

15 May 2017

**Our Ref:** N-16044

**Planning Panels Secretariat**

GPO Box 39  
Sydney NSW 2001

**Att: Kim Holt**

Dear Kim,

**RE: DA REFERENCE DA-1443/2016 JRPP REF 2016HCC055 – PROPOSED SENIORS HOUSING – 14 HALYARD WAY, BELMONT**

Thank you for taking my call on the 18<sup>th</sup> April 2017, as discussed, we were extremely disappointed to learn that the above-mentioned proposal was recommended for refusal by Lake Macquarie Council.

We have reviewed the report to the JRPP and found this to be largely imbalanced focusing on ecological impacts without highlighting the significance of the social benefits this proposal will have to this area of Belmont.

Our concern is that should the JRPP adopt the recommendation of Council to refuse the application, the savings provisions in the LEP would not continue to apply to the land and there would be no further opportunity to resubmit or consider a Seniors Housing proposal in this location.

Importantly, we have since received a completed independent review of the ecological information which reports an alternative pathway and introduces some minor modifications to the scheme to assist in achieving the local and national ecological objectives. Accordingly, information to support this modified scheme are now well underway.

We therefore request of the JRPP to defer a determination decision on this application to allow the applicant and design team a reasonable time frame to finalise the suite of (commissioned and almost completed) information which we believe would address the outstanding matters.

To demonstrate that significant work has already been undertaken, the revised layout is attached along with a suite of additional information. In addition, a project chart has been attached which demonstrates the work schedule of the remaining information.

On the basis that this is the only remaining opportunity to consider an application for a Seniors Housing development on this site due to the LEP limitations, we propose that the JRPP consider our request to defer the determination of the application for a period of 3 months – 18<sup>th</sup> August 2017.

This will enable the project team to complete the suite of revised information within 1 month and allow Council sufficient time to assess and provide an addendum report to the JRPP. We believe this would provide sufficient time to address the concerns raised in the report.

In this circumstance, we therefore provide the following information which identifies the active progression of the scheme which we believe identifies a suitable alternative approval pathway for this project.

Please find enclosed the following additional information for your consideration and demonstrated intent to resolve all issues:

1. Summary of the ecology position from CPSD and a supporting independent biodiversity study from Biosis recommending an alternative and suitable design solution through a biobanking option;
2. Revised plan from Tattersall Lander demonstrating some slight modifications to the development footprint on the broader site to achieve a more positive ecological outcome in response to the recommendations from Biosis;
3. Additional discussion regarding proposed land use, zone objectives and social and economic benefit from CPSD and Palmer Bruyn;
4. Submission from Tattersall Lander undertaking detailed responses to each of Council's original matters;
5. Table of key time events in the establishment of this application;
6. Projection of timeframes for submission of additional information;

Thank you for accepting this letter, I trust that it will be delivered to the JRPP on the day of the determination meeting to support our justification in deferring a decision.

Yours sincerely,



CHRIS SPEEK  
ASSOCIATE DIRECTOR  
CITY PLAN STRATEGY AND DEVELOPMENT PTY LIMITED

## ATTACHMENT 1 – ECOLOGY SUMMARY AND BIOSIS INDEPENDENT REVIEW

### Ecology Summary

From project inception, ecology has been the main point of discussion for this site. Undertaking ecological surveys of the broader site, the development footprint has been reduced significantly to the 4.83ha area of land as proposed. Importantly, this footprint retains 27ha of bushland on and around the site.

The information supporting the application acknowledges that the Asset Protection Zones will modify a further 8ha of land around the development footprint and professional reports have been provided which support this arrangement.

To support the application, Tattersall Lander submitted:

- a detailed Flora Report undertaken by Anne Clements
- a specialised report on *Tetratheca juncea* by Anne Clements
- a fauna report by Wildthing

The reports concluded that there would not be a significant impact to *T. juncea* and retention of the species within the APZ can be adequately managed through a suitable management plan. An adequate canopy can be provided around the development of between 30m and 50m to support the squirrel glider.

As reported, this approach is unsupported by Council on the basis that the vegetation within the APZ's are considered to be deemed destruction.

Further to the report, Biosis were commissioned to undertake an independent review of the information and have identified an alternative and suitable route for this development via biobanking legislation. It also recommends to slightly modify the footprint of the development to provide for a higher quality vegetation corridor around the development.

This report has been submitted to Council on April 18<sup>th</sup>. Council provided an undertaking to review this prior to the meeting on the May 18<sup>th</sup>. The report is attached to this suite of additional information. A biobanking statement is being prepared and we require additional time to complete this.

10 April 2017

Chris McNaughton  
Palmer Bruyn  
PO Box 174  
NEWCASTLE NSW 2300

Dear Chris

**Re: Peer review and preliminary BioBanking assessment of a proposed seniors living facility, Halyard way, Belmont**

**Project no. 24483**

## **Background**

Biosis Pty Ltd was commissioned by Palmer Bruyn, on behalf of the proponent Tattersall Lander Pty Ltd, to undertake a peer review of previous flora and fauna assessments for a proposed seniors living development at Lot 803 DP 1156934, Halyard Way, Belmont.

The objectives of this peer review were:

- To provide an independent assessment of the work undertaken.
- Determine whether the project is likely to result in a significant impact to threatened species, populations and communities listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and *Threatened Species Conservation Act 1995* (TSC Act).
- Provide recommendations to address concerns raised by Council in their previous correspondence regarding the project.

The peer review included an assessment of the flora assessment by Anne Clements & Associates (2015, 2016) and fauna assessment by Wildthing (2016). These documents were reviewed against the relevant Lake Macquarie City Council guidelines (LMCC 2014a, 2014b, 2015), as well as NSW and Commonwealth biodiversity assessment guidelines.

Following a preliminary review of these documents we have concluded that a significant impact is likely to result to Black-eyed Susan *Tetratheca juncea*, with potential for a significant impact to Squirrel Glider *Petaurus norfolcensis* and Powerful Owl *Ninox strenua*. Accordingly, a Species Impact Statement (SIS) would be required.

