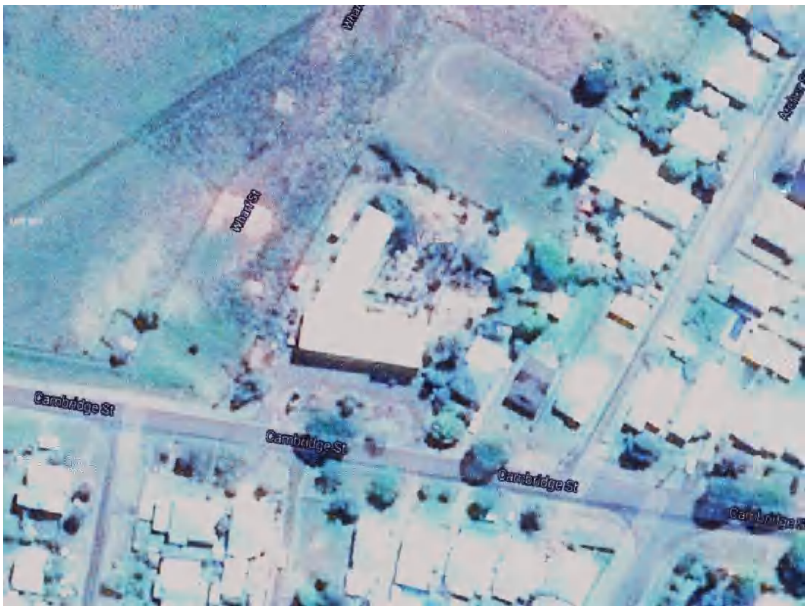
PLANNING PROPOSAL

165-169 Cambridge Street
SOUTH GRAFTON



Prepared by: Davkel Drafting and Design, Waterview Heights NSW

Date: April 2015

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APPLICATION PROPOSING THE REZONING OF LAND

FORMER DAISY WHEEL NURSERY
CAMBRIDGE STREET, SOUTH GRAFTON
(Amended Application April 2015)

This is an application to request the rezoning of three urban allotments at South Grafton, from B1 Business Neighbourhood to R1 General Residential.

1. PRELIMINARY

1.1 Site Description

The land is Lots 2981, 2982 and 2983 DP733046, being Nos. 165-169 Cambridge Street, South Grafton. All three lots have frontage to Cambridge Street. Lots 2981 & 2982 are "battle-axe" shaped lots. The three lots also have side frontage to an unmade street, Wharf Street, on their western sides. The collective 3 lot site abuts residential zoned land to both the east and the south, with the northern and western site boundaries abutting open, rural-zoned land.

Lots 2981, 2982 & 2983 are 1264m2, 1070m2 & 1338m2 in area respectively, having an aggregate total area of 3,672m2. (Diagrams 1, 2 & 3).

1.2 Site History

The original 3,672m2 site was Por. 298, Parish of Southhampton. The whole site was zoned Residential 2(a) under the provisions of the former Grafton Planning Scheme Ordinance. A market garden is said to have existed on the site prior in earlier times.

In May 1986 Council approved the subdivision of Por 298 into three lots, for individual residential use (subdivided under DP 733046), with access to each allotment from Cambridge Street. However the three lots were very quickly subsumed into a new commercial use proposal, being a plant nursery lodged as DA 86/40, and as a result of this the 3 lots were rezoned in early 1987 to Neighbourhood Business zone to enable consent to be issued. A subsequent Building Permit No 87/30 for the new nursery building was granted by Council in March 1987.

1.3 Current Land Use

The three (vacant) lots in DP 733046 were collectively developed in 1987 as a plant nursery, with manager's dwelling, known as Daisy Wheel Nursery (See Diagram 2). The nursery is no longer operating, and there is no intention to re-open it or to install any other type of neighbourhood business on or within the three allotments.

1.4 Current Zoning

The three Lots in DP733046 are currently zoned B1 Neighbourhood Centre under the provisions of the Clarence Valley LEP 2011. This is an isolated and 'stand-alone' business zone in an otherwise residential area, the spot zone being specifically created in 1987 to facilitate a nursery use that was approved by Council in March 1987.

The subject three commercially-zoned lots adjoin a broad area R1 General Residential zoning along their collective southern and the eastern boundaries; and RU1 Primary Production zoning to their western and northern side boundaries (Diagram 5).

1.5 The Rezoning Proposal and Proposed Development of the Site

It is proposed that Lots 2981, 2982 and 2983 DP733046 be rezoned from B1 Neighbourhood Centre to R1 General Residential. This will allow all three lots to be developed residentially, including the conversion and redevelopment of the existing former commercial building on site (Diagram 6).

A return to a residential zoning over the land is wholly in conformity with the original purpose that the lots were created for back in 1986 and the zoning that existed on the land at that time.

Upon rezoning to Residential, the owners propose to

(a) carry out a boundary adjustment between Lots 2892 and 2893 to 'remove' any current building encroachments;
(b) retro-fit the existing former nursery office and residence on Lot 2983 to a residential building to contain 4 units; and
(c) develop Lots 2891 and 2892 with new duplex dwellings.

This action will result in a total of 8 dwellings on the three allotments, providing an average density of one dwelling per 460 sq m of site area.

2. PART 1 - STATEMENT OF OBJECTIVES AND INTENDED OUTCOMES

The site, consisting of three existing urban allotments at numbers 165-169 Cambridge Street, South Grafton (Lots 2981, 2982 and 2983 DP 733046) currently contain a disused and abandoned commercial use. The proposed rezoning will allow the three existing allotments to return to their former residential zoning and be individually developed for their originally created purpose, being residential development. The dwellings may be a mix of single dwellings and/or duplexes, and in the case of the existing former nursery building on Lot 2983, is proposed to be converted to a residential unit building.

The rezoning will also take into account that part of the north-western sides of the lots that are designated flood liable.

3. PART 2 - EXPLANATION OF PROVISIONS

Lots 2891, 2982 and 2983 are proposed to be rezoned from Business B1 Neighbourhood Centre to R1 Residential General by amending the Clarence Valley Council LEP 2011 Land Zoning Map.

The proposed outcome showing the rezoned three allotments in Cambridge Street is as indicated on the proposed zoning map (Diagram 6)

The Clarence Valley Council LEP 2011 Height of Building Map will not require alteration as the subject 3 lots are already included in the 9m.urban height limitation under this plan.

4. PART 3 - JUSTIFICATION FOR THE OBJECTIVES AND OUTCOMES

Section A – Need for the Planning Proposal

Q.1. Is the planning proposal a result of any strategic study or report?

No. It is an individual and isolated application.

Q.2. Is the planning proposal the best means of achieving the objectives or intended outcomes, or is there a better way?

The options here are to do nothing and leave the land as an isolated, unused business zone; or if the land is to be revitalized to its former contiguous residential use then objectives can only be met by rezoning it to residential – there is no other way to achieve that objective.

Section B – Relationship to Strategic Planning Framework

Q.3. Is the planning proposal consistent with the objectives and actions of the applicable regional or sub-regional strategy (including the Sydney Metropolitan strategy and exhibited draft strategies)?

Yes. The proposal fully accords with the principles enumerated in the Mid North Coast Regional Strategy. It is difficult to draw clear, specific guidelines from this strategy due to its general overview broad-issue presentation; however insofar as residential advancement is concerned the strategy clearly states -

"In light of the amount and quality of environmentally sensitive areas and the value of natural resources, future planning decisions will need to be made in the face of increasing shortages of unconstrained land. Much of the suitable land has already been used and the remaining suitable land that is free of constraints must be used to its greatest advantage.

However, given factors such as the impending shift to coastal lifestyles associated with the retirement of the so called baby boomer generation and the greater accessibility of the Region arising from improvements to the Pacific Highway, it is likely that the Region will continue to experience strong population increases.

Currently 80 per cent of all dwellings in the Region are detached houses but with demographic change and lower occupancy ratios there will need to be a greater proportion of multiunit dwellings in future to provide accessible and adaptable housing choices. This can be achieved by increasing the amount of attached or multi-unit housing from its current level of 20 per cent to 40 per cent.

The population and housing challenges are to:

- *closely monitor and review population increases and migration trends*
- *manage the expected population growth in a way that retains the coastal and local character of existing settlements, enhances a sense of community, prevents urban sprawl and limits damage to environmental and rural production values*
- *reinforce the role of major regional centres and towns*
- *provide housing choice and affordability in the right locations reflecting changing population characteristics and associated reduction in household occupancy ratios*
- *provide a framework for the planning of new infrastructure and facilities for the growing and ageing population*
- *ensure that new development reflects and enhances the character of the settlement in which it is located and is based on best practice urban design principles".*

Additionally, the MNCRS states the need to:

- *cater for a minimum housing demand of 59,600 new dwellings by 2031 to accommodate the forecast population increase of 94,000 persons and any anticipated growth beyond this figure arising from increased development processes in the Region; and*
- *ensure that new housing meets the needs of smaller households and an ageing population by encouraging a shift in dwelling mix and type so that 60 per cent of new housing is the traditional detached style and 40 per cent is of multi-unit style.*

Further, new housing should not *"conflict with policy issues*" within the strategy, such as biodiversity, transport and infrastructure, yet requiring "*a contribution to the geographical market spread of housing supply…"*

Clearly the return of this land (ie the three existing urban allotments) back to residential is wholly in conformity with the requirements of the Regional Strategy, being one of the primary sustainable criteria identified within the strategy. The specific land is also located within the growth area strategy mapping area for South Grafton. The proposal is entirely compatible with the Regional Strategy.

Q.4. Is the planning proposal consistent with a Council's local strategy or other local strategic plan?

Yes. Firstly the LEP itself can be taken as a 'strategy'. The LEP zonings clearly show that a residential rezoning would be completely contiguous with the adjacent, nearby and locality zoning and land use. Secondly a residential rezoning is wholly in conformity with Council's Residential Development Control Plan, and a number of other council adopted strategies and plans.

Further criteria supporting consistency are

(a) The application only seeks to restore the residential zoning that was over the site prior to the 1987 rezoning to permit a commercial use on the land;
(b) The current B1 zone is an isolated 'spot' zoning which, since cessation of the nursery use, serves no practical purpose in the neighbourhood;
(c) Returning the zoning to Residential provides a contiguous and logical outcome wholly in conformity with adjacent zonings;
(d) There is no doubt that a residential use of these lots will be to the satisfaction and indeed advantage of all other residential landholders in the area, rather than having a continued commercial use of the land in some form. These advantages include factors such as traffic considerations, potential conflicts of land use, and visual/aesthetic values; and
(e) There are no complexities involved; the proposal is rational, exercising a common sense approach in order to achieve a logical and superior outcome from a current situation. It will be to the benefit of all concerned – the proponents, the neighbourhood, it is a more appropriate land use, and at the same time it fully satisfies sound planning principals.

Clarence Valley Settlement Strategy - March 1999

The Strategy aims that most of the new growth is to be focused close to Grafton and Maclean in sewered areas which are close to services. These areas comprise Grafton, South Grafton, Maclean, Yamba, Junction Hill village, a future village at Clarenza and possible village-type development at Waterview Heights.

The aims and objectives of the strategy are also to establish the framework for future settlement patterns within the Clarence River catchment.

The current rezoning application before Council is fully in accord with the aims and objectives of the strategy, and more particularly with specific Urban Settlement aims from 'SPECIFIC PLANNING PRINCIPLES' under Sec 2.2

The proposal is also very much in accord with the 'Vision' of the Strategy (Sec 4.1) which aims for "*a healthy, prosperous and sustainable future for all forms of life in the Clarence Valley by acknowledging and building on the strengths of the Valley, particularly the river, and by encouraging a settlement pattern which builds on existing communities and minimises urban and rural residential sprawl*".

The specific 'Area Strategy for South Grafton' under Sec 5.3 provides that *"Future residential development will comprise urban infill and small peripheral extensions".*

The proposal before Council fully meets all the relevant criteria under this Strategy.

Clarence Valley Council Biodiversity Management Strategy – 2010

This strategy has been initiated to install measures to prevent the decline in biodiversity that has been happening within the Clarence Valley LGA.

The site at South Grafton that is proposed to be rezoned is an existing urban property containing an abandoned plant nursery. The whole of the site (ie three lots) has been developed and used for nursery purposes in the past, and contains several small shrubs and trees, none of which have any significance. Any new residential development would provide new individual landscaping, which should improve and enhance the current presentation. There is no inconsistency between the strategy and the proposal for rezoning.

Clarence Valley Affordable Housing Strategy 2007

This strategy is an all-encompassing strategy which analyses the need to provide affordable housing, particularly for disadvantaged groups in the Clarence Valley LGA.
The strategy recognises that:

"*Affordable purchase housing is most likely to be provided by the construction of two and three bedroom housing, with one bathroom and no garage, in the suburbs of South Grafton, Grafton, Junction Hill and Maclean*".

It further states *that "..affordable housing in the Clarence Valley LGA is locational, with the most affordable location (being) South Grafton, followed by Grafton, Junction Hill, and Maclean".*

Clearly the provision of additional residential (housing) opportunities centrally within the existing South Grafton neighbourhood as the current application proposes accords directly within the aims and terms of this strategy.

Q.5. Is the planning proposal consistent with State Environmental Planning Policies?

Yes. Reference the separate table under Appendix 1 of this report for interaction of the proposal with all prevailing State Environmental Planning Policies (SEPPs). There are no inconsistencies with this proposal and prevailing SEPPs.

Q.6. Is the planning proposal consistent with applicable Ministerial Directions (s.117 directions)?

Yes. Reference the separate table under Appendix 2 of this report for analysis and compliances with s.117 Directions. The minimal impacts on the site from both acid sulfate soils and flooding are discussed in the assessment under 4.1 and 4.3 respectively in Appendix 2. There are no inconsistencies with directions.

Section C – Environmental, social and economic impact

Q.7. Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?

No. No habitat is affected. The site was wholly used and developed for plant nursery and commercial purposes.

Q.8. Are there any other likely environmental effects as a result of the planning proposal and how are they proposed to be managed?

(a) Residential development will in fact enhance the locality by removing a conflicting zoning and land use, and will enable the three allotments to be developed with a land use wholly consistent with the adjoining neighbourhood - *and* in conformity with both the original zoning and the original subdivision purpose.
(b) In terms of flood affectation -part of the western sides of all three (existing) allotments are subject to flooding (Diagram 4). This is back-up flood fringe affectation only; nevertheless it is an important aspect to consider. Given the minor section of flood liable land on each lot it is not considered feasible to zone those parts differently to the intended residential zoning, as it would be dysfunctional to do so, and may well deny future use of the flood effected parts with otherwise residentially -related 'backyard' uses. Also there are adequate controls built in to the planning approvals system to give full management control to any proposals that might arise in respect of the flood-affected sections of land.
(c) The site has been subjected to a contaminated land survey. The results of this survey and analysis are discussed below.

<u>SEPP 55 – Contaminated Land Analysis</u>

Consultants Gutteridge Haskins & Davey were engaged to undertake a comprehensive contamination review of the subject site (See Appendix 4)

The following potential contamination sources were identified as being possibly relevant to the site's former use as a plant nursery:

- spillage or leakage of oils, fuels, herbicides or pesticides;
- historical use of herbicides or pesticides across the site as part of nursery activities;
- potential for use of fill materials from unknown origins for site levelling; and

- potential for hazardous building materials within the buildings on the site.

Test bores were sunk and the site fully analysed for evidence of heavy metals, various hydrocarbons, seepages, asbestos, and OCP. Minor traces of certain elements were noted, but were 'below the limit of reporting' or below the assessment criteria for all samples analysed, with the only exceptions being zinc in one sample, and also surface oil staining in one corner of the site. No asbestos was evident.

The report concludes that **'based on the desk-top review and the results of the current site investigations, it is considered that the site can be made suitable for redevelopment for residential use by implementation of (the following) remediation works".**

The remediation works are as specified in Section 10.2 of the consultant's report in Appendix 4.

Q.9. Has the planning proposal adequately addressed any social and economic effects?

Yes. There are a number of practical and logical points in support of this application, and these are outlined above in Q.4 of this section.

However essential to the consideration of social effects is the base consideration that returning these three allotments to residential use will be to the advantage of all other residential land holders/occupiers in the area, rather than having an intrusive, continuing non-conforming commercial use of the land in some form. These advantages include such factors as traffic considerations, potential for conflicts of land use, and visual and aesthetic values. This of course can have a beneficial flow-on effect on land and property values in the neighbourhood.

There are no economic benefits to be had in having a disused commercial use on the site, either to the owners, or to other landowners in the locality.

Section D – State and Commonwealth interests

Q.10. Is there adequate public infrastructure for the planning proposal?

Yes. All requisite domestic services are existing and available to the three lots.

Q.11. What are the views of State and Commonwealth public authorities consulted in accordance with the Gateway determination?

As a Gateway determination has not yet been issued, views of relevant authorities are not known at this stage.

5. PART 4 - MAPPING – RELEVANT MAPS TO IDENTIFY THE PLANNING INTENT

A full mapping package is included with this application. These include:

Diagram 1 – Locality Plan
2 – Site plan showing existing development
3 – Copy of DP plan of subdivision
4 – Map showing Council's identified flood area
5 – Existing zoning
6 – Proposed zoning

6. PART 5 - DETAILS OF COMMUNITY CONSULTATION

Community input will occur when Council gives public notification of the rezoning proposal, as required under the EP&A Act. However, notwithstanding, the residents/occupants of dwellings No.s 158-176 and 157-163 Cambridge St, and No.s 36 & 38 Archer St were individually canvassed by letter advising of the proposed rezoning and intended residential use, asking for any comments or concerns (See Appendix 3)

There were no comments, queries or submissions received from any of these residents following the two-week consultation period.

Consultations have also been had with officers of Clarence Valley Council during the preparation of this report, which have been constructive and helpful.

It is considered that this rezoning proposal is a "low impact" one, in that it:

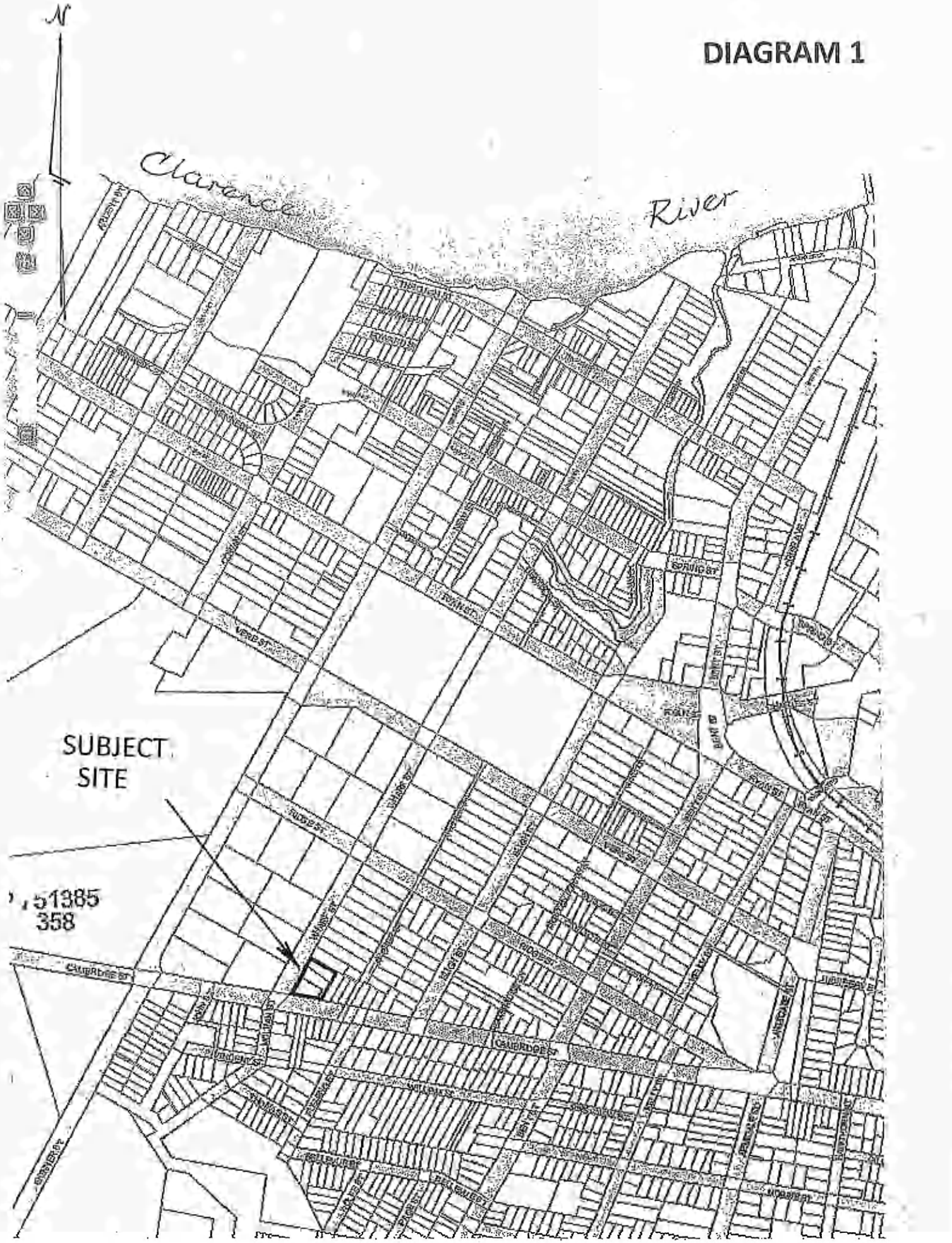
- is consistent with the pattern of surrounding land use zones and land uses;
- is consistent with the strategic planning framework;
- presents no issues with regard to infrastructure servicing;
- is not a principal LEP; and
- does not reclassify public land.

