Oxford Falls Retirement Resort

Water & Sewer Services Investigation Major Project – 05_0113 Seniors Living Resort, Oxford Falls Proposed Concept Plan

Prepared by

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Project Management
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For Tiffany Developments

Date October 2008

1. Introduction

John M Daly & Associates have been engaged to investigate the provision of water and sewer facilities to the proposed Seniors Living Resort to be erected on the subject site.

The site comprises Lots 1110, 1111, 1113 & 1336 in DP 752038, Lot 20 in DP 842523 & Lot 80 in DP 846099. With access off Barnes Rd to the south, Oxford Falls Road to the west and Wearden Rd to the north, the site is located in the bottom of a valley to the north of existing residential developments within the Local Government Area of Warringah.

The provision of water and sewer facilities in the vicinity of the site is controlled by Sydney Water. Inquiries were made with Sydney Water as to the provision of water and sewer reticulation to a previous resort proposal with similar loading conditions to the currently proposed development. Sydney Water advised that adequate services could be provided for the proposed development subject to the completion of certain water and sewer infrastructure works as specified in their document Case No 106532 of 3 April 2007. Following completion of the works specified by Sydney Water, adequate water and sewer facilities will be available for the proposed development in accordance with the Director General's requirements for MP 05_0113. The connection of the proposed development to the Sydney Water sewer network will aid in the achievement of the objectives in the Director General's requirements by removal of numerous existing on-site sewer disposal systems currently operating on the site.

2. Water Facilities

The site is currently enjoys access to Sydney Water's water reticulation via a 150mm water main in Oxford Falls Road and a 100mm water main in Wearden Road. Based on advice from Sydney Water (refer case No 106532 of 3 April 2007 – copy attached), the existing water mains do not have sufficient capacity to serve the ultimate form of the proposed development.

In order to facilitate the development, it will be required to amplify the existing water mains by the installation of a 300mm water main from the corner of Patanga Road and Dareen Street to the site via Barnes Road. Due to the significant difference in level between Barnes Rd and the site, a pressure reducing valve will need to be installed immediately upstream of the connection to the site. This new water main will also be cross connected to the existing mains adjacent to the site.

Adequate water facilities can therefore be provided to the site subject to the construction of the additional water mains in accordance with the requirements of Sydney Water.

3. Sewer Facilities

Sydney Water's sewer reticulation does not at present extend into the valley containing the subject development site. The reticulation system has been extended in the past to service the lots in Barnes Road to the south-west of the site. This system is then pumped by the Barnes Road sewer pump station to the reticulation system to the south of the site. The Barnes Road pump station is at capacity under current conditions and so is not able to cater for the effluent from the proposed development.

Sydney Water has investigated the capacity of the existing reticulation system and have advised that the effluent from the proposed ultimate form of the development can be catered for by the current sewer system subject to the completion of certain augmentation works. The extent of works required is detailed in Sydney Water's advice (refer case No 106532 of 3 April 2007 – copy attached). Three options are available to the developer.

The preferred option for providing sewer facilities to the proposed development is currently under review. All three options will require the installation of private sewer reticulation within the site to service the proposed buildings. This private system will transfer the effluent from the site to a central well from which the effluent will be pumped up to the preferred discharge point. Various upgrades to the existing Sydney Water Infrastructure as determined by Sydney Water will be undertaken in conjunction with the proposed development at no cost to Council or Sydney Water.

4. Conclusion

Current water reticulation facilities adjacent to the site can not satisfy the expected water demands for the proposed development and sewer facilities are non-existent. Investigations have been made by Sydney Water into the feasibility of expanding the existing reticulation systems to meet the demands of the proposed development. It has been determined that subject to the installation of additional reticulation and some augmentation to the existing systems, satisfactory water supplies and sewer facilities can be made available for the proposed development. The completion of the augmentation and on-site reticulation works will ensure that the proposed development complies with the Director General's requirements for MP 05_ 0113 with respect to the provision of water and sewer reticulation.

