



Ref: 06265

2 October 2007

BBK Pty Ltd

Attention: Mr Barry France

**de Groot &  
Benson Pty Ltd**

**Consulting  
Engineers &  
Planners**

Dear Sir

**Water Supply and Sewerage Infrastructure**  
**LOT 21, DP714858 HEARNES LAKE ROAD, WOOLGOOLGA**

This report sets out the basis for provision of water and sewerage infrastructure to the proposed development.

**Water Supply**

The provision of water supply to the site is dealt with in the Coffs Harbour City Council Water Supply Infrastructure report. This report investigates the augmentations required to service the projected growing population for Coffs Harbour City.

For the development and the surrounding area, the report proposes the following:

- Provide a 150mm water main link from the existing 225mm main located on the western side of the Pacific Highway. It will be necessary to underbore the highway to prevent disruption to traffic on the highway.
- The 150mm main is to be extended along Hearnese Lake Road to the development site.
- All internal subdivision pipework to be generally 100mm upvc.
- In addition, a future link to Willis Street is to be provided by others. This would occur with the development of the adjoining parcels of land.

Details are shown on Drawing 06265-4W.

**Sewerage**

The provision of sewerage to the site is dealt with in the Coffs Harbour City Council Wastewater Treatment and Carrier System Developer Services Plan 2003. This report investigates the augmentations required to service the projected growing population for Coffs Harbour City.

This report proposes that a sewerage pumping station be located approximately midway between the Pacific Highway and the development site, on private land owned by others. Negotiations to date by the Developers with the landowners have so far not yielded any agreement between the



parties for the use of this land for a pumping station. As such, in consultation with Coffs Harbour City Council. Two strategies have been developed. These are summarised below:

**Strategy A – Construction in accordance with DSP**

*Gravity sewerage*

- Provide a sewerage pumping station as shown in the DSP.
- Construct a 150mm gravity sewerage main from the site to the pumping station. The gravity main would be located in Hearnese Lake Road.
- Internal sewage would be in accord with Council's Subdivision guidelines.

*Sewerage Rising Main*

The main would be constructed in two stages:

- Stage 1 - to run from the pumping station along Hearnese Lake road and the Pacific Highway and connect to existing gravity sewer in Bosworth Road.
- Long Term – The rising main would be extended to Treatment Plant as per Coffs Harbour City Council Wastewater Treatment and Carrier System Developer Services Plan 2003.

**Strategy B – Alternation Strategy**

*Gravity sewerage*

- Either:
  1. Provide temporary pumping station adjacent to south western corner of proposed lot 20 of the site for the permanent pumping station shown in the DSP cannot be acquired. This pumping station is to be decommissioned when main pumping station is constructed by Council in Hearnese Lake Road to service whole Hearnese Lake area.
  2. Provide a permanent pumping station in the road reserve as close as possible to the location shown in the DSP.
- Construct a 150mm gravity sewerage main from the site to the pumping station.
- Internal sewage would be in accord with Council's Subdivision guidelines.

*Sewerage Rising Main*

The main would be constructed in two stages:

- Stage 1 - to run from the pumping station along Hearnese Lake road and the Pacific Highway and connect to existing gravity sewer in Bosworth Road.
- Long Term – The rising main would be extended to Treatment Plant as per Coffs Harbour City Council Wastewater Treatment and Carrier System Developer Services Plan 2003.

