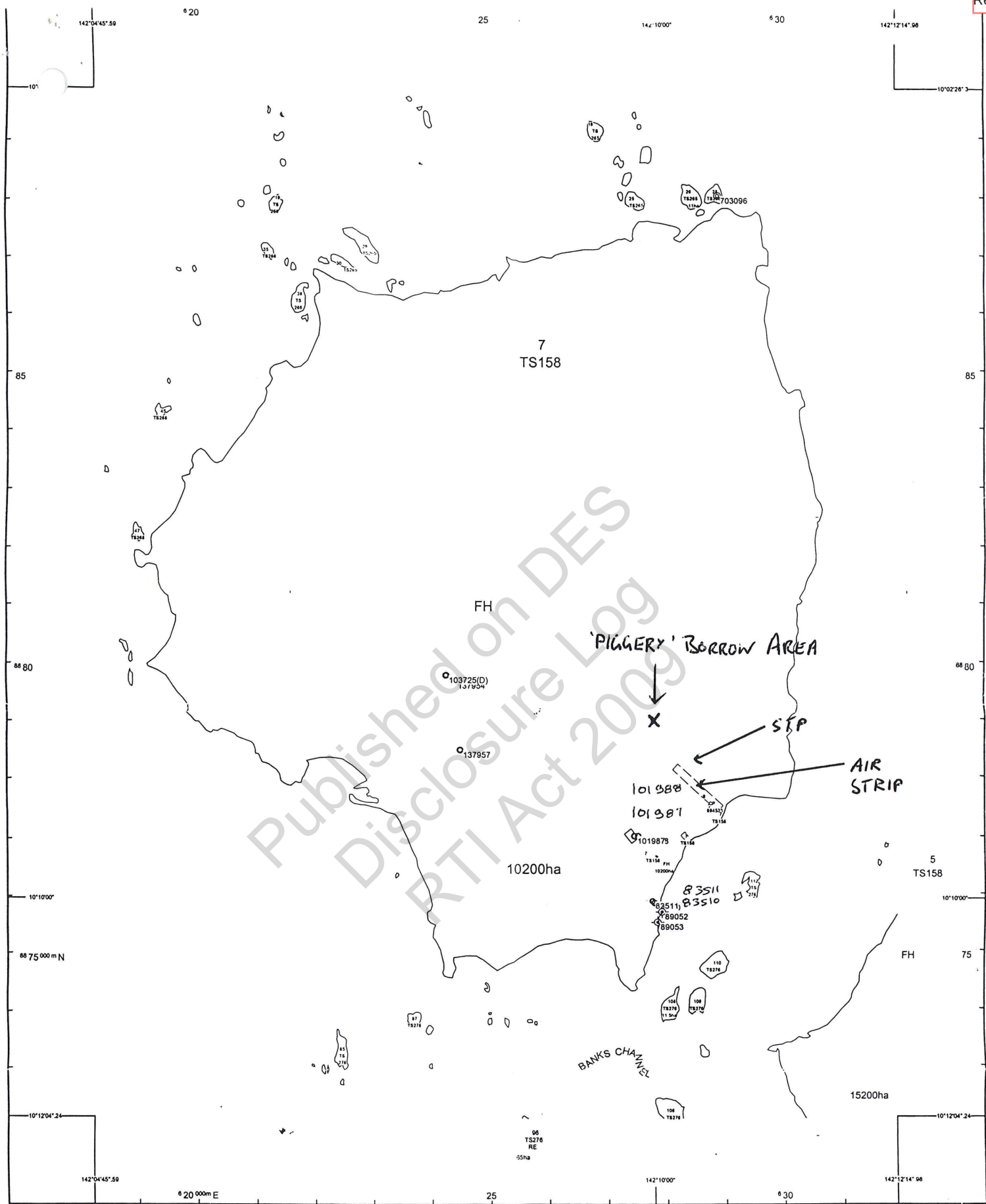
(07) 4044 2214

Attachments: Attachment A - Location of the Quarry
Attachment B - Background Water Quality Monitoring Results
Attachment C - Survey Data of the Creek Mouth
Attachment D - Engineering Drawings Including Pump Station Overflows.

Attachment A

Location of the Quarry.

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STANDARD MAP NUMBER
7377-41332

MAP WINDOW POSITION &
NEAREST LOCALITY



17-491

SUBJECT PARCEL DESCRIPTION

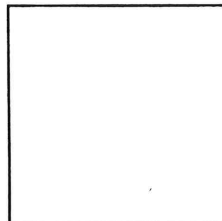
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Lot/Plan	No Lot/Plan Selected.
Area	No Lot/Plan Selected.
Tenure	No Lot/Plan Selected.
Local Government	No Lot/Plan Selected.
Locality	No Lot/Plan Selected.
Parish	No Lot/Plan Selected.
County	No Lot/Plan Selected.
Parcel/Segment	No Lot/Plan Selected.
SCDB Permanent Marks	No Lot/Plan Selected.

CLIENT SERVICE STANDARDS

PRINTED (dd/mm/yyyy) 15/1/2002
(Important Notice: The information
hereon is NOT an OFFICIAL RECORD and
is ACCURACY is NOT GUARANTEED)
DCDB 14/01/2002
(Lots with an area less than 49900
square metres are not shown)
SCDB 15/1/2002
For symbology see the BLIN Abbreviations
Sheet.

File A

LEGEND



BLINMAP

An External Product of the
Basic Land Information Network
Based upon an extraction from the
Digital Cadastral Data Base



Queensland
Government
Natural Resources
and Mines

(c) The State of Queensland,
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Attachment B

Background Water Quality Monitoring Results.