Terry Hams B.E. (Civil)

M.I.E. Aust (409949)

C.P. Eng



Case Number: 106532

3 April 2007

Tiffany Developments c/- John M Daly & Associates

FEASIBILITY LETTER

Developer:

Tiffany Developments

Your reference:

03508

Development:

1111 Oxford Falls Road Oxford Falls

Development Description: Proposal for 600-800 seniors living retirement resort with

75-100 assisted care units, 50 bed nursing home, site facilities

and small golf course

Your application date:

14 February 2007

Dear Applicant

This Feasibility Letter (Letter) is a guide only. It provides general information about what Sydney Water's requirements could be if you applied to us for a Section 73 Certificate (Certificate) for your proposed development. The information is accurate at today's date only.

If you obtain development consent for that development from your consent authority (this is usually your local Council) they will require you to apply to us for a Section 73 Certificate. You will need to submit a new application (and pay another application fee) to us for that Certificate by using your current or another Water Servicing Coordinator (Coordinator).

Sydney Water will then send you either a:

- Notice of Requirements (Notice) and Works Agreement (Agreement); or
- Certificate.

These documents will be the definitive statement of Sydney Water's requirements.

There may be changes in Sydney Water's requirements between the issue dates of this Letter and the Notice or Certificate. The changes may be

1. Developer Charges

- (a) Adjustment of charges due to the Consumer Price Index (CPI);
- (b) Adjustment of charges because of a scheduled review by the Independent Pricing and Review Tribunal (IPART). After that review and registration of the new charges. Sydney Water has to apply those charges; or

(c) If there is rezoning of any land within the development proposal then new charges will apply.

2. Reticulation Recovery Charges

These charges recover part of the cost of works that have been paid for by Sydney Water or other developers and that benefit your development. This charge has been made before your points of connection have been determined. If your completed designs show that your development will be connected to other main/s, the charge may be changed and/or you may need to construct other works.

3. Changing the Proposed Development

If you change your proposed development, e.g. the development description or the plan/site layout, after today, the requirements in this Letter could change when you submit your new application.

Also, if you decide to do your development in stages then you must submit a new application (and pay another application fee) for each stage.

You have made an application for specific information. Sydney Water's possible requirements are:

Water-Refer to Plan A attached

An extension of 630 metres of 300mm water main is required from the corner of Patanga Road and Doreen Street to the Barnes Road Pressure Reducing Valve (PRV). From the PRV to the point of connection a 300mm water main is still required.

The preferred point of connection is after the PRV along Barnes Road. Pressures upstream of the PRV are extreme at over 100 metres. A new PRV is to be sized to a 300mm water main at Barnes Road.

A number of cross connections will be required between the 300mm water main to the other existing mains along the route

Sewer

In reviewing the various sewer options for this proposal it should be noted that no further connections to the existing Barnes Road sewer pumping station are permissible as it has reached its capacity.

Also, the development area is zoned non urban and thus flow restrictions of 5 litres per second apply.

The proposed sewer options include :

Willandra Road Carrier Sec 2- Refer Plan 2 attached

This option would require approximately 1,300 metres of sewer amplifications from 300mm to 400mm downstream to be constructed.

The development would need to pump (at 5 litres per sec) via a private service to the existing manhole fronting 71 Tristram Road.

