

Our Ref: 20120423 – 11-129- LE Cover

27th April, 2012

Mr Dale Dickson
Chief Executive Officer
Gold Coast City Council
PO Box 5042
Gold Coast MC 9729



Attention: Planning and Development Section

Dear Sir/Madam,

**RE APPLICATION FOR DEVELOPMENT PERMIT, OPERATIONAL WORKS (CHANGE
GROUND LEVEL – RETAINING WALLS)
81 CHRISTENSEN ROAD SOUTH, STAPYLTON**

Enclosed is our application for a development permit, operational works (change surface levels – retaining walls) for the approved proposal at 81 Christensen Road South, Stapylton. The following are enclosed for your assessment:

1. Five sets of development drawings prepared by *i3 consulting pty ltd* (5 x A3);
2. Five copies of *i3 consulting pty ltd* planning report;
3. Five copies of Compliance Certificate – Form 15;
4. IDAS application forms and Assessment Checklists;
5. QLeave receipt as PLSL proof of payment;
6. Landowner's consent to making the application; and
7. Cheque for \$788.00 in favour of Gold Coast City Council in payment of GCCC application fees.

Should you require any further information, please do not hesitate to contact us.

Yours faithfully,

A handwritten signature in blue ink, appearing to read "Luke Munro".

Luke Munro
Lead Urban Planner





Administration Centre, Gold Coast, Queensland

Surfers Paradise Telephone: 07 5582 8211 Fax: 07 5581 6346

Nerang Telephone: 07 5582 8211 Fax: 07 5596 3653

PO Box 5042 Gold Coast MC Qld 9729 Australia

goldcoastcity.com.au

PAGE 1

TAX INVOICE

RECEIPT

 ABN: 84 858 548 460
 DATE 30/04/12
 REGISTER 670
 TAX INV.NO. 17031714
 TIME 11:21:55

MULTI SPAN AUSTRALIA GROUP P/L

c/o i3 CONSULTING

PO BOX 909

KENMORE Q 4069

 TAX INV.DATE
 30/04/12

REF: L334 SP193431

81 CHRISTENSEN RD STAPYLTON

Allocations

	Value	GST	Price
REVENUE SUREV SUNDRY REVENUE REF: 367754 ACCOUNT 98468 OPW	788.00	0.00	788.00
CHANGE TO GROUND LEVEL OPERATIONAL WORKS APPLICATION			
201200482			

Total Amounts:	788.00	0.00	788.00
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Which consists of:

MAIL-CHQ PROCESSING 000099

Total Tendered:

788.00

788.00

THIS PAYMENT MAY NOT REPRESENT FULL AND FINAL SETTLEMENT OF THE DEBT ON COUNCIL'S RECORDS.

The receiving of the application documentation and tendered fee does not mean that an application is either "Properly Made" or "Well Made". If the application is not "Well Made", a surcharge fee may apply. If not "Properly Made", the application may not be processed.

201200482 OPW

Company owner's consent to the making of a development application under the Sustainable Planning Act 2009

I, Paul Anthony McAvoy

[insert name in full]

Director of Burnside Developments Pty Ltd the below mentioned company and

I, Renato Andreatta

[insert name in full]

Director of Yellowstone Investments Pty Ltd the below mentioned company

[insert position in full— i.e. another director, or a company secretary. Delete the above name and company position if not applicable, i.e. for a proprietary company that has a sole director who is also the sole company secretary, only that director needs to complete the owner's consent]

Burnside Developments Pty Ltd and Yellowstone Investments Pty Ltd

of _____ *[insert name of company]*

as owner of premises identified as follows:

Lot 334 on SP193431

[insert street address, lot or plan description, or coordinates of the premises the subject of the application]

consent to the making of a development application under the Sustainable Planning Act 2009 by

Multispan Australia

_____ *[insert name of applicant]*

on the premises described above for the purposes of

Building Approvals

[insert details of the proposed development e.g. material change of use for three storey apartment building]

R. Andreatta *[signature of Director]*

signed on the FIRST day of SEPTEMBER 20 11

[Signature] *[signature of Director]*

signed on the 1ST day of SEPTEMBER 20 11

Company seal *[if used]*

The Sustainable Planning Act 2009 is administered by the Department of Infrastructure and Planning, Queensland Government

PP2 0034 43 (A) Version 1 10.12.09



BUILDING AND CONSTRUCTION INDUSTRY NOTIFICATION AND PAYMENT FORM

Form BCI 10 v4 Effective 01-Jan-2010

THIS FORM CAN ALSO BE COMPLETED AND PAID ONLINE

PLEASE DO NOT USE STAPLES ON THIS FORM. (*) denotes mandatory

QLEAVE PROJECT NUMBER



B393738

A.D.N. 89 596 619 189

PART 1 PAYER DETAILS

Please use BLACK INK and print within boxes using BLOCK LETTERS.

Levy Payer Customer No

Payer Legal Name ABN (if applicable)

Payer Legal Name *

EXAMPLE

MULTI SPAN AUSTRALIA GROUP PTY LTD

Payer Trading Name (if applicable)

Unit Number

Street Number

Street Name *

32 PRECISION STREET

Suburb *

State

Post Code *

SALISBURY

4107

Contact Person *

Contact Daytime Phone No. (include area code) *

DARRELL HOOD

0732744209

PART 2 PROJECT DETAILS

Project Description *

NEW WAREHOUSE AND OFFICE

Lot No. (if applicable)

Plan No. (if applicable)

33A

SP193431

Street Number

Street Name *

84 CHRISTENSEN ROAD SOUTH

YATALA QLD 4207

Your Job No. or Reference No. (if applicable)

Estimate Your Start Date *

Expected Completion Date *

4050

Project Owner (who is the work being done for) *

BURNSIDE DEV & YELLOWSTONE INV

Certifier Business Name *

PHILIP CHOW

Certifier Phone No. (include area code)

0738393499

Principal Contractor Legal Name (if appointed, otherwise write UNKNOWN) *

MULTI SPAN AUSTRALIA GROUP PTY LTD

Principal Contractor ABN *

Principal Contractor Phone No. (include area code) *

Owner Builder No. (if applicable)

31147474628

0732744209

OB

PART 3 LEVY / FEE PAYMENT ALL AMOUNTS ARE TO BE SHOWN TO THE NEAREST WHOLE DOLLAR: 50 CENTS OR BELOW ROUND DOWN - 51 CENTS OR ABOVE ROUND UP TO NEAREST DOLLAR

Notification for Building and Construction work more than \$80,000 (inc. GST) A\$

A Total Cost of Work (inc. GST)

B Exempted Cost of Work (documentation may be requested)

C Leviable Cost of Work (C = A - B)

D Levies and Fee Payable (GST is not payable on the Levies or Fee) D = C x 0.525%

Cross this box if you are applying for instalments. Building and Construction work is over \$5M and completion will take more than one year.

D\$

29,911.00

PART 4 DECLARATION

Name

SHANE KEILOR

Signature

Date

190911



4375250028

Notification and Payment

This form deals with two major obligations: "Notification" and "Payment". These obligations can fall on different parties and may be completed separately. Significant penalties apply to breaches of these obligations. Normally, completion, lodgement and payment by a person will be enough to comply with these obligations.

Who is Liable to Notify?

Notification of a project should be by or for the person for whom the work is to be done.

Who is Liable to Pay?

- If the work is being done for the Commonwealth, the contractor engaged by the contractor is liable.
- If the work is being done for a local government, government entity or non-Queensland Government entity, the local government or entity is liable.
- If an application is made to an assessment manager in relation to work for a development permit for building work, plumbing or drainage work or operational work, the applicant is liable.
- In all other cases, the person for whom the work is to be done is liable for payment.

When to Notify and Pay

QLeave must be notified and the applicable Levies and Fee must be paid:

1 Prior to the issue of a development permit or

2 If no permit is given, before the work starts.

This Form

This form has two copies which should be kept together and lodged with your payment:

AustraliaPost will receipt stamp the two copies. They will send the original white copy to QLeave and give the second copy to you which needs to be submitted to your Certifier/Local Council.

The perforated section is your copy to be kept as record of payment.

PAYERS NAME Show full details of the Payers "Legal Name" - individuals show "your name", companies etc show Pty Ltd, Family Trust, Inc, etc. Also include your ABN

CONTACT PERSON QLeave should be able to contact this person during office hours.

QLeave will typically correspond with the party named as the payer. Correspondence includes letters, invoices and refunds.

CERTIFIER Who is certifying the work?

Approvals for certain building work must be obtained from a building certifier, who can be a local government building certifier or a private certifier

PROJECT OWNER The person for whom the work is being done. Show full "Legal Name".

PRINCIPAL CONTRACTOR Show full "Legal Name" - and ABN. The Workplace Health and Safety Act 1995 (WHS Act) defines the Principal Contractor as:

(1) The principal contractor for construction work is the person appointed by the client as the principal contractor for the construction work under section 184A.

(2) If the client does not appoint a principal contractor for the construction work, the client is taken to be the principal contractor for the construction work.

Privacy Statement - QLeave is collecting the information on this form for the purposes of administering the Building and Construction Industry (Portable Long Service Leave) Act 1991, as required by that Act. QLeave may give some or all of this information to various other Government departments or agencies, as required or permitted by law.

AUSTRALIA POST
SALISBURY 4107

Portable LSL Authority Levy Payment
Form No B393738 29911.00
TOTAL \$29911.00
Payment Tendered Details :
Cheque 29911.00
19/09/11 00/21298 off/a 422270 12:48

POSTBILLPAY
ASK WHICH BILLS YOU CAN PAY HERE.

Amount Paid
\$ 29,911.00
Make cheques payable to QLeave, rounded to nearest dollar (50 cents or below round down, 51 cents or above round up to the nearest dollar.)



GREEN - PAYERS INFORMATION

Project Description
NEW WAREHOUSE & OFFICE
84 CHRISTENSEN ROAD SOUTH, YATALA.
Project Address
THIS FORM CAN ALSO BE COMPLETED AND PAID ONLINE
Web www.qleave.qld.gov.au



Application Details - IDAS form 1

(Sustainable Planning Act 2009 version 1.0 effective 18 December 2009)

You **MUST** complete **ALL** questions unless the form indicates otherwise. Incomplete forms or forms without all necessary information and documentation will result in your application not being a properly made application.

For all development applications, you must:

- complete this form (*Application details - IDAS form 1*)
- complete any other forms relevant to your application
- provide any mandatory supporting information identified on the forms as being required to accompany your application.

All terms used on this form have the meaning given in the *Sustainable Planning Act 2009* or the *Sustainable Planning Regulation 2009*.

Applicant details (note: the applicant is the person responsible for making the application and need not be the owner of the land. The applicant is responsible for ensuring the information provided on all IDAS application forms is correct. Any development permit or preliminary approval that may be issued as a consequence of this application will be issued to the applicant.)

Please note: If there is more than one applicant, provide additional applicant details by clicking the "Add another applicant" button below.

Name/s (individual or company name in full)	Multispan Australia c/- Luke Munro
For companies, contact name	i3 Consulting
Postal address	PO Box 909 KENMORE QLD 4069
Contact phone number	07 3878 9100
Mobile number (non-mandatory)	
Fax number (non-mandatory)	
e-mail address (non-mandatory)	luke.munro@icubed.com.au

1. What is the nature of development proposed? (tick all applicable boxes)

- ☐ material change of use of premises
☐ building work
☒ operational work
☐ reconfiguring a lot



☐ ☐ ☐

2. What type of approval is being sought?

- ☒ development permit
☐ preliminary approval
☐ both - provide details below

3. Is the application for a mobile and temporary environmentally relevant activity (ERA)?

- ☒ No
☐ Yes - complete table A and then go to question 5

4. Location of the premises (complete table B and/or table C as applicable. Identify each lot in a separate row)

Table B - street address/lot for the premises or street address/lot on plan for the land adjoining or adjacent to the premises

	Street Address				Lot on plan description		Local government area (e.g. Logan, Cairns)
	Unit No.	Street No.	Street name and official suburb/locality name	Post code	Lot No.	Plan type and plan no.	
1		81	CHRISTENSEN RD S STAPYLTON	4207	334	SP193431	GOLD COAST CITY

- ☒ Street address / lot on plan
☐ Street address / lot on plan for the land adjoining or adjacent to the premises (appropriate for development in water e.g. jetty, pontoon)

Table C - premises coordinates (appropriate for development in remote areas, over part of a lot or in water e.g. channel dredging in Moreton Bay)

	Coordinates (note: place each set of coordinates in a separate row)				Zone reference	Datum	Local government area (If applicable)
	Easting	Northing	Latitude	Longitude			
1						☒ GDA94 ☐ WGS84 ☐ other	GOLD COAST CITY

5. Total area of the premises on which the development is proposed (indicate hectares or m²)

251,820 m²

6. Current use/s of the premises (e.g. vacant land, house, apartment building, cane farm, etc.)

1	Building 8 lease site is vacant land
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7. Provide a brief description of the proposal (e.g. six unit apartment building, 30 lot residential subdivision etc.)

Operational Works - Earthworks (Change Ground Level - Retaining Walls)

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8. Is owner's consent required for this application? (refer to notes at the end of this form for more information)

- ☒ No
☐ Yes - complete either table D, table E or table F as applicable

Table D (note: do not complete this table if lodging the application on-line using Smart eDA)

Name of owner/s of the land

I/We, the above-mentioned owner/s of the land, consent to the making of this application.

Signature of owner/s of the land

Date

Table E

Name of owner/s of the land

- ☐ The owner's written consent is attached or will be provided separately to the assessment manager

Table F

Name of owner/s of the land

- ☐ By making this application, I, the applicant, declare that the owner has given written consent to the making of the application.

9. Does the application involve a state resource? (e.g. the application involves state land, or taking quarry materials. Refer to the notes at the end of this form for more information)

- ☒ No ☐ Yes - complete table G

10. Identify if any of the following apply to the premises (tick applicable box/es)

- ☒ adjacent to a water body, watercourse or aquifer (e.g creek, river, lake, canal) - complete table H
☐ on strategic port land under the *Transport Infrastructure Act 1994* - complete table I
☐ in a tidal water area - complete table J

Table H Name of water body, watercourse or aquifer

1	Sandy Creek
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11. Are there any existing easements on the premises? (e.g. for vehicular access, electricity, overland flow, water, etc.)

- ☒ No ☐ Yes - ensure the type, location and dimension of each easement is included in the plans submitted

☐ ☐ ☐

12. Does the proposal include new building work or operational work on the premises? (including any services)

☐ No ☒ Yes - ensure the nature, location and dimensions of proposed works are included in plans submitted

13. Is the payment of a portable long service leave levy applicable to this application? (refer to the notes at the end of this form for more information)

☐ No - Go to question 15 ☒ Yes

14. Has the portable long service leave levy been paid? (refer to notes at the end of this form for more information)

☐ No

☒ Yes - complete table K and submit with this application the yellow local government/ private certifier's copy of the receipted QLeave Form

Table K	Amount paid	Date paid	QLeave Project Number (6 digit number starting with A, B, E, L or P)
1	\$0.00 \$29,911.00.	18/09/2011	B393738

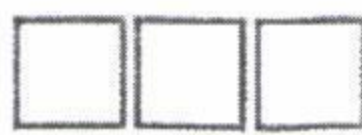
15. Has the local government agreed to apply a superseded planning scheme to this application under section 96 of the Sustainable Planning Act 2009?

☒ No

☐ Yes - provide details below

16. List below all of the forms and supporting information that accompany this application (include all IDAS forms, checklists, mandatory supporting information etc. that will be submitted as part of this application. Note: this question does not apply for applications made online using Smart eDA)

	Description of attachment or title of attachment	Method of lodgement to assessment manager
1	Development drawings. (x5 sets)	
2	Planning Report (x5). & COMPLIANCE CERTIFICATE(15)	
3	IDAS Forms 1 & 6 checklists 1 & 4	
4	Qleave receipt	
5	Landowners consent.	
6	Cheque.	



17. Applicant's declaration



By making this application, I declare that all information in this application is true and correct (note: it is unlawful to provide false or misleading information).

Notes for completing this form

Question 8:

- Section 263 of the *Sustainable Planning Act 2009* sets out when the consent of the owner of the land is required for an application. Section 260(1)(e) of the *Sustainable Planning Act 2009* provides that if the owner's consent is required under section 263, then an application must contain, or be accompanied by, the written consent of the owner, or include a declaration by the applicant that the owner has given written consent to the making of the application.
- Owner's consent is not required for a mobile and temporary ERA.

Question 9:

- Section 264 of the *Sustainable Planning Act 2009* provides that if a development involves a state resource, a regulation may require the application to be supported by certain evidence prescribed under the regulation. Schedule 14 of the *Sustainable Planning Regulation 2009* prescribes the state resources for which evidence is required to be given, and the evidence required, to support the application.

Question 13:

- The *Building and Construction Industry (Portable Long Service Leave) Act 1991* prescribes when the portable long service leave levy is payable.
- The portable long service leave levy amount and other prescribed percentages and rates for calculating the levy are prescribed in the *Building and Construction Industry (Portable Long Service Leave) Regulation 2002*.

Question 14:

- The portable long service leave levy need not be paid when the application is made, but the *Building and Construction Industry (Portable Long Service Leave) Act 1991* requires the levy to be paid before a development permit is issued.
- Building and Construction Industry Notification and Payment Forms are available from any Queensland post office or agency, on request from QLeave, or can be completed on the QLeave website at www.qleave.qld.gov.au. For further information contact QLeave on 1800 803 481 or www.qleave.qld.gov.au.

Privacy -the information collected in this form will be used by the Department of Infrastructure and Planning (DIP) in accordance with the processing and assessment of your application. Your personal details will not be disclosed for a purpose outside of the IDAS process, except where required by legislation (including the *Right to Information Act 2009*) or as required by Parliament. This information may be stored in a departmental database. The information collected will be retained as required by the *Public Records Act 2002*.