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Badu Island Sewerage
Water Testing at STP Proposed Outlet.
Undertaken 23/24 September 2002
Weather fine and calm

Neap Tide

Date	Time	Tide (m)	AHD (m)
23/09/02	0.25am	2.42	0.72
23/09/02	8.04am	1.42	-0.28
23/09/02	11.25pm	2.29	0.59
24/09/02	4.45am	1.46	-0.24
24/09/02	1.13pm	1.94	0.24

Date Time	23/09/02 10.00	23/09/02 14.00	23/09/02 18.00	23/09/02 22.00	24/09/02 2.00	24/09/02 6.00	
Field Comments	Low tide, fine and calm only slight breeze	Incoming tide, fine, calm still	Incoming tide, fine, calm still	Incoming tide, fine, calm still	Outgoing tide, fine, calm still	Outgoing tide, fine, calm still	
In-situ Analysis							
Sal (ppt)	3.61	3.57	3.51	3.36	3.55	3.52	
cond (mS/cm)	54.5	53.8	52.9	52.8	53.4	53.5	
turb (NTU)	12	11	9	4	5	4	
DO (mg/l)	0.39	1.01	1.87	1.86	1.92	1.69	
temp (°C)	28	30.6	28.5	27.2	27.1	25.8	
pH	7.4	7.4	7.4	7.8	7.8	7.4	
Laboratory Analysis							LOR
Faecal Coliforms (CFU/100mL)	-	-	-	-	-	13	1
Ammonia (NH ₃) (mg/L as N)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05
Total Kjeldahl Nitrogen (mg/L as N)	0.19	0.18	0.13	0.20	0.17	0.26	0.05
Total Oxidised Nitrogen (mg/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05
Total Nitrogen (TKN+TON) (mg/L as N)	0.19	0.18	0.13	0.2	0.17	0.26	0.05
Total Phosphorus (mg/L)	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	0.05

Site water test results 5 09 02.xls30/10/02

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Badu Island Sewerage
Water Testing at STP Proposed Outlet.
Badu Island Sewerage
Water Testing at STP Proposed Outlet.
Undertaken 14/15 October 2002
Weather fine and calm

<u>Average Tide</u>	Date	Time	Tide (m)	AHD (m)
	14/10/02	4.24am	0.11	-1.59
	14/10/02	11.11am	2.45	0.75
	14/10/02	3.54pm	1.56	-0.14
	14/10/02	9.42pm	3.03	1.33
	15/10/02	4.52am	0.08	-1.62
	15/10/02	11.38am	2.38	0.68

Samples sent by Aerotropics to Cairns 11.30am 15/10/02

Date	14/10/02	14/10/02	14/10/02	14/10/02	15/10/02	15/10/02	
Time	10.00	14.00	18.00	22.00	2.00	6.00	
Field Comments	Incoming tide, fine, slight swell, slight breeze	Outgoing tide, fine, slight swell, slight breeze	Outgoing tide, fine, calm, still	High tide, fine, slight swell, still	Outgoing tide, fine, calm, still	Low tide, fine, calm still	
In-situ Analysis							
Sal (ppt)	3.68	3.59	3.65	3.64	3.7	3.75	
cond (mS/cm)	55.4	54.3	54.9	55.2	55.5	56.2	
turb (NTU)	9	6	12	4	6	9	
DO (mg/l)	2.13	2.29	2.25	2.53	2.49	2.45	
temp (°C)	27.2	27.9	28.6	27.1	26.5	26.0	
pH	7.4	7.8	8.0	7.2	7.0	7.0	
Laboratory Analysis							LOR
Faecal Coliforms (CFU/100mL)	-	-	-	-	-	37	1
Ammonia (NH ₃) (mg/L as N)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05
Total Kjeldahl Nitrogen (mg/L as N)	0.16	0.16	0.19	0.13	0.13	0.15	0.05
Total Oxidised Nitrogen (mg/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05
Total Nitrogen (TKN+TON) (mg/L as N)	0.16	0.16	0.19	0.13	0.13	0.15	0.05
Total Phosphorus (mg/L)	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	0.05

Site water test results 5 09 02.xls30/10/02

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Disclosure Log
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Badu Island Sewerage
Water Testing at STP Proposed Outlet.
Undertaken 5/6 September 2002
Weather fine and calm

Spring Tide

Date	Time	Tide (m)	AHD (m)
5/09/02	6.41am	0.49	-1.21
5/09/02	11.43am	1.81	0.11
5/09/02	5.47pm	1.21	-0.49
5/09/02	11.50pm	3.33	1.63
6/09/02	7.15am	0.53	-1.17
6/09/02	12.11pm	1.87	0.17

Date Time	5/09/02 10.00	5/09/02 14.00	5/09/02 18.00	5/09/02 22.00	6/09/02 2.00	6/09/02 6.00	6/09/02 10.00	
Field Comments	Low tide, no inflow	Low tide, no inflow	Tide in creek filling	Tide in, high	Tide in, very high	Tide turned, on way out, approx 2.0m below 2.00 tide	Low tide, no inflow	
In-situ Analysis								
Sal (ppt)	3.51	3.39	3.42	3.38	3.38	3.51	3.54	
cond (mS/cm)	53.1	51.7	51.7	51	51.2	52.9	53.3	
turb (NTU)	20	7	8	2	1	4	13	
DO (mg/l)	0.43	0.51	0.49	0.46	0.46	0.46	0.45	
temp (oC)	25.6	28.1	28.1	25.8	25.6	25	26.4	
pH	7.4	8.2	8.4	7.7	8.3	7.4	7.0	
Laboratory Analysis								LOR
Faecal Coliforms (CFU/100mL)	-	-	-	-	-	-	49	1
Ammonia (NH ₃) (mg/L as N)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05
Total Kjeldahl Nitrogen (mg/L as N)	0.21	0.12	0.13	0.07	0.07	0.19	0.25	0.05
Total Oxidised Nitrogen (mg/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05
Total Nitrogen (TKN+TON) (mg/L as N)	0.21	0.12	0.13	0.07	0.07	0.19	0.25	0.05
Total Phosphorus (mg/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05