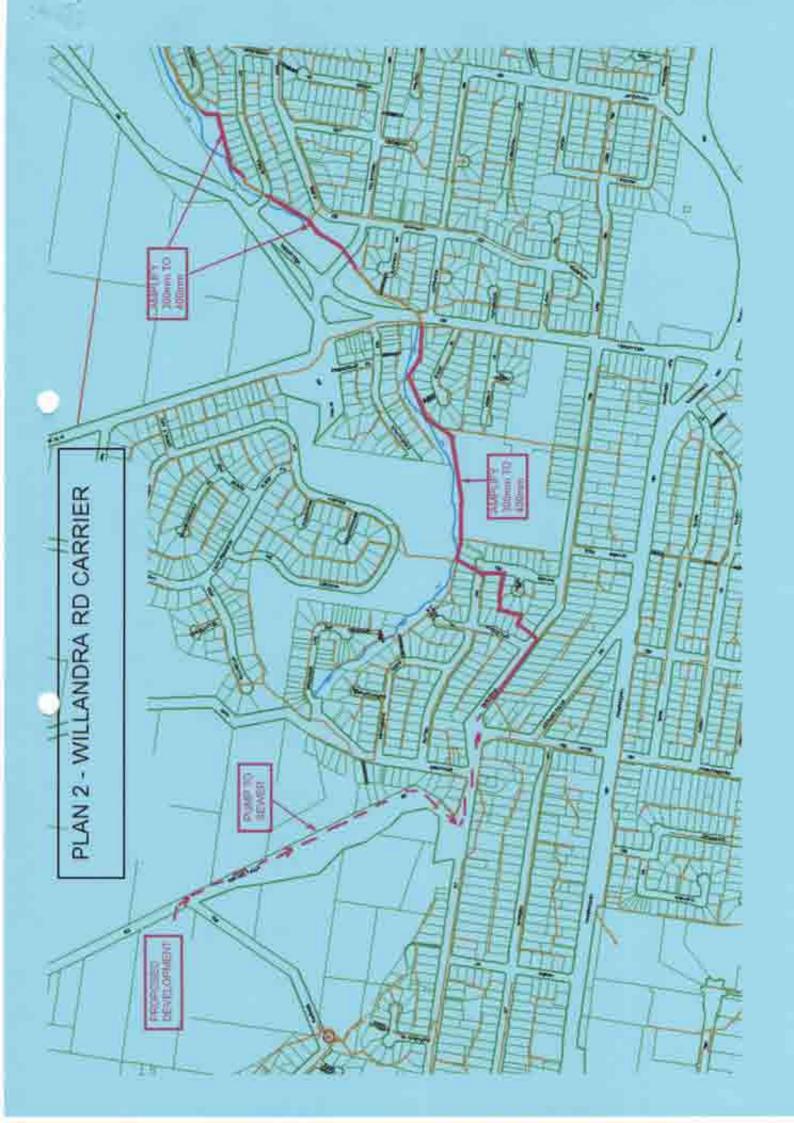
Parkway Carrier-refer to Plan 1 attached

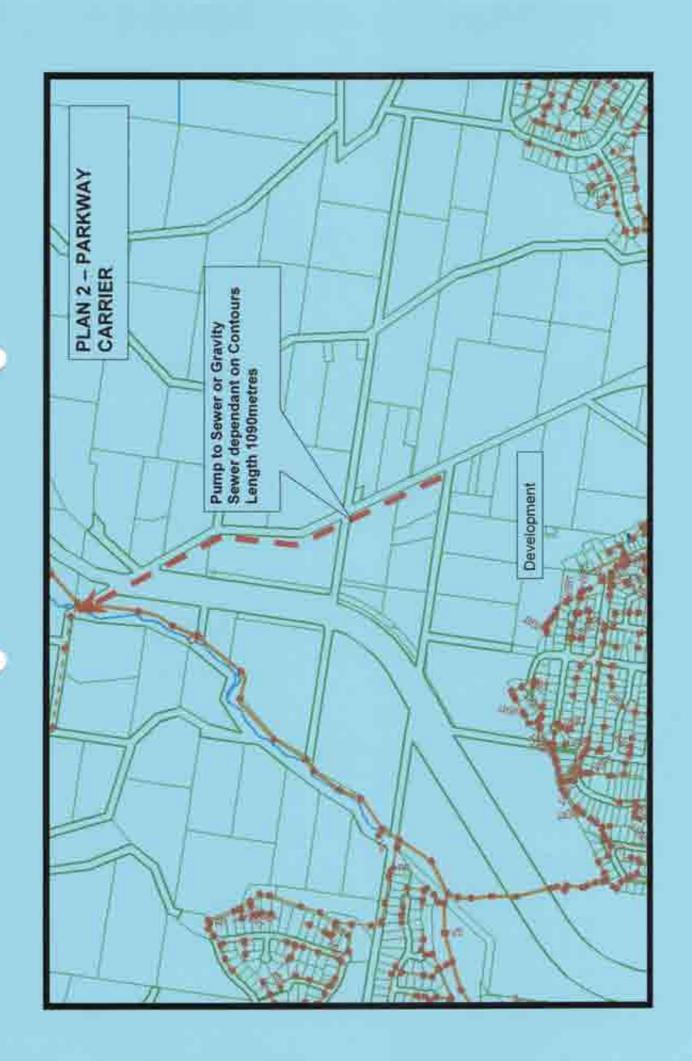
A private service would need to be laid to the manhole at the corner of Oxford Falls Road and Wakehurst Parkway (approximately 1.1km) as a pump to sewer arrangement. Pumping rate allowed is a maximum 5 l/s.