BioBanking offers an alternative pathway. Under Section 127ZO of the TSC Act, the issuing of a BioBanking statement for a development that development is taken not to result in a significant impact to threatened species, populations or communities. Given the Director General's Requirements (DGRs) recently issued for a number of SIS require offsetting in accordance with the NSW *BioBanking Assessment Methodology* (BBAM; OEH 2014) we recommend proceeding down this pathway.

Biosis Pty Ltd  
**Newcastle Resource Group**

Suite 8, 27 Annie Street  
Wickham NSW 2293

Phone: 02 4911 4040

ACN 006 175 097  
ABN 65 006 175 097

Email: [newcastle@biosis.com.au](mailto:newcastle@biosis.com.au)

**biosis.com.au**



Subsequent to this peer review, and based on this advice, Biosis has been requested by Palmer Bruyn to undertake a preliminary BioBanking assessment, in accordance with the BBAM, to:

- Determine offset requirements arising from the proposed development.
- Determine whether the residual land within the larger study area would be sufficient to offset these impacts.
- If insufficient what residual credit requirement there may be and how this could be met.

Two BioBanking assessments were completed using data collected by Anne Clements & Associates (2015, 2016) and Wildthing (2016); one for the development site (including impacts arising from asset protection zones [APZs]) and one for the proposed offset site (including management of the APZs). In this assessment, the following terms are used:

- Study area – refers to the broader site (the entirety of Lot 803 DP 1156934), including the development site, APZs and proposed offset site.
- Development site – refers to the impact footprint of the proposed seniors living development, as provided by Palmer Bruyn.
- APZ – refers to the 100 metre asset protection zone surrounding the development site.

This letter provides the outcomes of this assessment.

## **Landscape assessment**

The study area occurs within the:

- Sydney Basin IBRA bioregion
- Wyong IBRA subregion
- Gosford - Cooranbong Coastal Slopes Mitchell landscape
- Hunter-Central Rivers catchment management authority (CMA) area
- Lake Macquarie Local Government Area (LGA).

These are the areas used in the assessment.

The smallest inner and outer assessment circles (100 hectare and 1000 hectare) were used, as the 100 hectare assessment circle was sufficient to fit the study area. The inner and outer assessment circle for both the development site and proposed offset site were centred on the study area.

Native vegetation extent in the assessment circles was assessed using the *Lower Hunter Vegetation Mapping* (Parsons Brinkerhoff 2013). Vegetation was cropped to the assessment circles using a Geographic Information System (GIS). To determine the extent of native vegetation cover after development, the extent of vegetation required for removal is subtracted from the extent of native vegetation cover before development. This was assessed conservatively, deducting all vegetation within the development site and APZ. As there will be no change in the extent of vegetation after offsetting, the values post-development were used in the assessment.

Table 1 provides a summary of the extent of native vegetation cover within the inner and outer assessments circles, before and after development.

**Table 1 Extent of native vegetation cover before and after development**

| Assessment circle       | Before development |    | After development |    |
|-------------------------|--------------------|----|-------------------|----|
|                         | Area (ha)          | %  | Area (ha)         | %  |
| Outer assessment circle | 367                | 37 | 355               | 36 |
| Inner assessment circle | 61                 | 61 | 50                | 50 |

The study area does not support any of the following:

- An area identified as being part of a state significant biodiversity link.
- A riparian buffer 50 metres either side of a 6th order stream.
- A riparian buffer 50 metres around an important wetland or estuarine area.
- An area identified as being part of a regionally significant biodiversity link.
- A riparian buffer 20 metres either side of a 4th or 5th order stream.

Therefore, the proposed development will not impact on any state significant biodiversity links or regionally significant biodiversity links. The study area was assessed as being part of three connective links:

- A link to the north towards the Floraville Ridge.
- A link to the southwest, to Green Point.
- A link to the southwest, towards remnant peri-urban vegetation.

Vegetation to the southeast of the study area is most restricted in width, with a linkage width of 75 metres (moderate linkage width class). Following development the most restricted width will be to the immediate west of the development site, within the proposed APZ. In this area, retained vegetation will be restricted to a width of approximately 5 metres in this area (very narrow linkage width class); this is the most restricted width for the offset area before and after development. These values were used in the connectivity assessment.

Patch size was assessed by sequentially selecting all vegetation not in low condition and separated by a distance of less than 100 metres (woody vegetation types) and 30 metres (non-woody vegetation types) from the vegetation mapping by Parsons Brinkerhoff (2013). Using this method, the vegetation within the study area forms part of an extra large patch of connecting vegetation with a patch size larger than 1000 hectares.

## Native vegetation

A flora assessment of the study area was undertaken by Anne Clements & Associates (2015).

Vegetation communities were mapped across the study area, with initial mapping of vegetation communities based on dominant species in the overstorey. These communities were aligned with plant community types (PCTs) for the Hunter Central Rivers catchment management area (CMA). This resulted in the identification of two PCTs within the study area:

- 1589 - Spotted Gum - Broad-leaved Mahogany - Grey Gum grass - shrub open forest on Coastal Lowlands of the Central Coast (HU803).

- 1619 - Smooth-barked Apple - Red Bloodwood - Brown Stringybark - Hairpin Banksia heathy open forest of coastal lowlands (HU833).

All vegetation was assessed as being in moderate/good condition, so no further stratification of the PCTs was required. A summary of the PCTs and vegetation zones identified is provided in Table 2.

**Table 2 Plant community types within the study area**

| Plant community type (vegetation zone)                                                                                                  | Development site (ha) | APZ (ha)    | Offset area (ha) | Total (ha)   |
|-----------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------|------------------|--------------|
| <b>1589 - Spotted Gum - Broad-leaved Mahogany - Grey Gum grass - shrub open forest on Coastal Lowlands of the Central Coast (HU803)</b> | 0.0                   | 1.88        | 11.81            | <b>13.69</b> |
| <b>1619 - Smooth-barked Apple - Red Bloodwood - Brown Stringybark - Hairpin Banksia heathy open forest of coastal lowlands (HU833)</b>  | 4.47                  | 5.16        | 4.50             | <b>14.13</b> |
| <b>Total (ha)</b>                                                                                                                       | <b>4.47</b>           | <b>7.04</b> | <b>16.31</b>     | <b>27.82</b> |

For a full vegetation description see Anne Clements & Associates (2015).