Site water test results 5 09 02.xls30/10/02

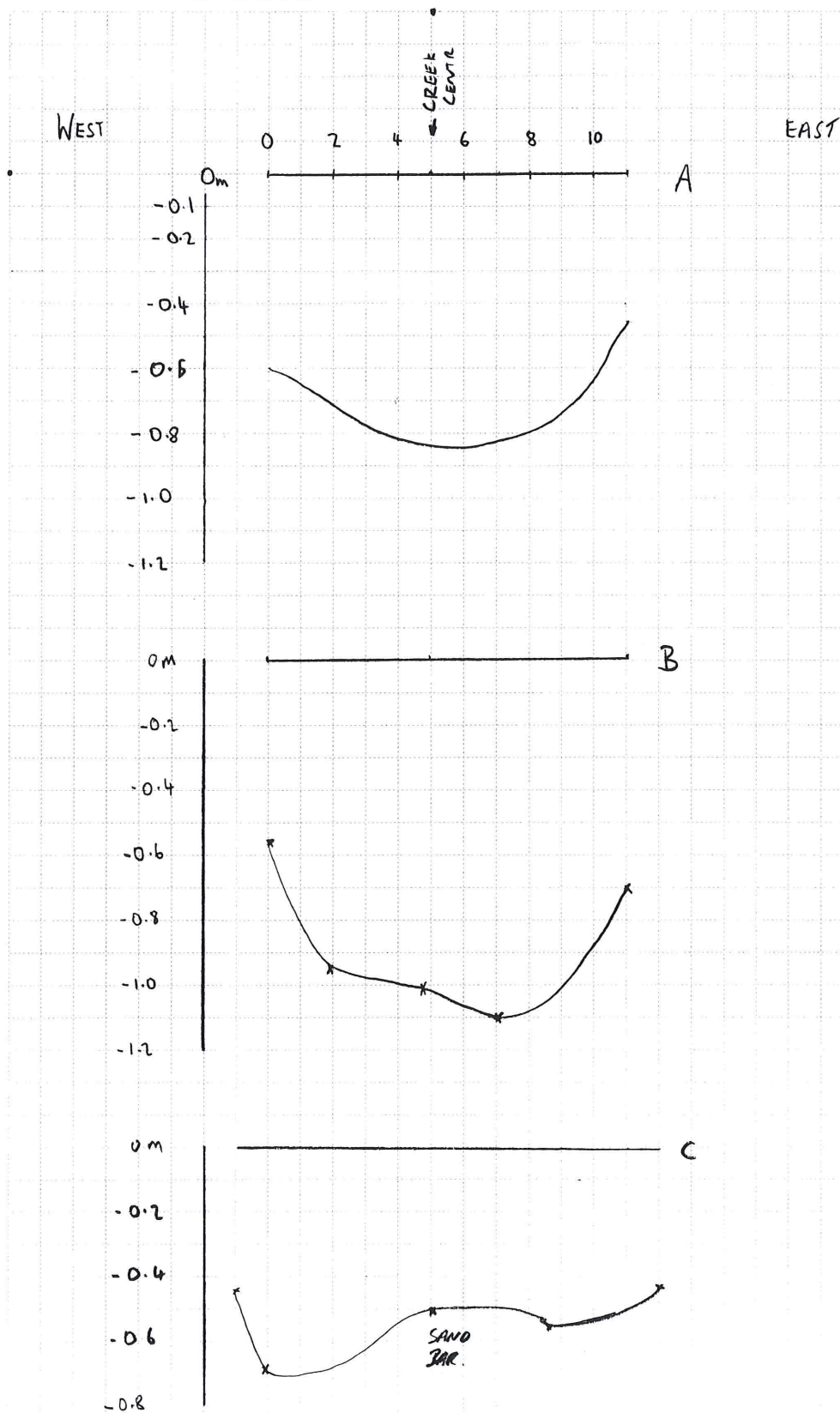
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Attachment C
Survey Data of the Creek Mouth.

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Calculations

Client	ISLAND CO-ORDINATING COUNCIL	Job no.	42 11450	Sheet	1 of 3
Project	BADU ISLAND SEWAGE	Calcs by	M. BRENNAN	Date	22/10/02
Subject	EFFLUENT CREEK CROSS SECTIONS	Checked by		Date	



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Calculations

Client

Job no.

