

BRIEFING NOTE

To: Stewart Seale, The Hills Shire Council

CC: Mayor Dr Michelle Byrne; Michael Edgar, General Manager

From: Andrew Wilson, Development Manager, Merck Property Pty Ltd

Date: 15/08/2018

Subject: RMS Submission on Planning Proposal for 93-107 Cecil Avenue & 9-10 Roger Avenue, Castle Hill

1. Introduction

For some months, the Planning Proposal for the rezoning of land at 9-10 Roger Avenue and 93-107 Cecil Avenue, Castle Hill has stalled because of matters raised by RMS.

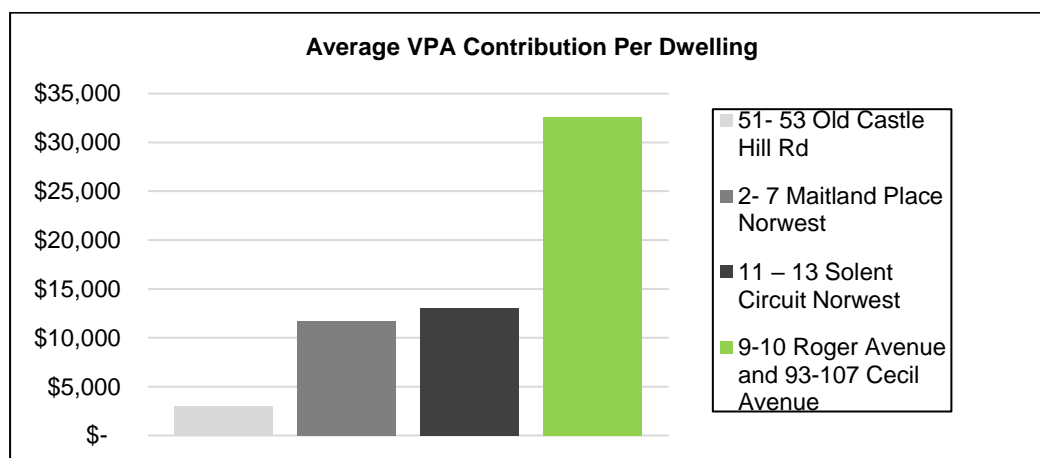
In a recent submission to Council dated 2 July 2018 (RMS ref SYD17/01148 / Council ref 12/2016/PLP), RMS provided a way forward that did not include a new precinct-wide transport study. In-substance, RMS recommended that a traffic signal upgrade be implemented at the Old Northern Road / Francis Street as an alternate measure.

The developer's traffic consultants, Stantec (formerly TDG), concluded that *"Our assessment indicates that without the installation of traffic signals at the intersection of Francis Street with Old Northern Road, the road network would not be significantly impacted by the Planning Proposal with all nearby intersections continuing to operate at the same level of service as if traffic signals were in place at Francis Street."*¹ In their report, they recommended that the existing traffic control at this intersection could be maintained.

Notwithstanding this conclusion, the developer is offering to contribute far more than its fair share for significant traffic management upgrades across the Castle Hill South precinct, as identified in the Council's recent traffic study through the VPA contribution it has submitted to Council. The VPA contribution the developer is offering is \$15 million

On a per dwelling basis, the VPA contribution from the developer is ten times that provided by the developers of 51- 53 Old Castle Hill Rd, nearly three times that of the developers of 2- 7 Maitland Place Norwest and over twice the size of that provided by the developers of 11 – 13 Solent Circuit Norwest (see Chart 1 below). This higher than normal contribution has been provided to enable the proposal to proceed with confidence that apportioned contribution costs are covered.

Chart 1 Showing Average VPA Contribution Per Dwelling



¹ The full report is attached at Appendix – 1.

Our view is that this significant contribution provides the resources for all of the upgrade works that RMS may be required to be met. As such, we believe that this should facilitate this proposal proceeding immediately.

It should also be noted that, based on estimates from Stantec (formerly TDG), a fair contribution to traffic upgrades identified in the Castle Hill South Traffic Study Dec 2017 commissioned by the Council, would be a maximum of \$2,128,935. The VPA contribution at \$15,000,000 is close to covering the entirety of the traffic management upgrades identified in the Castle Hill South Traffic Study which Stantec estimates to be \$21,500,000 at most.