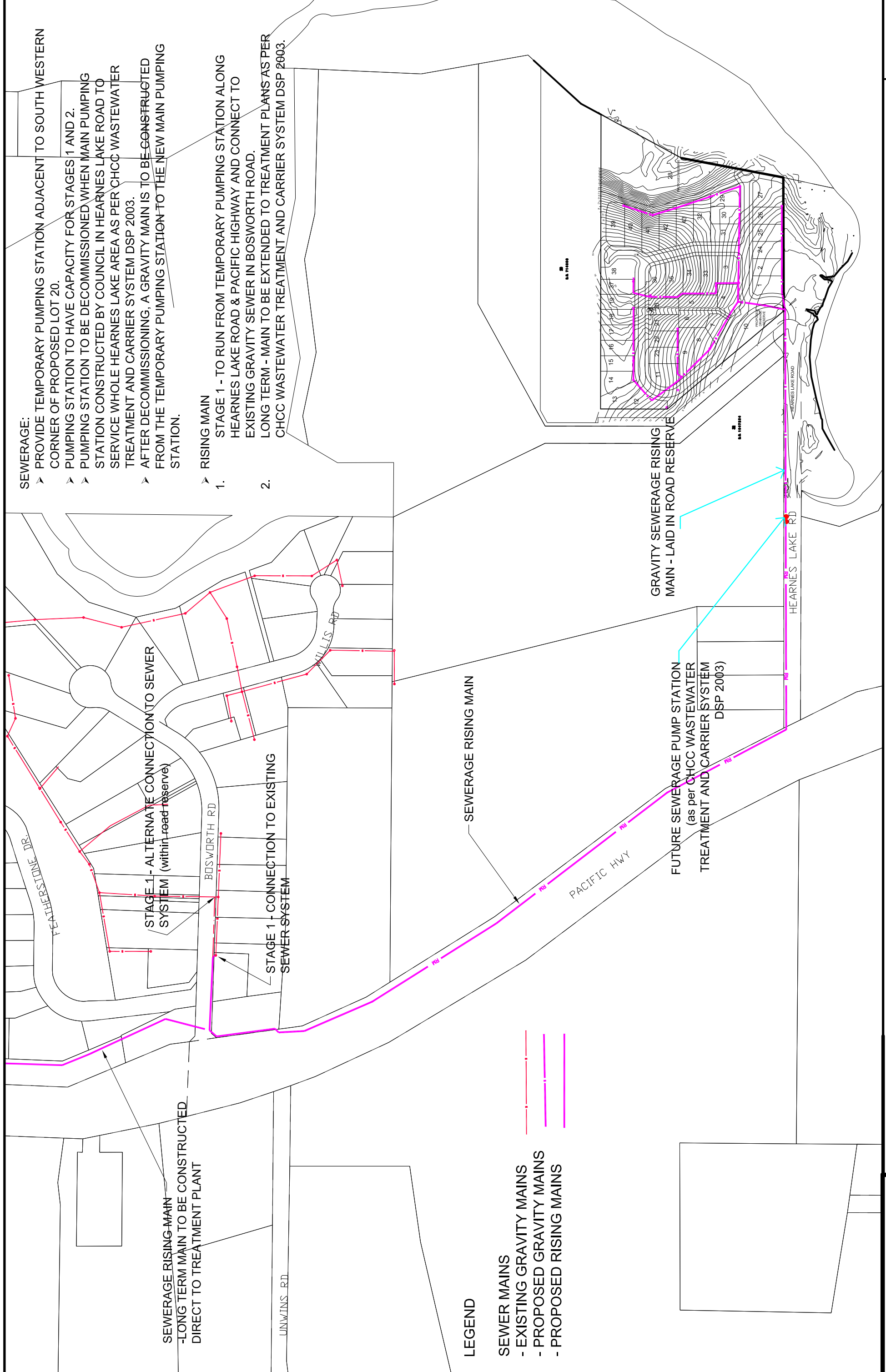
Details are shown on Drawing 06265-4W.

A copy of the letter from Council which supports the above strategy is attached.

Should you have any further queries, please contact Rob de Groot on 02 6652 1700, or mobile 04 1883 1700 or by email at [rob@dgb.com.au](mailto:rob@dgb.com.au).

Yours faithfully

R J de Groot



**SEWERAGE:**

- PROVIDE TEMPORARY PUMPING STATION ADJACENT TO SOUTH WESTERN CORNER OF PROPOSED LOT 20.
  - PUMPING STATION TO HAVE CAPACITY FOR STAGES 1 AND 2.
  - PUMPING STATION TO BE DECOMMISSIONED WHEN MAIN PUMPING STATION CONSTRUCTED BY COUNCIL IN HEARNES LAKE ROAD TO SERVICE WHOLE HEARNES LAKE AREA AS PER CHCC WASTEWATER TREATMENT AND CARRIER SYSTEM DSP 2003.
  - AFTER DECOMMISSIONING, A GRAVITY MAIN IS TO BE CONSTRUCTED FROM THE TEMPORARY PUMPING STATION TO THE NEW MAIN PUMPING STATION.
- RISING MAIN**
1. STAGE 1 - TO RUN FROM TEMPORARY PUMPING STATION ALONG HEARNES LAKE ROAD & PACIFIC HIGHWAY AND CONNECT TO EXISTING GRAVITY SEWER IN BOSWORTH ROAD.
  2. LONG TERM - MAIN TO BE EXTENDED TO TREATMENT PLANS AS PER CHCC WASTEWATER TREATMENT AND CARRIER SYSTEM DSP 2003.