Sheet 2 of 3

Project

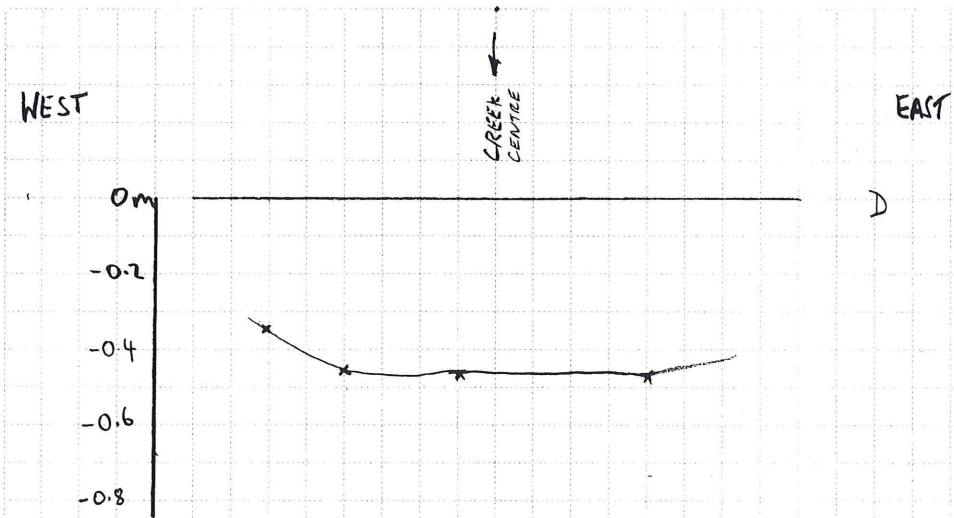
Calcs by

Date

Subject

Checked by

Date

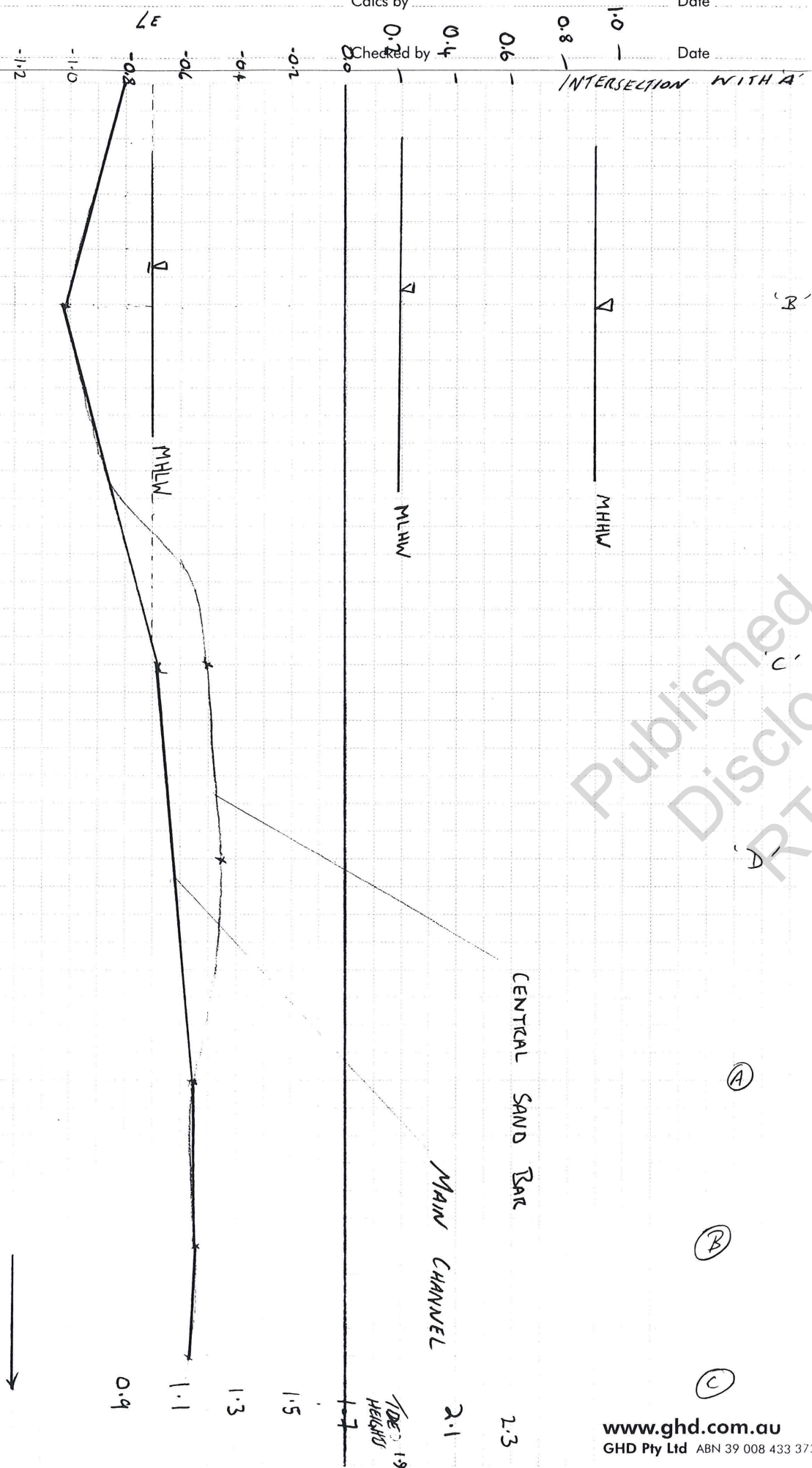


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Calculations

Client	Job no.	Sheet 3 of 3
Project	Calcs by	Date
Subject	Checked by	Date

LONG SECTION 'E'
DOWN CENTRE
OF CREEK