Site value was assessed in 2014 using data obtained via a series of plots and transects, as per the methodology outlined in Section 5 of the BBAM. Plot and transect data was collected from the study area and included:

- A 20 metre x 50 metre quadrat and 50 metre transect for assessment of site attributes.
- A 20 metre x 20 metre quadrat, nested within the quadrat outlined above, for full floristic survey to determine native plant species richness.

A total of 13 plots/transects were completed within the study area, with three in the development site, three in the APZ and seven in the proposed offset site (Table 3).

**Table 3 The number of plots/transects completed in each vegetation zone**

| Plant community type (vegetation zone)                                                                                                  | Development site (inc APZ) | Offset area | Grand Total |
|-----------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------|-------------|
| <b>1589 - Spotted Gum - Broad-leaved Mahogany - Grey Gum grass - shrub open forest on Coastal Lowlands of the Central Coast (HU803)</b> | 0                          | 5           | <b>5</b>    |
| <b>1619 - Smooth-barked Apple - Red Bloodwood - Brown Stringybark - Hairpin Banksia heathy open forest of coastal lowlands (HU833)</b>  | 6                          | 2           | <b>8</b>    |
| <b>Grand Total</b>                                                                                                                      | <b>6</b>                   | <b>7</b>    | <b>13</b>   |

A number of assumptions had to be made to fulfil the plot/transect requirements of the BBAM:

- As no plots/transects were completed in HU803 within the development site (including APZ), the nearest plot/transect was used (BB7).
- Plot/transect BB3 was used in both the development site (APZ) and proposed offset site (APZ).

- Plots/transect BB7, BB9 and BB10 were modified to reflect scores following clearing of APZs.
- An additional plot/transect (BB101) was created using data from BB9-modified and BB10-modified to meet minimum plot/transect requirements.

Plot/transect data is provided in Table 13 in Appendix 1. Current site value for each vegetation zone is outlined in Table 4.

**Table 4 Vegetation zones and associated site value scores**

| Vegetation zone                   | Plant community type                                                                                                                                           | Area (ha) | Site value score |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------------|
| <b>Development site (inc APZ)</b> |                                                                                                                                                                |           |                  |
| <b>1</b>                          | <i>1589 - Spotted Gum - Broad-leaved Mahogany - Grey Gum grass - shrub open forest on Coastal Lowlands of the Central Coast (HU803) - Moderate/good</i>        | 1.88      | 92.71            |
| <b>2</b>                          | <i>1619 - Smooth-barked Apple - Red Bloodwood - Brown Stringybark - Hairpin Banksia heathy open forest of coastal lowlands (HU833) - Moderate/good</i>         | 9.63      | 73.78            |
| <b>Proposed offset site</b>       |                                                                                                                                                                |           |                  |
| <b>3</b>                          | <i>1589 - Spotted Gum - Broad-leaved Mahogany - Grey Gum grass - shrub open forest on Coastal Lowlands of the Central Coast (HU803) - Moderate/good</i>        | 11.81     | 92.71            |
| <b>4</b>                          | <i>1589 - Spotted Gum - Broad-leaved Mahogany - Grey Gum grass - shrub open forest on Coastal Lowlands of the Central Coast (HU803) - Moderate/good (poor)</i> | 1.88      | 22.92            |
| <b>5</b>                          | <i>1619 - Smooth-barked Apple - Red Bloodwood - Brown Stringybark - Hairpin Banksia heathy open forest of coastal lowlands (HU833) - Moderate/good</i>         | 4.50      | 73.78            |
| <b>6</b>                          | <i>1619 - Smooth-barked Apple - Red Bloodwood - Brown Stringybark - Hairpin Banksia heathy open forest of coastal lowlands (HU833) - Moderate/good (poor)</i>  | 5.16      | 18.75            |

## Threatened species

An assessment of the occurrence of geographic habitat features, in accordance with Section 6 of the BBAM, was undertaken to identify a list of candidate species. The presence of the habitat features within the study area was assessed. The results of this assessment, along with the species generated by the calculator associated with the BBAM, are outlined in Table 14 in Appendix 2.

Targeted flora surveys have been undertaken by Anne Clements & Associates (2015, 2016) using a combination of the following techniques:

- Plots/transects
- Belt transects separated by 50 metres

These surveys recorded 1594 clumps of Black-eyed Susan within the study area, as outlined in Table 5. No other threatened flora species were recorded during targeted surveys.

**Table 5 Black-eyed Susan clumps recorded in the study area**

|                         | Development site | APZ  | Proposed offset site | Total       |
|-------------------------|------------------|------|----------------------|-------------|
| <b>Black-eyed Susan</b> | 21               | 1052 | 521                  | <b>1594</b> |

Targeted fauna surveys have been undertaken by Wildthing (2016) using a combination of the following techniques:

- Habitat assessment
- Terrestrial mammal trapping
- Arboreal mammal trapping
- Harp trapping
- Bat call surveys
- Amphibian surveys
- Reptile surveys
- Diurnal avifauna surveys
- Spotlighting and call playback
- Stag watching
- Remote camera surveys

Current and previous fauna surveys have recorded a number of threatened fauna species within the study area, including the Squirrel Glider, Powerful Owl, Grey-headed Flying-fox *Pteropus poliocephalus*, Little Bentwing-bat *Miniopterus australis*, Eastern Bentwing-bat *Miniopterus schreibersii oceanensis*. A number of additional species are considered a moderate to high likelihood of occurrence. The Squirrel Glider and Powerful Owl are ecosystem credits species in this CMA, resulting in a multiplier for ecosystem credits but no specific species credits. The study area provides foraging habitat for the bat species, but does not provide roosting habitat or breeding habitat. Therefore species credits are also not required for these species.