SEWERAGE RISING MAIN  
-LONG TERM MAIN TO BE CONSTRUCTED DIRECT TO TREATMENT PLANT

STAGE 1 - ALTERNATE CONNECTION TO SEWER SYSTEM (within road reserve)

STAGE 1 - CONNECTION TO EXISTING SEWER SYSTEM

**LEGEND**

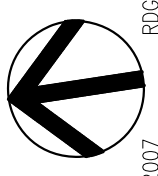
- EXISTING GRAVITY MAINS
- PROPOSED GRAVITY MAINS
- PROPOSED RISING MAINS

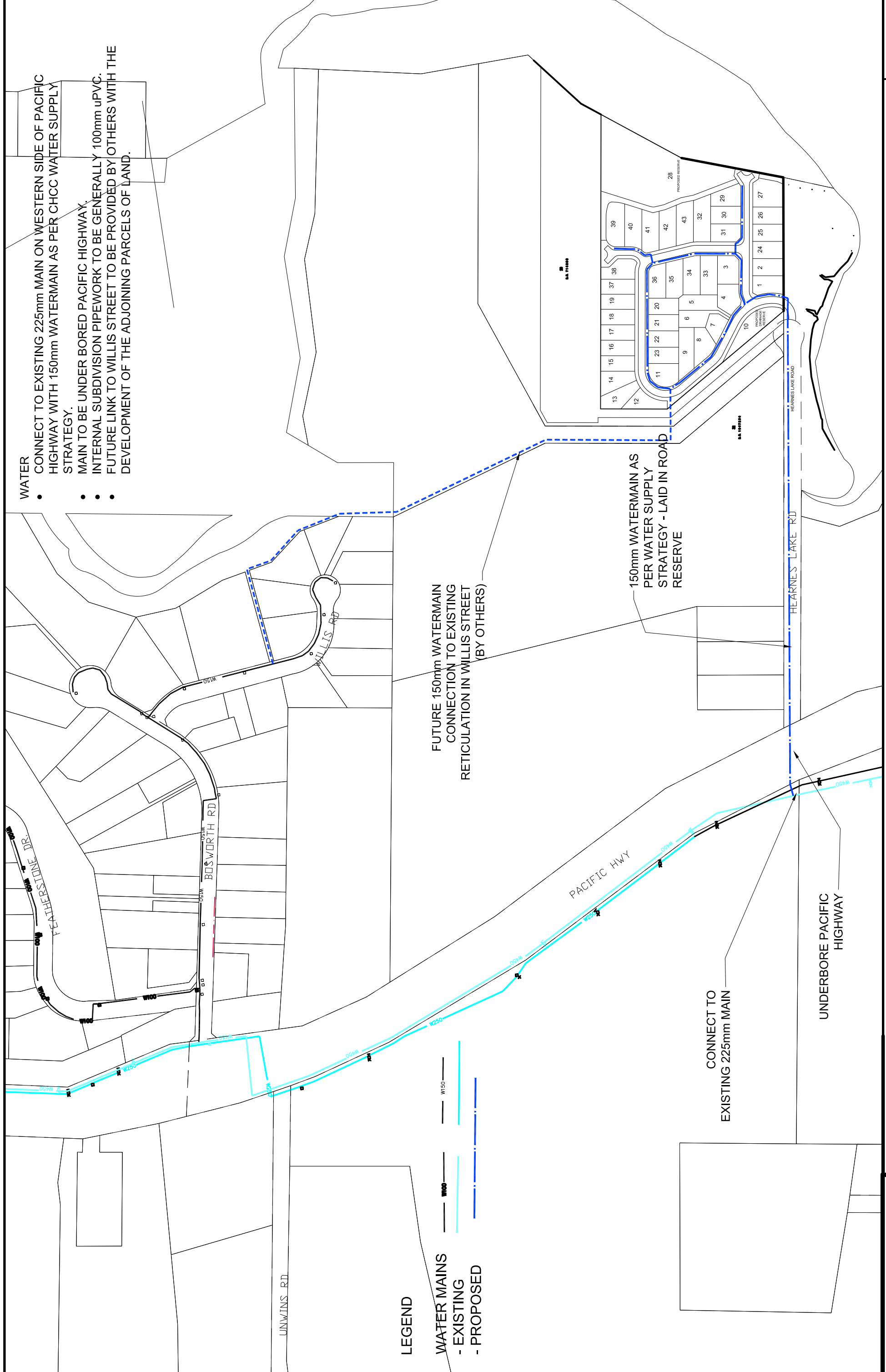
GRAVITY SEWERAGE RISING MAIN - LAID IN ROAD RESERVE

FUTURE SEWERAGE PUMP STATION (as per CHCC WASTEWATER TREATMENT AND CARRIER SYSTEM DSP 2003)



RESIDENTIAL SUBDIVISION  
LOT 21, DP714858 HEARNES LAKE ROAD, WOOLGOOLGA  
**SEWER CONCEPT PLAN**





**WATER**

- CONNECT TO EXISTING 225mm MAIN ON WESTERN SIDE OF PACIFIC HIGHWAY WITH 150mm WATERMAIN AS PER CHCC WATER SUPPLY STRATEGY.
- MAIN TO BE UNDER BORED PACIFIC HIGHWAY.
- INTERNAL SUBDIVISION PIPEWORK TO BE GENERALLY 100mm uPVC.
- FUTURE LINK TO WILLIS STREET TO BE PROVIDED BY OTHERS WITH THE DEVELOPMENT OF THE ADJOINING PARCELS OF LAND.

**LEGEND**

**WATER MAINS**

- EXISTING

- PROPOSED



MAP 4W  
Amendment No. 06265  
RDG  
6 JULY 2007

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SCALE 1:4000

RESIDENTIAL SUBDIVISION  
LOT 21, DP714858 HEARNES LAKE ROAD, WOOLGOOLGA

**WATER CONCEPT PLAN**

# COFFS HARBOUR CITY COUNCIL



Your ref: GS05042.22  
Our ref: DA 1401/06, 1693494

7 July 2007

Mr. Geoff Smith  
PO Box 1925  
COFFS HARBOUR NSW 2450

Dear Mr Smith

**DA 1401/06, Residential Subdivision, 45 Hearnese Lake Road, Woolgoolga**

With regards to your letter dated 3 July 2007, Council's preferences for the provision of Sewerage Services to the above development are described below.