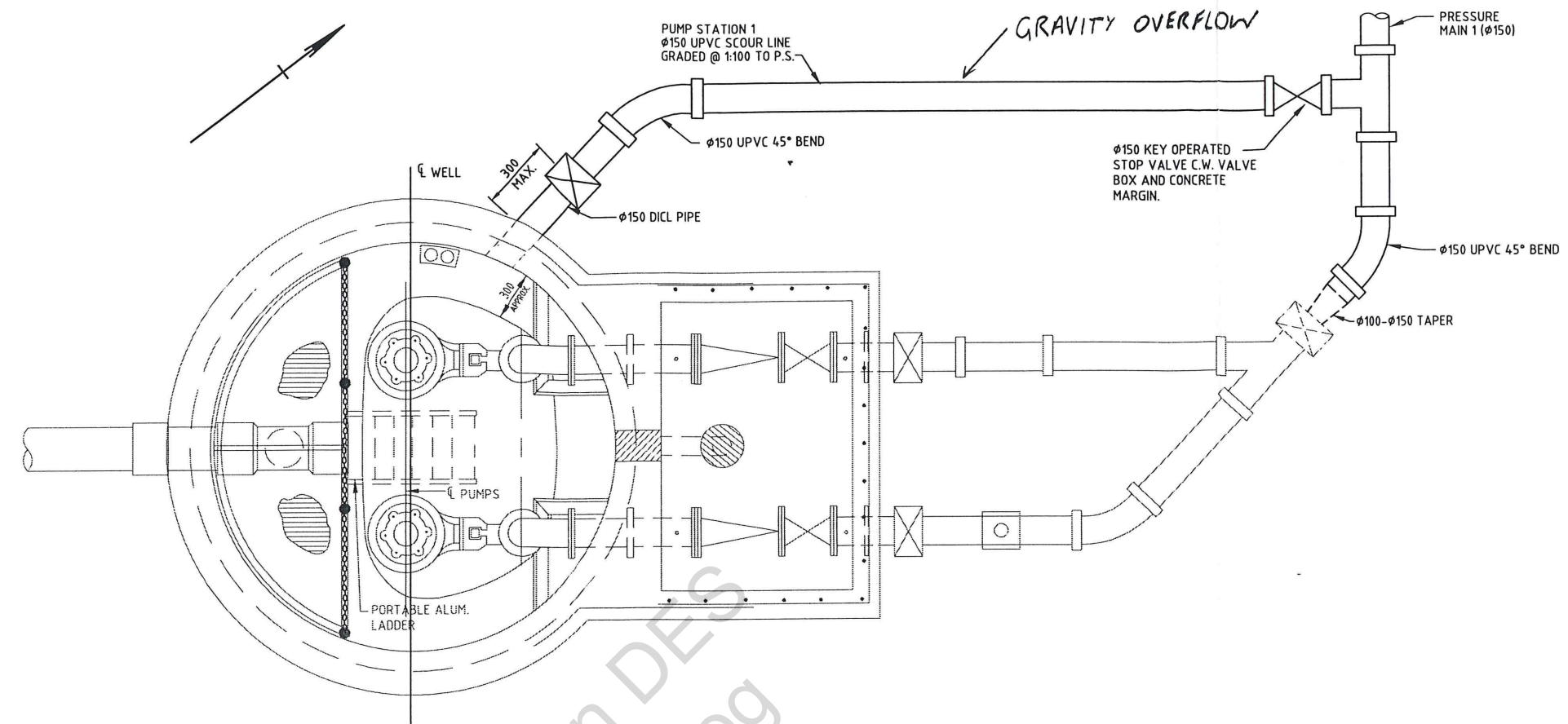


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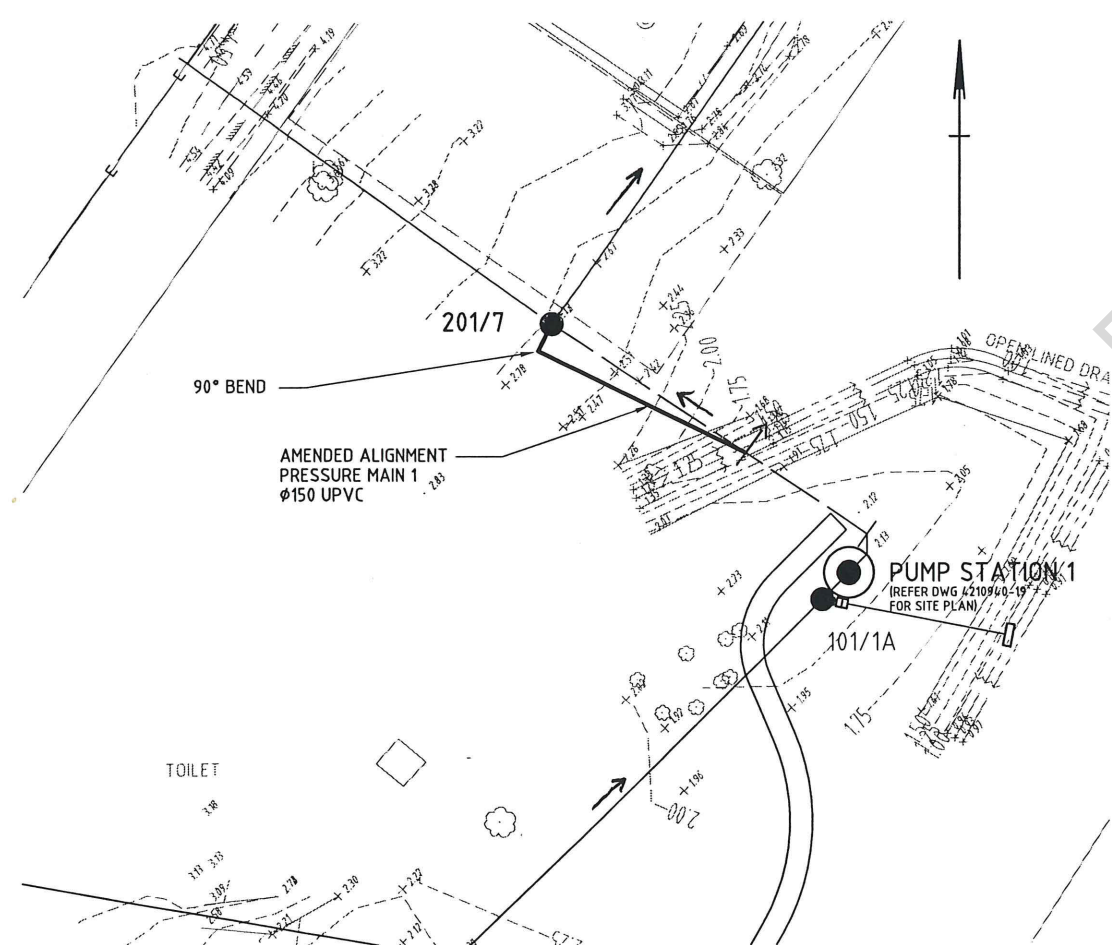
Attachment D

Engineering Drawings Including Pump Station
Overflows.

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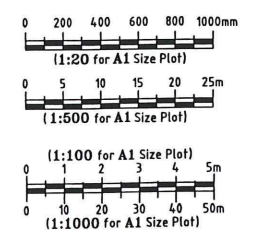
PLAN - PUMP STATION 1
SCALE 1:20