On this basis an exhibition period of 14 days is considered appropriate in the circumstances.

7. PART 6 - PROJECT TIMELINE

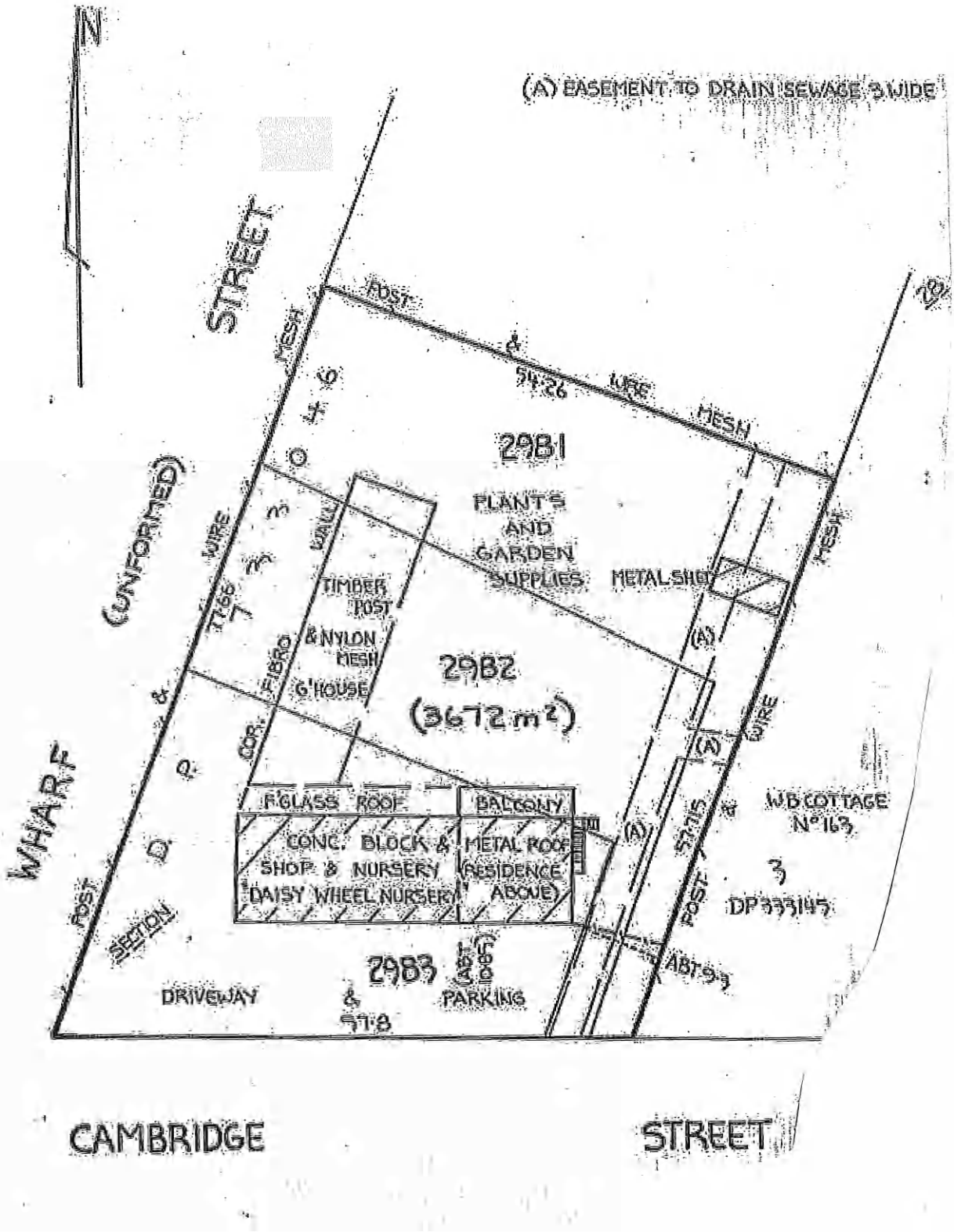
An estimated timeline for this project is 6 months from the issue of a Gateway determination, providing such determination does not impose conditions that prove onerous to satisfy.

DIAGRAM 1



Locality Plan

DIAGRAM 2



Site Plan (showing existing site layout)

PLAN FORM 2

Plan Drawing only to appear in this space

*OFFICE USE ONLY

Signatures and seals only.

D. P. 733046

Registered: 15-5-1986

C.A.: NR 1/541 OF 27-9-1986

Title System: TORRENS

Purpose: SUBDIVISION

Ref. Map: Y9110 - 72#

Last Plan: ———

PLAN OF SUBDIVISION OF PORTION 298 #N# SECTION 28

Reduction Ratio 1: 2500
Lengths are in metres.

Mun/Shire: GRAFTON
City

Locality: SOUTH GRAFTON

Parish: SOUTHAMPTON

County: CLARENCE

This is sheet 1 of my plan in sheets.
(Delete if inapplicable).

I, JAMES PATRICK O'DONOHUE

of BUCKLEY & ASSOC. SOUTH GRAFTON

a surveyor registered under the Surveyors Act, 1929, as amended, hereby certify that the survey represented in this plan

is accurate and has been made (Strike out (2) under my immediate supervision in accordance with the Survey Practice Regulations, 1933, and was completed on *

1ST MAY 1985

Signature: J.P. O'Donohue

Surveyor registered under Surveyors Act, 1929, as amended.
Datum Line of Azimuth: X-Y
*Strike out either (1) or (2). (Insert date of survey.

Panel for use only for statements of intention to dedicate public roads or to create public reserves, drainage reserves, easements or restrictions as to user.

PURSUANT TO SEC.88B OF THE CONVEYANCING ACT, 1919, AS AMENDED, IT IS INTENDED TO CREATE:

1. RESTRICTION AS TO USER .
2. EASEMENT TO DRAIN SEWAGE 3 WIDE

Y0013A11A

DIAGRAM A
(RA 1:800)

DIAGRAM B
(NOT TO SCALE)

(A) EASEMENT TO DRAIN SEWAGE 3 WIDE

Council Clerk's Certificate

I hereby certify that in relation to the proposed SUBDIVISION

Date 27-3-86

Council Clerk

*This part of certificate to be deleted where the subdivision is only for a consolidation of lots or the opening of a new road or where the land to be subdivided is wholly outside the area of operations of the Metropolitan Water Sewerage and Drainage Board and the Hunter District Water Board.
†Delete if inapplicable.

M.P.D.

WARNING: CREASING OR FOLDING WILL LEAD TO REJECTION

SURVEYOR'S REFERENCE 4844

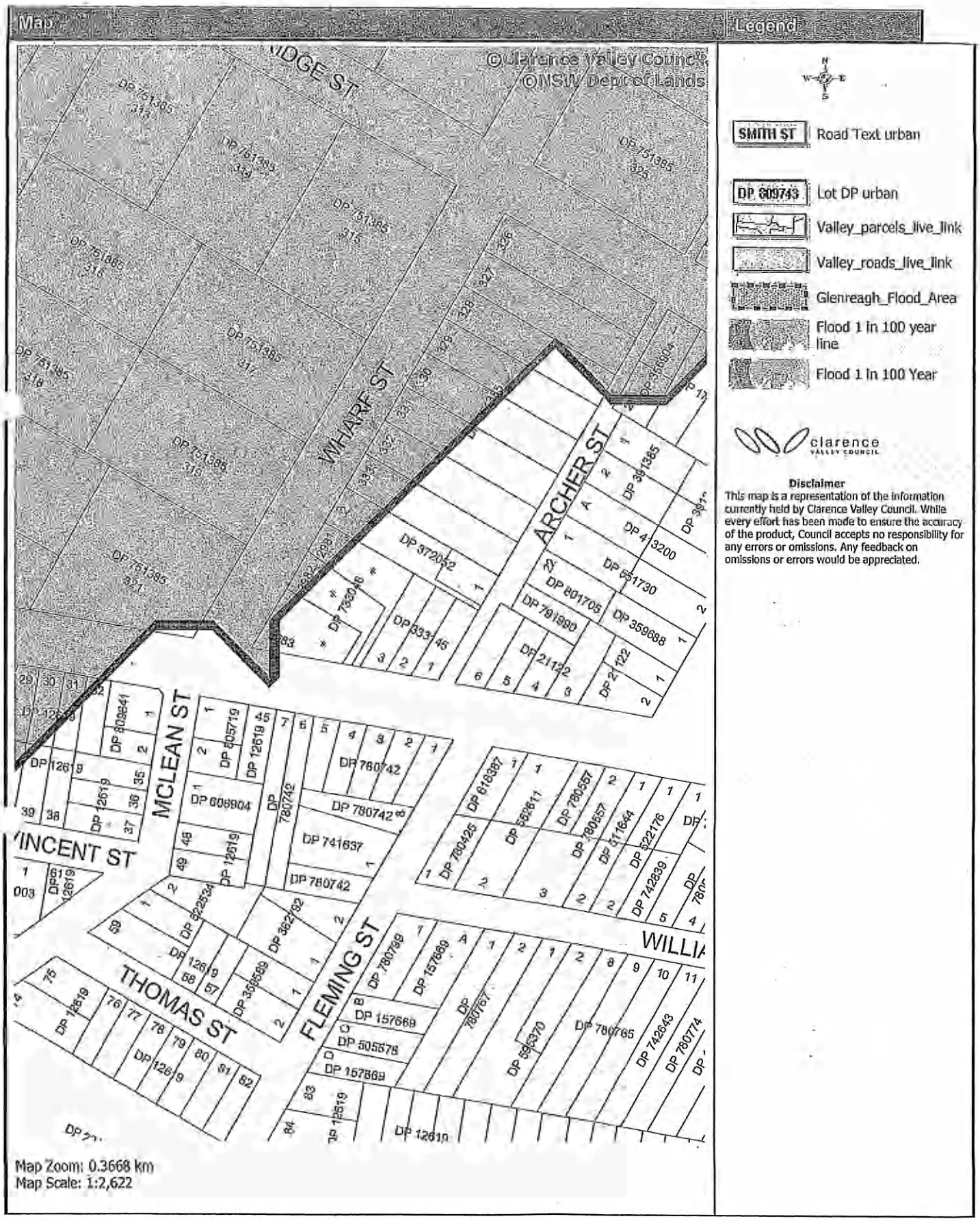
This negative is a photograph made as a permanent record of a document in the custody of the Registrar General this day. 15th May, 1986

DP 733046

DIAGRAM 3

DIAGRAM 4

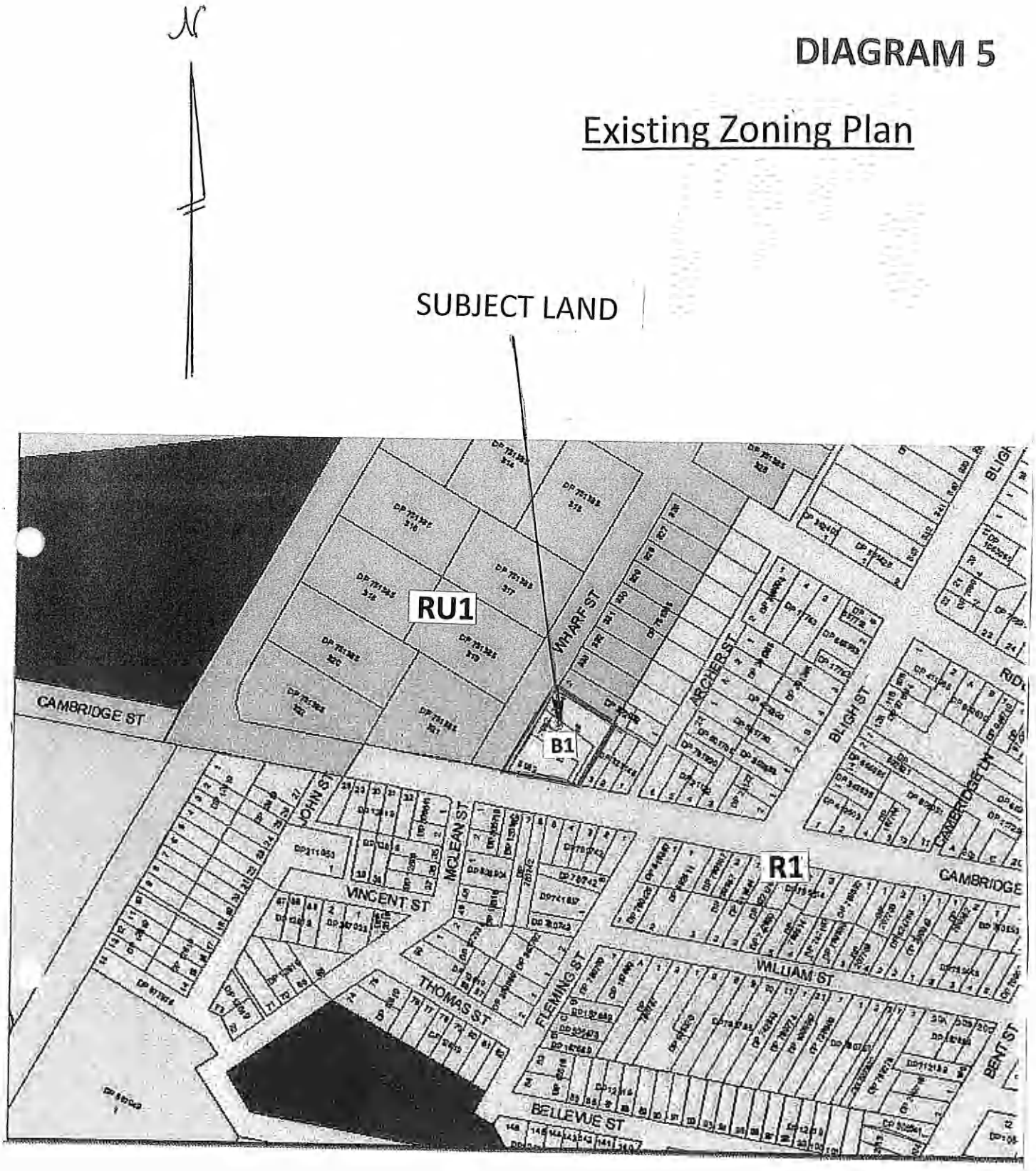
Created on Monday, 5 May 2014 by _ALL_CVC_STAFF



Flood Plan

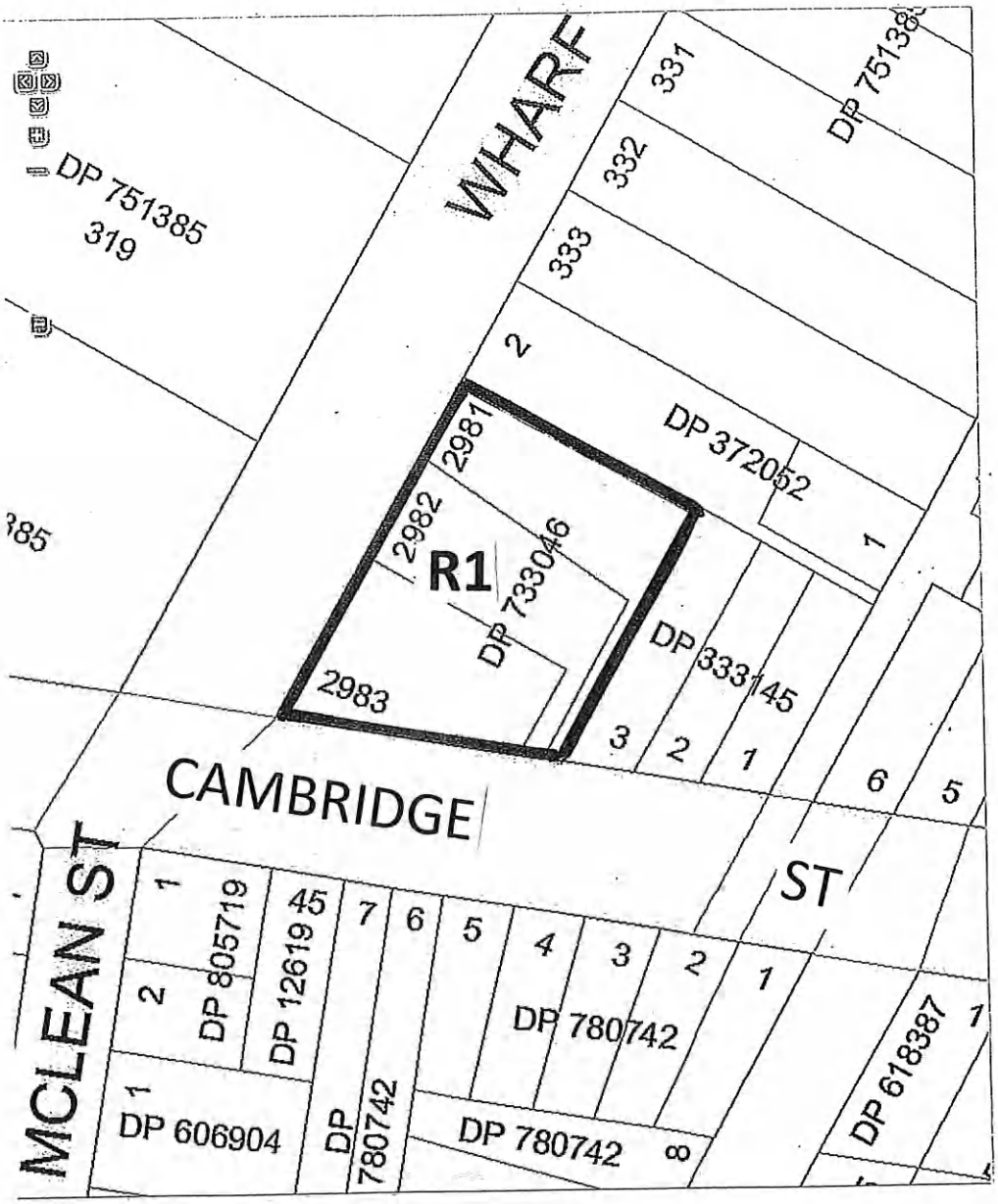
DIAGRAM 5

Existing Zoning Plan



Existing Zoning

DIAGRAM 6



Proposed Zoning

APPENDIX 1: STATE ENVIRONMENTAL PLANNING POLICY CHECKLIST

An analysis of prevailing SEPPs and how these apply to the current application is as follows:

SEPP/SEPP No.	Applicable to Application	Comments
1 – Development Standards	No	
14 – Coastal Wetlands	No	
15 – Rural Land Sharing Communities	No	
19 – Bush land in Urban Areas	No	This SEPP does not apply to the Clarence Valley LGA ere is no bush land on site
21 – Caravan Parks	No	
26 – Littoral Rainforests	No	Property is not affected by rainforests
29 – Western Sydney Recreation Area	No	
30 – Intensive Agriculture	No	
32 – Urban consolidation (Redevelopment of Urban Land)	Yes	The rezoning proposal directly supports the aims and objectivities of SEPP 32, which are:- **SEPP 32 Aims and objectives** **(1)** This Policy aims: (a) to promote the orderly and economic use and development of land by enabling urban land which is no longer required for the purpose for which it is currently zoned or used to be redeveloped for multi-unit housing and related development, and (b) to implement a policy of urban consolidation which will promote the social and economic welfare of the State and a better environment by enabling: (i) the location of housing in areas where there are existing public infra-structure, transport and community facilities, and (ii) increased opportunities for people to live in a locality which is close to employment, leisure and other opportunities, and (iii) the reduction in the rate at which land is released for development on the fringe of existing urban areas. **(2)** The objectives of this Policy are: (a) to ensure that urban land suitable for multi-unit housing and related development is made available for that development in a timely manner, and (b) to ensure that any redevelopment of urban land for multi-unit housing and related development will result in: (i) an increase in the availability of housing within a particular locality, or (ii) a greater diversity of housing types within a particular locality to meet the demand generated by changing demographic and household needs, and (c) to specify: (i) the criteria which will be applied by the Minister to determine whether the redevelopment of particular