1. Council's preferred strategy is for construction of the Sewerage Pumping Station to be constructed on private land, in the position as indicated in the Hearnese Lake/Sandy Beach Development Control Plan.
2. In the event that issues make option 1 impractical, Council will support the construction of the Sewerage Pumping Station within the Hearnese Lake Road, road reserve. The concepts forwarded by de Groot and Benson are generally acceptable. Issues such as the size of the wet well, odour control and the compliance to Council's Standard Pumping Station will need to be addressed in the detail design. This Pumping Station and associated infrastructure shall be in accordance with my letter to de Groot and Benson of 21 May 2007, (copy attached).
3. Council will only support the option of a temporary private pumping station in the event that other options were exhausted.

For further information please contact Glenn O'Grady on 6648 4454.

Yours faithfully

A handwritten signature in black ink, appearing to read 'Glenn O'Grady'.

Glenn O'Grady  
Manager Strategy and Development

GMO:sbm

Encl: Copy of letter I/R 1646830

# COFFS HARBOUR CITY COUNCIL



Your ref:  
Our ref: 1646830

21 May 2007

Mr Rob de Groot  
de Groot and Benson Pty Ltd  
PO Box 1908  
COFFS HARBOUR NSW 2450

COPY

Dear Rob

## **Provision of Sewerage Services – 45 Hearnese Lake Road, Woolgoolga**

I reply in response to our meeting and your e-mail of 7 May 2007, regarding the provision of sewerage services to the above development.