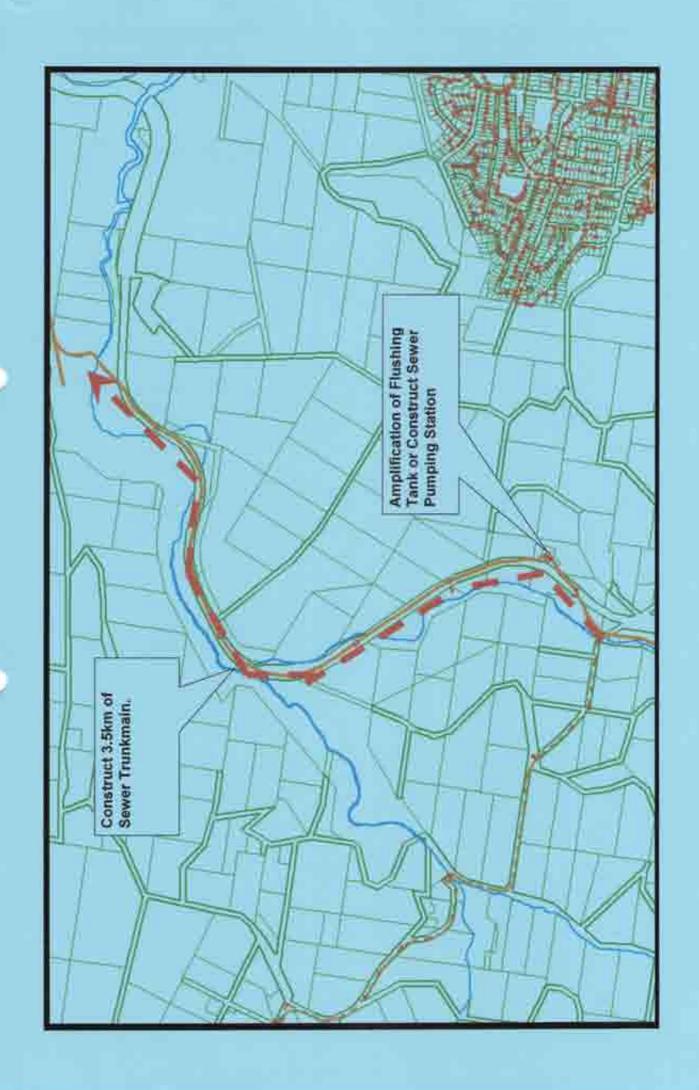
Upgrade flushing tank arrangement or construct a sewer pumping station along Wakehurst Parkway.

Construction of 3.5km of trunk sewer main with approximate sizing being in 750mm diameter. Connection would be made to the Middle Creek Carrier Sec 1-Box Section, along the Wakehurst Parkway.

No warranties or assurances can be given about the suitability of this document or any of its provisions for any specific transaction. It does not constitute an approval from Sydney Water and to the extent that it is able, Sydney Water limits its liability to the reissue of this Letter or the return of your application fee. You should rely on your own independent professional advice.







OPENSO THE Name of Street Barnes Rd PRV *DINCH. į MILKNI MOLENNA ₽

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THE ONFORD FALLS RD, FRENCHS FOREST

e-Developer

VIEW REQUIREMENTS

CASE INFORMATION	
Case Number	106532
VSC's Reference	03508
Application Type	Feasibility
Development Type	Community
Development Location	1111 Oxford Falls Road, Oxford Falls
VSC Personnel Name	Matthew Parker
VSC Company Name	John M Daly & Assoc. Pty Ltd + (Prov W3 Design)
Developer's Name	Tiffany Developments
Stage Name	
Stage Number	1
Denne DSR Responsible	Brian Mailigan
VIEW REQUIREMENTS	
View Natice/Letter	View
Modifications to the Draft Notice of Reguli	ements/
NEGOTIATE REQUIREMENTS	
Do you agree with the requirements speci	filed in this notice? Yes No

This advice is provided as a guide only, is current at the deterof issue and may be subject to change