OFFICE USE ONLY

Date received

30/4/12

Reference numbers

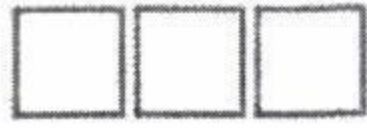
DA. 201200528
OPW. 201200482

NOTIFICATION OF ENGAGEMENT OF A PRIVATE CERTIFIER

To:

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

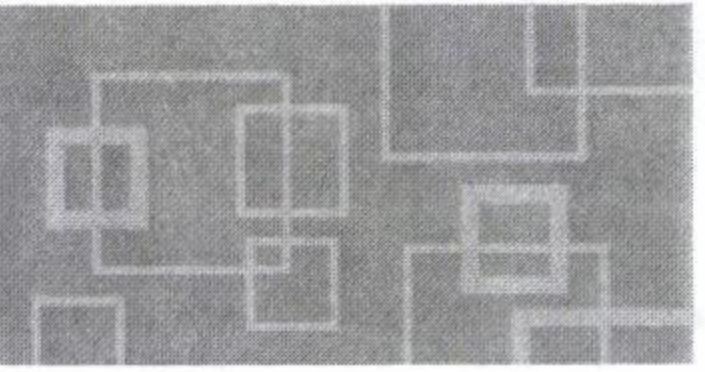
Date of engagement	Name	BSA Certification license number	Building classification/s



QLEAVE NOTIFICATION AND PAYMENT (for completion by assessment manager or private certifier if applicable)

	Description of the work	QLeave Project Number	Amount paid (\$)	Date paid	Date receipted form sighted by assessment manager	Name of officer who sighted the form
1						

The *Sustainable Planning Act 2009* (SPA) is administered by the Department of Infrastructure and Planning. This form and all other required application materials should be sent to your assessment manager and any referral agencies.



Building or operational work assessable against a planning scheme - IDAS form 6

(Sustainable Planning Act 2009 version 1.0 effective 18 December 2009)

This form must be completed for development applications for building works or operational work assessable against a planning scheme.

You **MUST** complete **ALL** questions unless the form indicates otherwise. Incomplete forms or forms without all necessary information and documentation will result in your application not being a properly made application.

For all development applications, you must:

- complete *Applicant details - IDAS form 1*
- complete any other forms relevant to your application
- provide any mandatory supporting information identified on the forms as being required to accompany your application.

All terms used on this form have the meaning given in the *Sustainable Planning Act 2009* or the *Sustainable Planning Regulation 2009*.

This form can also be used for development on strategic port land under the *Transport Infrastructure Act 1994*.

1. What is the nature of the work that requires assessment against a planning scheme? (tick applicable box/es)

☐ building work - complete table A

☒ operational work - complete table B

Table B

What is the nature of the operational work made assessable in the planning scheme? (tick applicable box/es)

- | | | |
|---|--|--|
| ☐ road works | ☐ stormwater | ☐ water infrastructure |
| ☐ drainage Works | ☒ earthworks | ☐ sewerage infrastructure |
| ☐ landscaping | ☐ signage | ☐ clearing vegetation under the planning scheme |
| ☐ other - please specify below | | |

What type of approval is being sought? (if you have indicated multiple works in the above question, please use an attachment to this form to detail each approval request)

- ☒ development permit ☐ preliminary approval ☐ both - specify below

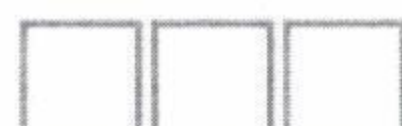
Is the operational work necessary to facilitate the creation of new lots? (e.g. subdivision)

- ☒ No ☐ Yes - specify the number of lots being created

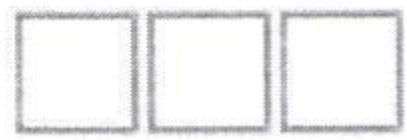
Are there any current approvals associated with this application? (e.g. material change of use)

- ☒ No ☐ Yes - provide details below

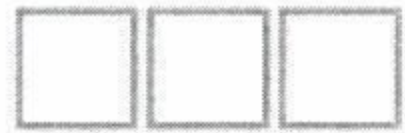
2. What is the dollar value of the proposed building work? (inc GST, materials and labour) \$ 5,697,333



3. Confirm the following mandatory supporting information accompanies this application		
	Confirmation of lodgement	Method of lodgement
All applications for operational works		
site plans drawn to scale which show the following: - the location and site area of the land to which the application relates (<i>relevant land</i>) - the north point - the boundaries of the relevant land - the allotment layout showing existing lots, any proposed lots (including the dimensions of those lots), existing or proposed road reserves, building envelopes and existing or proposed open space (note: numbering is required for all lots) - any existing or proposed easements on the relevant land and their function - any access limitation strips - all existing and proposed roads and access points on the relevant land	☒ confirmed	mail
a statement about how the proposed development addresses the local government's planning schemes and any other planning documents relevant to the application	☒ confirmed	mail
Applications for operational works involving earthworks (filling and excavating)		
drawings showing: - existing and proposed contours - areas to be cut and filled - the location and level of any permanent survey marks or reference stations used as datum for the works - the location of any proposed retaining walls on the relevant land and their height - the defined flood level (if applicable) - the defined fill level (if applicable)	☒ confirmed	mail
Applications for operational works involving roadworks		
drawings showing: - existing and proposed contours - the centreline or construction line showing chainages, bearings, offsets if the construction line is not the centreline of the road and all intersection points - information for each curve including tangent point chainages and offsets, curve radii, arc length, tangent length, superelevation (if applicable) and curve widening (if applicable) - kerb lines including kerb radii (where not parallel to centreline) and tangent point changes (where not parallel to centreline) - edge of pavement where kerb is not constructed - position and extent of channelisation - location and details of all traffic signs, guideposts, guardrail and other street furniture - pavement markings including details on raised pavement markers - catchpit, manhole and pipeline locations - drainage details (if applicable) - cross road drainage culverts (if applicable) - concrete footpaths and cycle paths - location and details for access points, ramps and invert crossings - changes in surfacing material	☐ confirmed	



	Confirmation of lodgement	Method of lodgement
Applications for operational works involving stormwater drainage		
drawings showing: - existing and proposed contours - drainage locations, diameters and class of pipe, open drains and easements - manhole location, chainage and offset or co-ordinates and inlet and outlet invert levels - inlet pit locations, chainage and offset or co-ordinates and invert and kerb levels	☐ confirmed	
Applications for operational works involving water reticulation		
drawings showing: - kerb lines or edge of pavement where kerb is not constructed - location and levels of other utility services where affected by water reticulation works - pipe diameter, type of pipe and pipe alignment - water main alignments - water supply pump station details (if applicable) - minor reservoir details (if applicable) - conduits - location of valves and fire hydrants - location of house connections (if applicable) - location of bench marks and reference pegs	☐ confirmed	
Applications for operational works involving sewerage reticulation		
drawings showing: - location of all existing and proposed services - location of all existing and proposed sewer lines and manhole locations - location of all house connection branches - kerb lines or edge of pavement where kerb is not constructed - chainages - design sewer invert levels - design top of manhole levels - type of manhole and manhole cover - pipe diameter, type of pipe and pipe alignment - location of house connections (if applicable) - sewer pump station details (if applicable)	☐ confirmed	
Applications for operational works involving street lighting		
drawings showing: - location of all light poles and service conduits - location of all other cross road conduits - type of wattage and lighting - any traffic calming devices - additional plans for roundabouts and major roads (if applicable) - details of any variations to normal alignment - details of lighting levels	☐ confirmed	



	Confirmation of lodgement	Method of lodgement
Applications for operational works involving public utility services		
drawings showing: • any existing light poles and power poles • any existing underground services • details of proposed services • alternation to existing services	☐ confirmed	
Applications for operational works involving landscaping works		
drawings showing: • the location of proposed plant species • a plant schedule indicating common and botanical names, pot sizes and numbers of plants • planting bed preparation details including topsoil depth, subgrade preparation, mulch type and depth, type of turf, pebble, paving and garden edge • the location and type of any existing trees to be retained • construction details of planter boxes, retaining walls and fences • the proposed maintenance period • irrigation system details	☐ confirmed	

Notes for completing this form:

- This form can also be used for development applications for building works or operational works assessable against the land use plan for Cairns airport land or Mackay airport land. Whenever a planning scheme is mentioned, take it to mean the land use plan for the airport land.

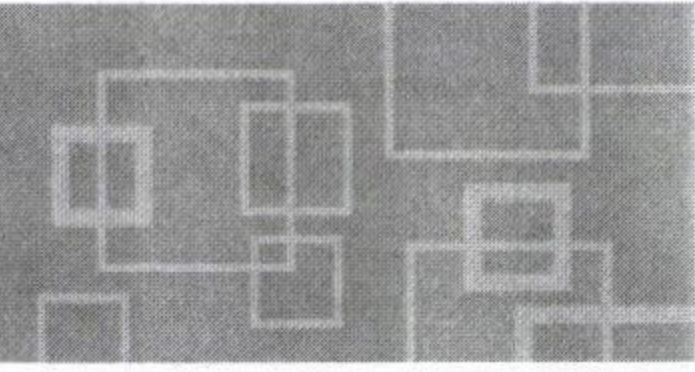
Privacy -please refer to your assessment manager for further details on the use of information recorded in this form.

OFFICE USE ONLY

Date Received

Reference Numbers

The *Sustainable Planning Act 2009* is administered by the Department of Infrastructure and Planning. This form and all other required application materials should be sent to your assessment manager and any referral agencies.



Development assessment checklist - IDAS checklist 1

(Sustainable Planning Act 2009, version 1.0 18 December 2009)

This checklist applies to the carrying out of development generally.

You are not required to complete this checklist as part of your development application, however you may submit the checklist with your application if you wish. The purpose of the checklist is to assist you in identifying:

- whether you need to make a development application for the proposed development
- if a development application is required, the relevant IDAS forms you need to complete as part of your application
- whether you need to give a copy of your application to any referral agencies.

If your development involves a material change of use, reconfiguring a lot or operational works, it is recommended that you complete *Material change of use - IDAS checklist 2*, *Reconfiguring a lot - IDAS checklist 3* or *Operational works - IDAS checklist 4*, as applicable.

If you are unsure how to answer any questions on this checklist, phone or visit your local government, or go to the Department of Infrastructure and Planning's website at www.dip.qld.gov.au.

All terms used in this checklist have the meaning given in the *Sustainable Planning Act 2009* or the *Sustainable Planning Regulation 2009*.

Part 1 - General questions

1.1 Have you received a referral agency response in relation to this proposed development prior to making an application?

☒ No	
☐ Yes	• To assist you in preparing your application, completing <i>Referral agency responses - IDAS checklist 6</i> is recommended

1.2 Do you wish the proposed development to be assessed against a superseded planning scheme?

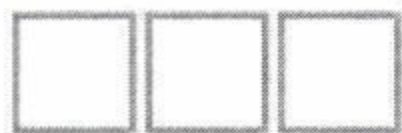
☒ No	
☐ Yes	• You must complete <i>Request to apply a superseded planning scheme - Sustainable Planning Act form 2</i> and give this notice to the relevant local government. If the local government agrees to your request, details must be provided in <i>Application details - IDAS form 1</i>

1.3 Does the proposal involve removing quarry material from a watercourse or lake for which an allocation notice is required under the *Water Act 2000*?

☒ No	
☐ Yes	• It is recommended that you complete part 2 of this checklist

1.4 Is any part of the proposed development intended to be carried out on a Queensland heritage place under the *Queensland Heritage Act 1992*?

☒ No	
☐ Yes	• It is recommended that you complete part 3 of this checklist

**1.5 Does the proposal involve development on a local heritage place?**

☒ No	
☐ Yes	• It is recommended that you complete part 4 of this checklist

1.6 Does the proposal involve an environmentally relevant activity, other than an agricultural ERA, a mining activity or a chapter 5A activity?

☒ No	
☐ Yes	• It is recommended that you complete part 5 of this checklist

1.7 Is any part of the development on strategic port land or airport land (other than development for a material change of use that is inconsistent with the land use plan for the strategic port land or airport land)

☒ No	
☐ Yes	• It is recommended that you complete part 6 of this checklist

1.8 Is any part of the development on land below a high water mark within the limits of a port under the *Transport Infrastructure Act 1994*?

☒ No	
☐ Yes	• It is recommended that you complete part 7 of this checklist

1.9 Is any part of the premises designated for community infrastructure?

☒ No	
☐ Yes	• It is recommended that you complete part 8 of this checklist

1.10 Does the proposal involve the establishment or expansion of a waste water disposal system?

☒ No	
☐ Yes	• It is recommended that you complete part 9 of this checklist

1.11 Is the development on land that adjoins a declared fish habitat area under the *Fisheries Act 1994*?

☒ No	
☐ Yes	• It is recommended that you complete part 10 of this checklist

Privacy - please refer to your assessment manager for further details on the use of information recorded in this checklist.

Disclaimer:

While the Department of Infrastructure and Planning (DIP) believes that this information contained on this checklist and provided as part of this process will be of assistance to you, it is provided on the basis that you will not rely on the information without first making your own enquiries regarding the interpretation and application of the applicable legislation to your circumstances.

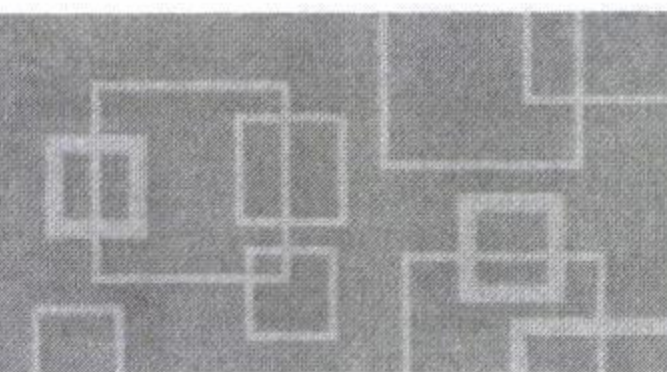
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OFFICE USE ONLY

Date received Reference numbers

The *Sustainable Planning Act 2009* is administered by the Department of Infrastructure and Planning.



Operational Works - IDAS Checklist 4

(Sustainable Planning Act 2009, version 1.0, 18 December 2009)

This checklist only applies when the development application seeks approval for operational works.

You should complete all questions unless the checklist indicates otherwise.

All planning and development applications require applicants to complete the following:

- Applicant details --IDAS form 1
- any forms or mandatory supporting information identified as forming part of your application.

If you are unsure of any answers to questions, phone or visit your local government, or go to the Department of Infrastructure and Planning's website, www.dip.qld.gov.au.

The checklist and relevant sections do not need to be completed for applications relating only to building work requiring assessment against *the Building Act 1975*.

Part 1 - General questions

1.1 Is the proposed operational work assessable under the planning scheme?

☐ No	
☒ Yes	- You must complete <i>Building and operational work assessable against a planning scheme - IDAS form 6</i> - Continue on to question 1.3

1.3 Is any part of the premises located in part of a future state-controlled road or within 100 metres of a state-controlled road?

☒ No	It is recommended that you complete part 2 (starting from question 2.1) of this checklist.
☐ Yes	It is recommended that you complete part 2 (starting from question 2.2) of this checklist.

1.4 Does State Planning Policy 2/02: Planning and Managing Development Involving Acid Sulfate Soils apply to the development?

☒ No	
☐ Yes	It is recommended that you complete part 3 of this checklist.

1.5 Is there any proposed operational work for filling or excavation?

☒ No	It is recommended that you complete part 4 (starting from question 4.5) of this checklist.
☐ Yes	It is recommended that you complete part 4 (starting from question 4.1) of this checklist.

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1.6 Is any of the proposed operational work listed in schedule 12 of the *Sustainable Planning Regulation 2009* and does it exceed the specified threshold?

☒ No	
☐ Yes	This application requires assessment by the Department of Transport and Main Roads as a concurrence agency

Section reference:

- Sustainable Planning Regulation 2009*, schedule 7, table 3, item 14

1.7 Is any of the proposed operational work listed in schedule 13 of the *Sustainable Planning Regulation 2009* and does it exceed the specified threshold?

☒ No	
☐ Yes	This application requires assessment by the Department of Transport and Main Roads as a concurrence agency

Section reference:

- Sustainable Planning Regulation 2009*, schedule 7, table 3, item 15

1.8 Is any part of the premises in an interim koala habitat protection area identified under the *South East Queensland Koala state planning regulatory provisions (SEQ Koala SPRP)*?

☒ No	
☐ Yes	It is recommended that you complete part 5 of this checklist.

1.9 Is any of the proposed operational work associated with reconfiguring a lot and the reconfiguration is also assessable?

☒ No	
☐ Yes	It is recommended that you complete part 6 of this checklist.

1.10 Does the *Vegetation Management Act 1999* apply to any of the proposed operational work for the clearing of native vegetation?

☒ No	
☐ Yes	It is recommended that you complete part 7 of this checklist.

1.11 Is any of the proposed operational work for any thing constructed or installed that allows, under the *Water Act 2000*, for taking or interfering with water from a watercourse, lake or spring (other than using a water truck to pump water; and other than under the *Water Act 2000*, section 20(2), (3) or (5), or from a dam constructed on a watercourse or lake?

☒ No	It is recommended that you complete part 8 (starting from question 8.8) of this checklist.
☐ Yes	It is recommended that you complete part 8 (starting from question 8.1) of this checklist.

1.12 Is any of the proposed operational work tidal work, other than excluded work defined under the *Sustainable Planning Regulation 2009*?

☒ No	
☐ Yes	It is recommended that you complete part 9 of this checklist.

☐	☐	☐
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1.13 Is any of the operational work proposed to be carried out within a coastal management district?

☒ No	
☐ Yes	• It is recommended that you complete part 10 of this checklist.

1.14 Is any of the proposed operational work for constructing or raising waterway barrier works under the Fisheries Act 1994?

☒ No	
☐ Yes	• It is recommended that you complete part 11 of this checklist.

1.15 Is any of the proposed operational work to be carried out completely or partly within a declared fish habitat area under the Fisheries Act 1994?

☒ No	
☐ Yes	• It is recommended that you complete part 12 of this checklist.

1.16 Is any of the proposed operational work removing, destroying or damaging marine plants under the Fisheries Act 1994?

☒ No	
☐ Yes	• It is recommended that you complete part 13 of this checklist.

1.17 Is any of the operational work proposed to be carried out in a wild river area declared under the Wild Rivers Act 2005?

☒ No	
☐ Yes	• It is recommended that you complete part 14 of this checklist.

1.18 Is any part of the premises located in part of a future state-controlled road or within 100 metres of a state-controlled road?

☒ No	
☐ Yes	• It is recommended that you complete part 15 of this checklist.

2.1 Is the proposed operational work for filling or excavating listed in the Sustainable Planning Regulation 2009 schedule 11 and does it exceed the threshold or combined threshold?

☒ No	• End of part 2 of this checklist.
☐ Yes	• This application requires assessment by the Department of Transport and Main Roads as a concurrence agency.

- End of part 2 of this checklist.