In order to provide service to this lot, Council proposes the following strategy:

1. The proposed Sewerage Pumping Station (SPS) at Hearnese Lake Road, as detailed in Council's Wastewater Treatment and Carrier System Development Services Plan 2003, be constructed. Civil components of the SPS, (wet well valve pit etc), and some pipework, shall be constructed to service the ultimate design loading, while pumps etc will be sized for short term loads (to be determined). Adequate power shall be supplied to cater for the ultimate pump loads and town water shall also be supplied to the site.
2. Stage 1 of the Rising Main from the SPS shall be constructed to a discharge point in the Bosworth Road area. The main shall be sized for the ultimate loading. The main shall be extended to the Woolgoolga Water Reclamation Plant at a later date.
3. A gravity main shall be constructed from your development to the SPS.

In order for the sewerage service to be available to 45 Hearnese Lake Road your development must undertake the following:

1. Design of the SPS and Rising Main, as well as the Trunk sewer connecting the development to the SPS.
2. Negotiate with the land owner on which the SPS is to be built and gain approval for its construction.
3. Liaise and negotiate with the Council, the RTA and any affected land owners regarding the construction of the Rising Main.
4. 'Forward fund' and construct the SPS and Stage 1 of the Rising Main. Council will repay these costs progressively as Development Contributions are received for the area.
5. Construct the trunk sewer main that connects the development with to the SPS.

..12.

**de Groot and Benson Pty Ltd**

**21 May 2007**

Please also contact this office for Council's requirements for Town Water supply to this development.