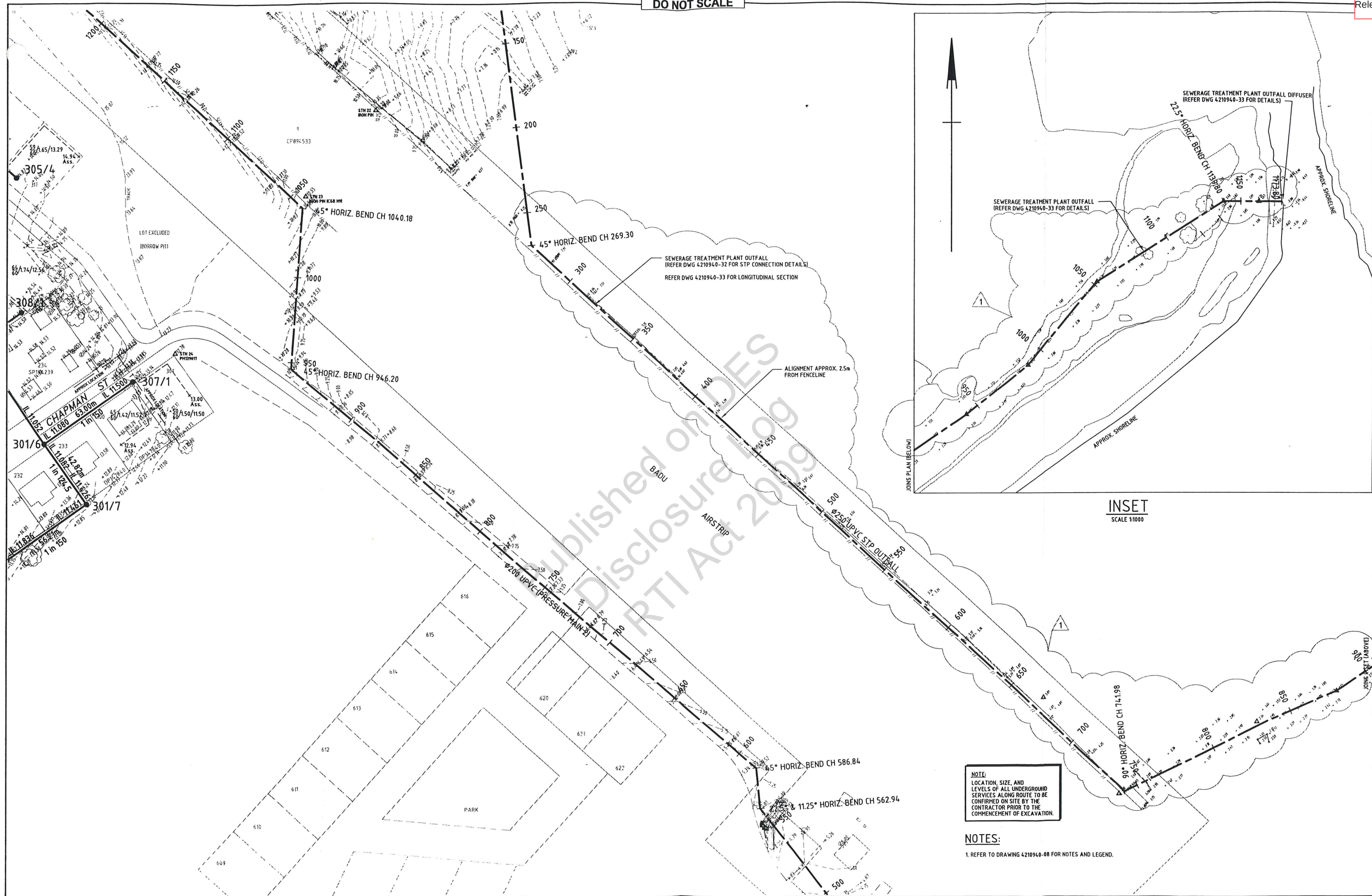
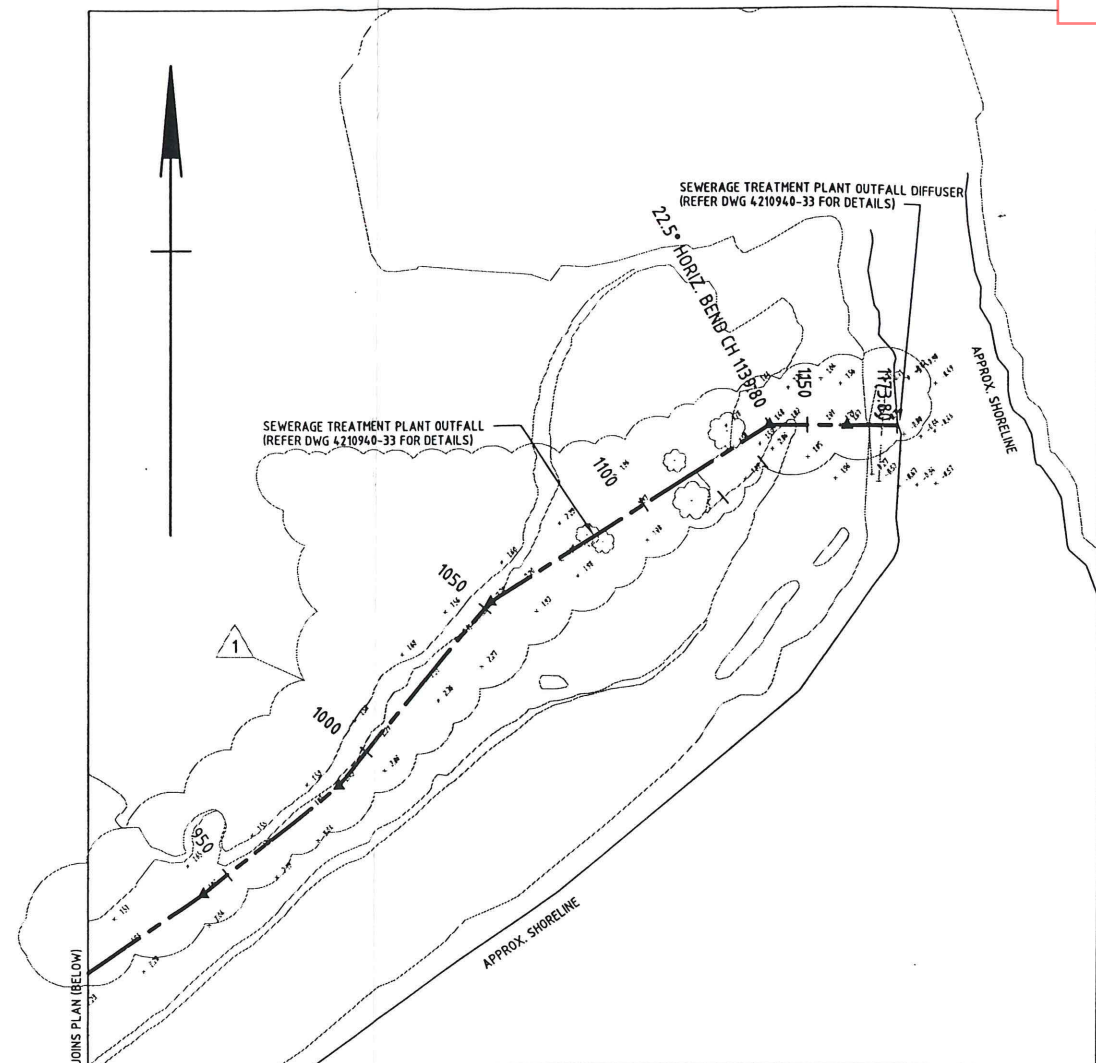


LAYOUT PLAN
SCALE 1:500

	PUMP STATION 1 45° HORIZ. BEND 150 x 150 TEE	OPEN LINED DRAIN SCOUR	90° HOR. BEND MANHOLE 201/7
DATUM	-4.0		
LOCATION	VACANT LAND		
PIPE DIA. & CLASS	150 UPVC CLASS 12		
GRADE	-6.00%	5.43%	
DEPTH TO INVERT (FROM NAT. SURFACE)	0.78	1.14	1.41
INVERT LEVEL	1.35	0.06	1.36
NATURAL SURFACE	2.13	1.20	2.77
CHAINAGE	2.00	21.51	51.00

PRESSURE MAIN 1 LONG SECTION
SCALE 1:1000 H, 1:100 V





INSET
SCALE 1:1000

NOTE:
LOCATION, SIZE, AND
LEVELS OF ALL UNDERGROUND
SERVICES ALONG ROUTE TO BE
CONFIRMED ON SITE BY THE
CONTRACTOR PRIOR TO THE
COMMENCEMENT OF EXCAVATION.