SEPP/SEPP No.	Applicable to Application	Comments
		urban land sites is of significance for environmental planning for a particular region, and (ii) the special considerations to be applied to the determination of development applications for multi-unit housing and related development on sites of such significance.
33 – Hazardous and Offensive Development	No	However the former nursery use will require that a contaminated land report be carried out concurrent with this application
36 – Manufactured Home Estates	No	
39 – Spit Island Bird Habitat	No	
44 – Koala Habitat Protection	No	Not in a Koala area. No Koala trees on site
47 – Moore Park Showground	No	
50 – Canal Estate Development	No	
52 – Farm Dams and Other Works	No	
55 – Remediation of land	Yes	Detailed site study and report from consultants, which advises that the land can be made suitable for residential use through implementation of specified remediation works
59 – Central Western Sydney Regional Open Space	No	
62 – Sustainable Aquaculture	No	
64 – Advertising and Signage	No	
70 – Affordable Housing	No	(Policy applies to Sydney only)
65 – Design Quality of Residential Flat Development	Yes	Some principles may apply to any residential flat development on the subject site
71 – Coastal Protection	No	
SEPP (Penrith Lakes Scheme) 1989	No	
SEPP (Kurnell Peninsula) 1989	No	
SEPP (Housing for Seniors or People with a Disability) 2004	No	
SEPP (Building Sustainability Index-BASIX) 2004	Yes	Will apply later residential development DA's on these sites
SEPP (Major Development) 2005	No	
SEPP (Sydney Region Growth Centres) 2006	No	
SEPP (Mining, Petroleum Production & Extractive Industries) 2007	No	
SEPP (Infrastructure) 2007	Yes	Infrastructure required to service the three proposed residential lots is already in situ and available
SEPP (Kosciusko National Park & Alpine Resorts) 2007	No	
SEPP (Rural Lands) 2008	No	
SEPP (Western Sydney Employment Area) 2009	No	
SEPP (Exempt & Complying Development Codes) 2008	No	Normal development codes will apply to the rezoned land
SEPP (Western Sydney Parklands) 2009	No	
SEPP (Affordable Rental Housing) 2009	No	However, the proposal is to provide for additional accommodation which may well include rental

SEPP/SEPP No.	Applicable to Application	Comments
		opportunities
SEPP (Urban Renewal) 2010	Yes	
SEPP (Sydney Drinking Water Catchment) 2011	No	
SEPP (State and Regional Development) 2011	No	Not of State or Regional significance
SEPP (Three Ports) 2013	No	
SEPP (SEPP 53 Transitional Provisions) 2011	No	
SEPP (Miscellaneous Consent Provisions) 2007	No	

APPENDIX 2: SECTION 117 DIRECTION CHECKLIST

An analysis of prevailing Sec.117 Directions and applicability to the current application is as follows:

No.	Title and Provisions	Applicable	Consistency
1.1	Business and Industrial Zones (1) The objectives of this direction are to: (a) encourage employment growth in suitable locations, (b) protect employment land in business and industrial zones, and (c) support the viability of identified strategic centres. (4) A draft LEP shall: (a) give effect to the objectives of this direction, (b) retain the areas and locations of existing business and industrial zones, (c) not reduce the total potential floor space area for employment uses and related public services in business zones, (d) not reduce the total potential floor space area for industrial uses in industrial zones, and (e) ensure that proposed new employment areas are in accordance with a strategy that is approved by the Director-General of the Department of Planning	Yes	The proposal is to change the current Business zoning, which would appear to be in conflict with 4(b) & 4 (c) of the Direction (in that the Business zone "floor space" should not be reduced, and that the location be retained). This site is both isolated (in terms of commercial connectivity) and abandoned (in terms of use). To rezone it back to residential (ie to its original zoning) is, given the location and character of the wider adjoining neighbourhood, entirely logical and a common sense application. It is emphasised that given the specific circumstances in relation to this application, it is clearly one of "minor significance" in terms of this Direction, and thus any inconsistency should be supported. .
1.2	Rural Zones	No	
1.3	Mining, Petroleum and Extractive Industries	No	
1.4	Oyster Aquaculture	No	
1.5	Rural Lands	No	
2.1	Environmental Protection Zones	No	
2.2	Coastal Protection Zones	No	
2.3	Heritage Conservation	No	
2.4	Recreational Vehicle Areas	No	
3.1	Residential Zones (1) The objectives of this direction are: (a) to encourage a variety	Yes	All objectives are directly met with this proposal. The criteria in Parts 4 and 5 are made possible or are met. Design principles will be met at later development

No.	Title and Provisions	Applicable	Consistency
	and choice of housing types to provide for existing and future housing needs, (b) to make efficient use of existing infrastructure and services and ensure that new housing has appropriate access to infrastructure and services, and (c) to minimise the impact of residential development on the environment and resource lands. (4) A planning proposal must include provisions that encourage the provisions of housing that will: (a) broaden the choice of building types and locations available in the housing market, and (b) make more efficient use of existing infrastructure and services, and (c) reduce the consumption of land for housing and associated urban development on the urban fringe, and (d) be of good design. (5) A planning proposal must, in relation to land which this direction applies: (a) contain a requirement that residential development is not permitted until land is adequately serviced (or arrangements satisfactory to the council, or other appropriate authority, have been made to service it), and (b) not contain provisions which will reduce the permissible residential density of land.		application stage. It is considered that the proposal is consistent with this direction.
3.2	Caravan Park & Manufactured Home Estates	No	
3.3	Home Occupations	No	
3.4	Integrating Land Use and Transport (1) The objective of this	Yes	In this application the streets and the subdivision are existing and fall into compliance with criteria by natural attrition.

No.	Title and Provisions	Applicable	Consistency
	direction is to ensure that urban structures, building forms, land use locations, development designs, subdivision and street layouts achieve the following planning objectives: (a) improving access to housing, jobs and services by walking, cycling and public transport, and b) increasing the choice of available transport and reducing dependence on cars, and (c) reducing travel demand including the number of trips generated by development and the distances travelled, especially by car, and (d) supporting the efficient and viable operation of public transport services, and e) providing for the efficient movement of freight. (4) A draft LEP shall locate zones for urban purposes and include provisions that give effect to and are consistent with the aims, objectives and principles of: (a) *Improving Transport Choice – Guidelines for planning and development* (DUAP 2001), and (b) *The Right Place for Business and Services – Planning Policy* (DUAP 2001).		The three lots *were* urban residential prior to being spot zoned to allow the plant nursery. Building forms and development design will remain fully flexible within the three lots. Travel distances and transport services are existing, will not be affected, and are not a variable factor in this rezoning situation. The *'Improving Transport Choice'* guidelines all relate to incorporating design principals into new urban areas and urban layout – such as aligning (town) centres with corridors, connecting streets, parking supply management, and pedestrian and cycle accesses. Given the existing street and subdivision layout that exists at the subject site, it is clear that the guideline principles are not directly applicable in this case. The "*Right Place for Business and Services*" planning policy projects policy issues such as reducing reliance on cars, encouraging multi-purpose trips, providing efficient accesses, limiting the demand for travel, encouraging public transport use, and the like. The policy clearly applies to the where and how business centres are located and in relation to access and transport. The policy has no direct bearing on the current rezoning application or location.
3.5	Development Near Licensed Aerodromes	No	
3.6	Shooting Ranges	No	
4.1	Acid Sulphate Soils The objective of this direction is to avoid significant adverse environmental impacts from the use of land that has a probability of containing acid sulphate soils. When a Council prepares a	Yes	Clause 7.1 of Clarence Valley Council's LEP 2011 contains acid sulphate planning controls and procedures. The subject land lots 2981 -2983 are identified in the acid sulphate mapping as being Class 5 – meaning that it is located within the perimeter band of land 500 metres wide that surrounds those lands classified as Classes 1 to 4 under the acid sulphates mapping.

No.	Title and Provisions	Applicable	Consistency
	draft LEP to introduce provisions to regulate works in acid sulphate soils, a number of procedures are required to be followed which are enumerated in direction items (4) to (7) of this direction.		The flood land to the west of the subject 3 lots is within a class 3 acid sulphate category. This Class 3 land is approx. 25m. distant from the north-west corner of Lot 2981, being the closest point to the subject three lots. This means that any works proposed on and within the subject three lots will require an acid sulphate soils management plan to be prepared prior to obtaining any development consent <u>if those works are likely to lower the water table below 1 metre A.H.D. on the adjacent class 3 land.</u> Residential dwelling development on the three subject lots is most unlikely to have ANY effect on any water table on the adjoining class 3 lands. In any case full management controls are already extant within Council's LEP in the unlikely event that any other development that might affect the water table is at any time proposed on any part of the subject land. It is considered that the terms of this direction are wholly met and satisfied.
4.2	Mine substance and Unstable Land	No	
4.3	Floor Prone Land (1) <u>The objectives of this direction are</u>: (a) to ensure that development of flood prone land is consistent with the NSW Government's Flood Prone Land Policy and the principles of the *Floodplain Development Manual 2005*, and (b) to ensure that the provisions of an LEP on flood prone land is commensurate with flood hazard and includes consideration of the potential flood impacts both on and off the subject land. <u>Given that the planning proposed intends to alter a zone that affects flood prone land, the following criteria are to be observed</u>:-	Yes	The 1 in 100 year flood level at this locality is 6.1 – 6.2 m A.H.D. The western sides of all three lots are flood liable, being affected by back-up waters (i.e. are flood-fringe). The flood plain here is actually protected by South Grafton Flood Levee, giving protection to at least a 1:100 year flood event. Notwithstanding, the land has still to be considered as flood liable and flood controls still prevail. Approx. 800 sq m. of the total site area of 3.672 sq.m. is flood affected, representing about 20% of the total site area. There is ample room on all three allotments to allow residential construction to avoid the flood liable parts. In any case, an appreciable part of this flood affected western strip is also synonymous with the building alignment set-back which will need to be observed along the western (unmade) street frontage, so that the "loss" to flood land is appreciably minimised anyhow.

No.	Title and Provisions	Applicable	Consistency
	(4) A draft LEP shall include provisions that give effect to and are consistent with the NSW Flood Prone and Policy and the principles of the *Floodplain Development Manual 2005* (including the *Guideline on Development Controls on Low Flood Risk Areas*); (5) A draft LEP shall not rezone land within the flood planning areas from Special Use, Special Purpose, Recreation, Rural or Environmental Protection Zones to a Residential, Business, Industrial, Special Use or Special Purpose Zone. (6) A draft LEP shall not contain provisions that apply to the flood planning areas which: (a) permit development in floodway areas, (b) permit development that will result in significant flood impacts to other properties, (c) permit a significant increase in the development of that land, (d) are likely to result in a substantially increased requirement for government spending on flood mitigation measures, infrastructure or services, or (e) permit development to be carried out without development consent except for the purposes of agriculture (not including dams, drainage canals, levees, buildings or structures in floodways or high hazard areas), roads or exempt development. 7) A draft LEP must not impose flood related development controls above the residential flood planning		The building on lot 2983 (containing the residence and former nursery) is already clear of the flood line. Provided that no residential development will occur within the flood affected sections of the three lots, and subject to Council's existing controls and minimum floor height requirements (of 7.1m AHD), there is no inconsistency with the criteria specified in sections (4) to (8) within this direction.

No.	Title and Provisions	Applicable	Consistency
	level for residential development on land, unless a council provides adequate justification for those controls to the satisfaction of the Director-General (or an officer of the Department nominated by the Director-General). (8) For the purposes of a draft LEP, a council must not determine a flood planning level that is inconsistent with the Floodplain Development Manual 2005 (including the *Guideline on Development Controls on Low Flood Risk Areas*) unless a council provides adequate justification for the proposed departure from that Manual to the satisfaction of the Director-General (or an officer of the Department nominated by the Director-General).		
4.4	Planning for Bushfire Protection	No	
5.1	Implemental of Regional Strategies The objective of this direction is to give legal effect to the vision, land use strategies, policies, outcomes, and actions contained in regional strategies. All draft LEP's shall be consistent with a regional strategy released by the Minister for Planning.	Yes	This direction applies because the subject land is within the terms of the Mid North Coast Regional Strategy (March 1999) The proposal is fully consistent with the terms of this strategy -see further discussion contained in PART 3 of the Planning Proposal.
5.2	Sydney Drinking Water Catchments	No	
5.3	Farmland of State and Regional Significance on the NSW Far North Coast	No	
5.4	Commercial and Retail Development along the Pacific Highway, North Coast	No	
5.8	Second Sydney Airport: Badgerys Creek	No	
5.9	North West Rail Link Corridor Strategy	No	

No.	Title and Provisions	Applicable	Consistency
6.1	Approval and Referral Requirements	No	
6.2	Reserving Land for Public Purposes	No	
6.3	Site Specific Provisions	No	
7.1	Implementation of the Metropolitan Plan for Sydney 2036	No	

APPENDIX 3: LETTER OF CONSULTATION WITH LOCAL RESIDENTS

DAVKEL DRAFTING & DESIGN PTY. LTD.
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Contact David & Kelly for

* PLANS & SPECIFICATIONS FOR ALL TYPES OF BUILDINGS
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APPENDIX 3

Phone: 6644 9800
Mobile: 0423 449 800
Email: davkeldrafting@bigpond.com
Postal : 54 Eatonsville Road
Waterview Heights 2460 NSW

To the Owner/Occupier

7th January 2015

Dear Sir/Madam

RE: PROPOSED REZONING 165-169 CAMBRIDGE STREET SOUTH GRAFTON (DAISY WHEEL NURSERY).

The current owners of 165-169 Cambridge Street (Daisy Wheel Nursery) are proposing to rezone the land from Neighbour business to residential. Prior to the current Nursery business being developed the land was zoned residential.

It is proposed to construct quality new residential dwellings on the site.

The purpose of this letter is to ask if you have any comments or queries in relation to this rezoning proposal.

Accordingly should you wish to make a comment or seek further information please do not hesitate to contact the undersigned by close of business on 23rd January 2015.

Yours faithfully

David C. Whyte

Davkel Drafting & Design Pty Ltd

Letter of Public Consultation

Chellew Property Investment Trust

Phase 1 Contamination Assessment with Targeted Sampling

163-165 Cambridge Street, South Grafton, NSW

May 2015

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1. Introduction

1.1 Background

GHD Pty Ltd (GHD) was engaged by Chellew Property Investment Trust (CPIT) to complete a Phase 1 Contamination Site Assessment (CSA) with a limited soil investigation for a former plant nursery located at 163-165 Cambridge Street, South Grafton, NSW (herein referred to as the Site). The Site location is presented in Figure 1 in Appendix A.

The Site is described as Lot 2981 - 2983 DP 733046 with an approximate area of 0.37 hectares.

It is understood that a planning proposal has been submitted for the Site to rezone the land for proposed development for residential land use.

1.2 Objectives

The objectives of the Phase 1 CSA were to:

- Identify potential contamination issues (historical and current) at the Site.
- Provide recommendations as to the requirement for further investigations, remediation or management of any contamination issues identified.

1.3 Scope of works

The scope of works included the following:

- A site history review including a review of current and historical aerial photographs and a review of Council contaminated land records, development applications, building applications and section 149 certificates.
- A review of any previous contamination investigations pertaining to the Site.
- Review of geology, hydrology and topography information for the Site.
- A review of NSW EPA notices under the Contaminated Land Management Act (1997) and a search of NRM Atlas on groundwater information for the area.
- Preparation of a site specific Health, Safety and Environmental Plan (HSEP).
- A site inspection to identify areas of potential contamination concern (staining, chemical storage, machinery storage/maintenance, pesticide use, burial areas) and confirm sampling locations.
- Completion of Dial Before You Dig (searches) to identify the location of services entering and within the Site.
- Collection of soil samples from seven test locations to target areas of potential contamination using a hand auger to a maximum depth of 0.7 m below ground level (bgl).
- Analysis of selected soil samples for pH, cation exchange capacity (CEC), heavy metals, total recoverable hydrocarbons (TRH), benzene, toluene, ethylbenzene, xylene and naphthalene (BTEXN), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), organochlorine pesticides (OCPs) and asbestos in soil.
- Preparation of this report with reference to the *Guidelines for Consultants Reporting on Contaminated Sites* (NSW OEH, 2011) detailing the results of the investigations, discussions and conclusions with respect to the requirement for further investigations or remediation (if required).

1.4 Limitations

The assessment was limited to the scope described in Section 1.3 and the limitations outlined in Section 12. The works were limited to desktop review of site contamination issues, a site inspection and limited soil sampling and did not include investigation of groundwater. The assessment was limited to assessment of contamination of land and did not include any assessment of chemicals or building materials on the site. The scope of work was limited to target areas of potential contamination concern such as staining, chemical storage, machinery storage/maintenance, pesticide use, burial areas. The investigation is not strictly in accordance with the NSW EPA Sampling Design Guidelines which recommends between nine and 11 test locations for a site of 0.37 ha but is considered appropriate for a preliminary assessment of contamination conditions at the Site.

2. Site description and environmental setting

2.1 Site location and description

The Site is comprised of three lots, Lot 2981, Lot 2982 and Lot 2983 within DP 733046, which were used for commercial purposes as a plant nursery (Daisy Wheel Nursery). All three lots are located at the western end of Cambridge Street, between Archer and Skinner Street. The area of the site is approximately 0.37 hectares. A Site locality plan is shown in Figure 1, Appendix A.

2.2 Zoning and surrounding land uses

Lots within the Site are zoned under the Clarence Valley Council (CVC) Local Environmental Plan (LEP 2011) as B1 (Neighbourhood Centre). Land to the west and north of the Site are zoned as RU1 (Primary Production), and land to the east and south are zoned as R1 (General Residential).

Developments which are permitted without consent on B1 zoned land include home-based child care and home occupations. The objectives of Zone B1 (Neighbourhood Centre) include:

- To provide a range of small-scale retail, business and community uses that serve the needs of people who live or work in the surrounding neighbourhood.
- To reinforce the neighbourhood centres of Coutts Crossing, Glenreagh, Lawrence and Ulmarra as the locations for commercial premises.
- To minimise conflict between land uses within the zone and land uses within adjoining zones.
- To enable other land uses that are compatible with and do not detract from the viability of retail, business and community uses within the zone.

The surrounding land uses include:

North – Residential properties and undeveloped vacant subdivided land.

South – Residential properties.

East – Residential properties.

West – Vacant subdivided land, and a drainage channel (Christopher Creek).

2.3 Site observations

A site inspection was conducted by a GHD Environmental Engineer on 6 March 2015. Observations for each property as noted during the site inspection are documented below. Photographs are presented in Appendix B.

- The Site comprised three lots, 2981 (north-east portion), 2982 (central portion) and 2983 (south-west portion) combined as a former plant nursery which consisted of a large two-storey brick building (with metal roof) in the south-west portion of the site (Lot 2983) with a nursery yard extending to the north-east (behind the former nursery building) through the central and north-east portions of the site (Lot 2982 and approximately half of Lot 2981).
- The large two-storey brick building in the south-west portion of the site consisted of an upper level residence at the eastern end (which was occupied at the time of the inspection). The rear eastern end of the former nursery building appeared to be

constructed of fibre cement sheeting. Anecdotal evidence from the client indicated that the building was constructed in the 1990's.

- The south-west portion of the Site comprised an asphalt pavement (in front of the building) with entry and exit driveways at the western and eastern extents.
- A security fence/gate (for vehicle access) to the nursery yard was located between the south-west corner of the building and the north-west boundary of the Site.
- A degraded asphalt and gravel access road extended from the gate to the northern corner of the site along the north-west boundary, and then continued along the north-east boundary to a small shed (of insulated construction) near the north-east corner of the site. The access road formed the boundary of the former nursery yard.
- The small shed had a bare earth floor and contained two partially used bags of fertiliser.
- A small stockpile of concrete rubble was observed in the northern corner of the site. Tile, timber and plastic waste was observed along the north-east boundary.
- A large stockpile was observed near the centre of the north-east boundary, comprising waste building materials (timber and metal), vegetation and surface soils from a demolished awning formerly located off the western end of the nursery building.
- An oil stain (approximately 0.5 metre diameter) was observed in the eastern corner of the site. Several fragments of fibre cement sheeting were observed nearby.
- The north-west portion of the former nursery yard appeared to have been level-filled (up to 0.5 metres thick, presumably using cuttings from the access road) and retained by round timber logs (observed to be collapsing in sections).
- The former nursery yard was predominantly grassed (weedy) with some paved sections in the southern portion.
- A large open concrete pipe section (approximately one metre diameter) was located in the northern corner of the former nursery yard. Water was observed to be approximately one metre below ground level.
- A concrete pad and pit cover was observed east of the former nursery building and yard, presumed to be either stormwater (likely) or sewer.
- A garden was located east of the former nursery building, with a large palm and a wooden fence between the building and south-east boundary.
- Gravel garden beds were observed along the rear of the former nursery building. An empty container of Roundup was observed towards the eastern end.
- The site generally sloped to the north-west, with the exception of the levelled former nursery yard.