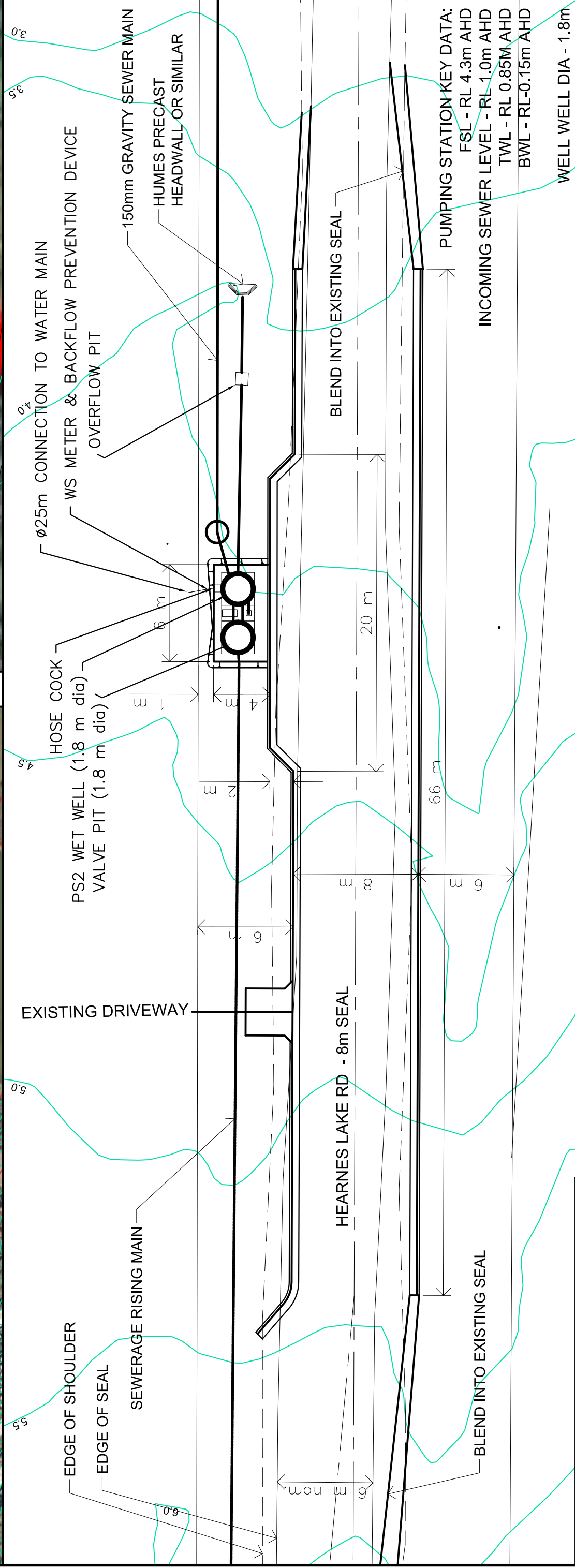
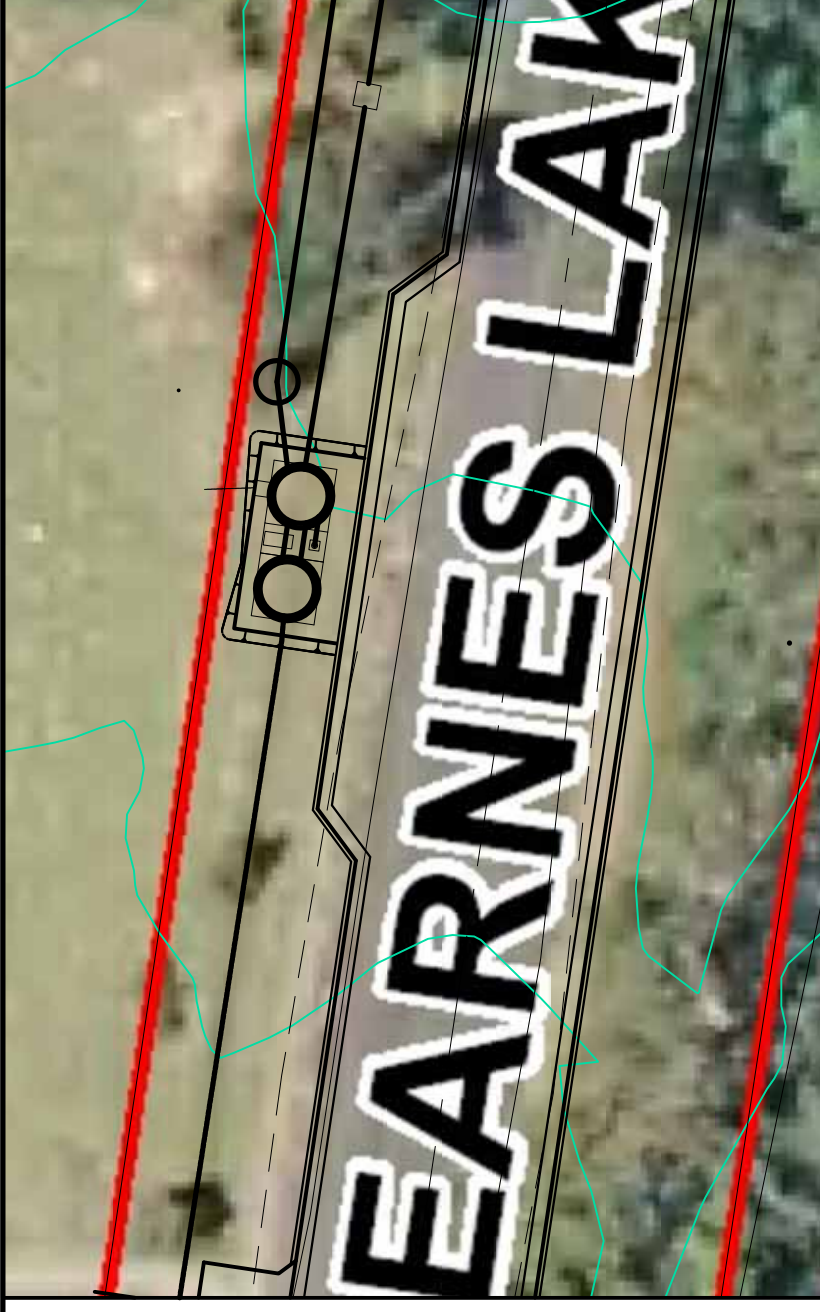
For further information please contact Glenn O'Grady on 6648 4454.