A list of ecosystem credit species predicted to occur within the development site (including APZ) and proposed offset site, based on the PCTs present was generated by the calculator associated with the BBAM. The potential for these species to occur within the development site and proposed offset site was assessed in accordance with Section 6.3 of the BBAM. The presence of these species could not be discounted using the methodology outlined in Section 6.3 of the BBAM. It was therefore assumed that all species may occur within the development site (including APZ) and proposed offset site. The forest owls (Barking owl *Ninox connivens*, Masked Owl *Tyto novaehollandiae* and Powerful Owl) have the lowest Tg value and therefore the highest threatened species offset multiplier of 3.

A list of species credit species predicted to occur within the development site and proposed offset site, based on the PCTs present, was generated by the calculator associated with the BBAM. The potential for a species to occur within the development site (including APZ) and proposed offset site was assessed in accordance with Section 6.5 of the BBAM and based on previous flora and fauna assessments. Using this methodology, species credits were required for the following species in the development site:

- Black-eye red Susan – impacts to 21 individuals.

Using this methodology, species credits were generated for the following species in the proposed offset site:

- Black-eye red Susan – impacts to 1573 individuals.

No other species credits are required or generated.

## Impact and offset assessment

### Development site

#### Impact summary

For the purposes of the preliminary BioBanking assessments, the proposed seniors living development will result in the following impacts:

- Removal of 4.47 hectares of 1619 - *Smooth-barked Apple - Red Bloodwood - Brown Stringybark - Hairpin Banksia heathy open forest of coastal lowlands (HU833)* within the development site.
- Modification of 1.88 hectares of 1589 - *Spotted Gum - Broad-leaved Mahogany - Grey Gum grass - shrub open forest on Coastal Lowlands of the Central Coast (HU803)* and 5.16 hectares of 1619 - *Smooth-barked Apple - Red Bloodwood - Brown Stringybark - Hairpin Banksia heathy open forest of coastal lowlands (HU833)* within the APZ.
- Removal of 21 clumps of the Black-eyed Susan.

Vegetation zones in the development site, including APZs, were stratified into three management zones based on whether they would be subject to complete clearing or partial clearing, as outlined in Table 6.

**Table 6 Management zones in the development site (including APZ)**

| Management zone | Vegetation zone | Plant community type                                                                                                                    | Management type                 | Area (ha) |
|-----------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|-----------|
| 1               | 1               | 1589 - <i>Spotted Gum - Broad-leaved Mahogany - Grey Gum grass - shrub open forest on Coastal Lowlands of the Central Coast (HU803)</i> | APZ – partial clearing          | 1.88      |
| 2               | 2               | 1619 - <i>Smooth-barked Apple - Red Bloodwood - Brown Stringybark - Hairpin Banksia heathy open forest of coastal lowlands (HU833)</i>  | Development – complete clearing | 4.47      |
| 3               | 2               | 1619 - <i>Smooth-barked Apple - Red Bloodwood - Brown Stringybark - Hairpin Banksia heathy open forest of coastal lowlands (HU833)</i>  | APZ – partial clearing          | 5.16      |

Development areas were assumed to be subject to complete clearing, with site value scores decreasing to zero. Impacts to APZs were assessed in accordance with Appendix 4 of the previous version of the BBAM (DECC 2009). This included the following decreases:

- Loss of species richness: score set to 1.
- Minor reduction in over-storey cover: score set to 1.
- Loss of all mid-storey cover: score set to 0.

- Minor reduction in grassy groundcover grasses: score set to 1.
- Loss of all groundcover shrubs: score set to 0.
- Minor reduction in grassy other: score set to 1.
- Increase in exotic plant cover: score set to 1.
- No loss of hollow-bearing trees: no change in score.
- Loss of overstorey regeneration: score set to 0.
- Loss of fallen logs: score set to 0.

Anne Clements & Associates (2016) provides a number of recommendations for management of Black-eyed Susan in the APZ. This includes providing a buffer of 20 metres around all retained plants, with removal of any vegetation for weed management of bushfire by management by hand only. Using these recommendations we have assumed that all plants within the APZ will be protected and managed as part of the offset site.

### Impacts requiring offsets and credit requirements

Utilising data from the preliminary BioBanking assessment herein, the following credits are required:

**Table 7 Ecosystem credits required in the development site (including APZ)**

| Plant community type name                                                                                                               | Area (ha) | Ecosystem credits required |
|-----------------------------------------------------------------------------------------------------------------------------------------|-----------|----------------------------|
| <b>1589 - Spotted Gum - Broad-leaved Mahogany - Grey Gum grass - shrub open forest on Coastal Lowlands of the Central Coast (HU803)</b> | 1.88      | 124                        |
| <b>1619 - Smooth-barked Apple - Red Bloodwood - Brown Stringybark - Hairpin Banksia heathy open forest of coastal lowlands (HU833)</b>  | 4.47      | 267                        |
| <b>1619 - Smooth-barked Apple - Red Bloodwood - Brown Stringybark - Hairpin Banksia heathy open forest of coastal lowlands (HU833)</b>  | 5.16      | 267                        |
| <b>Total number of credits required</b>                                                                                                 |           | <b>658</b>                 |

The following species credits are required:

**Table 8 Species credits required in the development site (including APZ)**

| Species                                           | Species credits required |
|---------------------------------------------------|--------------------------|
| <b>Black-eyed Susan <i>Tetrathecea juncea</i></b> | 315                      |

### Offset site

The proposed offset site would include areas proposed for conservation, as well as the APZ once initial management had been undertaken.