2.4 Topography

A review of the topographic map for the Grafton region (Six Maps, NSW Government, http://maps.six.nsw.gov.au/, accessed on 13 March 2015) indicated that the Site is situated between 10 and 30 m Australia Height Datum (AHD) with a slope towards the north, in the direction of the Clarence River.

2.5 Hydrology

The regional hydrology of the area is expected to be dominated by Cristopher Creek, 80m to the north and the Clarence River, approximately 1.2km to the north.

The Site is predominantly unsealed so surface water runoff is expected to either infiltrate into surface soils or run off towards the north, following topographic contours.

2.6 Soil landscape and geology

According to the NSW Office of Environment and Heritage (OEH, 2013), no soil landscape mapping is available for the Grafton region. As such, reference was made to the OEH eSPADE database (http://www.environment.nsw.gov.au/eSpadeWebApp/report/SoilReport) for soil and land information pertaining to the Site. The information from eSPADE was collected on the western side of Rushforth Park in 2006. The physiography of the area is described as “back plain under unknown on alluvium lithology with nil rock outcrop”. The slope is estimated at 0%, with an elevation of 9m and extremely low local relief (<9m). The profile is slowly permeable and imperfectly drained, but no free water appears to be evident. The soils can be described as haplic, brown kandosols, and yellow earth.

Reference to the Grafton 1:25 000 Quaternary Geology prepared by the NSW Department of Primary Industries (2008) indicates that the Site is classified by the R-Ks units, which are distinguished by Triassic to Cretaceous sedimentary rocks including coal measures (Clarence-Moreton Basin). The Grafton – Maclean 1:250 000 Metallogenic Map (Henley et al., 2001) identifies the Site by the Jgs units, which are indicative of the Grafton Formation. The Grafton Formation is described as interbedded sandstone (lithic to quartz arenites and wackes), clayey siltstone, claystone and minor coal; bedding thin to thick; commonly with ferruginous lateritic weathering profile.

2.7 Acid sulfate soils

The CVC Online Maps for Acid Sulfate Soils of the South Grafton Region (http://mapping.clarence.nsw.gov.au/Exponare/cvc_mapping_link) categorised the Site as a Class 5 - Planning instruments apply to works within 500 metres of adjacent Class 1,2,3 or 4 land which are likely to lower the water table below 1 metre AHD in Class 1,2,3 or 4 land.

2.8 Hydrogeology and groundwater bore search

Based on site observations and GHD’s understanding of the environmental setting of the Site, regional groundwater would generally be expected to flow in a northerly direction, towards the Clarence River.

GHD obtained database information from the NSW Office of Water database. The results of this search indicated that there are 14 registered groundwater wells within 1.5km of the Site, eight of which are within 1km. Summary information is presented in Table 2-1. Details of the groundwater search is provided in Appendix C.

Table 2-1 Summary of groundwater database search for the Site

Bore ID	Approximate Distance to Site	Standing Water Level (mbgl)	Water Bearing Zones (mbgl)	Final Depth (mbgl)	Salinity (mg/L)	Intended Purpose
Groundwater wells within 1 km radius of Site						
GW305106 Latitude: 29°42'24.5"S Longitude: 152°56'23.7"E	0.91 km	3.70	1.20 - 6.00	6.00	Bad	Monitoring Bore
GW305827 Latitude: 29°42'27.2"S Longitude: 152°56'27.5"E	0.95 km	-	-	6.10	-	Monitoring Bore
GW305826 Latitude: 29°42'27.6"S Longitude: 152°56'28.8"E	0.97 km	-	-	5.10	-	Monitoring Bore
GW305829 Latitude: 29°42'28.4"S Longitude: 152°56'29.3"E	0.96 km	-	-	6.10	-	Monitoring Bore
GW305828 Latitude: 29°42'29.8"S Longitude: 152°56'29.6"E	0.96 km	-	-	5.10	-	Monitoring Bore
GW306996 Latitude: 29°42'50.2"S Longitude: 152°55'42.0"E	0.53 km	2.80	2.80 - 4.00	4.20	-	Monitoring Bore
GW306995 Latitude: 29°42'53.2"S Longitude: 152°55'44.3"E	0.53 km	5.40	5.30 – 6.00	6.50	-	Monitoring Bore
GW306994 Latitude: 29°42'54.5"S Longitude: 152°55'41.8"E	0.53 km	3.60	3.60 – 4.20	4.20	-	Monitoring Bore
Groundwater wells outside of 1 km radius of Site						
GW300861 Latitude: 29°42'11.4"S	1.00 km	3.00	-	11.50	Fresh	Domestic

Bore ID	Approximate Distance to Site	Standing Water Level (mbgl)	Water Bearing Zones (mbgl)	Final Depth (mbgl)	Salinity (mg/L)	Intended Purpose
Longitude: 152°56'06.5"E						
GW302132 Latitude: 29°42'42.2"S Longitude: 152°54'59.1"E	1.57 km	-	-	3.00	-	Irrigation
GW301786 Latitude: 29°42'19.2"S Longitude: 152°55'22.9"E	1.17 km	-	8.40 – 10.00	10.00	-	Monitoring Bore
GW307116 Latitude: 29°42'10.7"S Longitude: 152°55'42.8"E	1.05 km	4.70	6.00 – 8.20	8.20	-	Monitoring Bore
GW307115 Latitude: 29°42'10.5"S Longitude: 152°55'44.3"E	1.05 km	4.70	3.50 – 5.80	5.80	-	Monitoring Bore
GW307114 Latitude: 29°42'10.1"S Longitude: 152°55'43.1"E	1.05 km	6.56	7.00 – 9.80	9.80	-	Monitoring Bore

Based on the information available, it is anticipated that the regional groundwater within 1km of the Site is at depths between 2 and 5 metres below ground level (mbgl). Based on the review of the Standing Water Level (SWL) information, groundwater within a 1 km radius of the Site, is unconfined, with SWL being equal to, or within, the water bearing zones.

Given that the Site is located within a region serviced by a reticulated water supply, it is considered unlikely that the groundwater in the immediate vicinity of the Site would be utilised for drinking water purposes. However, given the nature of the surrounding land use (semi rural/residential), it is likely that the groundwater is used for domestic stock or irrigation purposes. Several of the bores (to the north east of the Site) are detailed as monitoring bores and appear to correspond to the site of a former petrol station and a sewage treatment facility. Based on the distance between these locations and the subject Site, the potential for contamination to affect the Site is considered to be low.

3. Site history

The following section outlines the results of the site history review.

3.1 Review of previous reports

No reports relating to contamination for the Site were available for review.

3.2 Reported contamination incidents

A search conducted on the EPA record of notices for contaminated land on 13 March 2015 revealed two results within the Clarence Valley Council, none of which were in the vicinity of the Site.

3.3 Historical aerial photograph review

Historical aerial photographs of the Site and surrounding areas were obtained for 1954, 1965, 1975, 1985, 1994 and 2006. These photographs were reviewed, along with a current aerial photograph from Six Maps (NSW Government, http://maps.six.nsw.gov.au/) accessed on 12 March 2015. Results of the historical aerial photograph review are summarised in Table 3-1 and 3.2 and the photographs are presented in Appendix D.

Table 3-1 Review of historical aerial photographs

Photograph	Site observations
1954 Grafton Run: 5G Type: B & W NSW 251 - 5028 Scale : Unknown	The Site is undeveloped/vacant with the nursery and associated buildings not yet constructed. The Site is bound to the east and south by residential properties and to the west and north by cleared land/rural land use. The drainage channel (Christopher Creek) is not present to the north west of the Site.
1964 Grafton Run: 5G Type: B & W NSW 1285 - 5126 Scale : Unknown	There are no significant changes to the Site from the 1954 photograph with the exception of a small shed like structure observed in the north eastern corner of the property. There is further development of the residential area across Cambridge Street to the south. The drainage line of Christopher Creek is evident to the west and north of the Site.
1978 Grafton Run: 4 Type: B & W NSW 2723-110 Scale : Unknown	There are no significant changes to the Site from the 1964 photograph with the exception that the South Grafton velodrome is evident to the far north west of the Site. Christopher Creek to the west and north west of the Site is highly apparent.
1987 Grafton Run: 4 Type: B & W NSW 3582 - 87 Scale: Unknown	Some nursery buildings have been constructed on the Site consisting of a large structure in the southern portion and a large garden (with planting in a linear pattern) covering the northern half of the Site. A number of smaller structures, potentially storage bays, appear to line the western and northern boundary of the Site. No other obvious changes to the surrounding land use.

Photograph	Site observations
1994 Grafton Run: 6 Type: Colour NSW 4229 - 135 Scale: 1:25,000	An addition to the original large building is evident along the western portion of the Site. It may be an awning structure. Further, an additional shed is evident in the north eastern corner of the Site. A well-defined channel is evident leading from the Sites north western boundary towards Christopher Creek. This may be for site drainage.
2006 Grafton Run: 6 Type: Colour NSW 4962 - 55 Scale: 1:25,000	The Site remains predominantly unchanged from the previous photograph with the exception that the small storage structures that were evident on the western and northern perimeter of the Site are no longer apparent and the drainage channel between the north western corner of the Site and Christopher Creek appears to have been filled, with no obvious evidence of its previous location.
2012 Source: **Six Maps** (accessed 12 March 2015).	The Site remains predominantly unchanged from the previous photograph with the exception that structures resembling shipping containers are apparent on the western boundary of the Site. Further, stockpiles of soil are apparent inside the western fence line and piles of waste materials are evident at the north western corner of the Site and along the northern boundary.

Based on the review of historical aerial photographs, it appears that the Site was developed as a nursery/residence sometime between 1978 and 1987. From 1987 to present, no major alterations have been made other than additional buildings/awnings constructed.

In the 1994 photograph, a well-defined channel was observed running between the north western boundary of the Site and Christopher Creek. This may have been for site drainage. In the 2006 photograph the drainage channel has been infilled.

3.4 Section 149 certificates review

GHD reviewed Section 149 (Part 2 and 5) certificates for the three Lots within the Site. Section 149 Certificates have been attached as Appendix E.

Key information pertaining to the environmental condition of the Lots is summarised below:

- The subject land is not known to comprise a critical habitat.
- The subject land is not located within a heritage conservation area under the local environmental planning instrument.
- The subject land does not consist of an item of environmental heritage under the local environmental planning instrument.
- Council has not been notified whether the land is affected by the Coastal Protection Act, 1979.
- The land is not within a proclaimed mine subsidence district.
- The land is mapped as being potentially affected by Acid Sulfate Soils.
- Councils policy on contaminated land restricts development of land proposed to be used for certain purposes where the land may be :
  - affected by contamination
  - which has been used for certain purposes; and
  - where there is not sufficient information about contamination for the land.
- The land is considered to be located below the flood planning level.

- The land is not within land declared to be significantly contaminated land, subject to a management order, subject of an approved voluntary management proposal, ongoing maintenance order or site audit statement under the meanings of the *Contaminated Land Management Act 1997*.

3.5 Council search

A search of the CVC DA database for DAs approved on 13 March 2015 revealed the following DA's relating to properties within the vicinity of the site:

- 66 Cambridge Street, South Grafton – located approximately 900 m east of the Study Area. DA for the construction of a shed. Approved between 8 and 14 March 2015.
- 12 William Street, South Grafton – located approximately 400 m south east of the Study Area. DA for additions to a dwelling and for a swimming pool. Approved between 22 and 28 February 2015.
- 16 Ellen Street, South Grafton – located approximately 1500 m south east of the Study Area. DA for a deck and carport. Approved between 18 and 24 January 2015.

A search of the CVC DA database for DAs pending approval on 13 March 2015 revealed no DA's relating to properties within the vicinity of the site.

None of these development applications are considered to affect the potential for contamination at the Site.

3.6 EPA contaminated land management register search

A search of the EPA record of notices within the CVC Local Government Area (LGA) on 13 March 2015 revealed no notices of contaminated sites within the vicinity of the Site. Two results were applicable to a search of notices of contaminated sites within the Clarence Valley Shire; however, as these sites were located in Ashby and Koolkhan and are not considered to affect the Site.

4. Conceptual site model

A conceptual site model (CSM) was developed to provide an understanding of the potential for exposure to contaminants and impacts to beneficial uses from contamination within the Site. The CSM draws together historical data, specific and regional geological, hydrogeological, hydro-geochemical and contamination information to identify potential contamination sources, migration and exposure pathways and sensitive receptors for the Site.

4.1 Potential contamination sources

Based on the results of the desktop assessment including review of historical information for the Site and results of the site inspection, the following potential contamination sources have been identified for the Site:

- Spillage or leakage of oils, fuels, herbicides or pesticides associated with a nursery.
- Historical use of herbicides or pesticides across the site as part of nursery activities.
- Potential for use of fill materials from unknown origin for site levelling.
- Potential hazardous building materials (asbestos containing materials, lead paints etc) to be present within buildings across the Site.

4.2 Pathways

The following migration pathways were identified for the Site:

- Soils across the Site which are expected to generally consist of moderately permeable sandy clay and clay materials. As such, there is the potential migration of surface impacts into subsurface soils. Contaminants may also be mobilised through windborne dust or may be transported via surface water flow.
- Surface water on and adjacent to the Site. Any surface runoff generated within the Site is expected to follow the topography and be directed towards the north west. Surface runoff is expected to either infiltrate into surface soils or runoff into local drainage channels (Christopher Creek).
- Groundwater beneath the Site. Given the elevation of the Site, the proximity of the Clarence River and the standing water levels reported in Section 2.8, it is expected that regional groundwater would be relatively shallow (<5m bgl). Based on this, while there is a slight potential for the penetration of surface impacts into shallow groundwater aquifers beneath the Site, the overall potential for impact to regional groundwater is considered to be low.

4.3 Receptors

The following potential sensitive human and environmental receptors of contamination were identified for the Site and surrounding areas:

Human Health Receptors

- Current and future occupants of the Site.
- Visitors to the Site (e.g. family/friends of residents, workers, members of the public).
- Current and future occupants of surrounding properties (e.g. residents).

Environmental Receptors

- Flora and fauna within the Site and surrounding land.
- Christopher Creek, less than 100m to the north of the Site.
- Groundwater beneath the Site.

4.4 Potential for contamination

Table 4-1 summarises the potential areas of environmental concern based on the results of the desk-top review and site inspection.

Table 4-1 Potential areas of environmental concern

Description	Rationale/detail	Potential contamination
Agricultural land uses.	Use of pesticides or herbicides on the site for weed or insect control.	Arsenic, OCPs and OPPs.
Storage and use of chemicals.	Storage of oils, fuels, grease, herbicides and pesticides.	TPH, BTEX, PAHs, phenols, heavy metals, OCPs and OPPs.
Fill	Potential use of fill	Heavy Metals, TPH, BTEX, PAHs, PCBs OCPs, OPPs, phenols and asbestos.
Buildings and sheds	Use of hazardous materials within building structures.	Asbestos and lead.

1. TPH – Total Petroleum Hydrocarbons.
2. BTEX – Benzene, Toluene, Ethyl-benzene and Xylenes.
3. PAH – Polycyclic Aromatic Hydrocarbons.
4. OCP – Organochlorine Pesticides.
5. OPP – Organophosphate Pesticides.
6. PCB – Polychlorinated biphenyls.

Based on the results of the desktop assessment, the overall likelihood for significant chemical contamination to be present within the Site is considered to be low.

5. Sampling, analysis and methodology

5.1 Sampling and analytical program

The sampling and analytical program is presented in Table 5-1. Sample locations were selected to target areas of potential contamination across the Site. Sampling locations are shown in Figure 1 in Appendix A.

Table 5-1 Sampling and analytical program

Number of Sample Locations	Analytical Parameters	Number of Analyses (including QC[3])
7	Heavy metals [1]	10
	TRH/BTEXN/PAHs	4
	TRH (C_{10}-C_{40})	1
	pH	2
	CEC	2
	OCPs [2, 4]	2[4]
	Asbestos (bulk analysis)	1
	Asbestos in Soil (presence/absence)	2

1. Metals included As, Cd, Cr, Cu, Hg, Pb, Ni and Zn.
2. Analysed as 3 part composites.
3. Quality control sampled at a rate of 1 in 10 samples.
4 As OPPs rapidly degrade/breakdown in the surface soils, GHD did not include OPPs in the analytical suite.

BTEX – Benzene, Toluene, Ethyl benzene and Xylene
TRH – Total Recoverable Hydrocarbons.
PAH – Polycyclic Aromatic Hydrocarbons
OCP – Organochlorine Pesticides.

5.2 Sampling methodology

All fieldwork was performed by trained and experienced GHD professional personnel, in accordance with the company's written Standard Field Operating Procedures (SFOPs). All sampling was conducted using carefully documented and supervised quality assurance procedures.

5.2.1 Soil sampling

Soil sampling was undertaken by an Environmental Engineer from GHD, on 6 March 2015. Seven hand augers were drilled to a maximum depth of 0.7 m bgl.

Soil samples were taken from surface materials and at various depths throughout the soil profile, specifically targeting areas of potential contamination with between two and three samples collected from each location. Samples were collected directly from the hand augers using dedicated disposable gloves to limit cross contamination between sampling points. The hand auger was decontaminated with Decon™ and tap water between locations.

Soils penetrated during the investigations were described in accordance with the Unified Soil Classification system, with features such as discolouration, staining, odours and other indications of contamination being noted. This information was recorded on the borehole summary, completed for each of the sampling locations, as presented in Appendix F.

Collected soil samples were immediately transferred to laboratory supplied glass sample jars with Teflon lined lids. All sample containers were clearly labelled with a sample number, sample location, sample depth, and sample date. The sample containers were then transferred to a

chilled esky for sample preservation prior to and during shipment to the testing laboratory. A chain-of-custody form was completed and forwarded with the samples to the testing laboratory.

Samples for OCP analysis were composited by the laboratory and consisted of the following:

- COMP 1 – H01_0.0-0.1, H02_0.0-0.1 and H03_0.0-0.1
- COMP 2 – H04_0.0-0.1, H05_0.0-0.1 and H06_0.0-0.1

Duplicate samples included blind (intra-laboratory) duplicate samples, at an overall rate of approximately 10%. No rinsates or trip blanks were analysed.

5.3 Laboratory analysis of samples

GHD subcontracted laboratory analytical services to ALS, which is National Association of Testing Authorities (NATA) registered for the testing program. The laboratory-testing program comprised analysis of samples in accordance with the analytical schedule summarised in Table 5-1.

The results of the sample analysis are presented in Tables A and B in Appendix G and copies of the laboratory certificates are presented in Appendix H.

6. Basis for contamination assessment

All investigations and assessment were undertaken with reference to relevant guidelines including:

- Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC/NHMRC, 1992).
- National Environment Protection Measure (Assessment of Site Contamination) (NEPM, 1999) as amended in May 2103.
- Contaminated Sites: Sampling Design Guidelines (EPA, 1995).
- Guidelines for Consultants Reporting on Contaminated Sites (OEH, 2011).
- Guidelines for the NSW Site Auditor Scheme (2nd Edition) (DEC, 2006).
- Contaminated Sites: Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997, (DECC, 2009).

Assessment criteria

The National Environment Protection Measure (NEPM) 1999 (as amended in May 2013) includes a range of ecological investigation and screening levels, health investigation levels and health screening levels for a range of contaminants and for a range of land use and exposure scenarios.

The property is zoned B1 (Neighbourhood Centre) under the Clarence Valley Council (CVC) Local Environmental Plan (LEP 2011). Data will be compared with criteria from the amended National Environment Protection (Assessment of Site Contamination) 1999 (NEPC 2013) (the ASC NEPM) applicable for residential land uses for assessment and also to assess potential remediation requirements, including Health Screening Levels (HSLs) and management limits for hydrocarbons as well as aesthetic considerations. Further, Ecological Investigation Levels (EIL) will be included as criteria to assess potential impacts to sensitive environmental receptors.

The site specific characteristics have been considered in selecting appropriate assessment criteria, which are sourced from Schedule B1 of the NEPM and include the following:

- Ecological Investigation Levels for Residential/Open Space (pH 7.9-8.4 and CEC 1.9-13.8 meq/100g).
- Ecological Screening Levels for Residential/Open Space.
- Health Investigation Level A – Residential.
- Health Screening Levels for Vapour Intrusion – A/B Residential for 0 to <1 m sand soils.
- Management Limits for TRH fractions in soil – Residential/Open space.

The assessment criteria are detailed in Table A in Appendix G.

7. Quality assurance/quality control plan

7.1 Field quality assurance/quality control (QA/QC)

7.1.1 Field quality assurance

All fieldwork was conducted in general accordance with the GHD SFOP. The SFOP ensures that all environmental samples were collected by a set of uniform and systematic methods.