1.1 Overview of Development

The proposed development at 9-10 Roger Avenue and 93-107 Cecil Avenue will deliver approximately 460 new apartments in an innovative stepped design that respects its surroundings while adding much needed new housing supply to the new Castle Hill Metro Station nearby. As part of the development, a substantial \$15 million is being offered in a voluntary planning agreement for public domain and traffic improvements, while 50% of the site will be landscaped open space.

It is important to note that it will likely be at least six years until the development is complete. There is, therefore, plenty of time in the interim for public domain and traffic improvements to occur, with the funds provided in the draft VPA.

1.2 History of Engagement

- (a) A Planning Proposal was lodged with Council in January 2016.
- (b) In April of that same year, Council resolved to proceed to Gateway and public exhibition.
- (c) In November 2016 a Gateway Determination was issued by the Department of Planning and Environment to proceed with the public exhibition and notify relevant State Agencies.
- (d) From December 2016 to August 2017, additional information was submitted to Council as required by the Gateway Determination and to satisfy Council requests including an additional traffic assessment, shadow studies, a revised urban design, a 3D fly-through visualisation, information for the Draft Development Control Plan and a Draft Voluntary Planning Agreement.
- (e) From 24 August to 22 September 2017 the Planning Proposal was publicly exhibited, and relevant State agencies were notified.
- (f) On 20 September 2017, RMS submission requested a traffic study for Castle Hill south precinct. Council completed and submitted the study at the end of 2017.
- (g) On 11 October 2017 to now, the Planning Proposal process has stalled due to RMS submissions.
- (h) RMS has called for a new precinct-wide traffic and transport assessment (for Castle Hill north and south) which would significantly delay the project.
- (i) 2 July 2018, RMS provides a path for the Planning Proposal to proceed and addressing its concerns which does not involve a precinct-wide traffic study.

1.3 Status

The project has stalled while the developer responds to RMS. On 2 July 2018, Rachel Nicholson, Senior Strategic Land Use Coordinator from RMS wrote to Council offering a path for Council to proceed with the Planning Proposal.

1.4 Proposed Pathway

The issues raised by RMS can be resolved now with the existing VPA or by the developer refining the draft VPA without re-exhibition. The Planning Proposal can proceed through Council and go to the Department of Planning and Environment for Gazettal with or without refinement to VPA.

2. RMS Engagement

2.1 Recent RMS Correspondence

On 20 September 2017, RMS recommended that the Planning Proposal be deferred until a traffic assessment with a funding delivery mechanism for road upgrades was prepared for the Castle Hill South precinct. From September 2017 to April 2018, a traffic assessment for Castle Hill South precinct was completed by Stantec (formerly TDG) and submitted, as recommended by RMS. The developer provided, on request by Council, an estimate for an upgrade to the intersection of Old Northern Rd and Francis St and a heritage assessment of the intersection upgrade. On 2 July, RMS recommended the deferral of individual planning proposals until a precinct wide traffic study (understood to include both Castle Hill North and South) is completed. In the same submission, RMS provided an alternate path for Council to proceed with the Planning Proposal which outlined a range of issues that, if addressed, would be sufficient for RMS to allow the Planning Proposal to proceed.

2.2 RMS Concerns

The following issues were outlined in submission RMS ref SYD17/01148 / Council ref 12/2016/PLP. Specifically, the submission says, "should the Council resolve to endorse forwarding the planning proposal to DPE for finalisation, the issues detailed at Attachment A should be addressed prior to the making of the plan." To address those issues outlined we note the following:

(a) Issue One – Upgrading the Old Northern Road / Francis Street intersection

Previous traffic analysis submitted by the proponent's traffic consultant (December 2017) to support the planning proposal and Council's Castle Hill South Traffic Study (December 2017) have indicated the need to upgrade the Old Northern Road / Francis Street intersection from priority intersection to traffic signals. It is Roads and Maritime's view that this proposal should not be assessed as a stand-alone rezoning but be considered in the context of development growth within the precinct with the view of delivering a long term road network response that addresses the cumulative increase in development uplift and road network improvements identified in Council's Castle Hill South Traffic Study.

Extracted: Numbered Item 1 in Attachment A of RMS Correspondence (RMS ref SYD17/01148 / Council ref 12/2016/PLP)

The developer's traffic consultants, Stantec (formerly TDG), concluded that "the road network would not be significantly impacted by the Planning Proposal with all nearby intersections continuing to operate at the same level of service." In their report, they recommended that the existing traffic control at this intersection could be maintained. Notwithstanding this conclusion, the developer is offering to contribute far more than its fair share for significant traffic management upgrades across the Castle Hill South precinct.