## Proposed conservation measures

As determined through the preliminary BioBanking assessments provided herein, the proposed seniors living development will result in the following conservation outcomes:

- Management of 11.81 hectares of 1589 - *Spotted Gum - Broad-leaved Mahogany - Grey Gum grass - shrub open forest on Coastal Lowlands of the Central Coast (HU803)* and 4.50 hectares of 1619 - *Smooth-barked Apple - Red Bloodwood - Brown Stringybark - Hairpin Banksia heathy open forest of coastal lowlands (HU833)* for conservation purposes.
- Management of 1.88 hectares of 1589 - *Spotted Gum - Broad-leaved Mahogany - Grey Gum grass - shrub open forest on Coastal Lowlands of the Central Coast (HU803)* and 5.16 hectares of 1619 - *Smooth-barked Apple - Red Bloodwood - Brown Stringybark - Hairpin Banksia heathy open forest of coastal lowlands (HU833)* as a part on an APZ within the proposed offset site.
- Management of 1573 clumps of the Black-eyed Susan.

Vegetation zones in the proposed offset site were stratified into management zones based on the management type outlined in Table 6.

**Table 9 Management zones in the proposed offset site**

| Management zone | Vegetation zone | Plant community type                                                                                                                    | Management type           | Area (ha) |
|-----------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-----------|
| 4               | 3               | 1589 - <i>Spotted Gum - Broad-leaved Mahogany - Grey Gum grass - shrub open forest on Coastal Lowlands of the Central Coast (HU803)</i> | Offset – default increase | 11.81     |
| 5               | 4               | 1589 - <i>Spotted Gum - Broad-leaved Mahogany - Grey Gum grass - shrub open forest on Coastal Lowlands of the Central Coast (HU803)</i> | APZ – partial increase    | 1.88      |
| 6               | 5               | 1619 - <i>Smooth-barked Apple - Red Bloodwood - Brown Stringybark - Hairpin Banksia heathy open forest of coastal lowlands (HU833)</i>  | Offset – default increase | 4.50      |
| 7               | 6               | 1619 - <i>Smooth-barked Apple - Red Bloodwood - Brown Stringybark - Hairpin Banksia heathy open forest of coastal lowlands (HU833)</i>  | APZ – partial increase    | 5.16      |

It is assumed that all vegetation within the proposed offset site (excluding the APZ) will be managed for conservation purposes and default increases in site value scores were used in this assessment. For APZ areas, scores following development were used, with modified plot/transect data inputted into the calculator. Increases used to calculate gains were as follows:

- Native plant species richness: default increase.
- Native over-storey cover: no increase.
- Native mid-storey cover: no increase.
- Native groundcover (grasses): default increase.
- Native groundcover (shrubs): no increase.
- Native groundcover (other): default increase.



- Exotic plant cover: default increase.
- Number of trees with hollows: default increase.
- Overstorey regeneration: no increase.
- Length of fallen logs: no increase.

These are in line with the APZ management spelt out in DECC (2009).

### Credits generated by proposed offsets

Utilising data from the preliminary BioBanking assessment the following credits will be generated by the proposed offset site:

**Table 10 Ecosystem credits generated by the proposed offset site (including APZ)**

| Plant community type name                                                                                                               | Area (ha) | Ecosystem credits required |
|-----------------------------------------------------------------------------------------------------------------------------------------|-----------|----------------------------|
| <i>1589 - Spotted Gum - Broad-leaved Mahogany - Grey Gum grass - shrub open forest on Coastal Lowlands of the Central Coast (HU803)</i> | 11.81     | 81                         |
| <i>1589 - Spotted Gum - Broad-leaved Mahogany - Grey Gum grass - shrub open forest on Coastal Lowlands of the Central Coast (HU803)</i> | 1.88      | 8                          |
| <i>1619 - Smooth-barked Apple - Red Bloodwood - Brown Stringybark - Hairpin Banksia heathy open forest of coastal lowlands (HU833)</i>  | 4.50      | 40                         |
| <i>1619 - Smooth-barked Apple - Red Bloodwood - Brown Stringybark - Hairpin Banksia heathy open forest of coastal lowlands (HU833)</i>  | 5.16      | 28                         |
| <b>Total number of credits generated</b>                                                                                                |           | 157                        |

The following species credits are generated:

**Table 11 Species credits required in the development site (including APZ)**

| Species                                           | Species credits required |
|---------------------------------------------------|--------------------------|
| <b>Black-eyed Susan <i>Tetrathecea juncea</i></b> | 11,168                   |

## Conclusion and recommendations

A preliminary BioBanking of the development site and proposed offset site for a proposed seniors living development located at Halyard Way, Belmont. An assessment of the credits required by the impacts arising from the development and those generated by the proposed offset site was undertaken. A summary is provided in Table 12.

**Table 12 Biodiversity credits credit balance**

| Plant community type name                                                                                                               | Development site |                            | Offset site |                             | Credit (deficit) |
|-----------------------------------------------------------------------------------------------------------------------------------------|------------------|----------------------------|-------------|-----------------------------|------------------|
|                                                                                                                                         | Area (ha)        | Ecosystem credits required | Area (ha)   | Ecosystem credits generated |                  |
| <b>1589 - Spotted Gum - Broad-leaved Mahogany - Grey Gum grass - shrub open forest on Coastal Lowlands of the Central Coast (HU803)</b> | 1.88             | 124                        | 13.69       | 90                          | (34)             |
| <b>1619 - Smooth-barked Apple - Red Bloodwood - Brown Stringybark - Hairpin Banksia heathy open forest of coastal lowlands (HU833)</b>  | 9.63             | 534                        | 9.66        | 68                          | (466)            |
| <b>Black-eyed Susan <i>Tetrathecea juncea</i></b>                                                                                       | –                | 315                        | –           | 11,168                      | 10,853           |

This assessment indicates that the proposed offset area borders on meeting the offset requirements for 1589 - Spotted Gum - Broad-leaved Mahogany - Grey Gum grass - shrub open forest on Coastal Lowlands of the Central Coast (HU803), with a small deficit of 34 credits. However, there is a substantial deficit of 466 credits for 1619 - Smooth-barked Apple - Red Bloodwood - Brown Stringybark - Hairpin Banksia heathy open forest of coastal lowlands (HU833). This assessment indicates that there is also a substantial credit of Black-eyed Susan credits of 10,853 credits. Credit deficits will need to be sourced from other Biobank sites in the local area, while Black-eyed Susan credits surpluses can be sold into the market place. Please be aware that at a cost estimate of \$1500 per credit this equates to \$750,000 in offset costs. Credit pricing is subject to market fluctuations, and these estimates are based on minimum costs.