The SFOP describes field activities including:

- Implemented decontamination procedures.
- Sample identification procedures.
- Information requirements for soil bore logs.
- Chain of custody information requirements.
- Sample duplicate frequency.
- Field equipment calibration requirements.

7.1.2 Field quality control

Field quality control procedures used during the project comprised:

Blind duplicates: These are prepared in the field by duplicating the original sample and placing two equivalent portions into two separate containers. The blind intra-laboratory duplicate sample is sent anonymously to the project laboratory. The duplicate samples were analysed for the identical set of parameters requested for the corresponding original sample. For the blind duplicate sample pairs, relative percentage differences (RPDs) were calculated. Blind duplicates provide an indication of the analytical precision of the project laboratory, but may also be affected by factors such as sampling methodology, inherent heterogeneity of the sample medium and different laboratory analytical techniques.

Rinsate blanks were not collected during the field investigations as it was considered that the potential for significant contamination on site were low and that field decontamination procedures were appropriate.

No trip spikes were used during the field works as volatile hydrocarbons were not considered a main contaminant of concern for this site.

7.2 Laboratory quality assurance/Quality control

7.2.1 Laboratory quality assurance

The analytical laboratory undertook the analyses utilising their own internal procedures and test methods (for which they are NATA accredited) and in accordance with their own quality assurance system which forms part of their NATA accreditation.

7.2.2 Laboratory quality control

Laboratory quality control procedures used during the project and reported comprised:

- Laboratory Duplicate Samples: Analysis of duplicate sub-samples from one sample submitted for analytical testing and analysis of the samples in the one batch. A laboratory duplicate provides data on the analytical precision (repeatability) of an analytical batch.

- Spiked Samples: A sample is spiked by adding an aliquot of known concentration of the target analyte(s) to the sample matrix prior to sample extraction and analysis. A spike documents the effect of the sample matrix on the extraction and analytical techniques.
- Laboratory Blank: Usually an organic or aqueous solution that is as free of analyte as possible and contains all the reagents in the same volume as used in the processing of the samples. The reagent blank must be carried through the complete sample preparation procedure and contains the same reagent concentrations in the final solution as in the sample solution used for analysis. The reagent blank is used to correct for possible contamination resulting from the preparation or processing of the sample.
- Other internal laboratory quality control procedures, as required for NATA registration, are performed and are not reported by the laboratories. These procedures and results can be provided on request.

7.3 Quality assurance/Quality control results

7.3.1 Field QA/QC

One intra-laboratory soil sample was sent to the primary laboratory for analysis for heavy metals only: H01_0.0-0.1/Q01.

RPDs were calculated for the duplicated samples as part of the QA/QC program, and are presented in Table A in Appendix G.

No RPD's exceeded 30%. Based on a review of the field QA/QC data, it is considered that the analytical results are reasonably representative of conditions at the time of the investigation.

7.3.2 Laboratory QA/QC

The NATA certified laboratory results sheets, as presented in Appendix H refer to a quality control program comprising the analysis of spikes, method blanks and duplicate samples. The results reported indicate that the laboratory was achieving levels of performance within their recommended control limits during the period when the samples from this program were analysed.

No outliers occurred with duplicate sample RPDs, method blanks, laboratory control samples and surrogate recoveries. However, matrix spike recoveries for sample H01_0.0-0.1 for several fractions of TRH were not determined due to the background level being greater than or equal to 4x the spike level. This sample had the highest TRH results of the batch.

Based on a review of the laboratory QA/QC data, it is considered that the analytical results are reasonably representative of conditions at the time of the investigation.

8. Investigation results

8.1 Soil profile

Description of the soil profile encountered during the Site investigations is presented in the following sections. Hand auger bore summaries are presented in Appendix F.

The soil profile in H01 to H06 generally consisted of a surface covering of fill comprising mixtures of gravelly sand and clay with minor inclusions including brick fragments (H06) and fibre cement sheet (H01) to maximum depths of 0.3 m below ground level (bgl). The subsurface profile in H07 comprised fill/topsoil of sand and trace gravel overlying disturbed fill (dark brown sand) to a maximum depth of 0.6 m with refusal on cobbles.

Oil staining and odours were noted on the surface at location H01 in the eastern corner of the Site. No other obvious odours or seepage were noted.

Potential asbestos containing materials (fibre cement sheet fragments) were observed in H01. Results were negative for asbestos as detailed in Section 8.2 below.

8.2 Soil analytical results

Soil sample locations are presented in Figure 2 in Appendix A. Summaries of the laboratory results are presented in Table A in Appendix G. Detailed laboratory report sheets and COC (Chain of Custody) documents are provided in Appendix H.

In documenting these results, comparison has been made to the site assessment criteria as detailed in Section 6.

8.2.1 Soil analytical results

Heavy metals

Concentrations of heavy metals were either below the limit of reporting (LOR) or below the assessment criteria for all samples analysed with the exception of:

- Zinc in sample H01_0.0-0.1/Q01 which reported concentrations of 387 mg/kg and 334 mg/kg which are above the EIL (urban residential) criteria of 230 mg/kg.

Volatile hydrocarbons (TRH C_6 – C_{10} and BTEXN)

Samples analysed for BTEXN and TRH C_6 – C_{10} reported concentrations below the LOR.

Total recoverable hydrocarbons (TRH C_{10} – C_{40})

Samples analysed for TRH C_{10} – C_{40} fractions reported concentrations either below the LOR or the assessment criteria with the exception of the following:

- H01_0.0-0.1 and H01_0.3-0.4 with F2 TRH C_{10} – C_{16} concentrations of 830 mg/kg and 450 mg/kg (respectively) which are above the HSL A/B for vapour intrusion (110 mg/kg) and the ESLs for residential land use (coarse) of 120 mg/kg.
- H01_0.0-0.1 and H01_0.3-0.4 with F3 TRH C_{16} – C_{34} concentrations of 27,600 mg/kg and 13,500 mg/kg are above the ESLs for residential land use (coarse) of 300 mg/kg and the Management Limits for residential (coarse) of 2,500 mg/kg.
- H01_0.0-0.1 and H01_0.3-0.4 with F4 TRH C_{34} – C_{40} concentrations of 6,860 mg/kg and 3,910 mg/kg (respectively) which are above the ESLs for residential land use (coarse) of 2,800 mg/kg.

- H01_0.6-0.7 with F3 TRH C_{16} – C_{34} concentrations of 340 mg/kg marginally above the ESLs for residential land use (coarse) of 300 mg/kg.

Polycyclic Aromatic Hydrocarbons (PAHs)

Samples analysed for PAHs reported concentrations below the LOR.

OCPs

Concentrations of OCPs reported concentrations below the LOR in all composite samples analysed.

Asbestos

No asbestos was detected in bulk sample AS01 (fibre cement fragment) collected from surface materials in H01.

No asbestos was detected at the reporting limit of 0.1 g/kg for asbestos identification in soils in either of the soil samples analysed (H01_0.-0.1 and H03_0-0.1).

9. Discussion

Based on the results of the desktop assessment including review of historical information for the Site and results of the site inspection, the Site was vacant/undeveloped until between 1978 and 1987 when it was developed as a plant nursery. Anecdotal information from the client indicates that the residential portion of the site was constructed in the 1990's. The following potential contamination sources were identified for the Site:

- Spillage or leakage of oils, fuels, herbicides or pesticides associated with a nursery.
- Historical use of herbicides or pesticides across the site as part of nursery activities.
- Potential for use of fill materials from unknown origin for site levelling.
- Potential hazardous building materials to be present within buildings across the Site.

The soil sampling program undertaken reported contaminant concentrations below the adopted assessment criteria with the exception of zinc and TRH (C_{10}-C_{40}) at location H01. These contaminant concentrations are discussed further below.

Surface and near surface samples from location H01 indicated concentrations of TRH F2 above the HSL A/B, and the ESLs for residential land use. Further, concentrations of TRH F3 and TRH F4 were above the ESLs and concentrations of TRH F3 were above management limits (residential). These elevated results are associated with the observed surface oil staining. Analysis of a deeper sample from H01 (0.6-0.7 m) indicates a significant reduction in concentrations of all TRH fractions with only TRH F3 marginally above the ESLs (residential), indicating that vertical migration of TRH contamination is limited to within the top 1mbgl in this area.

Therefore the potential for widespread contamination around H01 is considered to be relatively low and likely to have been an isolated occurrence of oil staining from equipment or vehicle standing area. Given the isolated area of staining, it is considered that there is a low potential for hydrocarbon impacts to have migrated off site or impacted groundwater beneath the Site.

As the TRH contamination at H01 reported concentrations above the HSLs, the contamination may pose a potential health and environmental risk for redevelopment of the site for residential without appropriate remediation and/or management. It is estimated that the volume of contaminated soils requiring remediation (via removal) would be in the order of $2m^3$ which is estimated on a contaminated surface area of approximately $2m^2$ and excavations to a maximum depth of 1.0 m bgl. The surface area has been calculated to encompass the oil stained area with a 0.5 m margin of unstained surface soils around the area of concern.

Zinc concentrations in surface soil from H01 (0.0-0.1m) were above the EILs which may indicate some potential environmental impacts (e.g. phytotoxicity to sensitive plant species). However these results are not considered to impede the suitability of the Site for residential land use. Further, the surface soils containing the elevated zinc concentrations would be removed should remediation measures for this area be implemented.

A fragment of fibre cement sheet (negative for asbestos) was identified in the surface materials at H01. No other potential asbestos containing fragments were observed. No asbestos was detected in the two soils samples analysed for asbestos collected within the vicinity of where the fragment was identified (H01) or near to the building (H03).

10. Conclusions and recommendations

GHD Pty Ltd (GHD) was engaged by Chellew Property Investment Trust (CPIT) to complete a Phase 1 Contamination Site Assessment with a limited soil investigation for a former plant nursery located at 163-165 Cambridge Street, South Grafton, NSW. It is understood that a planning proposal has been submitted for the Site to rezone the land for proposed development for residential land use and the investigations were required to identify potential contamination issues within the Site.

10.1 Conclusions

Zinc concentrations exceeding EILs were found at one location (H01). While zinc concentrations greater than the EILs may indicate some potential environmental impacts, the concentrations are not considered to impede the suitability of the Site for residential land use. Further, the environmental risk from elevated zinc levels would be mitigated as part of recommended small scale remediation described in Section 10.2 below.

Hydrocarbon impacts were identified at an isolated area of apparent oil staining at sample location H01, but are likely to be limited to within 1.0 m of the surface at this area. Based on the analytical results it is considered that there is a low potential for hydrocarbon impacts to have migrated off site or impacted groundwater beneath the Site. However, given the presence TRH impacts above the ESLs for residential land use as well as in excess of HSLs and Management Limits for residential land use, it is considered that the contamination may pose a potential risk to human health and/or the environment for the proposed residential land use without appropriate remediation and/or management.

10.2 Recommendations

Based on the desk top review and the results of the current investigations, it is considered that the site can be made suitable for redevelopment for residential land use by implementation of the following:

- Preparation of a brief Contaminated Soil Management Plan (CSMP) to describe excavation, validation and disposal requirements for TRH contaminated materials. The CSMP should include contingency plans for remediation of additional contaminated soils (if encountered).
- Remediation of the surface soil materials in the area surrounding H01 by excavation and disposal offsite. The following procedure should be undertaken for this material:
  - The material should be excavated and appropriately managed prior to disposal, with excavations continuing in a lateral and vertical extent to remove material identified as being contaminated (stained and / or odorous soils).
  - The soil should be classified in accordance with the NSW EPA Waste Classification Guidelines, Part 1: Classifying Waste (NSW EPA 2014) and disposed offsite.
  - The resultant excavation should be validated to confirm the removal of the contaminated material with collection of soil samples from the base and walls of the excavation and analysis for contaminants of concern (zinc and TRH C_{10}-C_{40} only).
  - Provision of a short validation report detailing extent of remediation and validation results.

Works should be undertaken under the guidance of a suitably qualified environmental consultant and be completed in general accordance with guidelines developed or endorsed by NSW EPA.

The Site has been investigated for contamination as detailed in this report. However a degree of uncertainty is inherent in any site contamination investigation and a potential exists for undetected contaminated soils, wastes or hazardous building materials to be identified during any future redevelopment works that disturb the ground surface. In particular, there is a potential for previously unidentified contaminated materials to be present under inaccessible areas of the Site (concrete slabs or footings) or in any fill materials that may be present on site. Indications of potential contamination may include:

- Stained or discoloured fill, soils or seepage water.
- Construction/demolition wastes such as concrete, bricks, timber, tiles, fibre cement sheeting, fragments and pipes.
- General rubbish such as plastic, glass, packaging.
- Imported materials such as ash or slag or coal chitter.

Should unexpected contaminated soils be identified during any future ground works, advice should be sought from a suitably qualified environmental consultant and any additional investigations/remediation be completed in general accordance with guidelines developed or endorsed by NSW EPA.

11. References

ANZECC/NHMRC 1992, *Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites*

DEC 2006, *Contaminated Sites: Guidelines for the NSW Site Auditor Scheme*, 2006

DECC 2009, *Waste Classification Guidelines, Part 1: Classifying Waste*

DECC, 2009, *Contaminated Sites: Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act* (1997)

NEPC 1999, *National Environment Protection (Assessment of Site Contamination) Measure (NEPM), 1999 and Amendment 2013*

OEH, 2011 *Guidelines for Consultants Reporting on Contaminated Sites*

12. Limitations

This Additional Contamination Assessment Phase 1 Contamination Assessment with Targeted Sampling. 163-165 Cambridge Street, South Grafton, NSW ("Report"):

- Has been prepared by GHD Pty Ltd ("GHD") for Chellew Property Investment Trust (CPIT).
- May only be used and relied on by CPIT.
- Must not be copied to, used by, or relied on by any person other than CPIT without the prior written consent of GHD and subject always to the next paragraph.
- May only be used for the purpose as stated in Section 1 of the Report (and must not be used for any other purpose).

GHD and its servants, employees and officers otherwise expressly disclaim responsibility to any person other than CPIT arising from or in connection with this Report.

To the maximum extent permitted by law, all implied warranties and conditions in relation to the services provided by GHD and the Report are excluded unless they are expressly stated to apply in this Report.

The services undertaken by GHD in connection with preparing this Report:

- Were limited to those specifically detailed in Sections 1 and 12 of this Report and GHD proposal dated 10 February 2015, document number 22/01013/52/108801.
- Were undertaken in accordance with current professional practice and by reference to relevant environmental regulatory authority and industry standards, guidelines and assessment criteria in existence as at the date of this Report.

The opinions, conclusions and any recommendations in this Report are based on assumptions made by GHD when undertaking the services mentioned above and preparing the Report ("Assumptions"), as specified throughout this Report.

GHD expressly disclaims responsibility for any error in, or omission from, this Report arising from or in connection with any of the Assumptions being incorrect.

Subject to the paragraphs in this section of the Report, the opinions, conclusions and any recommendations in this Report are based on conditions encountered and information reviewed at the time of preparation of this Report and are relevant until such times as the site conditions or relevant legislations changes, at which time, GHD expressly disclaims responsibility for any error in, or omission from, this Report arising from or in connection with those opinions, conclusions and any recommendations.

GHD has prepared this Report on the basis of information provided by CPIT and others who provided information to GHD (including Government authorities), which GHD has not independently verified or checked ("Unverified Information") beyond the agreed scope of work.

GHD expressly disclaims responsibility in connection with the Unverified Information, including (but not limited to) errors in, or omissions from, the Report, which were caused or contributed to by errors in, or omissions from, the Unverified Information.

No investigations have been undertaken into any off-site conditions, or whether any adjoining sites may have been impacted by contamination or other conditions originating from this site.

The opinions, conclusions and any recommendations in this Report are based on information obtained from, and testing undertaken at or in connection with, specific sampling points and may not fully represent the conditions that may be encountered across the site at other than these locations. Site conditions at other parts of the site may be different from the site conditions found at the specific sampling points.

Investigations undertaken in respect of this Report were constrained by the particular site conditions, such as the location of buildings, services and vegetation. As a result, not all relevant site features and conditions may have been identified in this Report.

GHD has considered and/or tested for only those chemicals specifically referred to in this Report and makes no statement or representation as to the existence (or otherwise) of any other chemicals.

Site conditions (including any the presence of hazardous substances and/or site contamination) may change after the date of this Report. GHD expressly disclaims responsibility:

- Arising from, or in connection with, any change to the site conditions.
- To update this Report if the site conditions change.

Except as otherwise expressly stated in this Report GHD makes no warranty or representation as to the presence or otherwise of asbestos and/or asbestos containing materials ("ACM") on the site. If fill material has been imported on to the site at any time, or if any buildings constructed prior to 1970 have been demolished on the site or material from such buildings disposed of on the site, the site may contain asbestos or ACM.

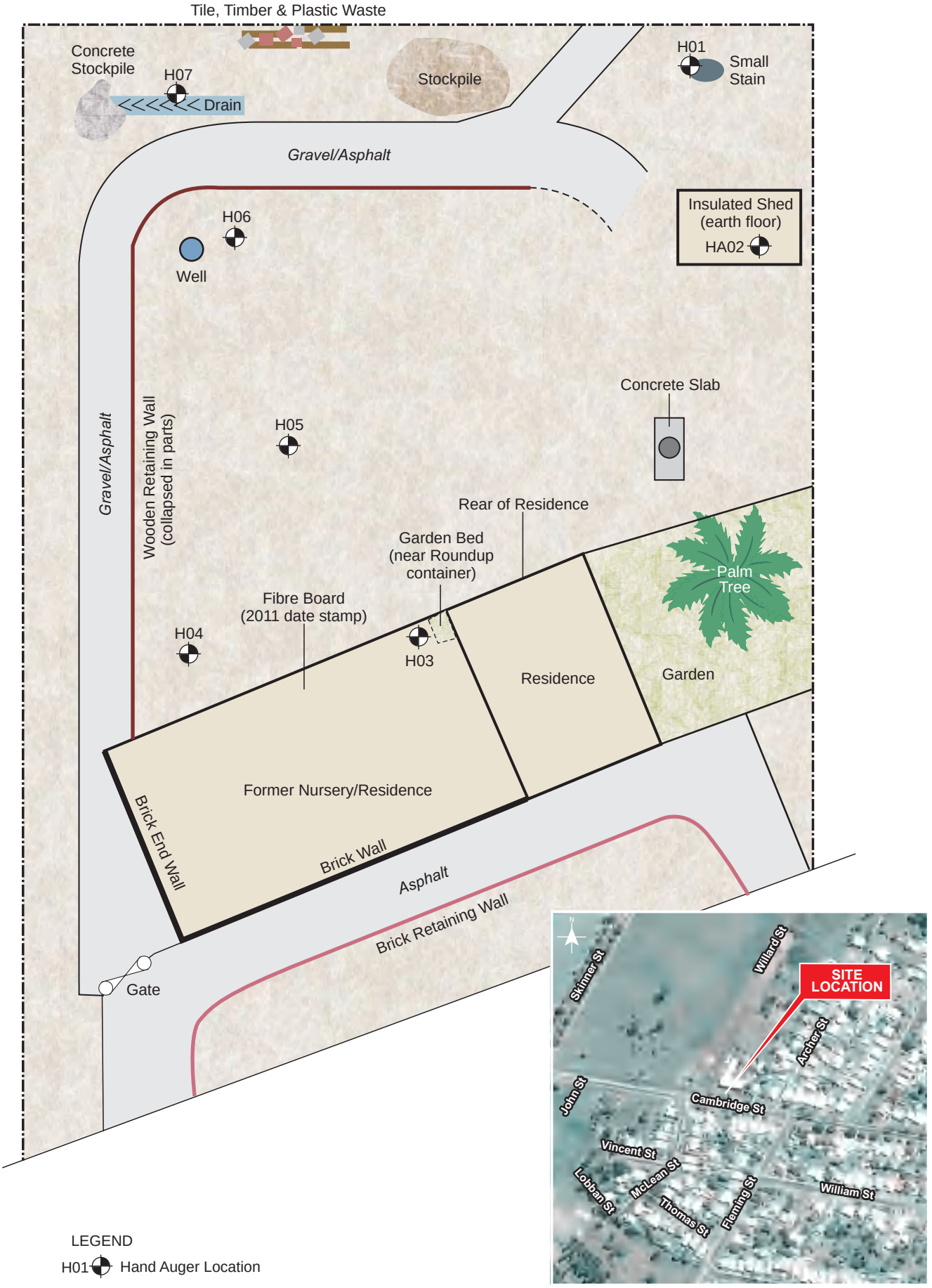
Subsurface conditions can vary across a particular site and cannot be exhaustively defined by the investigations carried out prior to this Report. As a result, it is unlikely that the results and estimations expressed or used to compile this Report will represent conditions at any location other than the specific points of sampling. A site that appears to be unaffected by contamination at the time of the Report may later, due to natural causes or human intervention, become contaminated.