In relation to delivering a long-term road network response, the Council has to date already undertaken significant work in this regard, including recently completing a traffic study of the Castle Hill South precinct. We believe there is therefore no need to undertake further work in this regard.

If the Council decides that a precinct-wide study (including Castle Hill North and Castle Hill South) is required, the amount in the draft VPA is more than enough to cover such a study. Further, the timeline for this development means that the Council would have plenty of time to undertake such a study before the development was completed.

For these reasons, we are of the view that this concern has been comprehensively addressed, not only by the developer's own efforts which include a significant voluntary contribution, but also by the Council's own efforts which include a very recent traffic assessment of the broader Castle Hill South precinct.

(b) Issue Two – Inconsistent Traffic Data

Recently submitted traffic analysis that seeks to justify that the proposal does not require intersection upgrade at Old Northern Road / Francis Street will need to **reconcile the inconsistent traffic data used in the December 2017, May 2018 and Castle Hill South Traffic Study modelling assessments**. Further justification is required to explain the difference in traffic data used for the traffic studies –

Extracted: Numbered Item 2 in Attachment A of RMS Correspondence (RMS ref SYD17/01148 / Council ref 12/2016/PLP)

See Appendix 2 for reconciliation of traffic data from Stantec (formerly TDG).

(c) Issue Three – Infrastructure Staging Plan

Roads and Maritime is of the view that traffic signals (or interim treatment) at this intersection is required as highlighted in Council's Castle Hill South Traffic Study however, its delivery including land components may not be the responsibility of one proponent. With the Castle Hill South Traffic Study confirming the need for traffic signals at this intersection, it is **recommended that Council undertakes further detailed assessment to identify an Infrastructure Staging Plan which identifies an infrastructure contribution and development triggers for the intersection upgrade including timing, cost and appropriate funding mechanism for delivery**.

Extracted: Numbered Item 3 in Attachment A of RMS Correspondence (RMS ref SYD17/01148 / Council ref 12/2016/PLP)

\$15 million has been committed by the developer for public domain improvements and traffic management upgrades. As part of addressing the concerns put forward by RMS, we have prepared a staging plan (see table below) which outlines the stages and the various actions that should be completed at each stage. It should be noted that in the draft VPA, \$5 million has already been set aside prior to the issuing of the Construction Certificate, with the remaining \$10 million to be paid out prior to the issuing of the Final Occupation Certificate. The initial \$5 million should be more than enough to cover the costs of the Old Northern Road / Francis Street intersection upgrade which has been costed at the request of Council. The cost estimate is \$3.38 million.

Table 1 Draft Staging Plan for the Old Northern Road / Francis Street Intersection Upgrade

Stage for Completion	Actions to be Completed
Prior to LEP Gazettal	<ul style="list-style-type: none"> Planning Agreement executed regarding the Infrastructure Contribution.
Prior to issue of Construction Certificate	<ul style="list-style-type: none"> Preparation of Traffic and Transport Assessment for Castle Hill town centre. Preparation of Infrastructure Staging Plan. Monetary contributions or bond paid for road and traffic management works.

(d) Issue Four – Draft VPA should be amended to include infrastructure contribution

The draft VPA supporting the planning proposal should include a condition that an infrastructure contribution is required prior to the development on the land consistent with the developer contribution identified for the Castle Hill Precinct / Castle Hill North precinct or Castle Hill South precinct whichever is identified first.

Extracted: Numbered Item 4 in Attachment A of RMS Correspondence (RMS ref SYD17/01148 / Council ref 12/2016/PLP)

The developer has already, in their planning proposal, committed \$15 million in a draft VPA for public domain improvements and traffic management upgrades at Castle Hill. These contributions are more than enough to cover any necessary traffic management upgrades and are far and above what comparable developments in the area have put forward in their VPAs. It should also be noted that the existing VPA already satisfies this requirement because it commits \$5,000,000 prior to the issuing of the Construction Certificate which should be more than enough to cover the costs of traffic management works. It should also be noted, per s 8.3 of the Draft Voluntary Planning Agreement submitted to Council, the monetary contributions are to be used for 'the constructions of improvements to the public domain, roads and traffic management works in the vicinity of the Land'.²

