Hunter Water Corporation
ABN 46 228 513 446
Customer Enquiries 1300 657 657
enquiries@hunterwater.com.au

PO Box 5171
HRMC NSW 2310
36 Honeysuckle Drive
NEWCASTLE NSW 2300

22 March 2013 Ref: 2013-155

Le Mottee Group
PO Box 363
Raymond Terrace NSW 2324

Attention: Kate Wheeler

Dear Kate

RE PRELIMINARY SERVICING ADVICE FOR PROPOSED DEVELOPMENT

Thank you for your request for Hunter Water's preliminary advice for the provision of water and sewer services to your proposed development: subdivision of 1 lot into 45 lots at Lot 100 DP 583216, 17 Fairlands Road, Medowie.

General information on water and sewer issues relevant to the proposal is included in this correspondence. This information is based on Hunter Water's knowledge of its system performance and other potential development in the area at the present time.

As you will appreciate, there may be significant changes that occur by the time the development proceeds to the lodging of a development application, therefore this preliminary advice is not a commitment by Hunter Water and may be subject to significant change prior to the development proceeding.

When you proceed with a development application you will need to lodge a further application with Hunter Water to then determine the formal requirements that shall apply. Hunter Water will then issue a **Notice of Formal Requirements**. You will need to comply with each of the requirements in this Notice for the issue of a Section 50 Compliance Certificate for the specific development.

In this instance, Hunter Water's preliminary advice is as follows:

Water Resources
This proposed rezoning and subdivision falls within Grahamstown Dam Catchment Area, defined in the Hunter Water Regulation 2010, which protects the Grahamstown Dam drinking water source. Grahamstown Dam supplies 35-40% of drinking water for the Lower Hunter. The ongoing ecological health of the catchment and storage is of paramount importance to provide safe drinking water to Hunter Water customers. **Attachment 1** demonstrates that at least part of the subject site drains directly into Grahamstown Dam, and therefore low intensity land uses such as those permitted under the current zoning are more appropriate than higher intensity land uses such as those that are possible under the proposed subdivision.

If the drainage of the subject parcel of land were to be reconfigured in such a way as not to flow directly into the dam, Hunter Water would request that an Environmental Impact Assessment was produced that considered:

1. The direction of drainage of the proposed new lots, and

2. A demonstration of a neutral or beneficial impact on surface and groundwater quality under all conditions.

If these conditions were met, the following advice would apply to the development.

Water Delivery

The site of the proposed subdivision is located in the Port Stephens Water Supply System, and is supplied from the Williamtown 1A water pump station (WPS). This area has not been identified in the most recent Wastewater Transportation Servicing Strategies either developer funded or Hunter Water funded.

The property has frontage to a DN100 CICL watermain along Ferodale Road. The height of the connection point is at approximately RL 21.7m AHD. The location of the watermain is shown in **Attachment 2**.

Analysis of a model of the Port Stephens Water Supply System indicates that there is sufficient capacity within the existing system to supply the proposed development without the need for augmentations.

Wastewater Transportation

The site of the proposed subdivision is located in the Medowie 10 waste water pump station (WWPS) catchment area, which is within the Raymond Terrace Waste Water Treatment Works (WWTW) catchment. This area has not been identified in the most recent Wastewater Transportation Servicing Strategies either developer funded or Hunter Water funded.

The nearest gravity sewer connection point to service this development is at AC H2685, located approximately 1426m away along Ferodale Rd, and it appears that flows from the development may require pumping to access this point. The location of the sewer connection point is shown in **Attachment 3**.

The theoretical sewage loading for the development is outlined in **Table 1** below.

Table 1 Theoretical Sewage Loading

Description	ET	ADWF (L/s)	PDWF (L/s)	SA (L/s)	PWWF (L/s)
1 into 45 rural residential lots	45	0.5	1.85	2.61	4.46

Note: ADWF = 0.011 L/s/ET; SA = 0.058 L/s/unit

A static analysis of the sewermain downstream of the connection point indicates that capacity is available.

All wastewater catchments in Medowie eventually discharge to Medowie 10 WWPS, which transfers flows to Raymond Terrace WWTW. There is currently limited capacity within Medowie 10 WWPS (352 L/s). However, a limited pump capacity upgrade is currently forecast to occur between 2014 and 2018, however the scope of this work is yet to be finalised due to constraints in the downstream transfer system and at the Raymond Terrace

WWTW. These constraints may limit longer term growth in the Medowie area and would require significant upgrades to rectify.
It should be noted that the decision and timing for upgrades is undertaken on a priority basis, determined by the greatest need throughout Hunter Water's entire water and wastewater systems, and any identified upgrades may be subject to change.