There are a number of steps that can be taken to address the credit deficit outlined herein. Key to these is minimising the impact arising from the proposed development. We understand you are currently exploring the potential to shift the development footprint to the south-west, towards Council owned land. This would not only reduce the direct impact footprint of the development, but also reduce the impacts of the APZs. This would result in a reduction in the extent of vegetation clearing, reduce the impacts to Black-eyed Susan and result in retention of a larger corridor of vegetation to the north-east of the development site for fauna connectivity, particularly the Squirrel Glider. We strongly support this measure.

In addition to this, we recommend further reducing the extent of development in the north-east. The retention of a fauna movement corridor in this area will be key to addressing some of Council's concerns raised in previous correspondence. Reducing the footprint in this area will result in a wider corridor, providing better fauna connectivity; it will also ensure less clearing of overstorey vegetation.

Measures to suitably manage Black-eyed Susan within the APZ will also need to be explored further. This preliminary BioBanking assessment is based on from Anne Clemens (pers. comm.) that this can be achieved. To provide surety to both Council and OEH, and the Commonwealth Department of the Environment and Energy (DEE) this issue will need to be resolved before proceeding.

If you choose to prepare an application for a BioBanking statement further assessment will be required, and an application will need to be submitted to the Office of Environment and Heritage (OEH). Whilst BioBanking offers an alternative pathway to undertaking a SIS, it is not a guarantee of development consent. We recommend that further discussion with Council and OEH is undertaken to seek their in-principle support before proceeding.

Currently, a BioBanking statement cannot be sought for this development due to approval for clearing of native vegetation being required under the *Native Vegetation Act 2003* (NV Act). However, as of 1 July 2017

the new *Biodiversity Conservation Act 2016* (BC Act) will commence operation. The BC Act provides a new framework for assessment of ecological values during the planning process. It includes a new Biodiversity Assessment method (BAM) and expands on NSW's existing offset policies to most types of development across the state under a new biodiversity offsets scheme. Under the BC Act, this restriction and interaction with the NV Act does not apply. Any future applications for offsetting will need to be undertaken in a manner consistent with this new legislation.

We also recommend consultation with DEE is undertaken, as impacts to Black-eyed Susan will need to be assessed under the EPBC Act. The project is likely to require a referral to the Commonwealth Minister for the Environment for assessment and determination, in addition to local and state assessment.

I trust that this advice is of assistance to you. Please contact me if you would like to discuss any elements of this ecological advice further.

Yours sincerely

A handwritten signature in black ink, appearing to read 'N Garvey', with a stylized flourish at the end.

Nathan Garvey  
Senior Consultant Ecologist  
Newcastle Resource Group Manager  
Accredited BioBanking Assessor (No. 0103)

## References

Anne Clements & Associates 2015. Flora assessment: Lot 803 DP1156934 in Belmont. Report to Palmer Bruyn Pty Ltd. Authors: AM Clements, D Clarke, A Baumann, T Rodd, D Brennan and R Snowdon.

Anne Clements & Associates 2015. Assessment of Significance: 14 Halyard Way (Lot 803 DP1156934), Belmont. AM Clements, J Gardener and E Dowding. Report to Palmer Bruyn Pty Ltd.

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LMCC 2014b. Interim Lake Macquarie Large Forest Owl Planning and Management Guidelines 2014. Lake Macquarie City Council, Speers Point.

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OEH 2014. BioBanking Assessment Methodology. Office of Environment and Heritage, Sydney.

Parsons Brinkerhoff 2013. Lower Hunter Vegetation Mapping. Report prepared for the Department of Sustainability, Environment, Water, Population and Communities by Parsons Brinkerhoff, Canberra.

Wildthing 2016. Fauna Assessment for a Proposed Seniors Living Village at Lot 803 DP 1156934 (No. 14) Halyard Way, Belmont, NSW. Report to Tattersall Lander Pty Ltd. Wildthing Environmental Consultants.

## Appendix 1 Plot/transect data

**Table 13 Plot/transect data**

| Vegetation zone                   | PlotName         | NPS | NOS | NMS | NGCG | NGCS | NGCO | EPC | NTH | OR | FL | Easting | Northing | Zone |
|-----------------------------------|------------------|-----|-----|-----|------|------|------|-----|-----|----|----|---------|----------|------|
| <b>Development site (inc APZ)</b> |                  |     |     |     |      |      |      |     |     |    |    |         |          |      |
| <b>1</b>                          | (BB7)            | 51  | 30  | 15  | 25   | 10   | 10   | 1   | 4   | 0  | 21 | 374085  | 6346225  | 56   |
| <b>2</b>                          | BB5              | 75  | 25  | 15  | 40   | 10   | 5    | 10  | 0   | 1  | 36 | 374100  | 6345885  | 56   |
|                                   | BB6              | 55  | 15  | 15  | 40   | 15   | 5    | 15  | 6   | 1  | 19 | 373912  | 6345963  | 56   |
|                                   | BB8              | 65  | 30  | 10  | 10   | 3    | 40   | 15  | 1   | 0  | 16 | 374122  | 6345976  | 56   |
|                                   | BB9              | 61  | 30  | 10  | 15   | 3    | 5    | 5   | 3   | 1  | 33 | 374182  | 6345932  | 56   |
|                                   | BB10             | 53  | 30  | 2   | 40   | 5    | 5    | 10  | 2   | 1  | 18 | 374070  | 6345817  | 56   |
|                                   | BB12             | 56  | 25  | 3   | 50   | 5    | 2    | 1   | 0   | 1  | 41 | 373960  | 6346085  | 56   |
| <b>Proposed offset site</b>       |                  |     |     |     |      |      |      |     |     |    |    |         |          |      |
| <b>3</b>                          | (BB3)            | 45  | 25  | 1   | 30   | 0    | 1    | 1   | 3   | 1  | 22 | 374493  | 6345524  | 56   |
|                                   | BB4              | 56  | 30  | 40  | 2    | 3    | 30   | 15  | 0   | 1  | 20 | 374513  | 6345797  | 56   |
|                                   | BB11             | 58  | 25  | 10  | 20   | 10   | 3    | 3   | 2   | 1  | 60 | 374152  | 6346370  | 56   |
|                                   | BB13             | 62  | 15  | 5   | 60   | 20   | 5    | 2   | 0   | 0  | 20 | 374388  | 6345896  | 56   |
| <b>4</b>                          | (BB7 – modified) | 18  | 7   | 0   | 14   | 0    | 4    | 40  | 4   | 0  | 0  | 374085  | 6346225  | 56   |
| <b>5</b>                          | BB1              | 78  | 15  | 20  | 50   | 10   | 5    | 10  | 3   | 1  | 20 | 374192  | 6345728  | 56   |
|                                   | BB2              | 57  | 30  | 1   | 40   | 2    | 2    | 1   | 0   | 0  | 28 | 374331  | 6345616  | 56   |