Section reference:

- Sustainable Planning Regulation 2009, schedule 7, table 3, items 1(b) and 2

4.5 Is any part of the premises subject to an easement in favour of the holder of Pipeline Licence Number 1 issued under the Petroleum Act 1923 for the construction or operation of the Moonie to Brisbane strategic pipeline?

☒ No	• End of part 4 of this checklist.
☐ Yes	• This application requires assessment by the pipeline licence holder as an advice agency.

☐	☐	☐
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8.8

Is any of the proposed operational work for any thing constructed or installed that allows, under the *Water Act 2000*, for taking or interfering with artesian water (other than using a water truck to pump water)?

☒ No	
☐ Yes	- You must complete <i>Taking artesian or sub-artesian water - IDAS form 12</i>. - This application requires assessment by the Department of Environment and Resource Management as a concurrence agency.

8.9

Is any of the proposed operational work for any thing constructed or installed that allows, under the *Water Act 2000*, for taking overland flow water (other than using a water truck to pump water)?

☒ No	Go to question 8.12.
☐ Yes	

8.12

Is any of the proposed operational work for any thing constructed or installed that allows, under the *Water Act 2000*, for taking or interfering with subartesian water (other than using a water truck to pump water)?

☒ No	Go to question 8.14
☐ Yes	

8.14

Does any of the proposed operational work for any thing constructed or installed that allows, under the *Water Act 2000*, for interfering with overland flow water (other than using a water truck to pump water)?

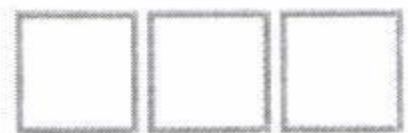
☒ No	Go to question 8.19
☐ Yes	

8.19

Is the proposed operational work for the following?

for the construction of a referable dam as defined under the <i>Water Supply (Safety and Reliability) Act 2008</i>	☐ Yes	☒ No
to increase the storage capacity of a referable dam by more than 10 per cent	☐ Yes	☒ No

- If yes to any of the above you must complete *Referable dam - IDAS form 16*.
- This application requires assessment by the Department of Environment and Resource Management (DERM). If DERM is not the assessment manager for the application, the role of the agency will be as a concurrence agency and you must give DERM a copy of the application



Notes for completing this form:

- *Applicant details - IDAS form 1 and Development application assessment - IDAS checklist 1* must be completed for all development applications to be considered.
- The *Sustainable Planning Act 2009* is administered by the Department of Infrastructure and Planning.

Privacy - please refer to the assessment manager for further details on the use of information recorded in this form.

Disclaimer:

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Urban Planning Report: Operational Works (Change Ground
Level – Retaining Walls)

81 CHRISTENSEN ROAD SOUTH, STAPYLTON

within

GOLD COAST CITY COUNCIL

for Multispan Australia Pty Ltd

April, 2012



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innovation ingenuity inspiration

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c o n s u l t i n g

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1. Executive Summary

SITE DETAILS	
ADDRESS	81 Christensen Road South, Stapylton QLD 4207
LOT ON PLAN	Lot 334 SP193431
PROPONENT	Multispan Australia Pty Ltd
JURISDICTION	Gold Coast City Council
RELEVANT PLANNING INSTRUMENT	Gold Coast Planning Scheme
ZONE	General Impact Business and Industry, Yatala Enterprise Area
APPLICABLE PLANNING CODES	Yatala Enterprise Area LAP Place Code Changes to Ground Level and Creation of New Waterbodies Bushfire Management Areas Natural Wetland Areas and Natural Waterways Sediment and Erosion Control Steep Slopes or Unstable Soils
DEVELOPMENT PROPOSAL DETAILS	
REFERRALS	None
APPLICATION TYPE	Development Permit for Operational Works (Change Ground Level – Retaining Walls)
LEVEL OF ASSESSMENT	Code Assessable
PROPOSAL	Operational works for a change to ground level – retaining walls
ASSESSMENT MANAGER/S	Gold Coast City Council
APPLICANT	Multispan Australia, c/- i ³ consulting pty ltd
CONTACT	c/- Luke Munro P – 07 3878 9100 i ³ consulting pty ltd F – 07 3878 9144 PO Box 909, Kenmore QLD 4069

2. Introduction

This planning report provides an assessment of operational works for a change to ground level – retaining walls at 81 Christensen Road South, Stapylton (Lot 334 SP193431) within Gold Coast City Council.

3. Site Description and Development Proposal Context

The subject site is designated for General Impact Business and Industry under the Gold Coast Planning Scheme and the application is code assessable against the relevant LAP and constraints codes. Development proposal responses to the code provisions are included in *Appendix B*. The site is surrounded by industrial uses and vacant land. The proposal is in accordance with the relevant code provisions and the intent of the planning scheme.

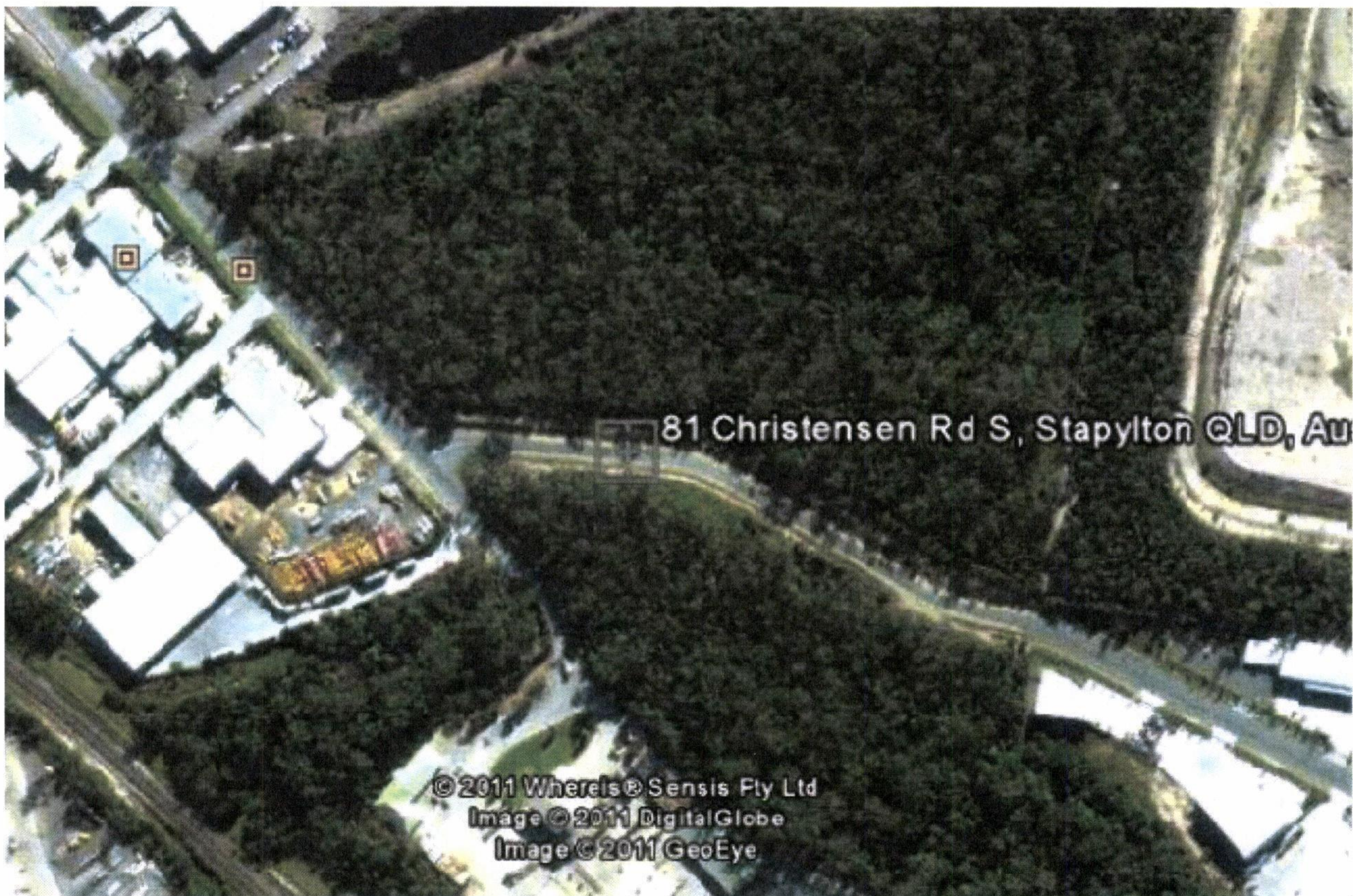


Figure 1: Aerial photo showing subject site in its development context.
Source: Google Earth 2011

4. **Statement of Compliance with Development Code Provisions**

The proposal is generally consistent with the provisions of the Gold Coast Planning Scheme and the LAP. A statement of compliance is included in *Appendix B* against planning code provisions.

5. **Referrals**

Referrals are not required as part of this application.

6. **Conclusion**

This application seeks Development Permits for operational works (Change Ground Level – Retaining Walls). The proposal is generally consistent with designated future land uses and current activity for the area, the intent of the Yatala Enterprise Area LAP and the relevant planning scheme provisions.

Appendix A – Development Plans

Drawings submitted by *i³ consulting pty ltd*

Document No:	Document Description
11-129-C04-A	Finished Surface Levels Plan – 1 (for information only)
11-129-C06-B	Stormwater Plan 1 (for information only)
RD/1204/S1	General Construction Notes
RD/1204/S1	Rockwall Detail with Concrete Footing and No fine Concrete behind wall
Bridging/01	Bridging Detail over Service Pip
Servicepipe/Parallel/01	Detail at Service Pipe Parallel to Rock Wall



Appendix B – Code Assessment

Yatala Enterprise Area LAP Place Code

Page 1 of 45

	a) low set buildings less than five metres high, a minimum setback of six metres; b) buildings less than eight metres in height, a minimum setback of ten metres; c) buildings eight metres or more in height, a minimum setback of 15 metres. All Precincts: AS4.3 Buildings are set back from both side boundaries a minimum of five metres, for a minimum of 30 metres from the frontage. AS4.4 The minimum rear setback is 1.5 metres, except where the site abuts a residential use or public open space, where the minimum setback is three metres.	Not applicable.
PC5 Vehicular crossings associated with the development must be designed and constructed to ensure: a) a safe footpath environment; b) safe vehicular access to the property; c) appropriate hydraulic performance of the stormwater infrastructure; d) no damage to vehicle or road infrastructure; e) minimal loss of on-street parking spaces; f) continued amenity of the neighbourhood.	AS5 The vehicular crossing is provided and designed in accordance with Part 10, Division 1 Standard Drawings: ☐ ☐ Drawing No. 59213 (Rural Access with Pipe Crossing); ☐ ☐ Drawing No. 59217 (Driveway and Verges Low Density Residential); ☐ ☐ Drawing No. 59218 (Driveways Industrial, Commercial and Multi-Unit Residential). Note: All vehicular crossings require an approval in accordance with Local Law No 11 - Roads and Malls.	Not applicable.
PC6 The height of buildings is to be consistent with the role of the YEA as a predominantly industrial use area. Buildings are to be constructed to a height that complements the surrounding built form and the local landscape character.	AS6 The maximum height of buildings does not exceed three storeys.	Not applicable.
PC7 All buildings must be sited to complement the industrial character and the predominant built form of the surrounding area and to reduce potential conflicts between uses having regard to a site analysis, prepared in accordance with Planning Scheme Policy	AS7.1 No acceptable solution provided.	Not applicable.

17 - Site Analysis.		
PC8 The layout of the site must provide a clear separation between the public access areas and the areas set aside for servicing the building.	AS8 No acceptable solution provided.	Not applicable.
PC9 Industrial structures, storage or service areas, which are likely to appear visually dominating or unsightly, are located to the rear or sides of sites or are otherwise designed and screened to enhance their appearance, when viewed from the street.	AS9 No acceptable solution provided.	Not applicable.
PC10 Buildings are sited and designed such that suitable external spaces remain available for future expansion of buildings, and internal spaces are of a size and shape suited to variable internal layout, maximum vertical storage and addition of mezzanine floors.	AS10.1 Building shapes are regular so as to provide opportunities for future expansion in different directions, and for flexibility in internal location of activities and equipment. AS10.2 Internal column spacing and column heights are generous (for example, building spans of 18 metres and over, bay spacing of 12-18 metres, and column heights of at least eight metres).	Not applicable. Not applicable.
PC11 Buildings are sited and designed to suit climatic conditions.	AS11.1 Wherever practicable, buildings are oriented to the north east to take advantage of summer breezes and winter sun. Western aspects are avoided, wherever possible. AS11.2 Where not air conditioned, buildings incorporate a maximum of openings (ie. louvring, windows, doorways) on eastern walls. AS11.3 Windows are minimised and trees are planted along west walls for protection from hot afternoon sun. AS11.4 Shading devices (ie: large roof overhangs, window hoods/blinds, awnings and verandahs) are attached to buildings on all sides, particularly eastern and western	Not applicable. Not applicable. Not applicable. Not applicable.

	sides. Where possible, shading devices are retractable on northern sides during winter. AS11.5 Semi-enclosed workstations, where relatively strenuous manual labour takes place, are located in the cooler and more ventilated parts of the building.	Not applicable.
PC12 All buildings must be designed and constructed to a high aesthetic standard and to complement or enhance the local character of the YEA.	AS12.1 The massing and proportions of new industrial buildings are consistent with those of adjoining industrial buildings. AS12.2 Building materials, patterns, textures and colours used in new buildings are complementary to those of nearby buildings.	Not applicable. Not applicable.
PC13 Building design and appearance must be conducive to the safety and comfort of all building users.	AS13.1 Glass which forms all or part of any external wall of a building does not exceed a maximum degree of reflection of both heat and light of 20%. The glass area does not exceed 60% of the total area of the external wall. AS13.2 Entrances to premises are clearly visible from the street, and are not obscured or dominated by car parking.	Not applicable. Not applicable.
PC14 All ground level parking is to be suitably landscaped to provide an attractive and pleasant outlook and shade for parked vehicles, and to contribute towards the quality presentation of new developments.	AS14.1 Significant trees are preserved and incorporated into car parking areas. AS14.2 Landscaped bays for the planting of shade trees are provided at regular intervals throughout car parking areas, at the rate of one landscaped bay per 40 vehicle parking bays or one large shade tree per ten parking spaces. Landscape bays have the same dimensions as a vehicle parking space. AS14.3	Not applicable. Not applicable. Not applicable.

	Large car parking areas and all heavy/service vehicle parking are situated to the side or rear of sites. Smaller car parking areas, particularly for short term and disabled parking, may be located to the front of sites. AS14.4 Car parking areas located in frontage setback areas are set back behind a minimum three metre landscaped buffer to the frontages. To reduce their visual impact, front car parking areas may be lowered and mounds incorporated in frontage landscaping.	Not applicable.
PC15 Those developments visible from the Pacific Motorway or the Gold Coast City Rail Line must exhibit a high standard of architectural presentation.	AS15.1.1 Facades visible from the Pacific Motorway or the Gold Coast City Rail Line are designed to incorporate: a) materials such as glass, brick and coloured/textured block work (standard concrete block should not be used). If metal cladding is used, it should be pre-coated in an appropriate colour and have some form of relief; b) relatively unobtrusive, earth toned colours, such as subdued greens, blues, browns and greys (bright colours and/or materials which cause glare are avoided); c) horizontal/vertical articulation of walls at least at 15 metre intervals; d) 'humanising' elements, such as entry forecourts, porticos, verandahs, windows, awnings and fenestration; e) other features which contribute to an interesting and attractive appearance. These design features are to be applied to the main facade facing the relevant roads/railway, as well as along a brief return or the full length of side walls. OR AS15.1.2 A landscaped buffer is provided to the Pacific Motorway or to the Rail Line. Where conservation areas or links are established along the relevant road/railway frontages, such that development behind will be largely screened by vegetation, the design requirements of AS13.1.1 need not be met.	Not applicable. Not applicable.



PC16 Advertising signage does not dominate the visual amenity of the area.	AS16 No advertising, freestanding or otherwise, is erected which would be readily visible from the Pacific Motorway or the Gold Coast City Rail Line.	Not applicable.
PC17 Signs and other forms of advertising on business/industry premises are kept to a minimum. Any advertising relates directly to the activity/process conducted on the premises, rather than general product advertisements.	AS17.1 There is one sign per premises. Multi-unit developments display a single index sign at the entrance to the development which details each occupant, its activity/process and respective unit number. AS17.2 The design and construction of signs meets the following parameters: a) signs are situated near site entries and are well placed for viewing by pedestrians and drivers; b) free-standing signs have a maximum area of 3m²; c) signs on facades have a maximum area of 5m²; d) signs utilise company logos or symbolic representations for quick and easy identification; e) wording on signs is limited to the name, location, business and products of the establishment; f) signs do not utilise fluorescent paints; g) signs do not rotate, flash or move; h) signs are integrated with the form of development and are not visually dominating. AS17.3 All signs are consistent with the provisions for the Industry 2 Domain set out in Specific Development Code 2 - Advertising Devices.	Not applicable. Not applicable. Not applicable.
PC18 Identified conservation areas remain in a substantially undeveloped condition, with vegetation retained to the fullest extent possible and, where necessary, rehabilitated using local native species.	AS18.1 Areas identified as Conservation on LAP Map 29.3 - Conservation Areas and Priorities are reserved for conservation purposes, through: a) transfer to Council; b) dedication of a conservation easement; or c) reservation of an area of the site as open space.	Not applicable.

	AS18.2 Reserved Conservation Areas are managed in the following manner: a) the land remains largely undisturbed by any buildings, clearing and earthworks; b) rehabilitation of natural features is undertaken, where necessary, particularly by way of revegetation of any previously cleared areas and stabilisation of any eroding banks of watercourses	Not applicable.
	AS18.3 In Conservation Areas associated with the Albert River and Sandy and Halfway Creeks, there is no discharge of waste water or contaminants or piped discharge of stormwater. Any development within the catchment of these waterways retains natural drainage patterns as far as possible, and utilises appropriate stormwater management techniques to minimise any increase in the volume, velocity or sedimentation of runoff into the river or creeks.	Not applicable.
	AS18.4 For linear Conservation Areas, any parallel roads or services are grouped on one side of the corridor to minimise disturbance. Fencing through Conservation Areas is avoided, wherever possible. Any breaks in the vegetation canopy, necessary for roads or services, are minimised by cutting through perpendicular to the corridor at a point where damage and discontinuity are minimised, such as where the canopy is already broken or sparse.	Not applicable.
	AS18.5 On land adjacent to Conservation Areas, buildings, clearing and earthworks are sited as far away as practicable from reserved Conservation Areas, with the greatest possible separation in the case of ridges, gullies and watercourses.	Not applicable.
	AS18.6	Not applicable.