Except as otherwise expressly stated in this Report, GHD makes no warranty, statement or representation of any kind concerning the suitability of the site for any purpose or the permissibility of any use, development or re-development of the site.

These Disclaimers should be read in conjunction with the entire Report and no excerpts are taken to be representative of the findings of this Report.

Appendices

Appendix A – Figures



Site Locality

Chellew Property Investment Trust
Phase 1 Contamination Assessment with Targeted Sampling
163-165 Cambridge Street, South Grafton, NSW

Site Layout & Sampling Locations

Job Number	22-17745
Revision	A
Date	25 May 2015

Figure 1

Level 3, GHD Tower, 24 Honeysuckle Drive Newcastle NSW 2300 **T** 61 2 4979 9999 **F** 61 2 4979 9988 **E** ntlmail@ghd.com **W** www.ghd.com

Appendix B – Photographs

Appendix B- Photographic log

Photo 1: Front of Site

Photo 2: Stockpile of concrete rubble

Photo 3: Stockpile of building waste

Photo 4: Oil stain in eastern corner of Site

Photo 5: Concrete pit

Photo 6: Stockpile of tiles, timber, and plastic

Photo 7: Fibreglass roof sheeting

Photo 8: Inside former cool room

Appendix C – Groundwater Search

NSW Office of Water
Work Summary

GW300861

Licence: 30BL177322
Licence Status: ACTIVE

Authorised Purpose (s): DOMESTIC
Intended Purpose(s): DOMESTIC

Work Type: Bore
Work Status:
Construct.Method: Rot. Rev. Circ. Air
Owner Type:

Commenced Date:
Completion Date: 25/06/1996
Final Depth: 11.50 m
Drilled Depth:

Contractor Name: KIERAN BYRNE & ASSOCIATES
Driller:
Assistant Driller:

Property: NEW SCHOOL OF ARTS CNR SPRING & SKINNER STREETS SOUTH GRAFTON 2460
Standing Water Level: 3.000
GWMA: -
GW Zone: -
Salinity: Fresh
Yield: 0.005

Site Details

Site Chosen By:

	County	Parish	Cadastre
Form A:	CLARC	CLARC.030	LT1 DP 783025
Licensed:	CLARENCE	SOUTHAMPTON	Whole Lot //

Region: 30 - North Coast
CMA Map:
River Basin: - Unknown
Area/District:
Grid Zone:
Scale:

Elevation: 0.00 m (A.H.D.)
Elevation Source: Unknown
Northing: 6714102.0
Easting: 493726.0
Latitude: 29°42'11.4"S
Longitude: 152°56'06.5"E

GS Map: -
MGA Zone: 0
Coordinate Source: Map Interpretation

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Hole	Hole	0.00	11.50	100			Rotary
1	1	Casing	P.V.C.	0.00	6.00	100			
1	1	Opening	Slots	10.50	11.50	100		1	PVC

Water Bearing Zones

From (m)	To (m)	Thickness (m)	WBZ Type	S.W.L. (m)	D.D.L. (m)	Yield (L/s)	Hole Depth (m)	Duration (hr)	Salinity (mg/L)

Geologists Log
Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments

Remarks

25/06/1996: Form A Remarks:
REM: DEVINER INDICATED WATER AT 5.5M, STRATA WAS FOUND HOWEVER TO BE STIFF GREY FELSIC CLAY, AND BUFF STIFF CLAY WITH LITTLE WATER HOLDING CAPACITY.

***** End of GW300861 *****

NSW Office of Water
Work Summary

GW301786

Licence: 30BL178436 **Licence Status:** ACTIVE

Authorised Purpose (s): MONITORING BORE
Intended Purpose(s): MONITORING BORE

Work Type: Bore
Work Status:
Construct.Method: Rotary Air
Owner Type:

Commenced Date: **Final Depth:** 10.00 m
Completion Date: 07/12/1998 **Drilled Depth:** 10.00 m

Contractor Name: GRICKS DRILLING
Driller: Stanley John Gricks
Assistant Driller:

Property: " SOUTH GRAFTON LANDFILL " MINDEN STREET SOUTH GRAFTON 2460 **Standing Water Level:**
GWMA: - **Salinity:**
GW Zone: - **Yield:**

Site Details

Site Chosen By:

	County	Parish	Cadastre
Form A:	CLARC	CLARC.030	LOT 488 DP 720460
Licensed:	CLARENCE	SOUTHAMPTON	Whole Lot 1//724243

Region: 30 - North Coast **CMA Map:**
River Basin: - Unknown **Grid Zone:** **Scale:**
Area/District:

Elevation: 0.00 m (A.H.D.) **Northing:** 6713863.0 **Latitude:** 29°42'19.2"S
Elevation Source: Unknown **Easting:** 492554.0 **Longitude:** 152°55'22.9"E

GS Map: - **MGA Zone:** 0 **Coordinate Source:** Map Interpretation

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Hole	Hole	0.00	10.00	165			Rotary Air
1		Annulus	Waterworn/Rounded	5.60	7.00				Graded
1	1	Casing	Pvc Class 18	-0.90	10.00	60			Seated on Bottom, Screwed
1	1	Opening	Slots - Horizontal	7.00	10.00	60		1	Sawn, PVC Class 18, SL: 40.0mm, A: 0.40mm

Water Bearing Zones

			WBZ Type						

From (m)	To (m)	Thickness (m)		S.W.L. (m)	D.D.L. (m)	Yield (L/s)	Hole Depth (m)	Duration (hr)	Salinity (mg/L)
8.40	10.00	1.60	Unknown			0.60	10.00	01:00:00	

Geologists Log
Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments
0.00	0.30	0.30	soil	Soil	
0.30	8.40	8.10	puggy clay	Clay	
8.40	10.00	1.60	sand	Sand	

Remarks

08/06/2011: Karla Abbs, 8-Jun-2011: Corrected Rock Types in Drillers Log

***** End of GW301786 *****

NSW Office of Water
Work Summary

GW302132

Licence: 30BL178398 **Licence Status:** ACTIVE

Authorised Purpose(s): IRRIGATION
Intended Purpose(s): IRRIGATION

Work Type: Bore
Work Status:
Construct.Method:
Owner Type:

Commenced Date:
Completion Date:
Final Depth: 3.00 m
Drilled Depth:

Contractor Name:
Driller:
Assistant Driller:

Property: MORAN'S 104 - 118 SOUTHAMPTON ROAD SOUTH GRAFTON 2460
Standing Water Level:
GWMA: -
Salinity:
GW Zone: -
Yield:

Site Details

Site Chosen By:

	County	Parish	Cadastre
Form A:		.	
Licensed:	CLARENCE	SOUTHAMPTON	Whole Lot 252//751385

Region: 30 - North Coast
CMA Map:
River Basin: - Unknown
Area/District:
Grid Zone:
Scale:

Elevation: 0.00 m (A.H.D.)
Elevation Source: Unknown
Northing: 6713153.0
Easting: 491914.0
Latitude: 29°42'42.2"S
Longitude: 152°54'59.1"E

GS Map: -
MGA Zone: 0
Coordinate Source: Unknown

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Hole	Hole	0.00	3.00	0			(Unknown)
1	1	Casing	Lining	0.00	3.00				

Water Bearing Zones

From (m)	To (m)	Thickness (m)	WBZ Type	S.W.L. (m)	D.D.L. (m)	Yield (L/s)	Hole Depth (m)	Duration (hr)	Salinity (mg/L)

Geologists Log

Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments

Remarks

***** End of GW302132 *****

NSW Office of Water
Work Summary

GW305106

Licence: 30BL183489 **Licence Status:** ACTIVE

Authorised Purpose (s): MONITORING BORE
Intended Purpose(s): MONITORING BORE

Work Type: Bore
Work Status:
Construct.Method: Auger - Solid Flight
Owner Type:

Commenced Date:
Completion Date: 19/11/2004
Final Depth: 6.00 m
Drilled Depth: 6.00 m

Contractor Name: Macquarie Drilling
Driller: Bryan Patrick Clancy
Assistant Driller:

Property: MOBIL OIL AUSTRALIA BENT STREET GRAFTON 2460
GWMA: -
GW Zone: -
Standing Water Level: 3.700
Salinity: Bad
Yield:

Site Details

Site Chosen By:

	County	Parish	Cadastre
Form A:	CLARC	CLARC.30	1 859759
Licensed:	CLARENCE	SOUTHAMPTON	Whole Lot 1//859759

Region: 30 - North Coast
River Basin: - Unknown
Area/District:
CMA Map:
Grid Zone:
Scale:

Elevation: 0.00 m (A.H.D.)
Elevation Source: Unknown
Northing: 6713701.0
Easting: 494187.0
Latitude: 29°42'24.5"S
Longitude: 152°56'23.7"E

GS Map: -
MGA Zone: 0
Coordinate Source: Unknown

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Hole	Hole	0.00	6.00	125			Auger - Solid Flight
1		Annulus	Crushed Aggregate	1.30	6.00				Graded
1	1	Casing	Pvc Class 18	0.00	5.90	50	44		Seated on Bottom
1	1	Opening	Slots	2.00	5.90	50		1	PVC Class 18

Water Bearing Zones

From (m)	To (m)	Thickness (m)	WBZ Type	S.W.L. (m)	D.D.L. (m)	Yield (L/s)	Hole Depth (m)	Duration (hr)	Salinity (mg/L)

1.20	6.00	4.80	Unknown	3.70					823.00

Geologists Log
Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments
0.00	0.20	0.20	concrete	Invalid Code	
0.20	0.50	0.30	fill, clayey sand, grey mg loose	Fill	
0.50	1.00	0.50	fill, sandy clay, grey fg soft	Fill	
1.00	6.00	5.00	clay, brown fg stiff	Clay	

Remarks

***** End of GW305106 *****

NSW Office of Water
Work Summary

GW305826

Licence: 30BL183495 **Licence Status:** ACTIVE

Authorised Purpose(s): MONITORING BORE
Intended Purpose(s): MONITORING BORE

Work Type: Well
Work Status: New Bore
Construct.Method:
Owner Type: Private

Commenced Date: **Final Depth:** 5.10 m
Completion Date: 16/03/2006 **Drilled Depth:** 5.10 m

Contractor Name: Total Drilling
Driller: Christopher David Kiernan
Assistant Driller:

Property: MOBIL OIL AUSTRALIA CNR PACIFIC HIGHWAY AND CHARLES STREET SOUTH GRAFTON 2460 **Standing Water Level:**
GWMA: - **Salinity:**
GW Zone: - **Yield:**

Site Details

Site Chosen By:

	County	Parish	Cadastre
Form A:	CLARC	CLARC.30	3//586649
Licensed:	CLARENCE	SOUTHAMPTON	Whole Lot 3//586649

Region: 30 - North Coast **CMA Map:**
River Basin: - Unknown **Grid Zone:** **Scale:**
Area/District:

Elevation: 0.00 m (A.H.D.) **Northing:** 6713604.0 **Latitude:** 29°42'27.6"S
Elevation Source: Unknown **Easting:** 494325.0 **Longitude:** 152°56'28.8"E

GS Map: - **MGA Zone:** 0 **Coordinate Source:** Map Interpretation

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Backfill	Bentonite	0.01	1.60				
1	1	Casing	Gab Monitoring Point	0.00	5.10				

Water Bearing Zones

From (m)	To (m)	Thickness (m)	WBZ Type	S.W.L. (m)	D.D.L. (m)	Yield (L/s)	Hole Depth (m)	Duration (hr)	Salinity (mg/L)

Geologists Log
Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments

Remarks

16/03/2006: Form A Remarks:
MW7 - LOGS ON FILE

***** End of GW305826 *****

NSW Office of Water
Work Summary

GW305827

Licence: 30BL183495 **Licence Status:** ACTIVE

Authorised Purpose (s): MONITORING BORE
Intended Purpose(s): MONITORING BORE

Work Type: Well
Work Status: New Bore
Construct.Method: Hand Auger
Owner Type: Private

Commenced Date:
Completion Date: 15/03/2006
Final Depth: 6.10 m
Drilled Depth: 6.10 m

Contractor Name: Total Drilling
Driller: Christopher David Kiernan
Assistant Driller:

Property: MOBIL OIL AUSTRALIA CNR PACIFIC HIGHWAY AND CHARLES STREET SOUTH GRAFTON 2460
Standing Water Level:
GWMA: -
GW Zone: -
Salinity:
Yield:

Site Details

Site Chosen By:

	County	Parish	Cadastre
Form A:	CLARC	CLARC.30	3//586649
Licensed:	CLARENCE	SOUTHAMPTON	Whole Lot 3//586649

Region: 30 - North Coast
CMA Map:
River Basin: - Unknown
Area/District:
Grid Zone:
Scale:

Elevation: 0.00 m (A.H.D.)
Elevation Source: Unknown
Northing: 6713618.0
Easting: 494289.0
Latitude: 29°42'27.2"S
Longitude: 152°56'27.5"E

GS Map: -
MGA Zone: 0
Coordinate Source: Map Interpretation

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Hole	Hole	0.00	1.20	100			Hand Auger
1		Hole	Hole	1.20	6.10	100			Cable Tool
1		Backfill	Bentonite	0.01	2.10				
1		Annulus	Crushed Aggregate	2.00	6.10				
1	1	Casing	Gab Monitoring Point	0.00	6.10				

Water Bearing Zones

From (m)	To (m)	Thickness (m)	WBZ Type	S.W.L. (m)	D.D.L. (m)	Yield (L/s)	Hole Depth (m)	Duration (hr)	Salinity (mg/L)

Geologists Log

Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments

Remarks

15/03/2006: Form A Remarks:
MW6 - BOREHOLE LOG ON FILE

***** End of GW305827 *****

NSW Office of Water
Work Summary

GW305828

Licence: 30BL183999
Licence Status: ACTIVE

Authorised Purpose (s): MONITORING BORE
Intended Purpose(s): MONITORING BORE

Work Type: Well
Work Status: New Bore
Construct.Method: Auger - Hollow Flight
Owner Type: Private

Commenced Date:
Completion Date: 20/07/2006
Final Depth: 5.10 m
Drilled Depth: 5.10 m

Contractor Name: Total Drilling
Driller: Christopher David Kiernan
Assistant Driller:

Property: ROAD FRONTING MOBIL OIL SCHWINGHAMMER STREET (PACIFIC HIGHWAY) SOUTH GRAFTON 2460
Standing Water Level:
GWMA: -
GW Zone: -
Salinity:
Yield:

Site Details

Site Chosen By:

	County	Parish	Cadastre
Form A:	CLARC	CLARC.30	3//586649
Licensed:	CLARENCE	SOUTHAMPTON	ROAD FRONTING 3//586649

Region: 30 - North Coast
CMA Map:
River Basin: - Unknown
Area/District:
Grid Zone:
Scale:

Elevation: 0.00 m (A.H.D.)
Elevation Source: Unknown
Northing: 6713539.0
Easting: 494347.0
Latitude: 29°42'29.8"S
Longitude: 152°56'29.6"E

GS Map: -
MGA Zone: 0
Coordinate Source: Map Interpretation

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Hole	Hole	0.00	1.20	100			Auger - Hollow Flight
1		Hole	Hole	1.20	5.10	100			Cable Tool
1		Backfill	Bentonite	0.10	1.60				
1		Annulus	Crushed Aggregate	2.00	5.10				
1	1	Casing	Gab Monitoring Point	0.00	5.10				

Water Bearing Zones

From (m)	To (m)	Thickness (m)	WBZ Type	S.W.L. (m)	D.D.L. (m)	Yield (L/s)	Hole Depth (m)	Duration (hr)	Salinity (mg/L)

Geologists Log

Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments

Remarks

20/07/2006: Form A Remarks:
MW9 - BORE LOG ON FILE

***** End of GW305828 *****

NSW Office of Water
Work Summary

GW305829

Licence: 30BL183999
Licence Status: ACTIVE

Authorised Purpose (s): MONITORING BORE
Intended Purpose(s): MONITORING BORE

Work Type: Well
Work Status: New Bore
Construct.Method: Auger - Hollow Flight
Owner Type: Private

Commenced Date:
Completion Date: 20/07/2006
Final Depth: 6.10 m
Drilled Depth: 6.10 m

Contractor Name: Total Drilling
Driller: Christopher David Kiernan
Assistant Driller:

Property: ROAD FRONTING MOBIL OIL SCHWINGHAMMER STREET (PACIFIC HIGHWAY) SOUTH GRAFTON 2460
Standing Water Level:
GWMA: -
GW Zone: -
Salinity:
Yield:

Site Details

Site Chosen By:

	County	Parish	Cadastre
Form A:	CLARC	CLARC.30	3//586649
Licensed:	CLARENCE	SOUTHAMPTON	ROAD FRONTING 3//586649

Region: 30 - North Coast
CMA Map:
River Basin: - Unknown
Area/District:
Grid Zone:
Scale:

Elevation: 0.00 m (A.H.D.)
Elevation Source: Unknown
Northing: 6713580.0
Easting: 494338.0
Latitude: 29°42'28.4"S
Longitude: 152°56'29.3"E

GS Map: -
MGA Zone: 0
Coordinate Source: Map Interpretation

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Hole	Hole	0.00	1.20	100			Auger - Hollow Flight
1		Hole	Hole	1.20	6.10	100			Cable Tool
1		Backfill	Bentonite	0.00	1.30				
1		Annulus	Crushed Aggregate	2.00	6.10				
1	1	Casing	Gab Monitoring Point	0.00	6.10				

Water Bearing Zones

From (m)	To (m)	Thickness (m)	WBZ Type	S.W.L. (m)	D.D.L. (m)	Yield (L/s)	Hole Depth (m)	Duration (hr)	Salinity (mg/L)

Geologists Log

Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments

Remarks

20/07/2006: Form A Remarks:
MW8 - BORE LOG ON FILE

***** End of GW305829 *****

NSW Office of Water
Work Summary

GW306994

Licence: 30BL185940
Licence Status: ACTIVE

Authorised Purpose (s): MONITORING BORE
Intended Purpose(s): MONITORING BORE

Work Type: Bore
Work Status: Equipped
Construct.Method:
Owner Type: Local Govt

Commenced Date:
Completion Date: 30/05/2012
Final Depth: 4.20 m
Drilled Depth: 4.20 m

Contractor Name:
Driller: Michael Hopkins
Assistant Driller:

Property: COUNCIL OF CITY OF GRAFTON CNR SKINNER & TYSON STREETS SOUTH GRAFTON 2460
Standing Water Level: 3.600
GWMA:
GW Zone:
Salinity:
Yield:

Site Details

Site Chosen By:

	County	Parish	Cadastre
Form A:	CLARC	CLARC.30	1//557049
Licensed:			

Region: 30 - North Coast
River Basin: - Unknown
Area/District:
CMA Map:
Grid Zone:
Scale:

Elevation: 0.00 m (A.H.D.)
Elevation Source: Unknown
Northing: 6712777.0
Easting: 493064.0
Latitude: 29°42'54.5"S
Longitude: 152°55'41.8"E

GS Map: -
MGA Zone: 0
Coordinate Source: Unknown

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Hole	Hole	0.00	4.20	150			Unknown
1	1	Casing	Pvc Class 18	0.00	4.20	50	40		Cemented, Screwed
1	1	Opening	Slots - Horizontal	1.20	4.20			1	PVC Class 9, Screwed

Water Bearing Zones

From (m)	To (m)	Thickness (m)	WBZ Type	S.W.L. (m)	D.D.L. (m)	Yield (L/s)	Hole Depth (m)	Duration (hr)	Salinity (mg/L)

3.60	4.20	0.60	Unknown	3.60					

Geologists Log
Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments
0.00	2.20	2.20	GRAVELLY CLAY	Clay	
2.20	3.00	0.80	CLAY ORANGE BROWN	Clay	
3.00	3.60	0.60	SILT VERY FINE GRAINED	Silt	
3.60	4.20	0.60	SILT,BECOMING MOIST TO WET	Silt	

Remarks

13/08/2014: Nat Carling, 13-Aug-2014; Added status, updated owner & rock type.