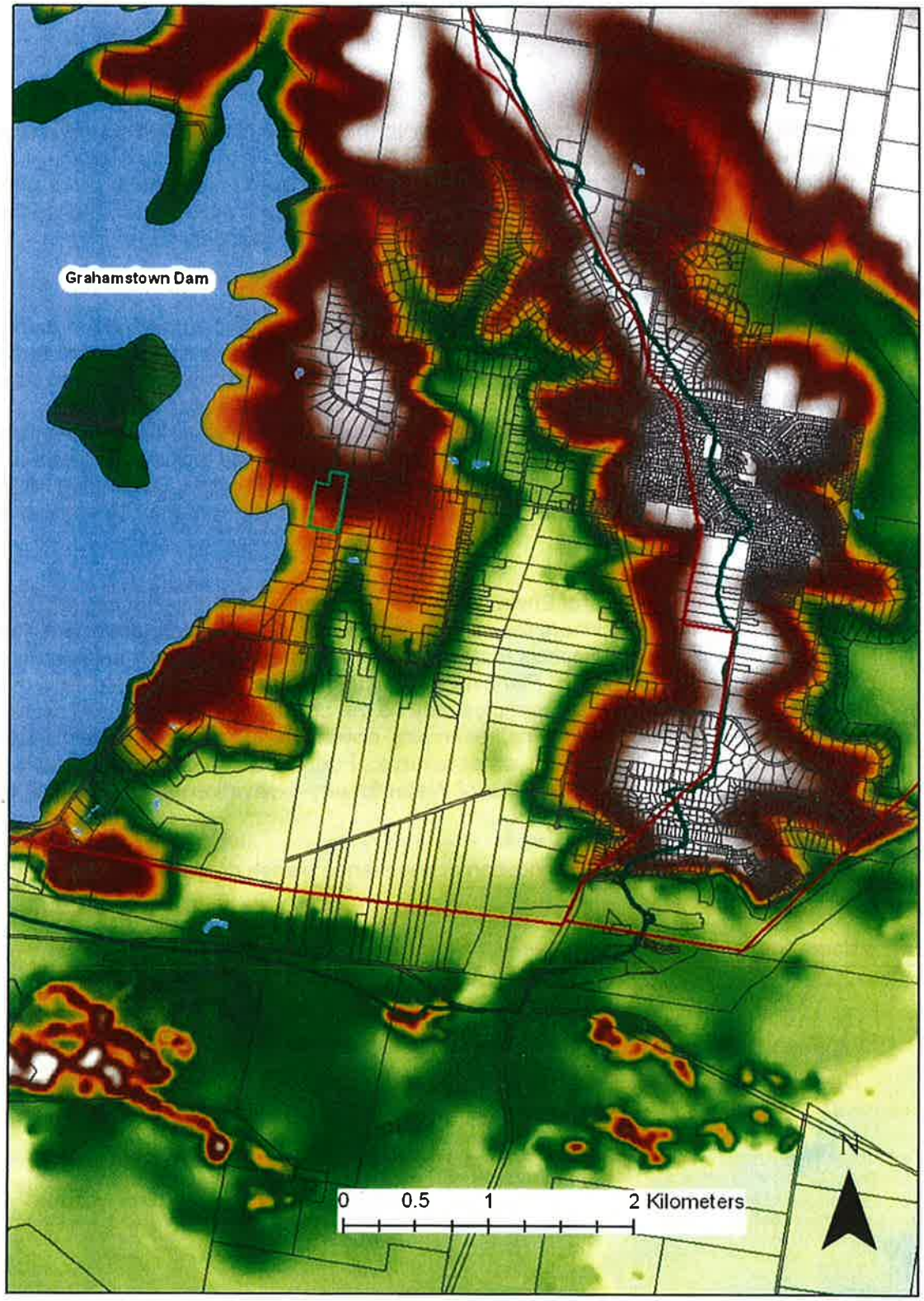
Wastewater Treatment
Raymond Terrace WWTW inlet works is currently approaching capacity. Due to the limitations of the inlet works, upgrades to Medowie 10 WWPS are constrained until the next stage of upgrades is commissioned. The inlet works are currently scheduled to be upgraded in 2024/25. Again, these upgrades will be undertaken on a priority basis.
It should be noted that there are several known existing or planned developments within the catchment which may consume the upgraded capacity. These include the areas of Tomago, Heatherbrae, Williamtown, North Raymond Terrace and Medowie. Depending on the development size and timing of connections in these areas, there may be some available capacity.