	Existing trees are retained, and additional trees planted within a 40 metre wide band, generally along the lines of the links identified on LAP Map 29.3 – Conservation Areas and Priorities : a) the links may form part of the landscape open space areas, associated with individual development proposals. If so, they should generally remain free of building and earthworks; additional tree planting utilises species similar to those existing naturally in the area; b) any parallel roads or services are grouped on one side of the link, to minimise disturbance; c) any breaks in the vegetation canopy, necessary for roads or services, are minimised by cutting through perpendicular to the link at a point where damage and discontinuity are minimised, such as where the canopy is already broken or sparse.	
PC19 In areas identified as Other Open Space on LAP Map 29.3 - Conservation Areas and Priorities as having open space values, development is of a limited scale and intensity, compatible with retention of habitat, landscape and/or buffer values.	AS19 No acceptable solution provided.	Not applicable.
PC20 Other areas within sites (not identified on LAP Map 29.3 - Conservation Areas and Priorities), with natural features, such as stands of remnant vegetation, gullies/ridges and watercourses, are to be incorporated in the open space/landscape areas associated with individual development proposals. Other features of ecological and/or landscape values are to be protected and enhanced, where practicable.	AS20 In these areas, existing vegetation and natural drainage patterns are retained and rehabilitated using local native species, as far as practical.	Not applicable.
PC21 Riparian areas include vegetated buffers of sufficient width to operate as wildlife corridors.	AS21 The following minimum buffer widths are provided: a) 50 metres from the top of the bank on either side of Sandy Creek; b) 50 metres from the top of the bank on the south side of Halfway Creek, west of the Pacific Motorway; c) 100 metres from the top of the bank on the north side of Halfway Creek, west of the Pacific Motorway, for fauna	Consistent with AS21. A 50m minimum buffer width is provided to Sandy Creek.

	corridor purposes; d) ten metres from the top of the bank on either side of Halfway Creek, east of the Pacific Motorway.	
PC22 Landscape design is used to enhance the landscape character of the YEA.	AS22.1 At least 20% of the total site area is landscaped and maintained as open space. AS22.2 Frontage setback areas are attractively landscaped, including: a) at least 25% of the frontage having a landscaped buffer of minimum five metres depth and the remainder, excluding access ways, a landscape buffer of minimum three metres depth; b) one metre landscaped area adjacent to building walls facing the street. AS22.3 Planting of shade trees occurs along pathways, throughout car parking areas and in any other exposed areas where relief from sun and glare would be beneficial. AS22.4 Dwarf walls prevent vehicles breaching landscaped areas along frontages. AS22.5 Screen planting, utilising an appropriate mix of tall trees and lower level shrubs, is used around outdoor parking, equipment, storage and other unsightly areas, particularly where visible from roads. AS22.6 Landscape Design includes: a) provision of pleasant, shaded areas with appropriate furniture for lunch/relaxation areas for workers and visitors; b) retention of existing mature vegetation, wherever	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.

	possible; c) retention of existing natural drainage channels and planting to strengthen their resistance to erosion d) especially where proposed development is expected to result in increased volume and velocity of stormwater runoff; e) use of garden edges, lines of trees and mass planting to frame pathways and define site and building entries.	
PC23 Potentially obtrusive noise, odour and visual impacts are effectively buffered.	AS23.1.1 Development incorporates landscape buffers, earth mounds and acoustic fencing appropriate to the likely off-site impacts of particular developments. OR AS23.1.2 A landscape buffer of a 20 metre width, densely planted with shrubs and trees, is provided along the relevant frontage. A landscape buffer to a minimum width of ten metres may be acceptable, depending on the potential of proposed planting arrangements to effectively screen development behind. Species selection, use of mature or semi mature trees, and density of planting will be important in this respect.	Not applicable.
PC24 The street side environment and other public spaces are developed to enhance their visual appeal and create a physical continuity and legibility throughout the YEA area and its component precincts.	AS24 Individual developments contribute to streetscape enhancement work (including street tree planting, paving, landscaping of traffic islands and provision of street lighting and furniture), in accordance with any adopted Council streetscape strategy.	Not applicable.
PC25 Public open spaces are developed to enhance their recreational amenity for workers and visitors to the Yatala area and the wider community.	AS25 Individual developments contribute (through works or financial contribution) towards construction of footpaths and cycle ways, seating, picnic facilities, play areas and/or other facilities in existing public open spaces and additional spaces established as a result of the development.	Not applicable.
PC26 Landscape design contributes to the creation of a distinctive,	AS26.1 Street design and plantings and major pedestrian paths are	Not applicable.

memorable and legible town centre, local centres and surrounding suburban areas for YEA.	aligned to take advantage of attractive local and distant views (eg, views to the mountains or other important landscape elements). AS26.2 Footpath paving treatments and street furniture integrate with adjoining development, and setback areas are integrated with public footpaths. AS26.3 Landscape plantings utilise local native species to promote a distinctive YEA or Albert Corridor character.	Not applicable. Not applicable.																					
PC27 Open space and pedestrian areas are to be designed to be both functional and safe.	AS27 Development is designed to ensure a high degree of casual surveillance from nearby residents, employees or passing traffic, public and semi-public spaces, pedestrian and cyclist paths, car parking areas and building entrances.	Not applicable.																					
PC28 All ground level car parking, open space and buffer areas must be landscaped and maintained to complement the character of the local area, and any adjoining residential or public open space areas.	AS28 The car park area, open space and buffer areas of the lot are landscaped with landscape design and use of plant species generally consistent with that of adjacent and nearby lots. The landscape design may incorporate extensive paved areas for pedestrian use.	Not applicable.																					
PC29 All lots are to be of sufficient size to comfortably accommodate the type of development envisaged in the LAP and the relevant precinct intent.	AS29 Any new lots created are sized in accordance with the following schedule: <table> <thead> <tr> <th>PRECINCT</th><th>MIN AREA</th><th>AVE AREA</th></tr> </thead> <tbody> <tr> <td>1</td><td>4,000m²</td><td>1 hectare</td></tr> <tr> <td>2</td><td>2,000m²</td><td>4,000m²</td></tr> <tr> <td>3</td><td>2 hectares</td><td>2 hectares</td></tr> <tr> <td>4</td><td>20 hectares</td><td>20 hectares</td></tr> <tr> <td>5</td><td>2 hectares</td><td>2 hectares</td></tr> <tr> <td>6</td><td>20 hectares</td><td>20 hectares</td></tr> </tbody> </table>	PRECINCT	MIN AREA	AVE AREA	1	4,000m ²	1 hectare	2	2,000m ²	4,000m ²	3	2 hectares	2 hectares	4	20 hectares	20 hectares	5	2 hectares	2 hectares	6	20 hectares	20 hectares	Not applicable.
PRECINCT	MIN AREA	AVE AREA																					
1	4,000m ²	1 hectare																					
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3	2 hectares	2 hectares																					
4	20 hectares	20 hectares																					
5	2 hectares	2 hectares																					
6	20 hectares	20 hectares																					
PC30 Allotments prior to development have suitable topography for industry.	AS30 Industrial allotments generally have a ground slope not greater than 10%, and access ways associated with battle axe allotments generally have a ground slope not greater than 16%.	Not applicable.																					

PC31 Allotments are of regular shapes suited to the intended uses, and allowing design flexibility, efficient development and access.	AS31.1 Development generally incorporates all of the following features: (a) allotments that are rectangular shapes; (b) allotments which have frontage to depth ratios between 1:2 and 1:4. OR AS31.2 Alternative allotment shapes are provided where warranted, due to: a) the special site requirements of particular industries; and/or b) exceptional physical constraints. OR AS31.3 The development incorporates a small proportion of battle axe allotments, where particular industries have special requirements for square or long and narrow sites. (Battle-axe allotments are useful for creating allotments of such shapes, as well as reducing road frontage construction costs and providing appropriate sites for visually offensive industries.)	Not applicable.
PC32 Allotments are oriented to suit climatic conditions.	AS32 Allotments are arranged in a manner that maximizes the number of allotments oriented to the north east to take advantage of breezes and enable optimal building orientation for energy efficiency and use of natural lighting.	Not applicable.
PC33 Reconfiguration of land incorporates open space provision in a way which takes account of the location and attributes of the site and its surrounds, and the need to set aside certain areas for purposes such as: a) conservation of vegetation/habitat; b) retention of creek corridors and natural drainage patterns;	AS33.1 Where reconfiguration takes place, an area of up to 10% of the site is provided as open space. This open space is set aside for public park or conservation purposes, developed with pathways and/or recreational facilities, landscaped and/or rehabilitated to its natural state.	Not applicable.



c) provision of pedestrian/cycle linkages and recreational facilities; and/or d) creation of landscaped entrances, focal points and streetscape.	AS34.2 Reconfiguration proposals incorporate a plan showing street planting to be undertaken. Planting themes contribute to the overall streetscape character of the estate.	
PC34 Reconfiguration may take place in the form of Community Title subdivision, allowing for sharing of space, facilities and services, while at the same time ensuring allotments created are suited to the intended businesses/industries.	AS34 Community Title subdivisions are provided, which: a) are consistent with the Acceptable Solutions for PCs 30-34 ; b) generally maintain a minimum lot size of 100-200m ² within a minimum overall site area of 2,000m ² ; c) are not used for heavy manufacturing, metal/food processing, or noxious, offensive or hazardous industries.	Not applicable.
PC35 Roads are provided so as to form a road hierarchy, with each road serving a particular function according to the intended land use characteristics of the estate, expected traffic volumes and types, and external existing and future road linkages to anticipated development on adjoining lots.	AS35.1 Concept plans submitted with reconfiguration and/or development applications identify all roads proposed to be upgraded and/or newly constructed and their intended function within a road hierarchy. AS35.2 Concept plans submitted with reconfiguration and/or development applications identify road connections with adjacent allotments that will promote connectivity; and AS35.3 Proposed road hierarchies are consistent with hierarchy identified on LAP Map 29.5 – Transport Infrastructure .	Not applicable. Not applicable. Not applicable.
PC36 The width, pavement, curvature, sight distances, intersections, turning radii and design features of roads convey the particular function of each road with the hierarchy mentioned in AS36.3 , and reflect the nature of traffic management. In particular, road design ensures the safe movement of heavy articulated vehicles.	AS36.1 Road design and construction is in accordance with Planning Scheme Policy 11 - Land Development Guidelines and the Table to this Acceptable Solution. AS36.2 Distances between intersections are not less than 60 metres.	Not applicable. Not applicable.

	AS36.3 Streets intersect at right angles, or as near as topography or other limiting factors permit. AS36.4 Various vehicle control devices are used to regulate traffic speed and enhance pedestrian safety (such as traffic lights and illuminated pedestrian crossings). AS36.5 Paving surfaces, landscape treatment and signage are used to define entrances to the estate and joint use areas within the estate AS36.6 Road pavements are designed and constructed for long life, hard wearing and suitability to the load capacity of expected vehicles. AS36.7 Median strips, roundabouts and footpaths are to be aesthetically treated and planted and paved accordingly; and AS36.8 The design of road networks avoids the use of culs-de-sac.	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
PC37 The alignment of roads reflects the physical land characteristics, and provides adequate drainage and safety.	AS37.1 Road drainage is designed and situated along natural drainage courses. AS37.2 Road grades are established to avoid excessive grading, indiscriminate removal of ground cover and tree growth, and unnecessary topographical levelling.	Not applicable. Not applicable.
PC38 A network of pedestrian paths and cycleways is provided which	AS38.1 Concept plans submitted with reconfiguration and/or	Not applicable.

considers: a) expected levels of pedestrian and cyclist activity; b) linkages between public transport, major employment activities, and parks; c) recreation opportunities along open space corridors; d) safe integration of users and vehicles, particularly at intersections; e) provision of end-of-journey facilities.	development applications identify all footpaths and, where appropriate, cycle paths proposed to be upgraded and/or newly constructed. AS38.2 Footpaths are provided as follows: a) throughout the main strip of Yatala township; b) on at least one side of all major industrial roads, shown on LAP Map 29.5 - Transport Infrastructure; c) as specified in any relevant Council adopted strategy. AS38.3 Cycle paths are provided along major open space corridors, such as alongside the Albert River and Upper and Lower Sandy Creek, or as specified in any relevant adopted Council strategy. AS38.4 Paths are designed and constructed in accordance with Council standards and AUSTROADS Part B. AS38.5 Features such as signs, road markings, lighting, paving, bollards and street furniture are provided to enhance the safety and amenity of foot/cycle paths. AS38.6 Individual establishments, particularly those with 100 employees or more, provide bike racks, showers/change rooms, and other-end-of journey facilities.	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
PC39 The road network is designed to accommodate the extension and integration of the public transport system, with accessible linkages and routes and stops providing for passenger comfort without obstructing traffic flow.	AS39.1 Bus routes are located along the major industrial roads shown on LAP Map 29.5 – Transport Infrastructure, or as specified by Council's City Transport Plan. AS39.2 Road design and construction incorporates bus lay-bys and	Not applicable. Not applicable.

	sheltered passenger waiting areas at regular intervals along bus routes, or as specified in any relevant Council strategy.	
PC40 Site access is designed and constructed to provide for the safe ingress/egress of vehicles to the site.	AS40 Vehicular access to the site is designed and constructed in accordance with Council, Department of Main Roads and AUSTROAD standards, and/or the following minimum requirements: a) comprises a single vehicular driveway (entrance/exit), wherever possible; b) is not closer than ten metres to an intersecting street on the same side of the street; c) provides a minimum sight distance of 110 metres; d) shares adjoining property access driveways, wherever possible; e) always enters the street at right angles; f) where the site has frontage to two roads, access is taken off the secondary/minor road, if possible.	Not applicable.
PC41 Treatment of access points to the site maintains appropriate sight distances and visually enhances its identification.	AS41 Access points incorporate decorative paving treatment and landscaping which distinguishes the access point, but which does not obstruct the safe sight distance requirements outlined above.	Not applicable.
PC42 Provision is made for safe pedestrian and disabled access.	AS42.1 Pedestrian paths designed for disabled access are provided between building entrances, public footpaths and car parking areas. AS42.2 Pedestrian paths are separated from vehicular driveways.	Not applicable. Not applicable.
PC43 The proposed use must not detract from the amenity of the local area, having regard, but not limited, to the impact of: a) noise; b) hours of operation; c) traffic; d) lighting; e) signage;	AS43 No acceptable solution provided.	Not applicable.

f) visual amenity; g) privacy; h) odour and emissions.		
PC44 The proposed development must take into account and seek to ameliorate any negative aspects of the existing amenity of the local area, having regard, but not limited, to the existing impact of: a) noise; b) hours of operation; c) traffic; d) lighting; e) signage; f) visual amenity; g) privacy; h) odour and emissions.	AS44 No acceptable solution provided.	Not applicable.
PC45 Conflicts between urban and rural uses are to be avoided by effective development design.	AS45 The development of land adjacent to the agricultural character areas includes a suitable buffer.	Not applicable.
PC46 Extractive industry operations are managed to make effective use of the extractive resource, while containing any impacts on the subject site.	AS46 The extractive industry is managed and developed consistent with the Extractive Industry Domain Place Code.	Not applicable.
PC47 Internal driveways are provided for safe and easy manoeuvring of vehicles.	AS47.1 Internal driveways are designed and constructed to enable all vehicles to enter and exit the site in a forward motion. AS47.2 Minimum driveway widths are as follows: a) six metres to accommodate non-articulated vehicles; b) nine metres to accommodate articulated vehicles; c) 4.5 metres for one-way driveways.	Not applicable. Not applicable.
PC48 On-site vehicle parking is provided to meet expected demand, having regard to: a) the size of the proposed workforce; b) the likely number of visitors to the site; c) the likely size and number of service and transport vehicles to be	AS48.1 The number of car parking spaces provided on- site generally meets the standards set out in Constraint Code 4 - Car Parking, Access and Transport Integration . AS48.2	Not applicable. Not applicable.

on the site at any one time; d) on-site parking and loading/unloading activities within sites; e) the availability of conveniently located onstreet parking; f) any possible future expansion, redevelopment or change of use.	For multi-unit or multi-use developments, the total car parking provided is an aggregate of the standard parking required for each individual unit and/or component use. AS48.3 A lesser provision may be acceptable where it can be demonstrated, to Council's satisfaction, that the parking needs of a particular development will be adequately met. Where less than the standard amount of parking is provided, the left over space is retained as landscaped open space and placed so as to be suited to ready conversion to additional parking, should the use of the site change and/or the actual car parking demand rise.	Not applicable.
PC49 On-site vehicle parking is located: a) to allow easy access to building entrances; b) to provide visitor spaces for short term/high turnover use clearly visible from the street and signposted accordingly; c) to be adequately screened from the street; d) compatible with surrounding development and, where possible, facilitating shared use with adjacent land users.	AS49.1 In areas where visual amenity is important and/or where relatively large amounts of parking are provided, parking areas are generally situated to the rear or side of the site. In particular, employee parking is situated at the rear of the site, with staff entrances at the rear of the building. AS49.2 Some parking may be located toward the front of the site convenient to the street, provided it is behind landscaping strips and treated aesthetically. AS49.3 Short term/high turnover visitor parking and disabled parking spaces are located close to the main building entrance and clearly signposted. AS49.4 Driveways and parking areas may be constructed to property boundaries and linked to adjoining car parking areas. Similarly, loading areas may be located to facilitate shared turning areas across property boundaries.	Not applicable. Not applicable. Not applicable. Not applicable.
PC50 All loading and unloading activities take place onsite, unless access is from a service street and effectively screened.	AS50 Loading docks are located in the side or rear portions of the site, separate from public/visitor parking and access	Not applicable.



	points, and screened by vegetation or walls to avoid public view.	
PC51 Adequate provision is made for on-site manoeuvring of heavy vehicles.	AS51.1 On sites over 4,000m² and/or where the uses thereon involve regular servicing by heavy vehicles, on-site service areas are provided. On-site service areas comprise an area of land with an appropriate hard surface to enable a heavy vehicle to turn around within the site (based on standard design turning templates given by AUSTROADS AS 2890.1, 2890.2), and space for additional service vehicle parking and storage requirements. AS51.2 It may be acceptable for two or more developments to share heavy vehicle turning areas.	Not applicable. Not applicable.
PC52 The design and provision of water, stormwater drainage, sewerage, electricity, gas and communications networks meets the needs of industry and business, and provides an orderly and economic progression of service development in the region.	AS52.1 The design and supply of water, stormwater drainage, sewerage, electricity, gas and communication services is in accordance with the requirements of Planning Scheme Policy 11 – Land Development Guidelines and the responsible authority (eg. Telstra, Queensland Electricity Boards, and Queensland Emergency Services). AS52.2 Car park entrances and ramps, loading docks and access ways are minimised, suitably designed and treated to ensure that they do not adversely impact on the streetscape and adjoining development.	Not applicable. Not applicable.
PC53 Conflicts between pedestrians and vehicles at entrance points to parking areas are to be minimised.	AS53.1 The number of vehicle entry points to a development site is minimised, particularly in areas which have high volumes of pedestrian traffic and on streets with a significant through road function. AS53.2 Entrance points to parking and loading areas have clear and unobstructed visibility of pedestrian pathway areas,	Not applicable. Not applicable.



	with pedestrian crossing points clearly identified which give priority to pedestrians.	
PC54 Development is to be designed to support the functional operation of the cycle network.	AS54 Development is designed to support the functional operation of the local and regional cycleway system. (Local cycle ways will be determined at time of subdivision of each development.).	Not applicable.
PC55 Commercial developments are to include public convenience facilities, where there is a need for their provision.	AS55 Where provided, public toilet facilities are open and readily accessible to the general public during retail trading hours or other trading hours relevant to the development.	Not applicable.