(e) Issue Five – Consider a left in / left out movement at Old Northern Road / Francis Street

Until the work outlined in item 3 has been undertaken, the traffic impacts associated with the planning proposal and other proposals anticipated to be submitted to Council in the area bounded by Old Northern Road, Cecil Ave, Orange Grove Road and Francis Street may require an interim traffic management measure at the Old Northern Road / Francis Street intersection. This intersection is currently experiencing extensive queues for the right turn movement from Old Northern Road to Francis Street as indicated in the December 2017 traffic assessment, the Castle Hill South Traffic Study and the intersection crash accident history. Old Northern Road will continue to function as a movement corridor carrying significant volumes of local and regional traffic including buses and trucks. This is expected to increase in the future with the growth anticipated in the Castle Hill Precinct. In this regard, maintaining the priority intersection is not supported. The proposal to divert traffic northbound to alternative local roads as discussed under Option 1 and 2 is difficult to implement without an interim traffic management measure at the Old Northern Road / Francis Street intersection. A left in / left out movement should be considered at the Old

² For the Draft Voluntary Planning Agreement, see Appendix – 3.

Northern Road / Francis Street intersection which would address the existing crash accident history, limit increasing demand for the right turn movement into Francis Street and enable right turning traffic to divert to alternative local roads as proposed.

Extracted: Numbered Item 5 in Attachment A of RMS Correspondence (RMS ref SYD17/01148 / Council ref 12/2016/PLP)

The developer has provided sufficient funds in the draft VPA submitted to Council for the full measure which is the traffic signal upgrade at the Old Northern Road / Francis Street intersection. Given this, the developer does not see any need for an interim traffic measure, because there is no barrier to just implementing a more lasting outcome which is the upgrade of the intersection with traffic signals.

If, however, the Council deems such an interim measure necessary, as previously noted, the current structure of the draft VPA as well as the generous amount offered by the developer provides Council with more than enough funds and flexibility to implement such a measure.

It should also be reiterated that this development is not expected to be completed until at least five years from now. Because of this there is more than enough time for Council to consider carefully how it intends to use the monies set aside in the draft VPA for traffic upgrades in the area.

- (f) Additional traffic analysis to assess the impact of a left-in / left-out at Old Northern Road / Francis Street

Additional traffic analysis is therefore required to assess the impact of a left-in / left-out at Old Northern Road / Francis Street and the diversion of traffic associated with the development to the surrounding local road network including impacts on the Old Northern Road / Cecil Ave and Old Northern Road / Crane Road intersections. It is noted that these intersections are currently experiencing congestion and capacity issues which will need to be mitigated as a result of future development growth in the precinct. The proponent may need to prepare a TMP and undertake community consultation to the satisfaction of Council in relation to the proposed right turn restriction outlined above.

Extracted: Numbered Item 6 in Attachment A of RMS Correspondence (RMS ref SYD17/01148 / Council ref 12/2016/PLP)

The developer does not believe that a left-in / left-out at Old Northern Road / Francis Street is necessary for the reasons outlined at (e) above. If, however, the Council deems such measures necessary, there is more than enough funds in the VPA and more than enough time until the expected completion date of this project, that the Council could undertake such a study to assess the impact of this interim measure.

3. Conclusion

Given that all of RMS' concerns regarding the proposal can be adequately addressed without the need for a precinct-wide traffic study, we believe that Council can now proceed with the planning proposal.

The developer has effectively responded to the issues raised by RMS. In the existing draft VPA submitted to Council, the developer has provided a contribution well above similar projects in the area which can be used to satisfy each of the concerns raised by RMS and more than covers the reasonable apportionment of the costs of road works identified by Council to accommodate future development at Castle Hill.

Even if the Council wanted to proceed with a precinct-wide traffic study, because there are at least six years between now and when the development is expected to be completed, the Council has more than enough time to undertake such a study, with the resources provided for by the developer through their VPA.

APPENDIX 1 – TDG TRAFFIC REPORT FOR CECIL AVE PLANNING PROPOSAL



Memorandum

To: Merc Capital and Affiliated Companies

From: Fred Gennaoui

Date: 12 July 2017

Job N°: 13561.003

Subject: Cecil Ave Planning Proposal – Traffic Assessment with No Signals at Intersection of Old Northern Road with Francis Street

Background

In our Parking and Traffic Study (PTS) dated June 2017, we (TDG) have indicated that traffic signals are currently required at the intersection of Old Northern Road with Francis Street in Castle Hill.