NOTES:

1. REFER TO DRAWING 4210940-08 FOR NOTES AND LEGEND.

No.	ISSUE	REVISION	DATE	M/FILM
1	SURVEY ADDED & STP OUTFALL ALIGNMENT AMENDED	GOB	JWG	16/10/02
0	TENDER ISSUE			

1	2	3
4	5	6
7	8	

SHEET LAYOUT

0 10 20 30 40 50m
(1:1000 for A1 Size Plot)

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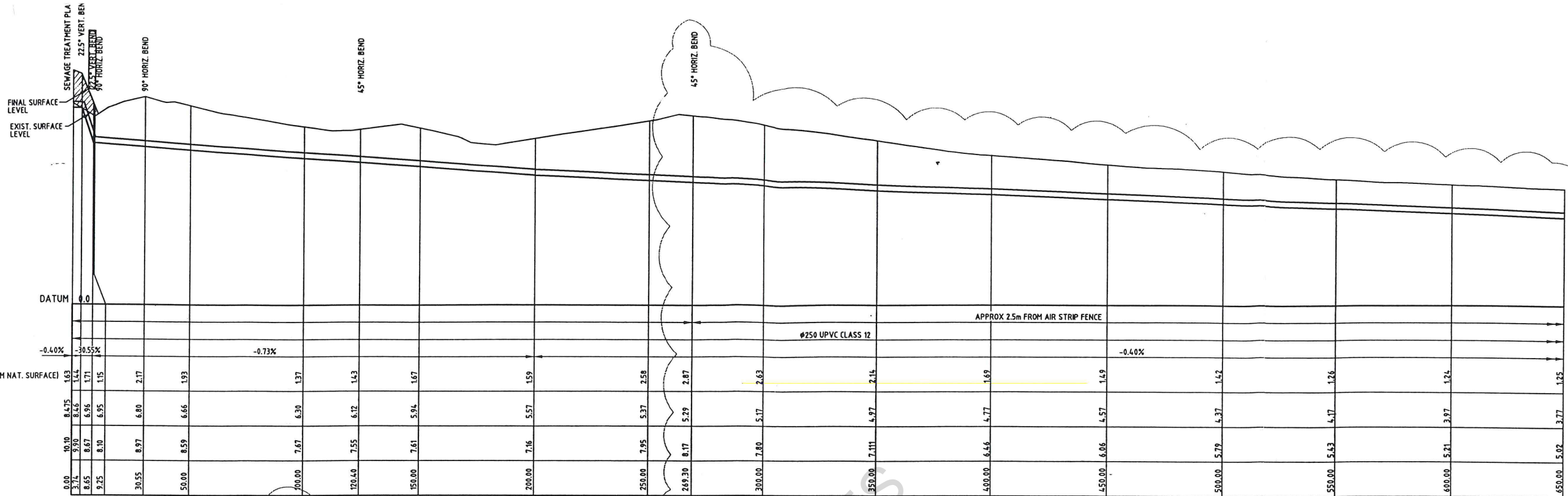
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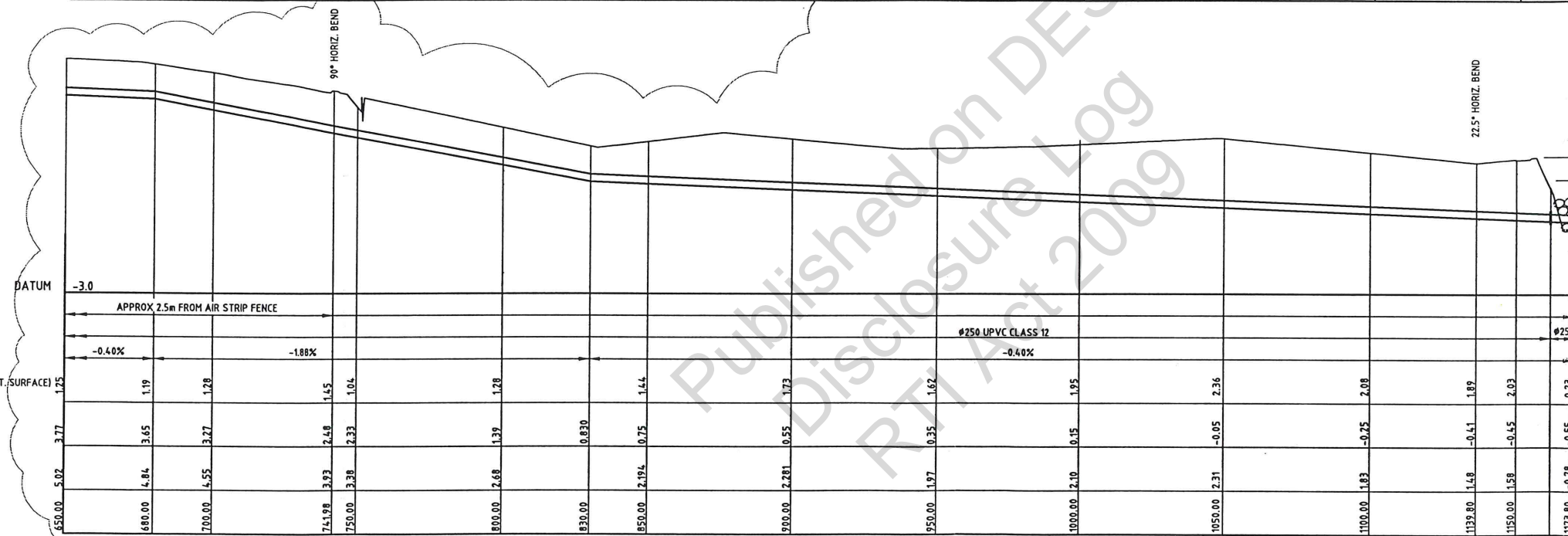
SCALE	1:1000
DRAWN/	JAG
TRADED	DESIGNED
CHECKED	*GOB
DESIGN	*GOB
APPROVED	
*J.Gerskowski 7/6/02	
This Drawing must not be used for Construction unless signed and approved	

CLIENT AND JOB	ISLAND COORDINATING COUNCIL MIP 2 BADU ISLAND SEWERAGE SCHEME		
TITLE	DESIGN PLAN (SHEET 3 OF 8)		
SIZE	A1	Drg. No.	4210940-10
Rev	1		