Natural Wetland Areas and Natural Waterways

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIANCE
PC1 Prior to commencing the development design: a) the ecological features and functions located on and/or adjacent to the site must be identified and assessed; b) any ecologically significant areas, including any wetland, aquatic and riparian areas, or degraded areas suitable for rehabilitation to become ecologically significant, and located on and/or adjacent to the site, must be identified.	AS1 An ecological assessment is prepared by a suitably qualified and experienced person in accordance with Planning Scheme Policy 8- Guidelines for Preparing Ecological Site Assessments during the Development Process.	Not applicable.
PC2 Ecologically significant areas must be protected and maintained.	AS2 Development does not occur within an ecologically significant area, including wetlands, aquatic and riparian communities.	Complies with AS2. Proposal provides a suitable buffer distance to Sandy Creek.
PC3 Ecologically significant areas must not be negatively impacted upon, either directly or indirectly, by activity resulting from the establishment and operation of the development.	AS3 No acceptable solution provided.	Complies with AS3. A suitable buffer to Sandy Creek protects its environmental values.
PC4 All development (including structures, fill, infrastructure and services) must be set back from any ecologically significant areas, including wetlands, aquatic and riparian communities, to enable: a) the continued ecological function of the area; and b) access to the area for maintenance and management purposes.	PC4 No acceptable solution provided.	Complies with PC4.
PC5 The degraded wetland and waterway areas, ecological corridors and buffer areas that are important to the viability of ecologically significant areas must be rehabilitated as near as is practical to the naturally occurring composition of plant species, and respond to the habitat requirements of fauna.	AS5.1 The degraded area identified in the approved Ecological Site Assessment as requiring rehabilitation is rehabilitated in accordance with an approved Rehabilitation Plan utilising local endemic species and stock that: a) reflects the species composition of native remnant vegetation on the site or surrounds; b) consolidates existing habitats on the site; c) does not displace native flora species or degrade fauna habitat.	Not applicable.



PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIANCE
	AS5.2 A detailed Landscape Plan, incorporating the rehabilitation, is prepared in accordance with Planning Scheme Policy 13 – Landscape Strategy Part 2 - Landscape Works Documentation Manual .	Not applicable.
PC6 The natural hydrological regimes of wetlands and waterways, including natural water quality, quantity and groundwater conditions, must be maintained and enhanced.	AS6 A Stormwater Management Plan which is prepared for the site in accordance with the Stormwater Management and Water Quality Guidelines demonstrates that: a) stormwater is treated prior to discharge into the wetland or waterway; b) stormwater is discharged at appropriate areas of the waterway; c) the velocity and quality of stormwater to be discharged into the wetland or waterway does not degrade the environmental values of the wetland or waterway; d) the development will not impact on the geohydrology affecting the wetland or waterway.	Consistent with AS6. Stormwater discharge is treated with an existing stormwater detention basin.
PC7 The ecologically significant areas must be buffered from effluent/irrigation treatment plants/disposal areas to ensure that suitable areas are provided for the treatment of wastewater, prior to entering into the existing groundwater system and adjoining waterway and wetland areas.	AS7 Where development is proposed to occur on unsewered land, any on –site wastewater disposal facility is to comply with the requirements of Part 7, Division 3, Chapter 17 – Unsewered Land Constraint Code .	Not applicable.
PC8 Buffers must be provided incorporating development setback/s of dimensions and characteristics that will ensure that the development does not result in a negative impact upon the long-term viability of the ecologically significant areas (including any wetland, aquatic and riparian communities) located on and/or adjacent to the site. Vegetated buffers should also include groundcover and shrubs, where the natural constraints of the site allow this.	AS8.1.1 Buffer/s of not less than 100 metres width, incorporating vegetated and degraded areas requiring rehabilitation, are provided between the development and a freshwater or tidal wetland and associated riparian communities, as identified on Overlay Map OM11 - Natural Wetland and Waterway Areas . OR AS8.1.2 Buffer/s are provided of dimensions and characteristics that	Consistent with AS8.1.1 to AS8.6.1. Proposal complies with existing subdivision buffer distances.

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIANCE
	will protect the long-term viability of any freshwater or tidal wetlands and their associated riparian communities, as identified on Overlay Map OM11 – Natural Wetland Areas and Natural Waterways, in accordance with expert ecological advice provided as part of the Ecological Site Assessment. OR AS8.1.3 Buffer/s of not less than 60 metres width, incorporating vegetated and degraded areas requiring rehabilitation, are provided between the development and a waterway identified as a Major Linkage (Water Based) and associated riparian communities, as identified on Overlay Map OM11 - Natural Wetland Areas and Waterways. OR AS8.1.4 Buffer/s are provided of dimensions and characteristics that will protect the long-term viability of Major Linkages (Water Based) and associated riparian communities as identified on Overlay Map OM11 - Natural Wetland Areas and Natural Waterways, in accordance with expert ecological advice provided as part of the approved Ecological Site Assessment. OR AS8.1.5 Buffer/s are provided of 30 metres width, incorporating vegetated and degraded areas requiring rehabilitation, between the development and any waterways identified as an Other Natural Waterway and associated riparian communities, as identified on Overlap Map OM11 - Natural Wetland and Waterway Areas. OR AS8.1.6	



PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIANCE
	Buffer/s, of dimensions and characteristics that will protect the long-term viability of any Other Natural Waterways and their associated riparian communities, as identified on Overlay Map OM11 - Natural Wetland and Waterways, are in accordance with expert ecological advice provided as part of the approved Ecological Site Assessment. Note: The buffer width for wetlands is measured from the outer, landward boundary of the mapped Freshwater or Tidal Wetland, as shown on Overlay Map OM11 – Natural Wetland Areas and Natural Waterways, or as defined through an approved Ecological Assessment The buffer width, on each side of the waterway, is measured from the top of the high bank or from the outer landward boundary of a mapped riparian community, as shown on Overlay Map OM11- Natural Wetland Areas and Natural Waterways, or as defined through an approved Ecological Assessment.	
PC9 Ecological corridors must be provided of dimensions and characteristics that can be demonstrated will effectively link ecologically significant areas on and/or adjacent to the site, in order to facilitate the effective movement of flora and fauna using the site and surrounds.	AS9.1 Ecological corridors of not less than 100 metres are provided on-site and link ecologically significant areas either within or adjacent to the site. AS9.2 Ecological corridors of dimensions and characteristics that are sufficient to facilitate the movement of flora and fauna between ecologically significant areas located on and/or adjacent to the site are provided in accordance with expert ecological advice provided as part of the approved Ecological Site Assessment	Not applicable. Not applicable.
PC10 Management arrangements must facilitate the conservation and protection of ecologically significant areas, ecological corridors and buffers.	AS10.1 Ecologically significant areas, buffers and ecological corridors, identified in the Ecological Assessment, are: a) dedicated as Public Open Space, where required for public access or for some other public purpose consistent with their ecological values and functions; or b) incorporated within Private Open Space and included	Not applicable.

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIANCE
	within a Voluntary Statutory Covenant under the Land Title Act 1994. AS10.2 An Open Space Management Plan has been prepared, in accordance with Part 7, Division 2, Chapter 21 – Specific Development Code - Landscape Work	Not applicable.
PC11 The number of vehicular and pedestrian crossings over or through ecologically significant areas on the site (in particular, the wetland, aquatic and riparian communities) must be minimised.	AS11.1.1 Vehicular and/or pedestrian accessways do not cross over or through ecologically significant areas (in particular, wetland, aquatic and riparian communities) on the site. OR AS11.1.2 Any vehicular and/or pedestrian accessways that cross over or through ecologically significant areas (in particular, wetland, aquatic and riparian communities) on the site are designed to: (a) minimise the area of disturbance; (b) facilitate the unimpeded movement of fauna.	Not applicable. Not applicable.



Sediment and Erosion Control

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIANCE
PC1 All development must not cause erosion or allow sediments to leave the site.	AS1 An Erosion and Sedimentation Hazard Assessment has been undertaken in accordance with the criteria listed in Table 1 , and the total score does not exceed 11 points.	Consistent with AS1.
PC2 All development must not cause erosion or allow sediments to leave the site.	AS2 An Erosion and Sedimentation Control Program has been prepared by a competent person, in accordance with Soil Erosion and Sediment Control Engineering Guidelines for Queensland Construction Sites , and demonstrates that: a) the environmental effects of sedimentation and erosion are controlled by best practice management measures; b) sediments resulting from the development are contained within the site; and c) development adjacent to the bank or the bed of a stream or watercourse, addresses environmental impact on waterbodies.	Complies with AS2.
PC3 All up-slope runoff must be diverted around areas to be disturbed.	AS3.1.1 Catch drains are utilised to divert the upstream runoff to a legal point of discharge. OR AS3.1.2 Alternative methods are used to divert upstream water from exposed or disturbed land.	Consistent with AS2. Upstream runoff will be diverted around the site as part of previous Operational Works approvals.

Changes to Ground Level and Creation of New Waterbodies

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIANCE
Acid Sulfate Soils		
PC1 Development on land containing acid sulfate soils must not result in environmental harm or damage.	AS1.1.1 The land is at or below AHD 5 and is assessed for acid sulfate soil, in accordance with Planning Scheme Policy 14 – Management of Activities Located Within Areas of Acid Sulfate Soils. AS1.1.2 The land is at or below AHD 20 and excavation is proposed to levels below AHD 5 and the development is assessed for acid sulfate soil, in accordance with Planning Scheme Policy 14 – Management of Activities Located Within Areas of Acid Sulfate Soils.	Not applicable. Not applicable.
Stormwater Drainage Considerations		
PC2 Development must not cause adverse stormwater drainage impacts on areas external and internal to the site.	AS2.1 The change to ground level maintains flood storage volume over the site for the 20 year ARI storm event. AS2.2 The change in ground level does not involve filling below Q100. AS2.3 The change in ground level does not impound or divert rainfall runoff.	Consistent with AS2.1 Consistent with AS2.2. Consistent with AS2.3.
Geotechnical Site Requirements		
PC3 All earthworks must be carried out in a location which is not at risk from: a) geotechnical instability at a nearby location; or b) geotechnical instability on the subject site.	AS3.1 The site is: a) located in areas free of compressible soils; b) designated as having very low to low slope instability.	Not applicable.

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIANCE
	AS3.2 The site is not identified on Overlay Map OM16 – Areas of Unstable Soils and Areas of Potential Land Slip Hazard as an area with moderate, high and very high risk of instability.	
PC4 All earthworks must be geotechnically stable, and must not decrease the geotechnical stability of the subject or adjacent sites.	AS4 The earthworks are undertaken in a manner which: a) involves a maximum cut and/or fill of less than 1 metre in height; b) involves batters no steeper than one in two.	Not applicable to AS4.
Local Amenity, Noise and Emissions		
PC5 All activities carried out for or associated with changes to ground level must be conducted in a manner which ensures minimal disturbance to the amenity of the built environment.	AS5.1 The development involves work which has the potential to generate dust, and the following control measures are implemented: a) daily water spraying of exposed areas; b) provision of sealed roads; c) protective covering of exposed areas; d) the installation of wind barriers. AS5.2 All earthworks on the property are undertaken only during the hours of 6am to 6pm, Monday to Friday, and 7am to 6pm on Saturday. No work is undertaken on Sunday.	Consistent with AS5.1. Consistent with AS5.2.
PC6 All work associated with any development must not create a negative impact upon the amenity of surrounding properties.	AS6.1 The cut and/or fill is retained, and the retaining wall is set back from any boundary at least one quarter of its height, with a minimum distance of 300mm, and: a) the site is located within a residential domain or adjacent to a site in a residential domain, and the retaining wall is stepped 1.5 metres for every 1.5 metres in height, and the terraces are landscaped; or b) the site is located within a non-residential domain, and the retaining wall is stepped 1.5 metres for	Not applicable to AS6.1.



PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIANCE
	every three metres in height, and the terraces are landscaped. AS6.2 The cut and/or fill is not retained, and the toe of any batter is no closer than 300mm from a boundary, and: a) the site is located within a residential domain or adjacent to a site in a residential domain, and batters along boundaries are no steeper than one in four and landscaped; or b) the site is located within a non-residential domain, and batters along boundaries are no steeper than 1 in 2 and landscaped.	Consistent with AS6.2.
Managing Contamination Risk		
PC7 Any filling or excavation must not result in the contamination of land.	AS7 The fill material is solid clean earth or clean inert material, free of organic, putrescible or refuse matter.	Consistent with AS7.
Geotechnical Fill Considerations		
PC8 Any materials used as fill must be able to adequately support future development of the land.	AS8 The proposed type, composition and source of fill material is geotechnically suitable, and is adequately compacted to support future development, in accordance with the requirements of Planning Scheme Policy 11 – Land Development Guidelines.	Consistent with AS7.
Hydraulic Considerations		
PC9 Any change to the level of the land must not have an adverse flooding impact on the flooding and drainage characteristics of external sites and/or premises.	AS9 As demonstrated by a hydraulic report prepared in accordance with Council's Hydraulic Report Requirements, the filling or excavation does not: a) cause ponding on the site or nearby land; b) increase flooding which adversely affects the safety or use of any land upstream and downstream; c) adversely affect the flow of water in any overland flow path; or otherwise d) contravene the intent of Constraint Code 8 - Flood	Not applicable to PC9.

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIANCE
	Affected Areas.	
PC10 Development upstream of areas with over floor flooding shall not increase the contribution of floodwater from the catchment. Over floor flooding occurs adjacent to: a) Currumbin Creek, downstream of weir near Stackpole Street; b) Tallebudgera Creek, downstream of Benardon Court; c) Mudgeeraba Creek, downstream of Berrigans Road; d) Nerang River, east of the Pacific Motorway; e) Coomera River, east of the Oxenford - Tamborine Road; f) Coombabah Creek, downstream of the Pacific Highway; g) Saltwater Creek, downstream of its crossing by Kopps Road.	AS10.1 Flood storage detention facilities are provided, where possible, on public land, of sufficient capacity to retain runoff such that the total peak runoff rate and volume released during the flood is not greater than would have been the case prior to development. AS10.2 A certified hydraulic study (and, if necessary, a hydrologic study) is prepared by a suitably qualified and experienced engineer to investigate the characteristics of both the undeveloped and developed site, and determines to the satisfaction of the Assessment Manager that a detention storage is not required, and a contribution is made by the developer to a Council sponsored community flood detention facility.	Not applicable to PC10.
PC11 All development must ensure that there is no impact to local drainage regimes, such that no real damage is caused to any properties upstream or downstream of the site.	AS11 Stormwater drainage is provided in accordance with Planning Scheme Policy 11 – Land Development Guidelines .	Not applicable.
Haulage Activity and Amenity		
PC12 All activities carried out for or associated with changes to ground level, including haulage activity, must be conducted in a manner which ensures minimal disturbance to the amenity of the built environment.	AS12.1 The development involves the transportation of fill material to and/or from the site, and the following measures are taken: a) loads are covered; b) spilled or wheel tracked material is immediately cleaned up from external roads; and c) heavy vehicle traffic is controlled. AS12.2 All waste material, including vegetation, is transported from the site and disposed of in an approved location.	Consistent with AS12.1 to AS12.4.

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIANCE
	AS12.3 All haulage routes are approved by the Department of Transport for declared main roads, and by Council for all other roads. AS12.4 All haulage to and from the site is to be undertaken only during the hours of 6am to 6pm Monday to Friday and 7am to 6pm on Saturdays.	
Treatment of Fill and Retaining Walls		
PC13 All work associated with any development must not create a negative impact upon the amenity of surrounding properties.	AS13.1 Filling material is placed on the development site and is maintained within the subject property, unless alternative arrangements are agreed by the affected neighbouring property owner. AS13.2 Any retaining walls which present to the street or adjoining land, have a finish that is compatible with surrounding development.	Consistent with AS13.1 and AS13.2.
Water Quality		
PC14 Development must not have an adverse impact upon the City's ground water, waterways and wetlands.	AS14 Sediment and erosion control measures are implemented with the filling/excavation work.	Consistent with AS14.
PC15 The natural hydrological regimes of the site, including natural water quality, quantity and groundwater conditions, must be maintained and enhanced.	AS15.1 Sediment and erosion control measures are implemented with the filling/excavation work, in accordance with an approved Erosion and Sedimentation Control Program. AS15.2 The methods of stormwater run-off control and the design of the stormwater system does not create a point source discharge to waterbodies. AS15.3	Consistent with AS15.1 to AS15.3. A Stormwater Management Plan was previously approved.

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIANCE
	A Stormwater Management Intent is prepared for the site which demonstrates that: a) stormwater is treated prior to discharge into any waterways; b) the velocity and quality of stormwater to be discharged into the waterways does not degrade the environmental values of the adjoining site.	
Finished Surface Levels		
PC16 All development must have a finished surface level which is free draining and free from flooding.	AS16.1.1 The development is free draining and the surface gradient of the fill and/or excavated area is within the range 0.5% to 1.5%. OR AS16.1.2 The development includes steep surface gradients, which achieve integration with the surrounding topography, and the finished profile does not interrupt or materially change the surface water drainage, from or onto adjoining land.	Consistent with AS16.1.1.
Construction of New Waterbodies		
PC17 The new waterbodies must be suitable for their intended uses, and must maintain and enhance the water quality of existing waterbodies connecting to them.	AS17.1 A Water Quality Management Plan, which is prepared by a competent person, demonstrates that: a) the water quality of the new waterbodies is of the same or higher standard as the existing water quality; b) long term maintenance of the desired water quality is achieved; c) breeding potential of biting insects is minimised. AS17.2 The water body does not have deep, isolated holes that stratify and increase the possibility of algal blooms occurring, if that stratification breaks down. AS17.3 Pumping for the purposes of maintaining water quality	Not applicable to PC17.