Please note that a Review of Environmental Factors will be required for any works external to the development site, or where the service design includes infrastructure or activities that may have environmental impacts that would not have been specifically addressed in council's or the Department of Planning & Infrastructure's assessment and determination of the proposed development. Examples may be the construction of water and sewer pump stations, sewer vents, trunk mains, reservoirs, development in a Wastewater Treatment Plant buffer zone, or development in a water reserve. Furthermore, a Controlled Activity Approval will be required from the NSW Office of Water for any excavation within 40m of a water body or should groundwater be present.

Should you require further clarification or assistance please do not hesitate to contact me on 4979 9476.

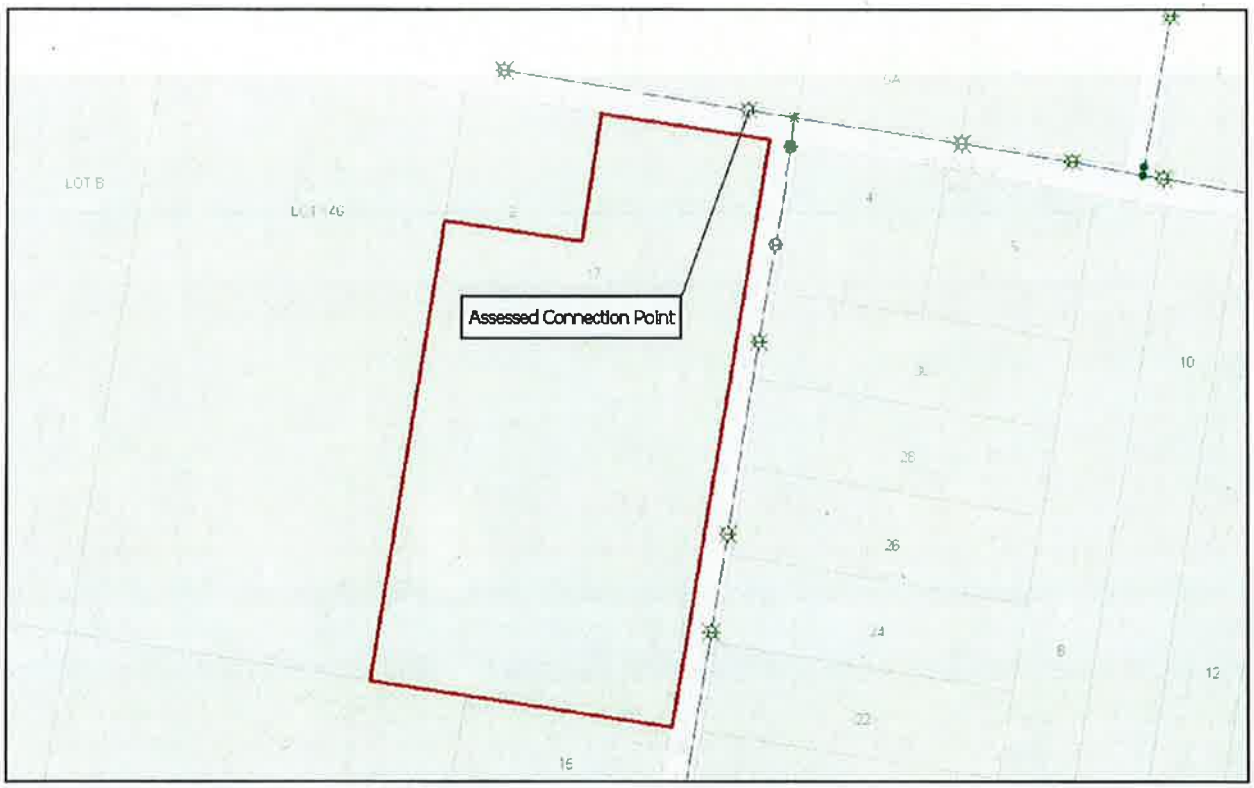
Yours Sincerely

Paul McKoy
Developer Services Engineer



Attachment 1: Digital Elevation Model of the subject site.

Trim File Ref: 2013-155/3.002
Author: Obert Moyo



Attachment 2: Water Supply Connection Point(s)

Attachment 3: Wastewater Connection Point(s)