LOCATION
PIPE DIA. & CLASS
GRADE
DEPTH TO INVERT (FROM NAT. SURFACE)
INVERT LEVEL
NATURAL SURFACE
CHAINAGE



LOCATION
PIPE DIA. & CLASS
GRADE
DEPTH TO INVERT (FROM NAT. SURFACE)
INVERT LEVEL
NATURAL SURFACE
CHAINAGE



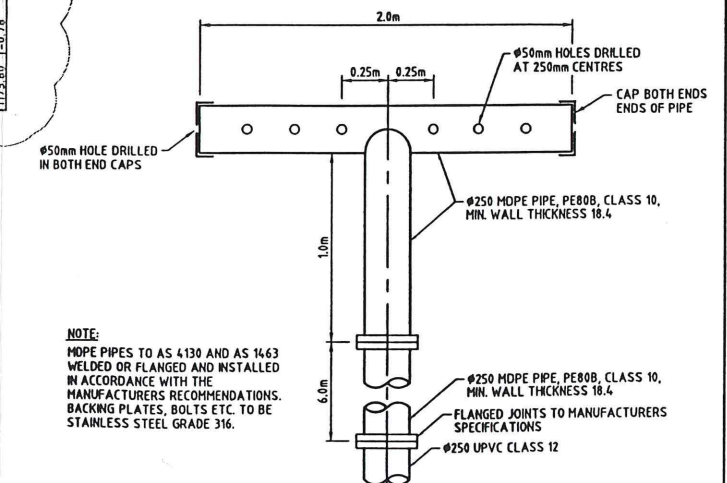
SEWAGE TREATMENT PLANT OUTFALL

SCALE HOR 1:1000, VER 1:100

HAT 1.7
MHHW 0.9
MLHW 0.2
MSL -0.27
MHLW -0.7
MLLW -1.4
LAT -2.4

PLACE #100 NOM. ROCK TO COVER OUTFALL DIFFUSER AS DIRECTED BY SUPERINTENDENT

OUTFALL DIFFUSER (REFER DETAIL)

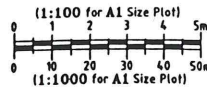


NOTE:
MOPE PIPES TO AS 4130 AND AS 1463 WELDED OR FLANGED AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS. BACKING PLATES, BOLTS ETC TO BE STAINLESS STEEL GRADE 316.

OUTFALL DIFFUSER DETAIL

SCALE 1:20

No.	ISSUE / REVISION	ENGINEER	APPROVED	DATE	M/FILM
1	SURVEY ADDED AND ALIGNMENT AMENDED	GOB	JNG	16/10/02	
2	TENDER ISSUE				



NOTE: * INDICATES SIGNATURES ON ORIGINAL ISSUE OF DRAWING OR LAST REVISION OF DRAWING

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Drawing File No.
4210940-33.DWG



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SCALE	HOR: 1:1000, VER 1:100
DRAWN/ TRACED	ARH
CHECKED	GOB
DESIGNED	ARH
DESIGN CHECKED	GOB
APPROVED	J.Gerskowksi 7/6/02

CLIENT AND JOB	ISLAND COORDINATING COUNCIL MIP 2 BADU SEWERAGE SCHEME
TITLE	SEWAGE TREATMENT PLANT OUTFALL LONGITUDINAL SECTION
SIZE	A1
Drg. No.	4210940-33
Rev	1



Enquiries
Telephone
Your reference
Our reference

Brynn Mathews
(07) 40466732

Environmental Protection Agency

Incorporating the
Queensland Parks and Wildlife Service

10 June 2003

Sean Lawler
Badu Island Council
Badu Island
Torres Strait QLD 4875

sch4p3(3) Prejudice the protection of an indiv

CNS	3917	2700	1974
CNS 2003/6164			

Dear Sean

Inspection of Environmentally Relevant Activities on Badu Island

I refer to inspections of Badu Island Council's activities carried out by Brynn Mathews of this office with Sean Lawler from Council on 1 November 2002. The purpose of these inspections was to determine which of Council's activities are environmentally relevant activities (ERAs) listed in Schedule 1 of the Environmental Protection Regulation 1998 and whether or not they held the relevant authorities under the Environmental Protection Act 1994 (EP Act). The following sites were inspected and the listed observations made.

1. s.73 irrelevant information

2. Sewage Treatment Plant (ERA #15)

- The operation of this plant is covered by development permit FN0096DA and Environmental Authority FN0555.
- This plant was well under construction at the time of inspection even though a development permit was not issued for the works until 20 January 2003. This issue of carrying out the works without a development permit has been taken up with the consultants managing the project.

3. **Quarry (ERA #20)**
s.73 irrelevant information

4.

5. **Hard Rock Quarry (ERAs #20 & 22)**

- Rock is quarried, crushed and screened at this site. If this quarry existed before 1 March 1995, it would also be subject to a deemed approval under the EP Act for a maximum extraction rate of 5,000 tonnes per annum. Any increase above this amount would require a development permit and licence under the EP Act. The crushing and screening plant are in the same situation and subject to the same tonnage limits and approval requirements for a level of operation greater than 5,000 tonnes per annum.
- This quarry also appeared to have no stormwater diversion above the working face to minimise erosion and contamination of stormwater with sediment.
- This quarry should be worked in accordance with a development plan that ensures that completed areas are safe, stable and readily revegetated. The present bench heights and slopes will make it difficult to rehabilitate the site in accordance with these requirements.

6. s.73 irrelevant information

s.73 irrelevant information

7.

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RTI Act 2009

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Statutory Approvals Required

The Council needs to apply for additional Environmental Authorities to operate the concrete batching plant and the Council Depot (motor vehicle workshop). If Council wishes to process more than 5,000 tonnes per annum from the piggery quarry, hard rock quarry or crushing and screening plant they will also need to apply for Environmental Authorities for these activities. As Council already holds two individual Environmental Authorities (5010000227 & FN0555 for the waste disposal site and sewage treatment plant respectively), you may wish to apply for an Integrated Authority to include all of Council's activities in the one document. When you have decided on the level of operation of the quarries and crushing and screening plant and whether you want an Integrated Authority, you should contact Brynn Mathews on (07) 40466732 to identify the necessary application forms to be lodged.

Yours faithfully

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Dean Sharpe
Operations Manager
Environmental Operations
Cairns District, Northern Region