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIANCE
	is avoided. AS17.4 The water body is designed with a suitable outlet to ensure that flushing, if required, is possible.	
PC18 Operational work must not cause geotechnical bank instability, erosion, bed scour or revetment wall collapse to adjacent waterbodies or to newly constructed waterbodies.	AS18 Edge treatment to the embankments of the waterbodies is in place during and after construction, in a manner certified by a competent person.	Not applicable to PC18.
PC19 New waterbodies to be transferred to public ownership must have regard to public safety.	AS19 The water body includes: a) warning signs; b) fencing of areas where access is restricted, such as steep sided embankments or large drops.	Not applicable to PC19.
Access to New Waterbodies		
PC20 Development incorporating new waterbodies must be designed to provide suitable access for maintenance of revetment walls and cleaning of the water body, including the removal of rubbish, reeds and surplus aquatic flora.	AS20 Access is provided to the owner/s of the waterbodies, by: a) dedication of land to the Crown, for this purpose; or b) existing access arrangements.	Not applicable to PC20.



Bushfire Management Areas

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIANCE
Bushfire Hazard		
PC1 The fire mitigation methods used at the site must be adequate for the Potential Bushfire Hazard rating of the individual site, having regard to: a) vegetation type; b) slope; c) aspect; d) on-site and off-site fire hazard implications of the development; e) bushfire history; f) conservation values of the site; g) ongoing maintenance.	AS1.1.1 A Fire Management Plan has been prepared in accordance with Planning Scheme Policy 9 – Guidelines for Preparing Fire Management Plans, and the development complies with the Fire Management Plan. OR AS1.1.2 The development is for a detached dwelling, located within a lot that has been created by a residential subdivision approval under one of the superseded Planning Schemes (ie. the lot is intended to be serviced by sewerage reticulation) and the development complies with the conditions of the subdivision approval. OR AS1.1.3. A written assessment by a competent person confirms that the subject site is of Low Potential Bushfire Hazard or has a lower rating; accordingly specific fire mitigation measures are not mandated for the development.	Not applicable.
Siting		
PC2 Buildings must be sited to minimise the Potential Bushfire Hazard and maximise the protection of life and property from bushfire. Note: This does not apply to sites where a written assessment by a competent person confirms that the subject site is of Low Potential Bushfire Hazard or has a lower rating.	AS2.1 Houses are located away from the most likely direction of a fire front, or on a flat site at the base of the slope (refer Figure 2-1). AS2.2 The Fire Management Plan clearly identifies the preferred location of building sites, and the building is located within these areas.	Not applicable.

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIANCE
Building Design and Construction		
PC3 A building proposed in a designated Bushfire Prone Area (ie. in an area confirmed through site-based assessment to be subject to High or Medium Potential Bushfire Hazard) must be designed and constructed to maximise the protection of life and property from bushfire.	AS3 The building is constructed in accordance with the requirements of the Building Code of Australia and, where relevant, AS3959-1999 – Construction of Buildings in Bushfire-Prone Areas .	Not applicable.
Private Water Supply – In Areas with No Water Reticulation		
PC4 The development proposed in a High and/or Medium Potential Bushfire Hazard Area must provide an adequate water supply for fire fighting purposes.	AS4.1.1 The property contains one dwelling, and the water supply has a volume of water not less than 5,000 litres, and is either: a) a separate tank; and/or b) a reserve section in the bottom part of the main water supply tank; and/or c) a swimming pool installed immediately upon construction of the dwelling OR AS4.1.2 The property contains more than one dwelling and the water supply is provided to protect each individual dwelling, and has a volume of water not less than 10,000 litres, and is: a) a separate tank; and/or b) a reserve section in the bottom part of the main water supply tank; and/or c) a swimming pool installed immediately upon construction of the home.	Not applicable.
PC5 In areas of High and/or Medium Potential Bushfire Hazard, all on-site water supply tanks, including domestic water supply tanks, must be fitted with the standard rural fire brigade fittings for emergency fire fighting purposes.	AS5 The water supply is fitted with a 50mm male camlock (standard rural fire brigade fitting).	Not applicable.

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIANCE
PC6 Water supply provided for fire fighting purposes must be safely located and freely accessible for fire fighting purposes at all times.	PC6 Water supply provided for fire fighting purposes must be safely located and freely accessible for fire fighting purposes at all times.	Not applicable.
Private Water Supply – In Areas with Water Reticulation		
PC7 The water supply must be reliable, and have sufficient flow and pressure requirements for fire fighting purposes at all times.	AS7 The development is proposed in a High and/or Medium Potential Bushfire Hazard Area, and reticulated water is supplied in accordance with Planning Scheme Policy 11 – Land Development Guidelines .	Consistent with AS7.
Public Water Supply – In Areas with No Water Reticulation		
PC8 The development proposed in a High and/or Medium Potential Bushfire Hazard Area must provide an adequate water supply which is readily accessible to fire brigades for fire fighting purposes.	AS8.1 Where public water supplies, fire hydrants, public water storage or permanent waterways do not exist, water tanks are provided on public land within the development. The water tanks: a) hold a volume of at least 22,500 litres; b) are of concrete construction; and c) fitted with a 50mm male camlock (standard rural fire brigade fitting). AS8.2 A hardstand area is provided not more than six metres from the water supply outlet.	Not applicable to AS8.1.
Clearing and Landscaping		
PC9 The development proposed in a High and/or Medium Potential Bushfire Hazard Area must undertake appropriate vegetation clearing and landscaping to mitigate fire hazard.	AS9 The Fire Management Plan addresses appropriate vegetation clearing and landscaping. Note: Part 7, Chapter 36 – Vegetation Management specifies the maximum area of clearing permitted by the Planning Scheme for bushfire hazard mitigation. The Fire Management Plan may recommend lesser clearing on the basis of the specific nature of the development and of the site and the use of	Not applicable.

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIANCE
	<i>alternative fire hazard mitigation measures such as landscaping with fire retardant species.</i>	
Fire/Maintenance Trails		
PC10 Fire/maintenance trails must be provided to: a) enable access for fire fighters, residents and equipment; b) mitigate against fire hazard; and c) allow fuel reduction activity.	AS10.1 The development is proposed in a Medium Potential Bushfire Hazard Area, and the subdivision design incorporates fire/maintenance trails located as close as possible to the boundaries of the lots and the adjoining bushland. AS10.2 The fire/maintenance trail has: a) a minimum cleared width of six metres; b) a minimum formed width of four metres; and c) a maximum gradient of 16%, with adequate drainage to prevent soil erosion and minimise ongoing trail maintenance. AS10.3.1 Vehicular links are provided along the fire/maintenance trail either to existing fire/maintenance trails or roads, and these links are designed having regard to the topography of the site, fire fighter safety and the need to regularly access water supplies. AND AS10.3.2 The fire/maintenance trail has vehicular access at each end, and links either to existing fire/maintenance trails or roads. OR AS10.3.3 Vehicular access at each end of fire/maintenance trails does not exist, and a turning circle is provided for turning of fire fighting vehicles. OR AS10.3.4 Vehicular access at each end of fire/maintenance trails	Not applicable to AS10.1 to AS10.5.3.

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIANCE
	does not exist, and a 'T' or 'Y' shaped turning bay is provided for turning of fire fighting vehicles. AS10.4 The fire/maintenance trail provides areas for vehicles to pass or turn at intervals of not more than 400 metres and with a maximum grade of 5% (1 in 20). AS10.5.1 Fire/maintenance trails are located on public land (including public open space areas) to facilitate access for fire brigades. OR AS10.5.2 Fire/maintenance trails are located on public land (including public open space areas) to facilitate access for fire brigades and other purposes, such as pedestrian and cycling access. OR AS10.5.3 Fire/maintenance trails are located on the site, and an access easement is granted in favour of Council and fire brigades.	
Advice to New Residents		
PC11 Reconfiguring a Lot occurs in a High and/or Medium Potential Bushfire Hazard Area and new residents must be informed about: a) the potential bushfire hazard on their site; b) their responsibility for fire management; and c) the measures available for ongoing fire hazard mitigation.	AS11 A copy of the Fire Management Plan is provided to each resident for the information of occupants.	Not applicable.
Vehicular Access		
PC12 The vehicular access (including internal roads) must be designed to mitigate against bushfire hazard by ensuring adequate access for:	AS12.1 The development is proposed in a High Potential Bushfire Hazard Area, and the Reconfiguring a Lot design incorporates a perimeter road that:	Not applicable.

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIANCE
a) fire fighting and other emergency vehicles; and b) the evacuation of residents and emergency personnel, in the event of an emergency.	a) is located between the boundary of the lots and the adjacent bushland; b) has a minimum cleared width of 20 metres; c) has a constructed road width of six metres; and d) is constructed to an all weather standard (refer Figure 2-2). AS12.2 The road design is capable of providing access for fire fighting and other emergency vehicles, in accordance with Planning Scheme Policy 11 – Land Development Guidelines . AS12.3 Reconfiguring a Lot is proposed to occur in a High Potential Bushfire Hazard Area, and all roads are through roads and <i>culs-de-sac</i> are not utilised (refer Figure 2-2). AS12.4.1 Reconfiguring a Lot is proposed to occur in a Medium Potential Bushfire Hazard area, and <i>culs-de-sac</i> are not more than 200 metres in length, and intersect or are met by a cross road or connecting road. OR AS12.4.2 Reconfiguring a Lot is proposed to occur in a Medium Potential Bushfire Hazard area, and <i>culs-de-sac</i> are utilised, and an alternative access links the <i>cul-de-sac</i> to other through roads.	
Lot Layout		
PC13 In areas of High and/or Medium Potential Bushfire Hazard, access and internal roads must be constructed for the safe and effective operational use of the water supply and equipment on the fire fighting vehicles.	AS13 The development is proposed in a High and/or Medium Potential Bushfire Hazard Area, and roads are designed and constructed in accordance with Planning Scheme Policy 11 – Land Development Guidelines .	Not applicable.
PC14 The lot layout of residential developments must be designed to mitigate any Potential Bushfire Hazard and	AS14 Residential lots are not located wholly within a High Potential Bushfire Hazard Area, and the building	Not applicable.

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIANCE
provide safe sites for dwellings.	envelope is located in a lower Potential Bushfire Hazard Area of the site.	
Land Use		
PC15 Any Material Change of Use, other than a detached dwelling, must not result in a high concentration of people living or congregating in a High Potential Bushfire Hazard Area.	AS15 The following uses are inappropriate in the High Potential Bushfire Hazard Area: a) educational establishment; b) hospital; c) aged persons accommodation; d) caravan park; e) child care centre; f) community care centre; g) corrective institution; h) ecotourism facility; i) minor tourist facility; or j) tourist cabins.	Not applicable.

Steep Slopes or Unstable Soils

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIANCE
Site Slope Constraints		
PC1 Building work must be responsive to the constraints of steep sloping land.	AS1.1.1 Building work is not undertaken on land with a maximum slope exceeding 20% in urban areas and 25% in non-urban areas. OR AS1.1.2 The development is for a detached dwelling, located within a lot that has been created by a residential subdivision approval (ie. the lot is intended to be serviced by sewerage reticulation) and the development complies with the conditions of the subdivision approval and any subsequent operational works approval.	Not applicable.
Built Form and Character		
PC2 The building style and construction methods used for development on sloping sites must be responsive to the constraints and building designs of steep slopes.	AS2.1 A split-level building form is utilised. AS2.2 A single plane concrete slab is not used except where the development is for a detached dwelling, located within a lot that has been created by a residential subdivision approval (ie. the lot is intended to be serviced by sewerage reticulation) and the development complies with the conditions of the subdivision approval and any subsequent operational works approval. AS2.3 Areas between the building's floor and the ground level, or between outdoor deck areas and the ground level, are screened from view by using lattice screen and/or landscaping.	Not applicable.

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIANCE
Visual Impact		
PC3 Development on steep slopes must minimise any impact on the landscape character of the City's rural, urban and hinterland areas.	AS3.1.1 Development on steep slopes is designed to not detract from the significant landscape character values identified in Planning Scheme Policy 12 – Landscape Strategy Part 1 – Landscape Character: Guiding the Image of the City. OR AS3.1.2 Development on steep slopes is designed and located to avoid protruding above the surrounding tree level or above any significant ridgelines.	Not applicable.
Stormwater Drainage		
PC4 Development on steep slopes must ensure that the quality and quantity of stormwater traversing the site must not cause any detriment to the natural environment or to any other sites.	AS4 All stormwater drainage discharges to a lawful point of discharge and does not adversely affect downstream, upstream, underground stream or adjacent properties, in accordance with Council's Best Practice Guidelines for Stormwater Pollution from Building Sites.	Consistent with AS4.
Cut and Fill Work		
PC5 All cut and fill work must not create a detrimental impact on the slope stability, erosion potential or visual amenity.	AS5.1.1 The height of cut and/or fill, whether retained or not, does not exceed: a) 900mm adjoining a public area; b) 1200mm adjoining a residential site; c) 2500mm adjoining a non-residential site. OR AS5.1.2 Cuts in excess of those stated in AS5.1.1 are separated by terraces with a minimum width of 1.2 metres that incorporate drainage provisions in accordance with Council's Best Practice Guidelines for Stormwater Pollution from Building Sites	Consistent with AS5.1.2.

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIANCE
	AS5.2 No crest of any cut or toe of any fill, or any part of any retaining wall or structure, is located closer than 600mm to any boundary of the property, unless the prior approval of both landowners and the Council, or its delegate, has been obtained. AS5.3 Cut and/or fill on slopes steeper than 1V:2H are retained at the time of earthworks by retaining structures or other stabilisation methods, in accordance with Council's Best Practice Guidelines for Stormwater Pollution from Building Sites. AS5.4 Non-retained cut and/or fill on slopes are stabilised and protected against scour and erosion by suitable measures, such as grassing, dense landscaping or other protective measures, in accordance with Council's Best Practice Guidelines for Stormwater Pollution from Building Sites.	
Slope Stability		
PC6 All development on land within the medium, high and very high hazard rating identified on Overlay Map OM16 – Areas of Unstable Soils and Areas of Potential Land Slip Hazard must apply measures to minimise the hazard risk.	AS6 A Stability Report, prepared by a registered professional engineer appropriately experienced in slope stability matters, is used to assess the stability of the land and provide construction measures to support the construction of the development.	Not applicable to PC6.
Documentation		
PC7 Development proposed on slopes with a Land Slip Hazard Rating of medium, high and very high identified on Overlay Map OM16 – Areas of Unstable Soils and Areas of Potential Land Slip Hazard must be supported by a report which incorporates adequate documentation of geotechnical stability of the site.	AS7.1 A Geotechnical Assessment Report is prepared which incorporates at least the following information: a) boundary dimensions; b) location of easements; c) existing services, such as sewer, stormwater, water, gas, electricity, telephone and other utility	Not applicable to PC7.

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIANCE
	services; d) contour lines to AHD (500mm vertical intervals); e) street front kerb location, cross over, side gully pits locations; driveway location and slope; f) off-street parking locations; building location and setback dimensions; g) earthwork details and building pad levels; h) retaining wall location, extent, height and offset from boundaries; i) existing and proposed on-site drainage system; j) identification of trees to be removed or retained; k) fencing extent, location, height, material and type; l) swimming pool location, level and depth; m) ancillary structures, such as pergolas and sheds; n) landscaping, lawn areas, paved areas, mass planting areas and trees. AS7.2 A Geotechnical Site Analysis includes, but is not limited to, a: a) Stability Assessment Report; b) Landslide Hazard Rating Analysis; c) Foundation Investigation Report (ie. a soil test report).	
Site Slope Constraints		
PC8 All subdivisions containing slope exceeding 25% must ensure that a development site suitable for its intended use can be created within each individual new lot.	AS8 A Slope Stability Report, which is certified by a registered professional engineer, demonstrates that a site is suitable for building purposes, and: a) identifies the stability risk; b) addresses potential stability problems.	Not applicable to PC8.
Access		
PC9 Subdivision on steep slopes must ensure that safe and efficient access by vehicles and pedestrians can be achieved.	AS9.1 The development area within every lot is accessible by a legal road access, in compliance with Planning Scheme Policy 11 – Land Development Guidelines, Section 3.4.6.	Not applicable to PC9.



PERFORMANCE CRITERIA		ACCEPTABLE SOLUTIONS	COMPLIANCE
		AS9.2 Driveways internal to the site are not steeper than 25% (1V:4H).	