Further analysis indicates that the intersection will continue to operate at a poor level of service upon the completion of the proposed development. The installation of traffic signals with the provision of an additional exclusive right turn lane in the northbound direction would considerably improve conditions at this location.

It is understood that Council is concerned about whether the installation of signals at the intersection of Francis Street and Old Northern Road will be supported in consultation with NSW Roads and Maritime Services.

We have assessed the impact of not providing signals at the intersection of Francis Street with Old Northern Road on the overall road network but more particularly critical intersections.

Options Tested

The following two options were tested:

Option 1 – All northbound development traffic anticipated to turn into Francis Street would redirect to Parsonage Street, Hume Avenue, Cecil Avenue before right turning onto Old Northern Road to access Francis Street from the north.

Option 2 – All northbound development traffic anticipated to turn right into Francis Street would remain along Old Northern Road before turning right into Cecil Avenue, travel northbound along Terminus Street before right turning into Crane Road then use Orange Grove to access the development from either Cecil Avenue or Francis Street.


Analysis of Option 1

An analysis of the operation of all critical intersections in the vicinity of the site for Option 1 was carried out using the SIDRA computer modelling program. The results of this analysis are summarised in **Table 1**.

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Intersections	With Signals at Francis*				Without Signals at Francis Option 1			
	AM Peak		PM Peak		AM Peak		PM Peak	
	D sec/v	LoS	D sec/v	LoS	D sec/v	LoS	D sec/v	LoS
Traffic Signals								
Old Northern Road with Cecil Avenue	32.0	C	39.7	C	33.0	C	40.8	C
Terminus Street with Crane Street	54.4	D	46.3	D	54.4	D	46.3	D
Old Northern Road with Francis Street	10.9	A	13.3	A				
Roundabout								
Cecil Avenue with Orange Grove	8.9	A	8.6	A	8.9	A	8.6	A
T-Junction Rule								
Francis Street with Roger Avenue	6.2	A	5.6	A	6.2	A	5.6	A
Old Northern Road with Francis Street					>70	F	>70	F

Table 1: Option 1 Operation of Intersections with Proposed Development

*SOURCE: TDG (2017)

The redirection of the northbound traffic destined to the proposed development to Hume Street and Cecil Avenue west would marginally impact the traffic signals at its intersection with Old Northern Road which will continue to operate at a satisfactory level of service "C" during the morning peak and the afternoon peak hours. All other intersections would not be impacted upon.

The intersection of Francis Street with Old Northern Road would continue to operate at a very poor level of service "F" as is currently the case.


The Option 1 traffic route is within the traffic carrying and environmental capacities of Parsonage Street and Hume Street.

Analysis of Option 2

An analysis of the operation of all critical intersections in the vicinity of the site for Option 2 was carried out using the SIDRA computer modelling program. The results of this analysis are summarised in **Table 2**.

The redirection of traffic destined to the proposed development from the south Terminus Street would have a marginal impact on the traffic signals controlling the intersection of Cecil Avenue with Old Northern Road and the intersection of Terminus Street with Crane Road which will continue to operate at a satisfactory level of service "C" and "D" respectively.

The roundabout controlling the intersection of Cecil Avenue with Orange Grove would continue to operate at a very good level of service "A" during the morning and afternoon peak periods.



Intersections	With Signals at Francis*				Without Signals at Francis Option 2			
	AM Peak		PM Peak		AM Peak		PM Peak	
	D sec/v	LoS	D sec/v	LoS	D sec/v	LoS	D sec/v	LoS
Traffic Signals								
Old Northern Road with Cecil Avenue	32.0	C	39.7	C	32.5	C	40.4	C
Terminus Street with Crane Street	54.4	D	46.3	D	54.7	D	46.5	D
Old Northern Road with Francis Street	10.9	A	13.3	A				
Roundabout								
Cecil Avenue with Orange Grove	8.9	A	8.6	A	9.1	A	9.1	A
T-Junction Rule								
Francis Street with Roger Avenue	6.2	A	5.6	A	6.1	A	5.6	A
Old Northern Road with Francis Street					>70	F	>70	F

Table 2: Option 2 Operation of Intersections with Proposed Development

*SOURCE: TDG (2017)

The intersection of Francis Street with Old Northern Road would continue to operate at a very poor level of service "F" as is currently the case. The Option 2 traffic route is mostly along Old Northern Road and Terminus Street, both arterial roads. The additional traffic along Crane Road and Orange Grove would not affect within the traffic carrying and environmental capacities of these streets.