Yours faithfully

Glenn O'Grady  
Manager of Alliance Contracts (Acting)

GMO:mah

COPY



RESIDENTIAL SUBDIVISION  
 LOT 21, DP714858 HEARNES LAKE ROAD, WOOLGOOLGA  
**SEWERAGE PS CONCEPT PLAN - OPTION 1**

MAP 8  
 Amendment No. 06265  
 RDG  
 6 JULY 2007

SCALE 1:1000

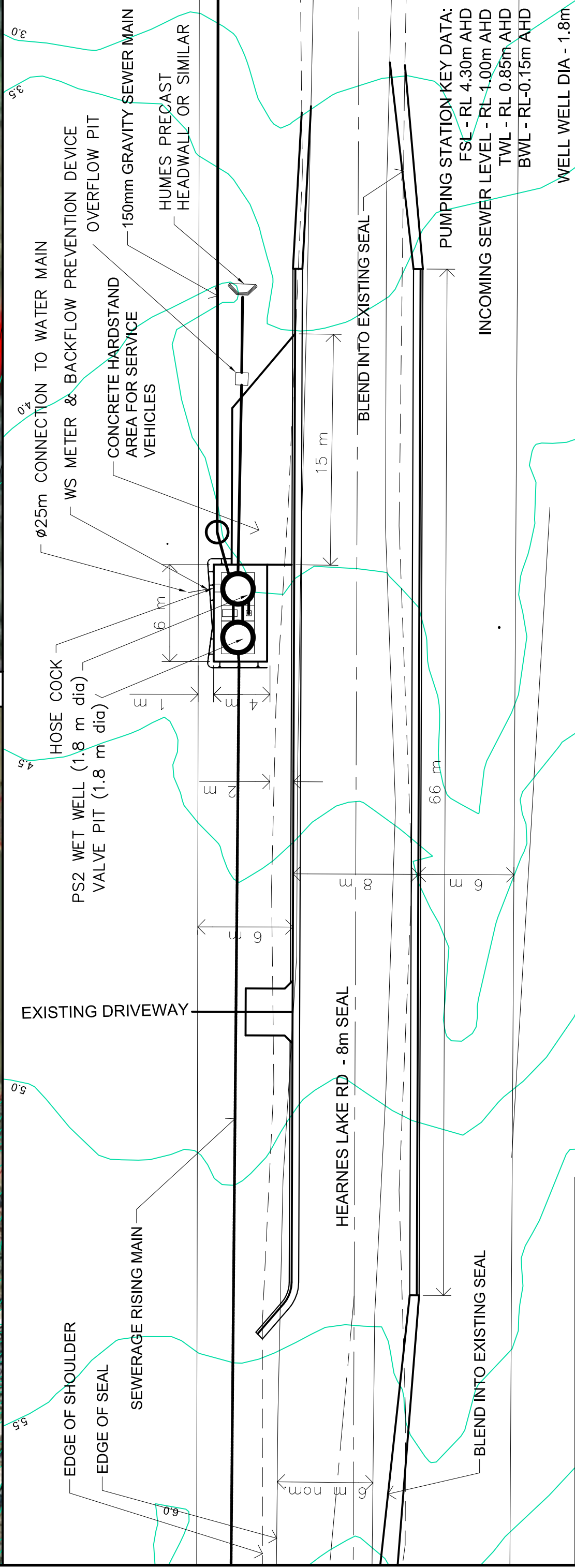
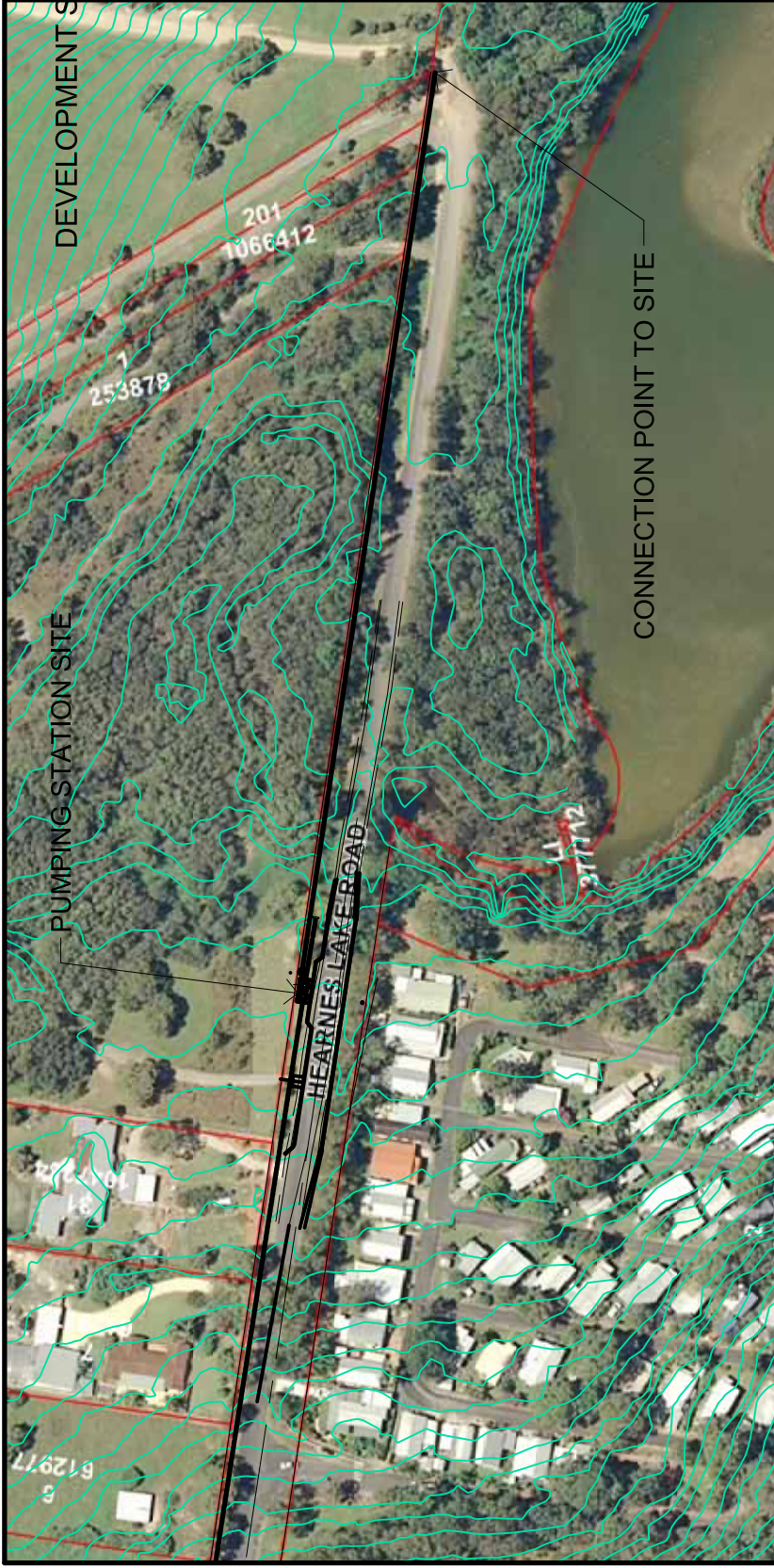
**de Groot & Benson Pty Ltd**  
 Consulting Engineers & Planners