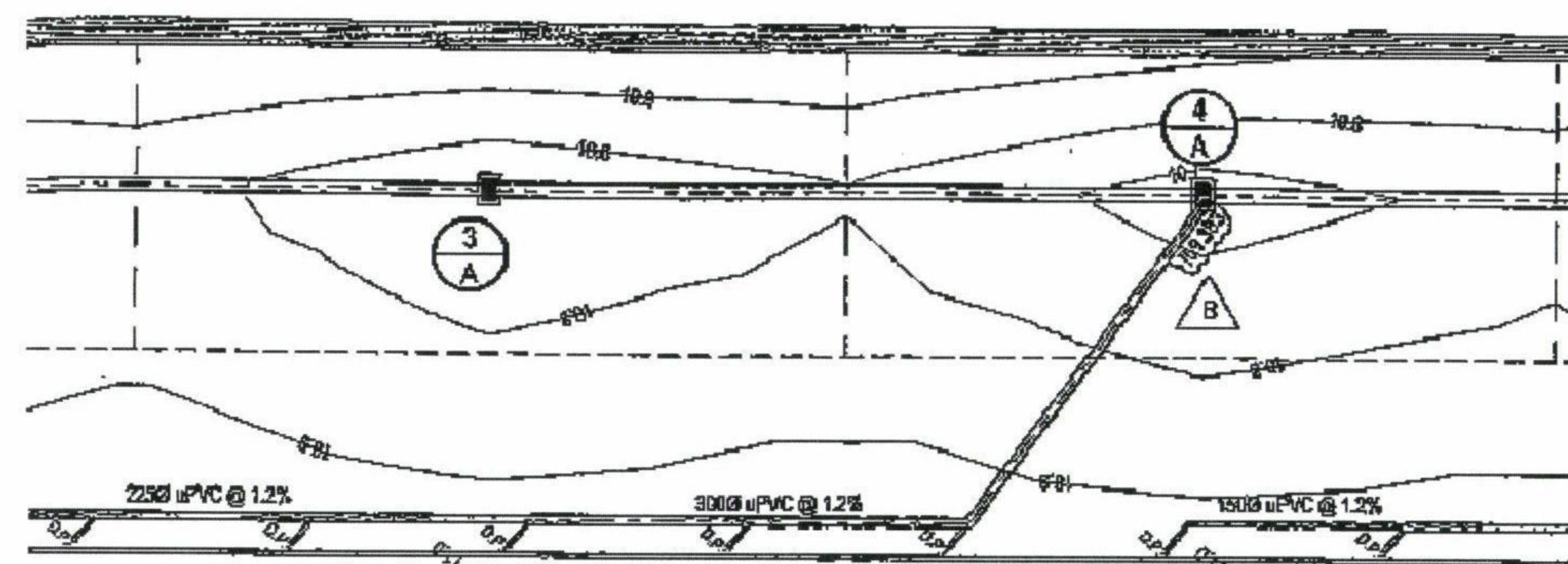
BOULDER
WALL

STORMWATER PLAN - 1

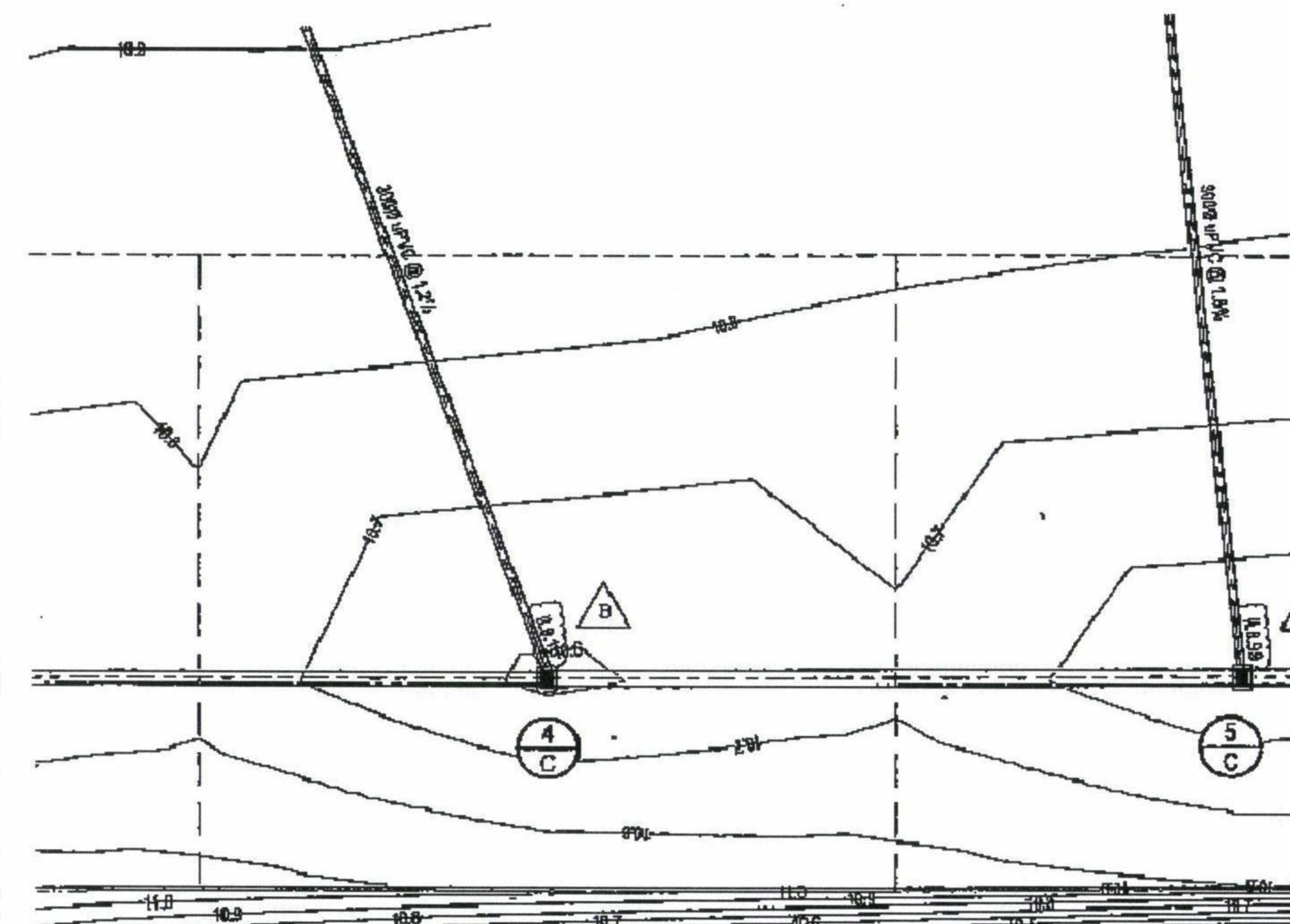
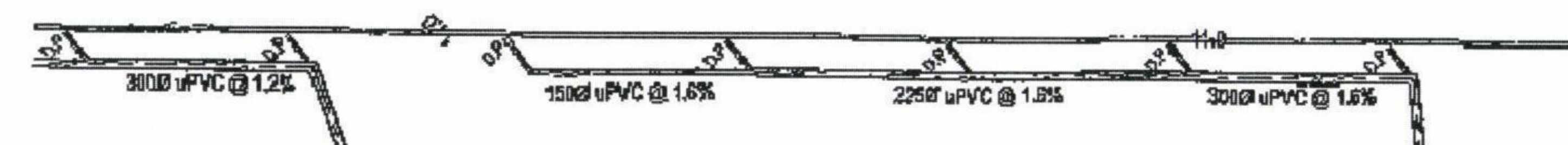
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PROJECT TEAM

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Engineers Certification:

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NPER Civil & Structural
CAES 3355 RPEQ 6750

Signature: _____

Date: _____

LEGEND

- EXISTING STORMWATER
- PROPOSED STORMWATER
- FINISHED SURFACE CONTOUR
- BIORETENTION
- SEDIMENT FOREBAY / SCOUR PROTECTION
- STORMWATER STRUCTURE NUMBER

- NOTES:
- ALL STORMWATER DRAINAGE SHALL BE IN ACCORDANCE WITH AS/NZS 3500.3
 - ALL NON-PRESSURE PIPE SHALL BE HD PVC PIPE UNLESS NOTED OTHERWISE

REV	DESCRIPTION	DATE	BY
B	INVERT LEVELS CHANGED	28/12/2011	BP
A	FOR APPROVAL	11/10/2011	BP

FOR APPROVAL

Project
BUILDING 8 ON LOT 334/SP193431
CHRISTENSEN ROAD SOUTH
YATALA
for
MULTISPAN AUSTRALIA

Title
STORMWATER PLAN - 1

Drawn	Check	Chief	Date
B.PARGE	BP	T.S.MITH	10/10/11
Design	Date	Appr	Date
B.PARGE	7/9/11	N.CANTO	11/10/11
Scale	AT	Chief	Date
AS SHOWN		N.CANTO	11/10/11
Project No.	Draw. No.	Rev	
11-129	C06	B	

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DESIGN PARAMETERS:**(A-1) SOIL PROPERTIES - RETAINED MATERIAL**

SOIL - COMPACTED FILL BUT NOT TESTED - AVERAGE SOIL
 SOIL DENSITY = 19 kN/CUM
 INTERNAL FRICTIONAL ANGLE (PHI) = 25°
 COHESION = 5 KPA

} $K_a = 0.30$

(A-2) SOIL PROPERTIES - FOUNDATION MATERIAL

SOIL - STIFF SILTY SANDY CLAY-NATURAL - AVERAGE SOIL
 SOIL DENSITY = 19 kN/CUM
 INTERNAL FRICTIONAL ANGLE (PHI) = 28°
 COHESION = 5 KPA
 ALLOWABLE BEARING CAPACITY OF SOIL = 100 kPa
 (ULTIMATE BEARING CAPACITY = 300 KPA - FOS = 3)

(B) STRUCTURAL CLASSIFICATION:

STRUCTURAL CLASSIFICATION = B
 STRUCTURAL CLASSIFICATION FACTOR = 1.0

(C) EXTERNAL STABILITY DESIGN VALUES:

LIMIT STATE DESIGN VALUES
 OVERTURNING FACTOR = 1 (1.5 FOR WORKING STRESS)
 BASE SLIDING FACTOR = 1 (1.5 FOR WORKING STRESS)
 BEARING CAPACITY FACTOR = 1 (1.5 FOR WORKING STRESS)
 FOOTING FRICTIONAL COEFFICIENT = 0.7
 WALL/SOIL FRICTIONAL COEFFICIENT = 0.67

(D) SOIL SHEAR STRENGTH FACTORS:

SOIL FRICTIONAL ANGLE FACTOR = 0.9
 SOIL COHESION FACTOR = 0.9

(E) DESIGN LIVE LOAD = 5.0 kPa AS PER AS4678**(F) GLOBAL STABILITY CHECK IS NOT WITHIN THE SCOPE OF THIS DESIGN, EXPERT ADVICE TO BE SOUGHT AT AREA PRONE TO SLIPPAGE**

- NOTES**
- 1) PREPARE BASE GROUND AS SHOWN WITH FALL TOWARDS BACK OF WALL AND CUT FRONT AND BACK TO RECEIVE CONCRETE
 - 2) FIRST LAYER OF THE ROCKS TO BE PRESSED VERY HARD WITH MACHINE WITH FALL AS SHOWN ON TO CONCRETE
 - 3) OTHER LAYERS TO BE PRESSED OVER ROCKS WITH MACHINE AS ABOVE
 - 4) ROCK WALL TO BE MINIMUM "C+150" mm BELOW GROUND
 - 5) 5.0 kPa LIVE LOAD AS PER AS4678 AND NO OTHER LIVE LOAD OR SURCHARGE EXCEPT LATERAL EARTH PRESSURE
 - 6) ALLOWABLE BEARING CAPACITY OF THE FOUNDATION MATERIAL = 100 KPA - TO BE CHECKED ON SITE BY GEOTECH ENGINEER
 - 7) GLOBAL STABILITY CHECK IS NOT WITHIN THE SCOPE OF THIS DESIGN
 - 8) NO GROUND WATER PRESSURE AS WELL AS OTHER PRESSURE ON WALL
 - 9) ROCK WALL RUNS ADJACENT TO ANY OTHER SERVICE OR CROSSES ANY OTHER SERVICE, ENGINEER TO BE CONSULTED FOR DESIGN & DETAIL
 - 10) SOIL PARAMETERS ARE BASED ON AN AVERAGE SOIL AS PER AS4678 AS PER SOIL REPORT BY CQA - JOB NO. CQA/03/177 - 04/06/2003 - RETAINED SOIL COMPACTED BUT NOT TESTED
 - 11) NO LOAD HAS BEEN ALLOWED FROM ANY EXISTING STRUCTURES OR ANY STRUCTURES OR TREES
 - 12) FLOOD-AS PER PLAN NO. 1396-96-13 BY GASSMAN DEVELOPMENT PERSPECTIVE WITH Q100 LEVEL PLOTTED ON DRAWING

WE CONSIDER THE WALLS WILL BE STRUCTURALLY ADEQUATE TO WITHSTAND THE DESIGN EARTH PRESSURE ONLY IF CONSTRUCTED IN ACCORDANCE WITH THE ATTACHED DETAILS AND GOOD CONSTRUCTION PRACTICE

UMESH C KHATRI
 RPEQ-4829.

LIMITATION OF THE DESIGN & DETAIL

- 1) THE RETAINING WALL HAS BEEN DESIGNED FOR 1/3 HYDROSTATIC PRESSURE
- 2) FILL MATERIAL BEHIND ROCKWALL TO BE COMPACTED AS PER CQA REPORT
- 3) ALL SURFACE WATER TO BE DIRECTED AWAY FROM THE ROCK WALL
- 4) THE STABILITY OF BOULDER WALL COULD BE COMPROMISED IF OVERLAND WATER FLOW IS ALLOWED TO FLOW OVER OR BEHIND THE WALL
- 5) THE COMPLETED RETAINING WALL RELIES ON THE GROUND AT THE BASE OF THE ROCKWALL FOR STABILITY
- 6) ANY EXCAVATION IN FRONT OF THE WALL OR BEHIND THE WALL OR RAISING OF THE FINISHED HEIGHT WILL COMPROMISE THE STRUCTURAL INTEGRITY OF THE WALL
- 7) NO LOAD FROM BUILDING OR STRUCTURE OR TREES ON TO ROCKWALL
- 8) WATER POOLING IN FRONT OF WALL IS NOT PERMITTED WHICH WILL COMPROMISE THE STRUCTURAL INTEGRITY OF ROCKWALL
- 9) ALL RETAINING WALL SHALL BE 2.0M AWAY FROM COUNCIL SEWER OR SWD OR AS REQUIRED BY LOCAL AUTHORITY
- 10) ROCKWALL IS NOT DESIGNED FOR LOAD DUE TO FLOWING WATER

NOTES

- 1) PROVIDE 65/100 MM DIA DRAIN PIPE BEHIND ROCK WALL TO ALL RETAINING WALL
- 2) PROVIDE GEOTEXTILE TO ALL RETAINING WALL AS SHOWN
- 3) PROVIDE NO FINE CONCRETE/GRANULAR FILL- FREE DRAINING MATERIAL MINIMUM 300 MM THICK TO ALL RETAINING WALL
- 4) PROVIDE SPOON DRAIN OR IMPERMEABLE MATERIAL AT TOP AS SHOWN
- 5) DISCHARGE SPOON DRAIN RUNOFF INTO STORM WATER DRAIN
- 6) DISCHARGE WATER FROM DRAIN PIPE INTO STORM WATER DRAIN
- 7) LOAD FROM TREES IS NOT WITHIN THE SCOPE OF THIS DESIGN, EXPERT ADVICE TO BE SOUGHT
- 8) CONCRETE FOOTING -150MM THICK AND 300MM THICK NO FINE CONCRETE BEHIND WALL UP TO 300mm ABOVE Q100 LEVEL - AS PER GCCC- FLOOD SEARCH REPORT- NOT AVAILABLE

ROCKS:

- 1) ALL ROCK MATERIAL SHALL BE SOUND, DURABLE, UNFRACTURED, IGNEOUS OR METAMORPHIC OR SANDSTONE ROCK OF ANGULAR SHAPE, IT SHALL BE CLEAN & FREE OF TOPSOIL OR ANY ORGANIC MATTERS
- 2) PRIOR TO PLACEMENT OF ROCKS GEOTEXTILE FABRIC TO BE LOCATED AGAINST FACE OF CUT EMBANKMENT. CONTINUE FABRIC TO SURFACE AND TURN BACK UNDER TOP ROCK - TYPICAL ALL ROCK WALLS

NOTES

- 1) PERIODIC INSPECTIONS WILL BE CARRIED OUT AND HENCE IT IS ROCKWALL CONTRACTOR/CIVIL CONTRACTOR/DEVELOPER'S RESPONSIBILITY TO VERIFY ALL ELEMENTS AS PER DETAIL DRAWINGS DURING CONSTRUCTION.
- 2) ROCK RETAINING WALL IS DESIGNED FOR APPLIED DESIGN CAPACITY SOIL LOADING ONLY FOR STATED SOIL PARAMETERS
- 4) REFER TO DRAWING S2 FOR ROCKWALL DETAILS AND NOTES

8) CONCRETE FOOTING -150MM THICK AND 300MM THICK NO FINE CONCRETE BEHIND WALL UP TO 300mm ABOVE Q100 LEVEL - AS PER GCCC- FLOOD SEARCH REPORT- NOT AVAILABLE

PROJECT

PROPOSED ROCK RETAINING WALL AT BUILDING -8
 ON LOT 334/SP193431 CHRISTENSEN ROAD SOUTH
 YATALA, QLD

SCALE :
 AS SHOWN

DRAWN :
 UK

DATE :
 APR 2012

ENGINEER

Umesh C Khatri 19 Horizon Place
 BE(Civil), CPEng, MFIE Eight Mile Plains
 MIE(Aust), NPER-3, Q-4113
 RPEQ. Tel/Fax: (07) 3341 8601
 MOB : 0421 891 149

TITLE:**GENERAL & CONSTRUCTION NOTES**

Drawing No BR/YATALA-BLDG-8-CHRISTENSEN RD/1204/S1

NOTES

- 1) PREPARE BASE GROUND AS SHOWN WITH FALL TOWARDS BACK OF WALL AND CUT FRONT AND BACK TO RECEIVE CONCRETE
- 2) 150mm THICK CONCRETE TO BE PLACED & COMPACT ON PREPARED GROUND WITH FALL. ALLOW 1 TO 2 HRS FOR INITIAL SETTING OF CONCRETE
- 3) FIRST LAYER OF THE ROCKS TO BE PRESSED VERY HARD WITH MACHINE WITH FALL AS SHOWN ON TO CONCRETE.
- 4) PLACE CONCRETE AROUND BOULDER AS SHOWN WITH FALL TOWARDS FRONT
- 5) OTHER LAYERS TO BE PRESSED OVER ROCKS WITH MACHINE AS ABOVE
- 6) ROCK WALL TO BE MINIMUM "C+150" mm BELOW GROUND
- 7) 5.0 kPa LIVE LOAD AS PER AS4678
- 8) ALLOWABLE BEARING CAPACITY OF THE FOUNDATION MATERIAL -TO BE 100 KPa
- 9) GLOBAL STABILITY CHECK IS NOT WITHIN THE SCOPE OF THIS DESIGN
- 10) NO GROUND WATER PRESSURE AS WELL AS NO OTHER PRESSURE
- 11) ROCK WALL RUNS ADJACENT TO ANY OTHER SERVICE OR CROSSES ANY OTHER SERVICE, ENGINEER TO BE CONSULTED FOR DESIGN & DETAIL

ROCK WALL HEIGHT TABLE

Wall Height mm	A mm	B mm	C mm	C+150 mm	D
1000	600	350	150	300	3
1500	800	400	250	400	3
2000	1100	500	350	500	3
2500	1400	600	450	600	3
3000	1700	700	550	700	3