| Vegetation zone | PlotName          | NPS | NOS | NMS | NGCG | NGCS | NGCO | EPC | NTH | OR | FL | Easting | Northing | Zone |
|-----------------|-------------------|-----|-----|-----|------|------|------|-----|-----|----|----|---------|----------|------|
|                 | BB9               | 61  | 30  | 10  | 15   | 3    | 5    | 5   | 3   | 1  | 33 | 374182  | 6345932  | 56   |
| 6               | (BB9 – modified)  | 17  | 8   | 0   | .25  | 0    | 1    | 40  | 3   | 0  | 0  | 374182  | 6345932  | 56   |
|                 | (BB10 – modified) | 15  | 8   | 0   | 0.25 | 0    | 1    | 40  | 2   | 0  | 0  | 374070  | 6345817  | 56   |
|                 | (BB101)           | 15  | 8   | 0   | 0.25 | 0    | 1    | 40  | 2   | 0  | 0  | 123456  | 7891011  | 15   |

## Appendix 2 Geographic habitat features assessment

**Table 14 Geographic habitat features assessment**

| Common name                       | Scientific name                  | Feature                                                                                                                                                                                                                                                         | Assessment of habitat feature         |
|-----------------------------------|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| <b>Wyong Sun Orchid</b>           | <i>Thelymitra adorata</i>        | Occurs from 10-40 m a.s.l. in grassy woodland or occasionally derived grassland in well-drained clay loam or shale derived soils. The vegetation type in which the majority of populations occur (including the largest colony) is a Spotted Gum - Ironbark For | No - soils and vegetation not present |
| <b>Biconvex Paperbark</b>         | <i>Melaleuca biconvexa</i>       | swamps, swamp margins or creek edges                                                                                                                                                                                                                            | No - habitat not present              |
| <b>Large-eared Pied Bat</b>       | <i>Chalinolobus dwyeri</i>       | land containing escarpments, cliffs, caves, deep crevices, old mine shafts or tunnels                                                                                                                                                                           | No - habitat not present              |
| <b>Heath Wrinklewort</b>          | <i>Rutidosia heterogama</i>      | heath on sandy soils, or moist areas in open forest                                                                                                                                                                                                             | Yes – habitat present in study area   |
| <b>Pale-headed Snake</b>          | <i>Hoplocephalus bitorquatus</i> | land within 40 m of watercourses, containing hollow-bearing trees, loose bark and/or fallen timber                                                                                                                                                              | Yes – habitat present in study area   |
| <b>Brush-tailed Rock-wallaby</b>  | <i>Petrogale penicillata</i>     | land within 1 km of rock outcrops or clifflines                                                                                                                                                                                                                 | No - habitat not present              |
| <b>Green and Golden Bell Frog</b> | <i>Litoria aurea</i>             | land within 100 m of emergent aquatic or riparian vegetation                                                                                                                                                                                                    | No - habitat not present              |
| <b>Green-thighed Frog</b>         | <i>Litoria brevipalmata</i>      | land within 100 m of semi-permanent or ephemeral ponds or depressions containing leaf litter                                                                                                                                                                    | No - habitat not present              |
| <b>Diuris bracteata</b>           | <i>Diuris bracteata</i>          | Dry sclerophyll woodland and forest with a predominantly grassy understorey.                                                                                                                                                                                    | Yes – habitat present in study area   |
| <b>Wallum Froglet</b>             | <i>Crinia tinnula</i>            | land within 40 m of swamps, wet or dry heaths or sedge grasslands                                                                                                                                                                                               | No - habitat not present              |
| <b>Eastern Osprey</b>             | <i>Pandion cristatus</i>         | land within 40 m of fresh/brackish/saline waters of larger rivers or creeks; estuaries, coastal lagoons, lakes and/or inshore marine waters                                                                                                                     | No - habitat not present              |
| <b>Common Planigale</b>           | <i>Planigale maculata</i>        | rainforest, eucalypt forest, heathland, marshland, grassland or rocky areas                                                                                                                                                                                     | Yes – habitat present in study area   |

| Common name                                                                                 | Scientific name                                   | Feature                                             | Assessment of habitat feature                 |
|---------------------------------------------------------------------------------------------|---------------------------------------------------|-----------------------------------------------------|-----------------------------------------------|
| <b><i>Eucalyptus oblonga</i></b><br>(Narrow-leaved Stringybark)<br>population at Bateau Bay | <i>Eucalyptus oblonga</i> - endangered population | coastal sands of the Norah Head Soil Landscape      | No - not within the Norah Head Soil Landscape |
| <b><i>Caladenia porphyrea</i></b>                                                           | <i>Caladenia porphyrea</i>                        | Grows in coastal sclerophyll forest on sandy soils. | No - habitat not present                      |