AC/N: 632 300 571  
 235 Harbour Drive  
 Coffs Harbour NSW 2450  
 Phone: (02) 6652 1700  
 Fax: (02) 6652 2418  
 Email: email@degb.com.au

**Geoff Smyth Consulting**  
 Town Planning & Development Advice

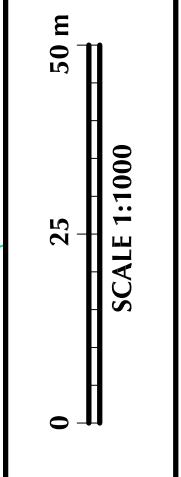
113 Bridge Road, PO Box 100, Coffs Harbour NSW 2450  
 Phone: (02) 6652 1700  
 Fax: (02) 6652 2418  
 Email: email@geoffsmyth.com.au

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**de Groot & Benson Pty Ltd**  
 Consulting Engineers & Planners  
 A.C.N. 632 300 571  
 235 Harbour Drive  
 Coffs Harbour NSW 2450  
 Phone: (02) 6652 1700  
 Fax: (02) 6652 2418  
 Email: ena@degb.com.au

RESIDENTIAL SUBDIVISION  
 LOT 21, DP714858 HEARNES LAKE ROAD, WOOLGOOLGA  
**SEWERAGE PS CONCEPT PLAN - OPTION 2**



MAP 8  
 Amendment No. 06265  
 RDG  
 6 JULY 2007  
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