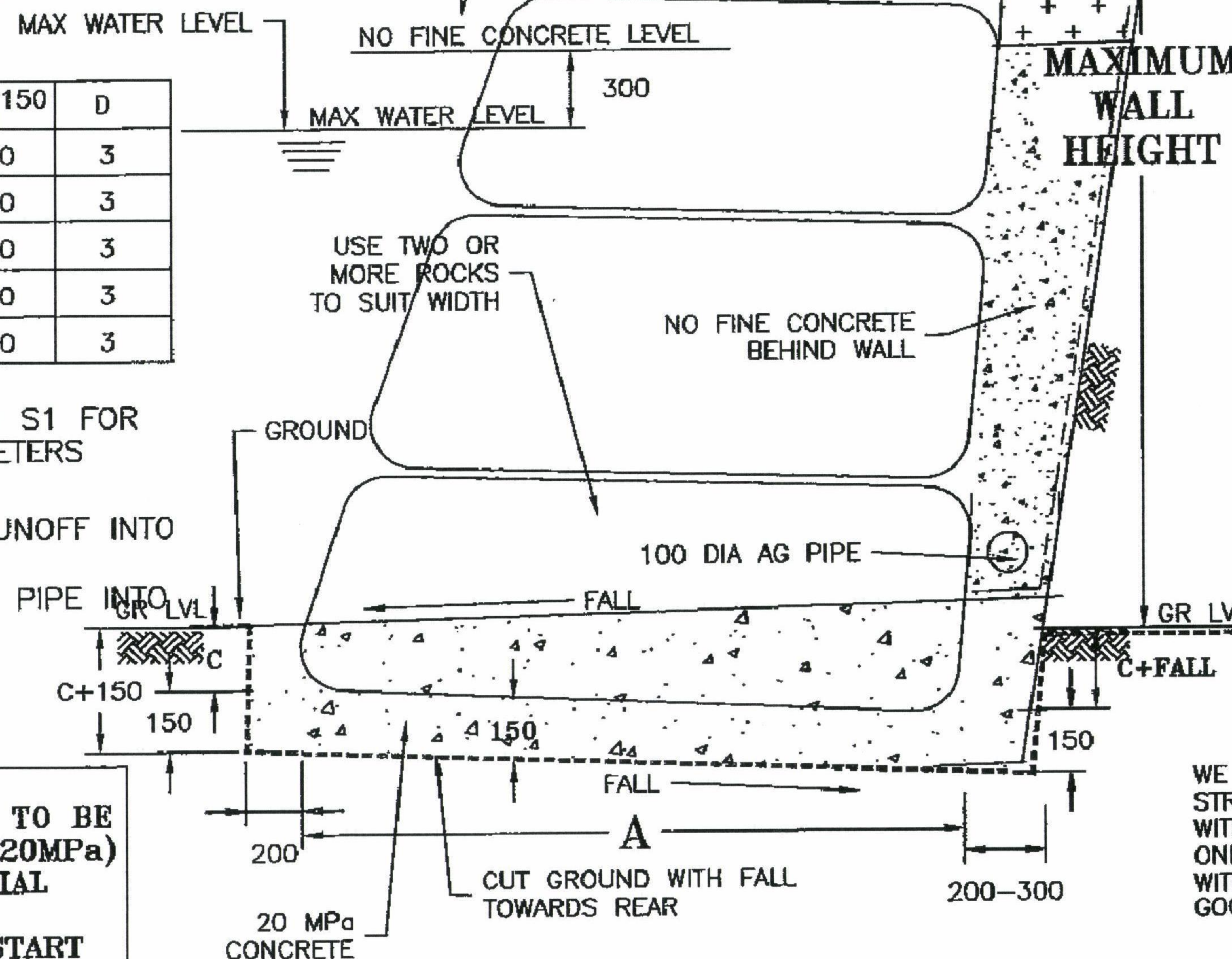
REFER TO DRAWING S1 FOR
NOTES AND PARAMETERS

NOTES

- 1) DISCHARGE SPOON DRAIN RUNOFF INTO STORM WATER DRAIN
- 2) DISCHARGE WATER FROM AG PIPE INTO STORM WATER DRAIN
- 3) PROVIDE GEOTEXTILE TO ALL RETAINING WALL AS SHOWN

CONCRETE-

- 1) 150mm THICK CONCRETE TO BE PLACED AND COMPACTED (20MPa)
- 2) ALLOW 1-2 HRS FOR INITIAL SETTING OF CONCRETE
- 3) AFTER INITIAL SETTING, START PLACING BASE BOULDER & CONCRETE AROUND AS SHOWN



ROCK WALL SECTION

N.T.S.

SPOON DRAIN OR
IMPERMEABLE MATERIAL

1 IN 12

GRANULAR FILL-
NO FINES

GEOTEXTILE

CUT GROUND

LIMITATION OF THE DESIGN & DETAIL

- 1) THE RETAINING WALL HAS BEEN DESIGNED FOR 1/3 HYDROSTATIC PRESSURE
- 2) FILL MATERIAL BEHIND ROCKWALL TO BE COMPACTED AS PER CQA REPORT
- 3) ALL SURFACE WATER TO BE DIRECTED AWAY FROM THE ROCK WALL
- 4) THE STABILITY OF BOULDER WALL COULD BE COMPROMISED IF OVERLAND WATER FLOW IS ALLOWED TO FLOW OVER OR BEHIND THE WALL
- 5) THE COMPLETED RETAINING WALL RELIES ON THE GROUND AT THE BASE OF THE ROCKWALL FOR STABILITY
- 6) ANY EXCAVATION IN FRONT OF THE WALL OR BEHIND THE WALL OR RAISING OF THE FINISHED HEIGHT WILL COMPROMISE THE STRUCTURAL INTEGRITY OF THE WALL
- 7) NO LOAD FROM BUILDING OR STRUCTURE OR TREES ON TO ROCKWALL
- 8) WATER POOLING IN FRONT OF WALL IS NOT PERMITTED WHICH WILL COMPROMISE THE STRUCTURAL INTEGRITY OF ROCKWALL
- 9) ALL RETAINING WALL SHALL BE 2.0M AWAY FROM COUNCIL SEWER OR SWD OR AS REQUIRED BY LOCAL AUTHORITY
- 10) ROCKWALL IS NOT DESIGNED FOR LOAD DUE TO FLOWING WATER

WE CONSIDER THE WALLS WILL BE STRUCTURALLY ADEQUATE TO WITHSTAND THE DESIGN EARTH PRESSURE ONLY IF CONSTRUCTED IN ACCORDANCE WITH THE ATTACHED DETAILS AND GOOD CONSTRUCTION PRACTICE

- NOTE: 1) REFER TO PLAN NO. 1396-96-13 FOR Q100 PLOTTED ON PLAN -BY GASSMAN DEVELOPMENT PERSPECTIVE
- 2) AS PER GCCC - FLOOD SEARCH REPORT - Q100 LEVEL WAS NOT AVAILABLE
- 3) BOULDER RETAINING WALL NEAR CREEK - DESIGNED AND DETAILED FOR 1/3 HYDROSTATIC PRESSURE DUE TO POSSIBLE FLOODING AND
- 4) USE 150mm CONCRETE FOOTING & 300mm THICK NO FINE CONCRETE BEHIND WALL

UMESH C KHATRI
RPEQ-4829.

PROJECT

PROPOSED ROCK RETAINING WALL AT BUILDING -8
ON LOT 334/SP193431 CHRISTENSEN ROAD SOUTH
YATALA, QLD

SCALE :
AS SHOWN

DRAWN :
UK

DATE :
APR 2012

ENGINEER

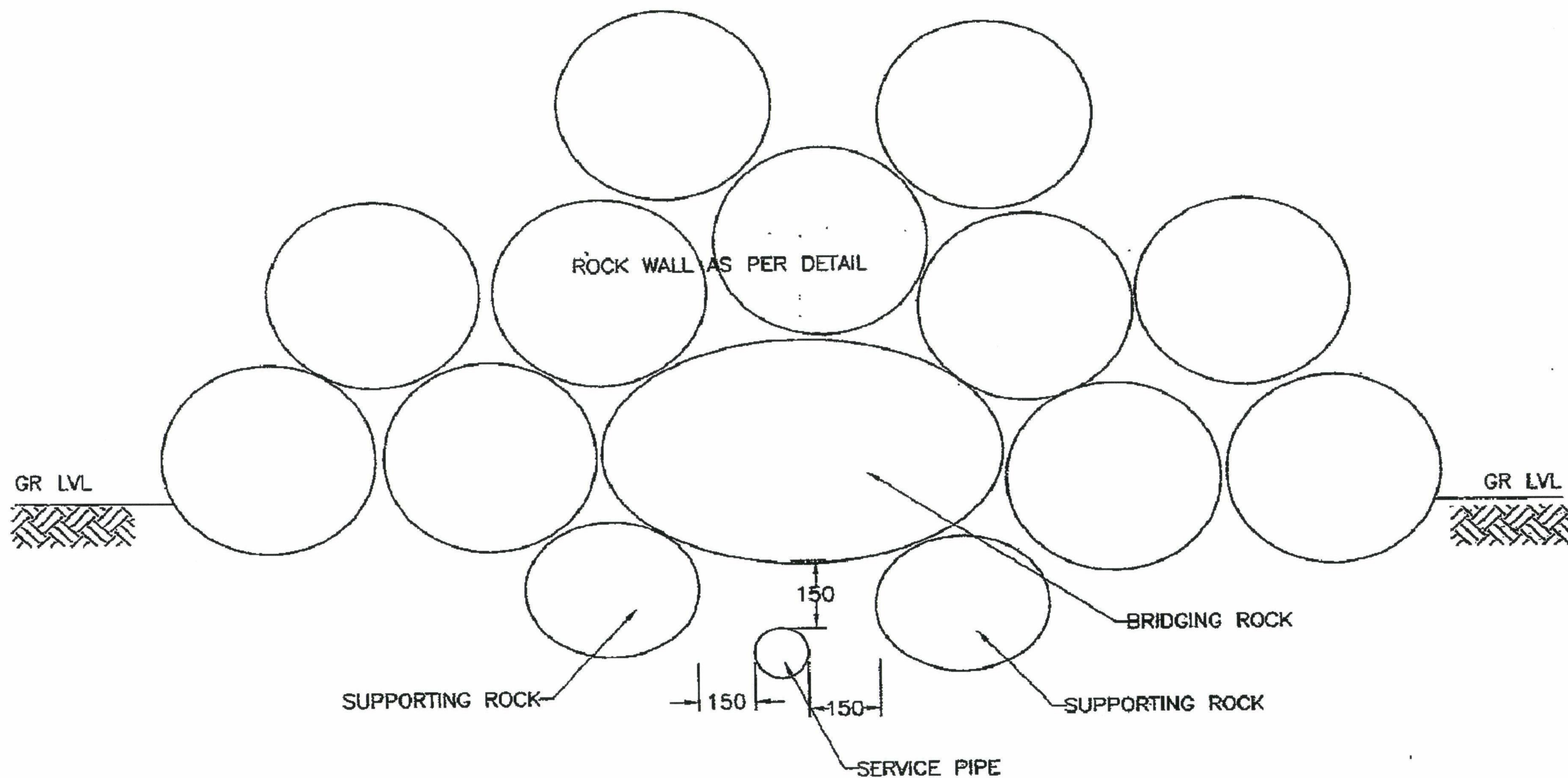
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TITLE:

**ROCKWALL DETAIL WITH
CONCRETE FOOTING &
NO FINE CONCRETE BEHIND WALL**

Drawing No.: BR/YATALA-BLDG-8-CHRISTENSEN RD/1204/S2



TYPICAL SECTION FOR BRIDGING DETAIL AT SERVICE PIPE

©

PROJECT

PROPOSED BRIDGING OVER SERVICE PIPE

SCALE :
AS SHOWN

DRAWN :
UK

DATE :
FEB 2003

ENGINEER

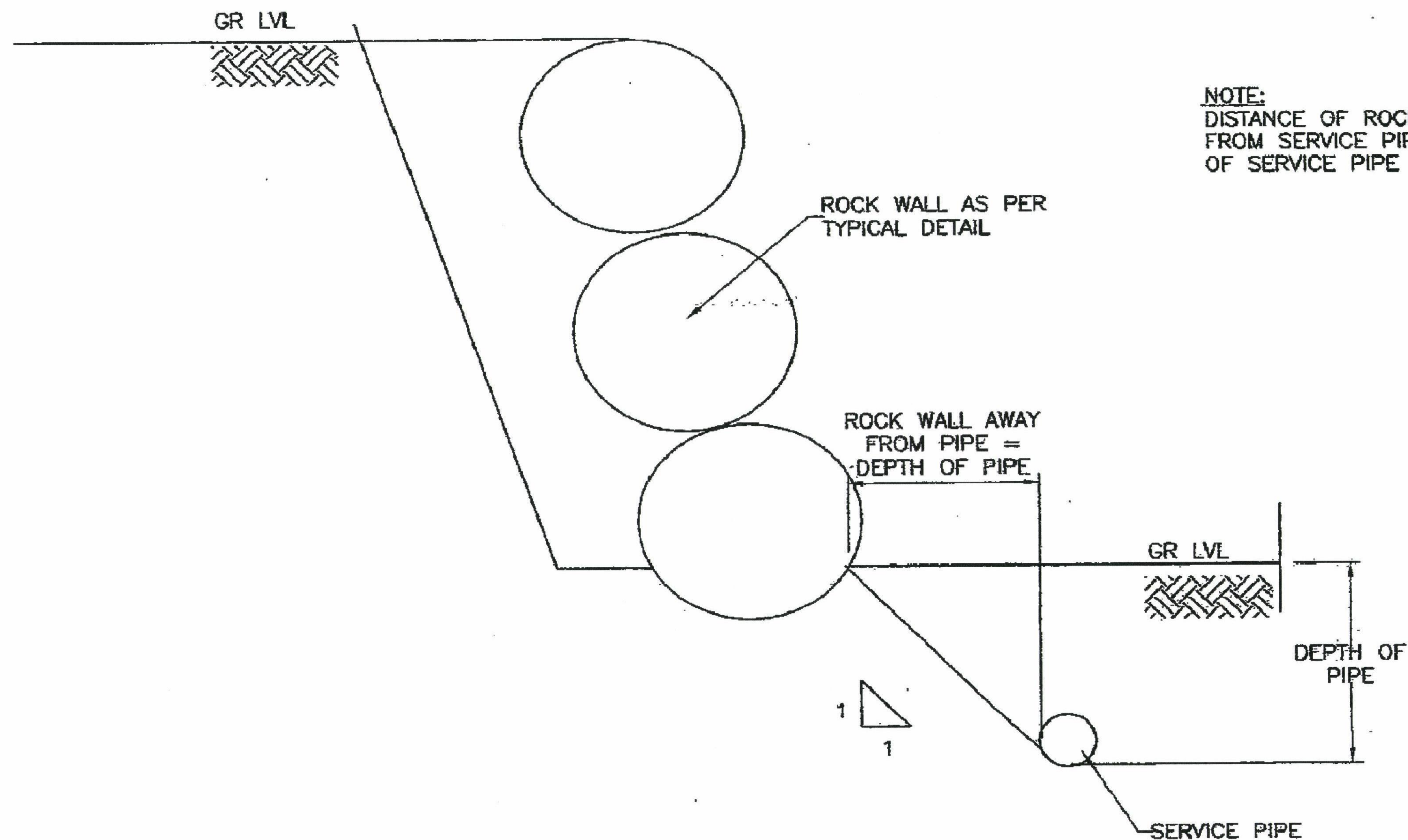
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TITLE:

**BRIDGING DETAIL
OVER SERVICE PIPE**

Drawing No.: BRIDGING/01



TYPICAL DETAIL OF ROCK WALL AT SERVICE PIPE PARALLEL TO ROCK WALL

©

PROJECT
PROPOSED DETAIL AT SERVICE PIPE PARALLEL
TO ROCK WALL

SCALE :
AS SHOWN

DRAWN :
UK

DATE :
FEB 2003

ENGINEER

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TITLE:

**DETAIL AT SERVICE PIPE
PARALLEL TO ROCK WALL**

Drawing No.: SERVICEPIPE/PARALLEL/01



FIRE ACCESS TO BUILDING 7

GRATED PIT
SL 10.84

GRATED PIT
SL 10.76

GRATED PIT
SL 10.70

AWNING OVERHEAD

FFL 11.00

AWNING OVERHEAD

GRATED PIT
SL 10.78

AWNING OVERHEAD

GRATED PIT
SL 10.67

GRATED PIT
SL 10.66

GRATED PIT
SL 10.56

REFER STRUCTURAL DRAWINGS
FOR RETAINING WALL DETAILS

FINISHED SURFACE LEVELS PLAN - 1

1:250

PROJECT TEAM

Consulting Engineer:



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Engineers Certification:

Nicola Canto MIE Aust. CPEng.
NPER Civil & Structural
CAES 3355 RPEQ 6750

Signature:

Date: 12.10.11

LEGEND

- FINISHED SURFACE CONTOURS
- HINGE LINE
- CARPARK - FLEXIBLE PAVEMENT
- TRUCK PARKING - 150mm THICK CBR15
- BIORETENTION
- FINISHED SURFACE LEVEL

- NOTES:
- SURFACES ARE TO BE GRADED LINEARLY BETWEEN POINTS.
 - REFER TO STRUCTURAL DRAWINGS FOR CONCRETE PAVEMENT DETAILS.
 - CARPARK PRELIMINARY PAVEMENT DESIGN:
25mm ASPHALT
100mm CBR 60
100mm CBR 45
 - CARPARK PAVEMENT DESIGN SHALL BE CONFIRMED WHEN CBR'S ARE AVAILABLE.
 - ALL KERBS SHALL BE IPWEAQ BARRIER KERB TYPE B2 UNLESS NOTED OTHERWISE. REFER IPWEAQ STD DRAWING NO. R-0080.
 - CONFIRM ALL LOCATIONS AND HEIGHTS BEFORE COMMENCING WORK.

A	FOR APPROVAL	11/10/2011	BP
REV	DESCRIPTION	DATE	BY

FOR APPROVAL

Project
BUILDING 8 ON LOT 334/SP193431
CHRISTENSEN ROAD SOUTH
YATALA
for
MULTISPAN AUSTRALIA

FINISHED SURFACE LEVELS PLAN - 1

Drawn	Date	Chkd	Date
B.PARGE	9/9/11	T.SMITH	10/10/11
Design	Date	Apprd	Date
B.PARGE	7/9/11	N.CANTO	11/10/11
Scale	A1	Certif	Date
AS SHOWN		N.CANTO	11/10/11
Project No.	Dwg. No.	Rev	
11-129	C04	A	

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