***** End of GW306994 *****

NSW Office of Water
Work Summary

GW306995

Licence: 30BL185940
Licence Status: ACTIVE

Authorised Purpose (s): MONITORING BORE
Intended Purpose(s): MONITORING BORE

Work Type: Bore
Work Status: Equipped
Construct.Method:
Owner Type: Local Govt

Commenced Date:
Completion Date: 30/05/2012
Final Depth: 6.50 m
Drilled Depth: 6.50 m

Contractor Name:
Driller: Michael Hopkins
Assistant Driller:

Property: COUNCIL OF CITY OF GRAFTON CNR SKINNER & TYSON STREETS SOUTH GRAFTON 2460
Standing Water Level: 5.400
GWMA:
GW Zone:
Salinity:
Yield:

Site Details

Site Chosen By:

	County	Parish	Cadastre
Form A:	CLARC	CLARC.30	1//557049
Licensed:			

Region: 30 - North Coast
River Basin: - Unknown
Area/District:
CMA Map:
Grid Zone:
Scale:

Elevation: 0.00 m (A.H.D.)
Elevation Source: Unknown
Northing: 6712817.0
Easting: 493131.0
Latitude: 29°42'53.2"S
Longitude: 152°55'44.3"E

GS Map: -
MGA Zone: 0
Coordinate Source: Unknown

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Hole	Hole	0.00	6.50	150			Unknown
1	1	Casing	Pvc Class 18	0.00	3.20	50	40		Cemented, Screwed
1	1	Opening	Slots - Horizontal	3.20	6.20			1	PVC Class 9, Screwed

Water Bearing Zones

From (m)	To (m)	Thickness (m)	WBZ Type	S.W.L. (m)	D.D.L. (m)	Yield (L/s)	Hole Depth (m)	Duration (hr)	Salinity (mg/L)

5.30	6.00	0.70	Unknown	5.40					

Geologists Log
Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments
0.00	1.30	1.30	SILTY CLAY,DARK BROWN	Silty Clay	
1.30	4.00	2.70	CLAYEY SILT,YELLOW BROWN	Clayey Silt	
4.00	6.50	2.50	SILT,FINE GRAINED.YELLOW BROWN	Silt	

Remarks

13/08/2014: Nat Carling, 13-Aug-2014; Added status & updated owner type.

***** End of GW306995 *****

NSW Office of Water
Work Summary

GW306996

Licence: 30BL185940
Licence Status: ACTIVE

Authorised Purpose (s): MONITORING BORE
Intended Purpose(s): MONITORING BORE

Work Type: Bore
Work Status: Equipped
Construct.Method: Auger - Solid Flight
Owner Type: Local Govt

Commenced Date:
Completion Date: 30/05/2012
Final Depth: 4.20 m
Drilled Depth: 4.20 m

Contractor Name:
Driller: Michael Hopkins
Assistant Driller:

Property: COUNCIL OF CITY OF GRAFTON CNR SKINNER & TYSON STREETS SOUTH GRAFTON 2460
Standing Water Level: 2.800
GWMA:
GW Zone:
Salinity:
Yield:

Site Details

Site Chosen By:

	County	Parish	Cadastre
Form A:	CLARC	CLARC.30	1//557049
Licensed:			

Region: 30 - North Coast
River Basin: - Unknown
Area/District:
CMA Map:
Grid Zone:
Scale:

Elevation: 0.00 m (A.H.D.)
Elevation Source: Unknown
Northing: 6712908.0
Easting: 493068.0
Latitude: 29°42'50.2"S
Longitude: 152°55'42.0"E

GS Map: -
MGA Zone: 0
Coordinate Source: Unknown

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Hole	Hole	0.00	4.20	150			Auger - Solid Flight
1	1	Casing	Pvc Class 18	0.10	1.00	50	40		Cemented, Screwed
1	1	Opening	Slots	1.00	4.00			1	PVC Class 9, Screwed

Water Bearing Zones

From (m)	To (m)	Thickness (m)	WBZ Type	S.W.L. (m)	D.D.L. (m)	Yield (L/s)	Hole Depth (m)	Duration (hr)	Salinity (mg/L)

2.80	4.00	1.20	Unknown	2.80					

Geologists Log
Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments
0.00	0.80	0.80	CLAY BROWN,FIRM,MOIST	Clay	
0.80	4.20	3.40	CLAY,BROWN WITH GREY MOTTLE,MOIST	Clay	

Remarks

13/08/2014: Nat Carling, 13-Aug-2014; Added status, updated owner & rock type.

***** End of GW306996 *****

NSW Office of Water
Work Summary

GW307114

Licence:
Licence Status:
Authorised Purpose (s):
Intended Purpose(s): MONITORING BORE

Work Type: Bore
Work Status: Equipped
Construct.Method: Auger - Solid Flight
Owner Type: Private

Commenced Date:
Completion Date: 09/06/2010
Final Depth: 9.80 m
Drilled Depth: 9.80 m

Contractor Name: Groundtruth Pty Ltd
Driller: Simon Carl Lott
Assistant Driller: Hayden Hopley

Property:
GWMA:
GW Zone:
Standing Water Level: 6.560
Salinity:
Yield:

Site Details

Site Chosen By:

	County	Parish	Cadastre
Form A:	CLARC	CLARC.30	RD ADJ 1//520023
Licensed:			

Region: 30 - North Coast
River Basin: 204 - CLARENCE RIVER
Area/District:
CMA Map: 9438-1S
Grid Zone:
Scale:

Elevation: 0.00 m (A.H.D.)
Elevation Source: Unknown
Northing: 6714142.0
Easting: 493096.0
Latitude: 29°42'10.1"S
Longitude: 152°55'43.1"E

GS Map: -
MGA Zone: 0
Coordinate Source: GPS - Global Positioning System

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Hole	Hole	0.00	9.80	150			Auger - Solid Flight
1		Annulus	Cement	0.00	0.20	150	58		
1		Annulus	Bentonite	0.20	3.00	150	58		
1		Annulus	Waterworn/Rounded	3.00	9.80	150	58		Graded
1	1	Casing	Pvc Class 18	0.00	6.80	58	50		Seated on Bottom, Screwed
1	1	Opening	Slots - Horizontal	6.80	9.80	58		1	Mechanically Slotted, PVC Class 18, Screwed, SL: 40.0mm, A: 6.00mm

Water Bearing Zones

			WBZ Type						

From (m)	To (m)	Thickness (m)		S.W.L. (m)	D.D.L. (m)	Yield (L/s)	Hole Depth (m)	Duration (hr)	Salinity (mg/L)
7.00	9.80	2.80	Unknown	6.56					

Geologists Log
Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments
0.00	0.15	0.15	Fill; concrete	Fill	
0.15	0.25	0.10	Gravel/Fill, with sand & silt	Gravel	
0.25	2.50	2.25	Silt; dark brown, damp, @0.5m brown trace sand	Silt	
2.50	4.00	1.50	Sand; trace silt, brown, damp, @3m some silt	Sand	
4.00	5.00	1.00	Silt, sandy; trace clay, @ 5m some clay	Silt	
5.00	7.00	2.00	Silt, clayey; trace sand, brown, moist	Silt	
7.00	9.80	2.80	Clay; dark brown/grey, wet	Clay	

Remarks

09/06/2010: Form A Remarks:
Nat Carling, 16-Oct-2013; GPS provided by the drillers.

***** End of GW307114 *****

NSW Office of Water
Work Summary

GW307115

Licence:
Licence Status:
Authorised Purpose (s):
Intended Purpose(s): MONITORING BORE

Work Type: Bore
Work Status: Equipped
Construct.Method: Auger - Solid Flight
Owner Type: Private

Commenced Date:
Completion Date: 09/06/2010
Final Depth: 5.80 m
Drilled Depth: 5.80 m

Contractor Name: Groundtruth Pty Ltd
Driller: Simon Carl Lott
Assistant Driller: Hayden Hopley

Property:
GWMA:
GW Zone:
Standing Water Level:
Salinity:
Yield:

Site Details

Site Chosen By:

	County	Parish	Cadastre
Form A:	CLARC	CLARC.30	1//520023
Licensed:			

Region: 30 - North Coast
River Basin: 204 - CLARENCE RIVER
Area/District:
CMA Map: 9438-1S
Grid Zone:
Scale:

Elevation: 0.00 m (A.H.D.)
Elevation Source: Unknown
Northing: 6714132.0
Easting: 493128.0
Latitude: 29°42'10.5"S
Longitude: 152°55'44.3"E

GS Map: -
MGA Zone: 0
Coordinate Source: GPS - Global Positioning System

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Hole	Hole	0.00	5.80	150			Auger - Solid Flight
1		Annulus	Cement	0.00	0.20	150	58		PL:Poured/Shovelled
1		Annulus	Bentonite	0.20	3.00	150	58		PL:Poured/Shovelled
1		Annulus	Waterworn/Rounded	3.00	5.80	150	58		Graded, PL:Poured/Shovelled
1	1	Casing	Pvc Class 18	0.00	3.00	58	50		Seated on Bottom, Screwed
1	1	Opening	Slots - Horizontal	3.00	5.80	58		1	Mechanically Slotted, PVC Class 18, Screwed, SL: 40.0mm, A: 6.00mm

Water Bearing Zones

			WBZ Type						

From (m)	To (m)	Thickness (m)		S.W.L. (m)	D.D.L. (m)	Yield (L/s)	Hole Depth (m)	Duration (hr)	Salinity (mg/L)
3.50	5.80	2.30	Unknown	4.70					

Geologists Log
Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments
0.00	0.15	0.15	Fill; concrete	Fill	
0.15	0.30	0.15	Gravel fill with silt	Fill	
0.30	1.00	0.70	Silt; dark brown, damp, @ 0.5m trace sand, brown	Silt	
1.00	3.50	2.50	Sand; trace silt, brown, damp, @ 3.0m moist	Sand	
3.50	5.00	1.50	Silt, trace sand, wet,	Silt	
5.00	5.80	0.80	Silt, Clayey; @ 5.8m odour	Unknown	

Remarks

09/06/2010: Form A Remarks:
Nat Carling, 17-Oct-2013; GPS provided by the drlliers.

***** End of GW307115 *****

NSW Office of Water
Work Summary

GW307116

Licence:
Licence Status:

Authorised Purpose (s):
Intended Purpose(s): MONITORING BORE

Work Type: Bore
Work Status: Equipped
Construct.Method: Auger - Solid Flight
Owner Type: Private

Commenced Date:
Completion Date: 09/06/2010
Final Depth: 8.20 m
Drilled Depth: 8.20 m

Contractor Name: Groundtruth Pty Ltd
Driller: Simon Carl Lott
Assistant Driller: Hayden Hopley

Property:
GWMA:
GW Zone:
Standing Water Level: 4.700
Salinity:
Yield:

Site Details

Site Chosen By:

	County	Parish	Cadastre
Form A:	CLARC	CLARC.30	1//520023
Licensed:			

Region: 30 - North Coast
River Basin: 204 - CLARENCE RIVER
Area/District:
CMA Map: 9438-1S
Grid Zone:
Scale:

Elevation: 0.00 m (A.H.D.)
Elevation Source: Unknown
Northing: 6714126.0
Easting: 493088.0
Latitude: 29°42'10.7"S
Longitude: 152°55'42.8"E

GS Map: -
MGA Zone: 0
Coordinate Source: GPS - Global Positioning System

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Hole	Hole	0.00	8.20	150			Auger - Solid Flight
1		Annulus	Cement	0.00	0.20	150	58		PL:Poured/Shovelled
1		Annulus	Bentonite	0.20	4.70	150	58		PL:Poured/Shovelled
1		Annulus	Waterworn/Rounded	4.70	8.20	150	58		Graded, PL:Poured/Shovelled
1	1	Casing	Pvc Class 18	0.00	5.20	58	50		Seated on Bottom, Screwed
1	1	Opening	Slots - Horizontal	5.20	8.20	58		1	Mechanically Slotted, PVC Class 18, Screwed, SL: 40.0mm, A: 6.00mm

Water Bearing Zones

			WBZ Type						

From (m)	To (m)	Thickness (m)		S.W.L. (m)	D.D.L. (m)	Yield (L/s)	Hole Depth (m)	Duration (hr)	Salinity (mg/L)
6.00	8.20	2.20	Unknown	4.70					

Geologists Log
Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments
0.00	0.10	0.10	Fill, Gravel; with silt, red/brown, damp	Fill	
0.10	0.50	0.40	Fill, Gravel; with sand & silt, black	Fill	
0.50	3.00	2.50	Silt, sandy; dark brown, @2m dark browm, @2.5m brown	Silt	
3.00	3.80	0.80	Sand, silty; brown, moist	Sand	
3.80	4.20	0.40	Sand; trace silt, moist, brown	Sand	
4.20	5.50	1.30	Silt, trace sand, moist	Silt	
5.50	6.00	0.50	Silt, trace clay, moist, dark brown	Silt	
6.00	8.20	2.20	Clay; some silt, brown, wet	Clay	

Remarks

09/06/2010: Form A Remarks:
Nat Carling, 17-Oct-2013; GPS provided by the drillers.

***** End of GW307116 *****

Appendix D – Aerial Photographs

Appendix E – 149 Certificate

clarence
VALLEY COUNCIL

RECEIVED
11 DEC 2013
BY:.....

Pollack Greening & Hampshire
PO Box 10
GRAFTON NSW 2460

Date of Issue: 06 December 2013
Certificate No: **PLAN2013/2224**
Your Ref: DMM:KN:130967
Receipt Details: 603170 04/12/2013 $53.00

Property Number: 102459
Property Address: 165-169 Cambridge Street SOUTH GRAFTON NSW 2460
Legal Description: Lot 2981 DP 733046, Lot 2982 DP 733046, Lot 2983 DP 733046
Owner: Gregory James Duroux & Suzanne Janette Duroux

PLANNING CERTIFICATE

Issued under Section 149(2) of the Environmental Planning and Assessment Act, 1979

Note: the information provided in sections 1 to 19 below is provided under section 149(2) of the Environmental Planning and Assessment Act 1979

1. Relevant planning instruments and development control plans

Text and zoning maps for the relevant local environmental plan/s and development control plan/s can be downloaded from Councils website – www.clarence.nsw.gov.au. Text for the relevant local environmental plan/s can be downloaded from the NSW Government website – www.legislation.nsw.gov.au.

A. Local Environmental Plans

Clarence Valley Local Environmental Plan 2011 applies to the land.

Zone B1 Neighbourhood Centre

1 Objectives of zone

- To provide a range of small-scale retail, business and community uses that serve the needs of people who live or work in the surrounding neighbourhood.
- To reinforce the neighbourhood centres of Coutts Crossing, Glenreagh, Lawrence and Ulmarra as the location for commercial premises.
- To minimise conflict between land uses within the zone and land uses within adjoining zones.
- To enable other land uses that are compatible with and do not detract from the viability of retail, business, and community uses within the zone.

2 Permitted without consent

Home-based child care; Home occupations; Home occupations (sex services).

3 Permitted with consent

Bed and breakfast accommodation; Boarding houses; Business premises; Child care centres; Community facilities; Dwelling houses; Home industries; Medical centres; Neighbourhood shops; Respite day care centres; Roads; Secondary dwellings; Shop top housing; Any other development not specified in item 2 or 4.

4 Prohibited

Agriculture; Air transport facilities; Airstrips; Animal boarding or training establishments; Boat building and repair facilities; Bulky goods premises; Camping grounds; Caravan parks; Cellar door premises; Cemeteries; Correctional centres; Crematoria; Depots; Eco-tourist facilities; Electricity generating works; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Hardware and building supplies; Heavy industrial storage establishments; Helipads; Highway services centres; Hospitals; Industrial retail outlets; Industrial training facilities; Industries; Mortuaries; Port facilities; Recreation facilities (major); Research stations; Residential accommodation; Restricted premises; Rural industries; Sewerage systems; Sex services premises; Storage premises; Timber yards; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Vehicle sales or hire premises; Warehouse or distribution centres; Waste or resource management facilities; Water storage facilities; Water treatment facilities; Wharf or boating facilities.

B. Proposed local environmental planning instruments

There are no Draft Local Environmental Plans applying to this land.

C. Development Control Plan

The Clarence Valley Development Control Plan - Development in Business Zones applies to the carrying out of development on the land.

D. State Environmental Planning Policies (SEPP)

Text for the relevant state environmental planning policies can be downloaded from the NSW Government website – www.legislation.nsw.gov.au.

The land is affected by State Environmental Planning Policies No 1, 4, 6, 15, 21, 22, 30, 32, 33, 36, 44, 50, 55, 62, 64, 65, Housing for Seniors or People with a Disability 2004, Building Sustainability Index (BASIX) 2004, Major Development 2005, Infrastructure 2007, Mining, Petroleum Production and Extractive Industries 2007, Temporary Structures and Places of Public Entertainment 2007, Exempt and Complying Development Codes 2008, Rural Lands 2008, State Environmental Planning Policy (Affordable Rental Housing) 2009, State Environmental Planning Policy (State and Regional Development) 2011 and North Coast Regional Environmental Plan 1988.

E. Proposed state environmental planning instruments

Draft amendment to the State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) (Coal Seam Gas Exclusion Zones) 2013 applies to the subject land and is or has been the subject of community consultation or public exhibition. The proposed amendments would prohibit coal seam gas development on or under land in and within 2km of a residential zone or future identified residential growth areas, and on or under land which is in a Critical Industry Cluster (CIC). There are no CICs in the Clarence Valley local government area. Details can be found at the Department of Planning and Infrastructure's website, <http://www.planning.nsw.gov.au>.

The State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) Amendment (Resource Significance) 2013 applies to the subject land and has been the subject of community consultation and public exhibition. These proposed amendments to the Policy ensure the significance of the resources (major or minor) must be considered in the decision-making process, stipulate the key environmental, ecological and amenity criteria to protect water resources, habitat and amenity, require that the economic and environmental issues mentioned above are properly balanced, and elevate the importance of the Office of Environment and Heritage (OEH) in the assessment process. The amendments aim to increase confidence for investors and the community about how decisions are made on mining proposals. Details can be found at the Department of Planning and Infrastructure's website, www.planning.nsw.gov.au <http://www.planning.nsw.gov.au>.

2. Other relevant local environmental planning provisions

Note: The following advice is relevant to the local environmental plan/s identified in Section 1A of this Certificate.

A. Minimum land dimensions for erection of dwelling house

There is no minimum lot size for dwelling purposes. Other development standards may apply.

B. Critical habitat

The subject land is NOT known to include or comprise critical habitat as defined in the *Threatened Species Conservation Act 1995* or Part 7A of the *Fisheries Management Act 1994*.

C. Heritage conservation area

The land is NOT located within a heritage conservation area (however described) under the local environmental planning instrument.

D. Item of environmental heritage

The land does NOT have located on it an item of environmental heritage (however described) under the local environmental planning instrument.

3. Complying development

Note: Text for the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 can be downloaded from the NSW Government website – www.legislation.nsw.gov.au.

Not withstanding the advice in Parts 3A to 3G (inclusive) below, for complying development to occur it must comply with all relevant requirements and other development standards of *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*.

A. General Housing Code

Complying development under this Code may be carried out on this land.

B. Rural Housing Code

In circumstances where it is indicated that complying development cannot occur on the subject land under the Rural Housing Code then despite that advice, complying development can occur on any part of the subject land where that part of the land is not identified as being 'excluded land' for any reason.

Complying development under this Code may be carried out on this land.

C. Housing Alterations Code

Complying development under this Code may be carried out on this land.

D. General Development Code

Complying development under this Code may be carried out on this land.

E. General Commercial and Industrial Code

Complying development under this Code may be carried out on this land.

F. Subdivisions Code

Complying development under this Code may be carried out on this land.

G. Demolition Code

Complying development under this Code may be carried out on this land.

4. Coastal protection

Council has not been notified by the Department of Public Works whether the land is affected by the operation of section 38 or 39 of the *Coastal Protection Act, 1979.*

4A Information relating to coasts and beaches

Either an order has NOT been made under Part 4D of the *Coastal Protection Act 1979* in relation to temporary coastal protection works (within the meaning of that Act) on the land (or on public land adjacent to that land), **or** where such an order has been made the Council is satisfied that the order has been fully complied with.

The Council has NOT been notified under section 55X of the *Coastal Protection Act 1979* that temporary coastal protection works (within the meaning of that Act) have been placed on the land (or on public land adjacent to that land).

4B Annual charges for coastal protection services under Local Government Act 1993

The owner (or any previous owner) of the land has NOT consented in writing to the land being subject to annual charges under section 496B of the *Local Government Act 1993* for coastal protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act).
[Note. "Existing coastal protection works" are works to reduce the impact of coastal hazards on land (such as seawalls, revetments, groynes and beach nourishment) that existed before the commencement of section 553B of the Local Government Act 1993.]

5. Mine subsidence

The land is NOT proclaimed to be within a mine subsidence district within the meaning of section 15 of the *Mines Subsidence Compensation Act, 1961.*

6. Road widening and road realignment

The land is NOT affected by any road widening or road re-alignment under Division 2 of Part 3 of the *Roads Act 1993*, any environmental planning instrument, or any resolution of Council, unless otherwise stated within this certificate.

7. Council and other Public Authority Policies on Hazard Risk Restrictions

Hazard Risk Restrictions (generally)
The subject land is NOT affected by a policy adopted by the Council, or by any other public authority and notified to the Council, that restricts the development of the land because of the likelihood of land slip, bushfire, tidal inundation, subsidence, acid sulphate soils or any other risk (other than flooding), unless otherwise stated within this certificate.