Conclusions

Our assessment indicates that without the installation of traffic signals at the intersection of Francis Street with Old Northern Road, the road network would not be significantly impacted by the Planning Proposal with all nearby intersections continuing to operate at the same level of service as if traffic signals were in place at Francis Street. The Planning Proposal can easily be accommodated by the existing road network including the nearby intersections as shown in Tables 1 and 2 above.

Yours sincerely
Traffic Design Group Ltd



Fred Gennaoui
Principal Consultant
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APPENDIX 2 – STANTEC (FORMERLY TDG) RESPONSE TO RMS CLAIMS OF INCONSISTENT TRAFFIC DATA

[Extracts from Attachment A of RMS Correspondence (RMS ref SYD17/01148 / Council ref 12/2016/PLP)], Stantec (formerly TDG) response in **bold**]

2. Recently submitted traffic analysis that seeks to justify that the proposal does not require intersection upgrade at Old Northern Road / Francis Street will **_need to reconcile the inconsistent traffic data used in the December 2017, May 2018 and Castle Hill South Traffic Study modelling assessments. Further justification is required to explain the difference in traffic data used for the traffic studies –**

- Traffic volume data in and out of Francis Street (May 2018) for the future AM and PM peak at the intersection of Old Northern Road / Francis Street with stop control is much lower than the traffic volume data in and out of Francis Street used in the December 2017 modelling assessment for the same period.

This is because in the original assessment (TDG Memo dated 12 July 2017, received by RMS May 2018), the trip assignment for the unsignalised intersection has less vehicles using the intersection due to the redirection of all additional traffic along Hume Street (Option 1) or remained as through traffic along Old Northern Road. The report that followed (TDG Report dated 26 July 2017, received by RMS December 2017) assessed the intersection as being signalised in the future. With a signalised intersection, vehicles typically recognise there being an easier route to make right turns compared with an unsignalised intersection, and as such, more traffic would be expected to enter / exit Francis Street at the intersection if it were signalised.

- Traffic volume data and cycle time used in May 2018 is much lower than the traffic volume data and the cycle time used in December 2017 for both intersections at Old Northern Road and Cecil Avenue and Terminus Street and Crane Road.

The SIDRA software allocated the optimum cycle length at the two intersections depending on the volumes. With an unsignalized intersection at Francis Street, more traffic generated by the proposed development would use these two intersections; if signalised more traffic would turn right into Francis Street rather than using the Cecil Avenue Terminus Street route.

- Traffic modelling for the northbound right turn movement from Old Northern Road into Francis Street (AM and PM respectively) in the May 2018 assessment showed minimal queue and delay along Old Northern Road. However, the modelling submitted in 15 December 2017 (AM and PM peaks future) showed a queue distance of 985.3m and average delay of 1496.7 sec in the AM peak and a queue distance of 1311.7m and average delay of 2237 sec in the PM peak.

Same comment as previous point.

- Right turn out of Francis Street - the May 2018 assessment states there will be only three vehicles per hour during the AM peak and one vehicle per hour during the PM peak however, the modelling submitted in December 2017 shows 109 vehicles per hour during the AM peak and 74 vehicles per hour during the PM peak.

Refer to above comment regarding the signalisation of the intersection acting as an attractor to vehicles, due to the perceived ease of right turns at signals versus unsignalised intersections.

APPENDIX 3 – THE DRAFT VPA

Schedule 1 – Monetary Contributions

Quantum of Monetary Contribution

The total quantum of the Monetary Contribution will be calculated once the Development has Development Consent and the configuration of units is known.

Unit Mix	Monetary Contribution Rate
1 bed	\$25,000.00
2 bed	\$32,092.00
3 bed	\$36,525.00
Commercial	\$150/m2

Timing for payment of Monetary Contribution Monetary Contribution

Monetary Contribution	Date for Payment
\$5,000,000.00	Prior to the issuing of the Construction Certificate for the Development of the Land
Balance of the Monetary Contribution	Prior to the issuing of the Final Occupation Certificate for the Development of the Land.