Acid Sulfate Soil
The subject land IS mapped AS BEING potentially affected by Acid Sulfate soils, as indicated on the Acid Sulfate Soils Planning Map held by Council.

Any Other Risk - Contaminated Land
Council has adopted a policy on contaminated land. This policy will restrict development of land which is affected by contamination, which has been used for certain purposes, in respect of which there is not sufficient information about contamination, which is proposed to be used for certain purposes, or in other circumstances outlined in the policy.

8. Flood related development controls

A. Flood controls on certain residential development

The land is considered to be located below the flood planning level. Hence, development on the land for the purposes of dwelling houses, dual occupancies, multi dwelling housing or residential flat buildings (not including development for the purposes of group homes or seniors housing) is subject to flood related development controls. Details are contained in the local environmental planning instrument and relevant development control plan/s.

B. Flood controls on other development

The land is considered to be located below the flood planning level. Hence, development on the land for any purpose (other than development referred to in item 8A above) is subject to flood related development controls. Details are contained in the relevant local environmental planning instrument/s and relevant development control plan/s.

9. Land Reserved for Acquisition

No environmental planning instrument or proposed environmental planning instrument referred to in item 1A, 1B, 1D or 1E of this certificate applies to this land that provides for the acquisition of the land by a public authority as referred to in Section 27 of the *Environmental Planning and Assessment Act 1979*, unless otherwise stated within this certificate.

10. Contributions plans

The Grafton City Council Section 94 Contributions Plan, 1993 applies to the land except for provisions of that plan that relate to the following:

- Open space or recreational facilities
- Community facilities
- Car parking
- Kerb and gutter and traffic facilities
- Bus shelters
- Drainage facilities in non-residential areas

The Clarence Valley Contributions Plan 2011 applies to the land. It identifies contributions for open space and community facilities applicable to residential development and a Section 94A levy for all other development.

In accordance with the above Contributions Plan/s, Council may require, as a condition of consent for certain developments, that works be carried out or contributions be paid towards the provision of works, services or amenities. Applicants intending to carry out developments should make their own enquiries regarding such possible contributions. In some cases, the Council may not be able to determine the exact requirements for works or contributions until a development application has been lodged and assessed.

11. Matters arising under the Contaminated Land Management Act 1997 (CLM Act)

Note: The following advice is by section 59 (2) of the Contaminated Land Management Act 1997 as additional matters to be specified in a planning certificate.

Contaminated Land Management Act 1997 matters (generally)
The land is NOT within land declared to be significantly contaminated land, subject to a management order, subject of an approved voluntary management proposal, subject of an ongoing maintenance order or subject to a site audit statement within the meaning of the *Contaminated Land Management Act 1997*, unless otherwise stated within this certificate.

12. Bushfire Prone land

The subject land is indicated on Council's bushfire prone land map as NOT being bush fire prone land.

13. Property vegetation plans

Council HAS NOT been notified that a property vegetation plan (PVP) under the Native Vegetation Act 2003 applies to the land.

14. Orders

Council has NOT been notified of an order made under the *Trees (Disputes Between Neighbours) Act 2006* to carry out work in relation to a tree on the land.

15. Directions under Part 3A

There is NO direction, issued by the Minister for Planning, in force under section 75P(2)(c1) of the Act to the effect that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the *Environmental Planning and Assessment Act 1979* does not have effect.

16. Site compatibility certificates and conditions for seniors housing

Note: Text for the *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004* can be downloaded from the NSW Government website – www.legislation.nsw.gov.au.

A. Site Compatibility Certificate

There is NO current site compatibility certificate issued under clause 25 of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land.

B. Conditions for seniors housing

No condition of a consent to a development application granted after 11 October 2007 in respect of the land has been granted containing a statement setting out any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004.

17. Site compatibility certificates for infrastructure

Note: Text for the *State Environmental Planning Policy (Infrastructure) 2007* can be downloaded from the NSW Government website – www.legislation.nsw.gov.au.

There is NO current site compatibility certificate issued under clause 19 of State Environmental Planning Policy (Infrastructure) 2007 in respect of proposed development on the land.

18. Site compatibility certificates and conditions for affordable rental housing

Note: Text for the *State Environmental Planning Policy (Affordable Rental Housing) 2009* can be downloaded from the NSW Government website – www.legislation.nsw.gov.au.

A. Site Compatibility Certificate

There is NO current site compatibility certificate (affordable rental housing) issued under State Environmental Planning Policy (Affordable Rental Housing) 2009 in respect of proposed development on the land.

B. Conditions for affordable rental housing

No condition of a consent to a development application in respect of the land has been granted containing a statement setting out any terms of a kind referred to in clause 17(1) or 37(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009.

19. Other Advice Issued by Council

The following additional advices are issued by Council in good faith pursuant to Section 149(5) of the Environmental Planning and Assessment Act, 1979.

Development Servicing Plans

Council's Development Servicing Plans for Water Supply and Sewerage Services apply in those areas serviced by a Council water supply scheme and sewerage scheme respectively. Enquiries as to whether the land the subject to this certificate is within a water supply or sewerage scheme area should be directed to Council's Water Cycle Section.

Water and Sewer Connection

Properties which consist of more than one lot for ratings purposes, and pay a single sewer and/or water access charge, are entitled to a single water and/or sewer connection. If additional water and/or sewer connections are required (for example when lots are sold separately) then the appropriate fee in Council's Fees and Charges, including a capital contribution, is applicable for any new connections.

Copies of relevant documents referred to in this Certificate may be available on request from Council, or by visiting its website at www.clarence.nsw.gov.au. Text for legislation referred to in this Certificate can be downloaded from the NSW Government website – www.legislation.nsw.gov.au.

SECTION 149(5)

On application to Council and the payment of the prescribed fee, advice is provided pursuant to Section 149(5) on such other relevant matters, affecting the land, of which Council may be aware.

PLEASE NOTE:

The Environmental Planning and Assessment Amendment Act 1997 commenced operation on 1 July 1998. As a consequence of this Act the information contained in this certificate needs to be read in conjunction with the provisions of the Environmental Planning and Assessment (Amendment) Regulation 1998, Environmental Planning and Assessment (Further Amendment) Regulation 1998 and Environmental Planning and Assessment (Savings and Transitional) Regulation 1998.

Disclaimer

This certificate contains information provided to Clarence Valley Council by third parties and is as current as the latest information available to Council at the time of production of this document. Council does not warrant the accuracy of the information contained within the information provided by third parties and has not independently verified the information. Please contact Council staff on 6643 0200 should you wish to obtain a listing of the information provided by third parties that has been relied upon in the production of this document. It is strongly recommended that you contact the relevant third parties to confirm the accuracy of the information.

David Morrison.

For and on behalf of the
GENERAL MANAGER

Appendix F – Borehole Summary Table

Appendix F - Hand Auger Log Summary	
Depth (m)	**Description/Findings**
H01 – Oil stain on eastern corner of Site.	
0.0 – 0.3	Fill – gravelly sand, fine-medium grained sand, medium-coarse grained gravel (brown) with clay, slight oil odour. PACM fragment approximately 0.5 m from hole (on surface) – AS01
0.3 – 0.6	Sandy Clay, trace gravel (brown), presumed natural.
0.6 – 0.7	Clay, trace sand, yellow/brown.
H02 – Inside cool room/shed, earth floor	
Depth (m)	**Description/Findings**
0.0 – 0.3	Fill – gravelly sand (brown) with some clay.
0.3 – 0.5	Clay, trace sand (brown).
0.5 – 0.6	Clay (brown), refusal on stiff clay.
H03 – Garden bed beneath residence (empty round-up container)	
Depth (m)	**Description/Findings**
0.0 – 0.2	Fill – gravelly sand (dark brown), with some clay, rootlets.
0.2 – 0.5	Sandy clay (brown).
0.5 – 0.6	Clay with trace sand (dark grey/black).
H04 – Western corner of nursery (beneath layers)	
Depth (m)	**Description/Findings**
0.0 – 0.3	Fill – gravelly sand (sub-base) (pale yellow/brown), rootlets.
0.3 – 0.6	Sandy clay (dark brown).
0.6 – 0.7	Clay (yellow/brown).
H05 – Centre of nursery in bare (sparse vegetation) ground	
Depth (m)	**Description/Findings**
0.0 – 0.2	Fill – gravelly sand (pale yellow/brown), rootlets.
0.2 – 0.4	Sandy clay (dark brown).
0.4 – 0.5	Clay, trace sand (brown).
H06 – Northern corner of nursery near well (approximately 1 m away)	
Depth (m)	**Description/Findings**
0.0 – 0.3	Fill – gravelly sand (pale yellow/brown), rootlets, brick fragments.
0.3– 0.6	Sandy clay (dark brown).
0.6 – 0.7	Sandy clay, some gravel (brown).
H07 – Northern corner of the site, low lying, near concrete stockpile	
Depth (m)	**Description/Findings**
0.0 – 0.2	Fill/Topsoil – sand, trace gravel (dark brown/grey).
0.2 – 0.5	Disturbed/Fill – sand (dark brown), unknown material
0.5 – 0.6	Fill/Disturbed – sand (dark brown), refusal on cobbles.

Appendix G – Soil analytical results

Appendix G
Table A
Soil analytical Results

									Field_ID	H01 0.0-0.1	Q01	%	H01 0.3-0.4	H01 0.6-0.7	H02 0.0-0.1	H03 0.0-0.1	H04 0.0-0.1	H05 0.0-0.1	H06 0.0-0.1	H07 0.0-0.1	H07 0.2-0.3	COMP-1	COMP-2	A01
									Location_Code	H01	H01	RPD	H01	H01	H02	H03	H04	H05	H06	H07	H07			A01
									Sample_Depth_Range	0-0.1	0-0.1		0.3-0.4	0.6-0.7	0-0.1	0-0.1	0-0.1	0-0.1	0-0.1	0-0.1	0.2-0.3			
									Sampled_Date_Time	6/03/2015	6/03/2015		6/03/2015	6/03/2015	6/03/2015	6/03/2015	6/03/2015	6/03/2015	6/03/2015	6/03/2015	6/03/2015	10/03/2015	6/03/2015	6/03/2015
				NEPM 2013 EIL-Urban Residential-Public Open Space #	NEPM 2013 Table 1A(1) HILs Res A Soil	NEPM 2013 Res A/B Soil HSL for Vapour Intrusion, Sand 0-1m	NEPM 2013 ESLs for Urban Res, Coarse Soil	NEPM 2013 Management Limits for Res, Coarse Soil																
Chem_Group	**ChemName**	**Unit**	**EQL**																					
	weight of sample	g	0.01							220	-	-	-		-	220	-	-	-	-	-	-	-	16.9
Inorganics	CEC	meq/100g	0.1							1.9	-	-	13.8	-	-	-	-	-	-	-	-	-	-	-
	Moisture	%	1							5.8	4		14.2	21.8	7.7	11	3.9	4.8	5.4	4.4	19.7	6.9	4.7	-
	pH (Lab)	pH Units	0.1							8.4	-	-	7.9	-	-	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	5	100	100					<5	<5	-	5	-	<5	14	10	<5	12	<5	7	-	-	-
	Cadmium	mg/kg	1	3*	20					<1	<1	-	<1	-	<1	<1	<1	<1	<1	<1	<1	-	-	-
	Chromium (III+VI)	mg/kg	2	190	100					12	10	18	10	-	13	22	10	13	19	5	22	-	-	-
	Copper	mg/kg	5	95	6000					<5	<5	-	17	-	<5	13	13	<5	12	5	5	-	-	-
	Lead	mg/kg	5	1100	300					5	5	0	18	-	6	5	<5	<5	6	<5	8	-	-	-
	Mercury	mg/kg	0.1	1*	40					<0.1	<0.1	-	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-
	Nickel	mg/kg	2	30	400					<2	<2	-	6	-	<2	<2	3	<2	<2	<2	<2	-	-	-
	Zinc	mg/kg	5	230	7400					387	334	15	59	-	25	17	23	8	24	15	15	-	-	-
TRH - NEPM 2013	C6-C10 minus BTEX (F1)	mg/kg	10			45	180	700		<10	-	-	<10	-	<10	-	-	-	-	-	<10	-	-	-
	C6 - C10 Fraction	mg/kg	10							<10	-	-	<10	-	<10	-	-	-	-	-	<10	-	-	-
	>C10-C16 minus Naphthalene (F2)	mg/kg	50			110	120	1000		830	-	-	450	<50	<50	-	-	-	-	-	<50	-	-	-
	>C16 - C34 Fraction (F3)	mg/kg	100				300	2500		27,600	-	-	13,500	340	<100	-	-	-	-	-	110	-	-	-
	>C34 - C40 Fraction (F4)	mg/kg	100				2800	10,000		6860	-	-	3910	130	<100	-	-	-	-	-	<100	-	-	-
	>C10 - C40 (Sum of Total)	mg/kg	50							35,300	-	-	17,900	470	<50	-	-	-	-	-	110	-	-	-
BTEX & MAH	Benzene	mg/kg	0.2			0.5	50	50		<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	-	-
	Toluene	mg/kg	0.5			160	85	85		<0.5	-	-	<0.5	-	<0.5	-	-	-	-	-	<0.5	-	-	-
	Ethylbenzene	mg/kg	0.5			55	70	70		<0.5	-	-	<0.5	-	<0.5	-	-	-	-	-	<0.5	-	-	-
	Xylene (o)	mg/kg	0.5							<0.5	-	-	<0.5	-	<0.5	-	-	-	-	-	<0.5	-	-	-
	Xylene (m & p)	mg/kg	0.5							<0.5	-	-	<0.5	-	<0.5	-	-	-	-	-	<0.5	-	-	-
	Xylene Total	mg/kg	0.5			40	105	105		<0.5	-	-	<0.5	-	<0.5	-	-	-	-	-	<0.5	-	-	-
	BTEX (Sum of Total) - Lab Calc	mg/kg	0.2							<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	-	-
PAH	Polycylic aromatic hydrocarbons	mg/kg	0.5							<0.5	-	-	<0.5	-	<0.5	-	-	-	-	-	<0.5	-	-	-
	Pyrene	mg/kg	0.5							<0.5	-	-	<0.5	-	<0.5	-	-	-	-	-	<0.5	-	-	-
	Acenaphthene	mg/kg	0.5							<0.5	-	-	<0.5	-	<0.5	-	-	-	-	-	<0.5	-	-	-
	Acenaphthylene	mg/kg	0.5							<0.5	-	-	<0.5	-	<0.5	-	-	-	-	-	<0.5	-	-	-
	Anthracene	mg/kg	0.5							<0.5	-	-	<0.5	-	<0.5	-	-	-	-	-	<0.5	-	-	-
	Benz(a)anthracene	mg/kg	0.5							<0.5	-	-	<0.5	-	<0.5	-	-	-	-	-	<0.5	-	-	-
	Benzo(a)pyrene	mg/kg	0.5				0.7	0.7		<0.5	-	-	<0.5	-	<0.5	-	-	-	-	-	<0.5	-	-	-
	Benzo[b+j]fluoranthene	mg/kg	0.5							<0.5	-	-	<0.5	-	<0.5	-	-	-	-	-	<0.5	-	-	-
	Benzo(k)fluoranthene	mg/kg	0.5							<0.5	-	-	<0.5	-	<0.5	-	-	-	-	-	<0.5	-	-	-
	Benzo(g,h,i)perylene	mg/kg	0.5							<0.5	-	-	<0.5	-	<0.5	-	-	-	-	-	<0.5	-	-	-
	Chrysene	mg/kg	0.5							<0.5	-	-	<0.5	-	<0.5	-	-	-	-	-	<0.5	-	-	-
	Dibenz(a,h)anthracene	mg/kg	0.5							<0.5	-	-	<0.5	-	<0.5	-	-	-	-	-	<0.5	-	-	-
	Fluoranthene	mg/kg	0.5							<0.5	-	-	<0.5	-	<0.5	-	-	-	-	-	<0.5	-	-	-
	Fluorene	mg/kg	0.5							<0.5	-	-	<0.5	-	<0.5	-	-	-	-	-	<0.5	-	-	-
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.5							<0.5	-	-	<0.5	-	<0.5	-	-	-	-	-	<0.5	-	-	-
	Naphthalene	mg/kg	0.5	170		3				<0.5	-	-	<0.5	-	<0.5	-	-	-	-	-	<0.5	-	-	-
	Phenanthrene	mg/kg	0.5							<0.5	-	-	<0.5	-	<0.5	-	-	-	-	-	<0.5	-	-	-
	Benzo(a)pyrene TEQ (zero) - Lab Calc	mg/kg	0.5		3					<0.5	-	-	<0.5	-	<0.5	-	-	-	-	-	<0.5	-	-	-
OC Pesticides	4,4-DDE	mg/kg	0.05							-	-	-	-	-	-	-	-	-	-	-	-	<0.25	<0.05	-
	a-BHC	mg/kg	0.05							-	-	-	-	-	-	-	-	-	-	-	-	<0.25	<0.05	-
	Aldrin	mg/kg	0.05							-	-	-	-	-	-	-	-	-	-	-	-	<0.25	<0.05	-
	Aldrin + Dieldrin	mg/kg	0.05		6					-	-	-	-	-	-	-	-	-	-	-	-	<0.25	<0.05	-
	b-BHC	mg/kg	0.05							-	-	-	-	-	-	-	-	-	-	-	-	<0.25	<0.05	-
	chlordane	mg/kg	0.05		50					-	-	-	-	-	-	-	-	-	-	-	-	<0.25	<0.05	-
	Chlordane (cis)	mg/kg	0.05							-	-	-	-	-	-	-	-	-	-	-	-	<0.25	<0.05	-
	Chlordane (trans)	mg/kg	0.05							-	-	-	-	-	-	-	-	-	-	-	-	<0.25	<0.05	-
	d-BHC	mg/kg	0.05							-	-	-	-	-	-	-	-	-	-	-	-	<0.25	<0.05	-
	4,4 DDD	mg/kg	0.05							-	-	-	-	-	-	-	-	-	-	-	-	<0.25	<0.05	-
	4,4 DDT	mg/kg	0.2	180						-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.2	-
	DDT+DDE+DDD - Lab Calc	mg/kg	0.05	180	240					-	-	-	-	-	-	-	-	-	-	-	-	<0.25	<0.05	-
	Dieldrin	mg/kg	0.05							-	-	-	-	-	-	-	-	-	-	-	-	<0.25	<0.05	-
	Endosulfan	mg/kg	0.05		270					-	-	-	-	-	-	-	-	-	-	-	-	<0.25	<0.05	-
	Endosulfan I	mg/kg	0.05							-	-	-	-	-	-	-	-	-	-	-	-	<0.25	<0.05	-
	Endosulfan II	mg/kg	0.05							-	-	-	-	-	-	-	-	-	-	-	-	<0.25	<0.05	-
	Endosulfan sulphate	mg/kg	0.05							-	-	-	-	-	-	-	-	-	-	-	-	<0.25	<0.05	-
	Endrin	mg/kg	0.05		10					-	-	-	-	-	-	-	-	-	-	-	-	<0.25	<0.05	-
	Endrin aldehyde	mg/kg	0.05							-	-	-	-	-	-	-	-	-	-	-	-	<0.25	<0.05	-
	Endrin ketone	mg/kg	0.05							-	-	-	-	-	-	-	-	-	-	-	-	<0.25	<0.05	-
	g-BHC (Lindane)	mg/kg	0.05							-	-	-	-	-	-	-	-	-	-	-	-	<0.25	<0.05	-
	Heptachlor	mg/kg	0.05		6					-	-	-	-	-	-	-	-	-	-	-	-	<0.25	<0.05	-
	Heptachlor epoxide	mg/kg	0.05							-	-	-	-	-	-	-	-	-	-	-	-	<0.25	<0.05	-
	Hexachlorobenzene	mg/kg	0.05		10					-	-	-	-	-	-	-	-	-	-	-	-	<0.25	<0.05	-
	Methoxychlor	mg/kg	0.2		300					-	-	-	-	-	-	-	-	-	-	-	-	<1	<0.2	-
Asbestos	Asbestos (Presence/Absence)	-	0.1							No asbestos detected	-	-	-	-	-	No asbestos detected	-	-	-	-	-	-	-	No asbestos detected

For EILs generally CEC of 5 and pH of 7.5 applied.
* Cadmium and Mercury - Provisional phytotoxicity-based investigation levels from Guidelines for theNSW Site Auditor Scheme (2006)

Appendix H – Laboratory Certificates

GHD

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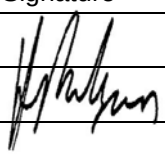
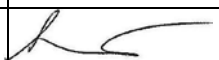
0	E Griffin	H Bridgman		A Monkley		27/03/2015
1	E Griffin	H Bridgman		A Monkley		13/05/2015

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