## ATTACHMENT 2 – AMENDED LAYOUT FOOTPRINT

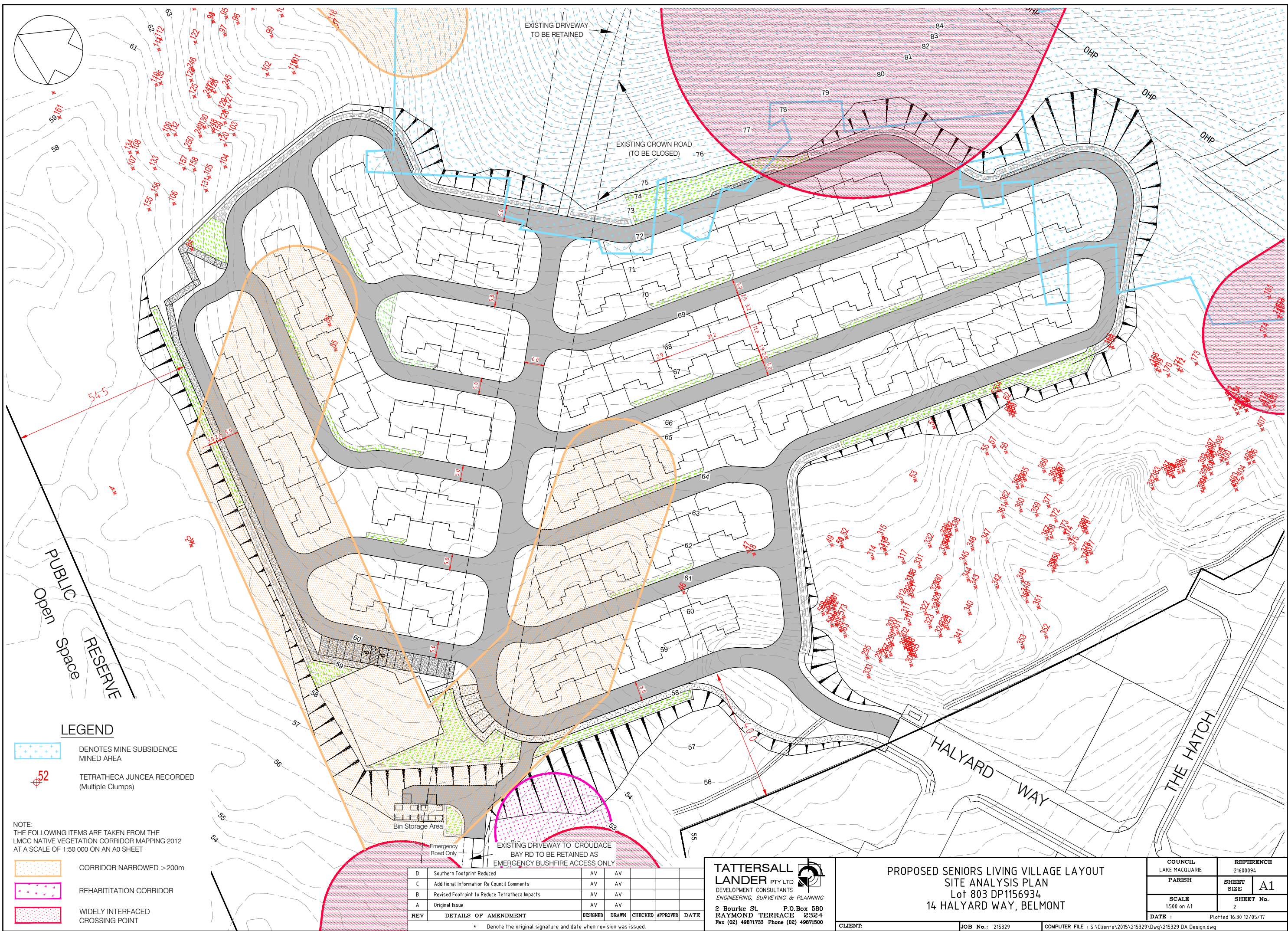
### **Discussion regarding the revised plan;**

As recommended by Biosis, the revised scheme reduces the eastern part of the development footprint to retain and provide for a larger corridor of retained higher quality bushland to the north east.

In addition to the ecological benefit, this revised scheme moves the development footprint out of the undermined areas. It also avoids the steeper parts of the site which reduces the amount of cut and fill and supports a prominent ecological corridor around the site.

This revised layout addresses Council's overall concerns and we now seek the time to re-establish the technical detail. We anticipate this can be undertaken relatively promptly. This is detailed in the timings sections below.





LEGEND

- DENOTES MINE SUBSIDENCE MINED AREA
- TETRATHECA JUNCEA RECORDED (Multiple Clumps)

NOTE:  
THE FOLLOWING ITEMS ARE TAKEN FROM THE  
LMCC NATIVE VEGETATION CORRIDOR MAPPING 2012  
AT A SCALE OF 1:50 000 ON AN A0 SHEET

- CORRIDOR NARROWED >200m
- REHABILITATION CORRIDOR
- WIDELY INTERFACED CROSSING POINT

|     |                                               |          |       |         |          |      |  |
|-----|-----------------------------------------------|----------|-------|---------|----------|------|--|
| D   | Southern Footprint Reduced                    | AV       | AV    |         |          |      |  |
| C   | Additional Information Re Council Comments    | AV       | AV    |         |          |      |  |
| B   | Revised Footprint to Reduce Tetraheca Impacts | AV       | AV    |         |          |      |  |
| A   | Original Issue                                | AV       | AV    |         |          |      |  |
| REV | DETAILS OF AMENDMENT                          | DESIGNED | DRAWN | CHECKED | APPROVED | DATE |  |

\* Denote the original signature and date when revision was issued.

**TATTERSALL  
LANDER** PTY LTD  
DEVELOPMENT CONSULTANTS  
ENGINEERING, SURVEYING & PLANNING  
2 Bourke St. P.O.Box 580  
RAYMOND TERRACE 2324  
Fax (02) 49871733 Phone (02) 49871500

PROPOSED SENIORS LIVING VILLAGE LAYOUT  
SITE ANALYSIS PLAN  
Lot 803 DP1156934  
14 HALYARD WAY, BELMONT

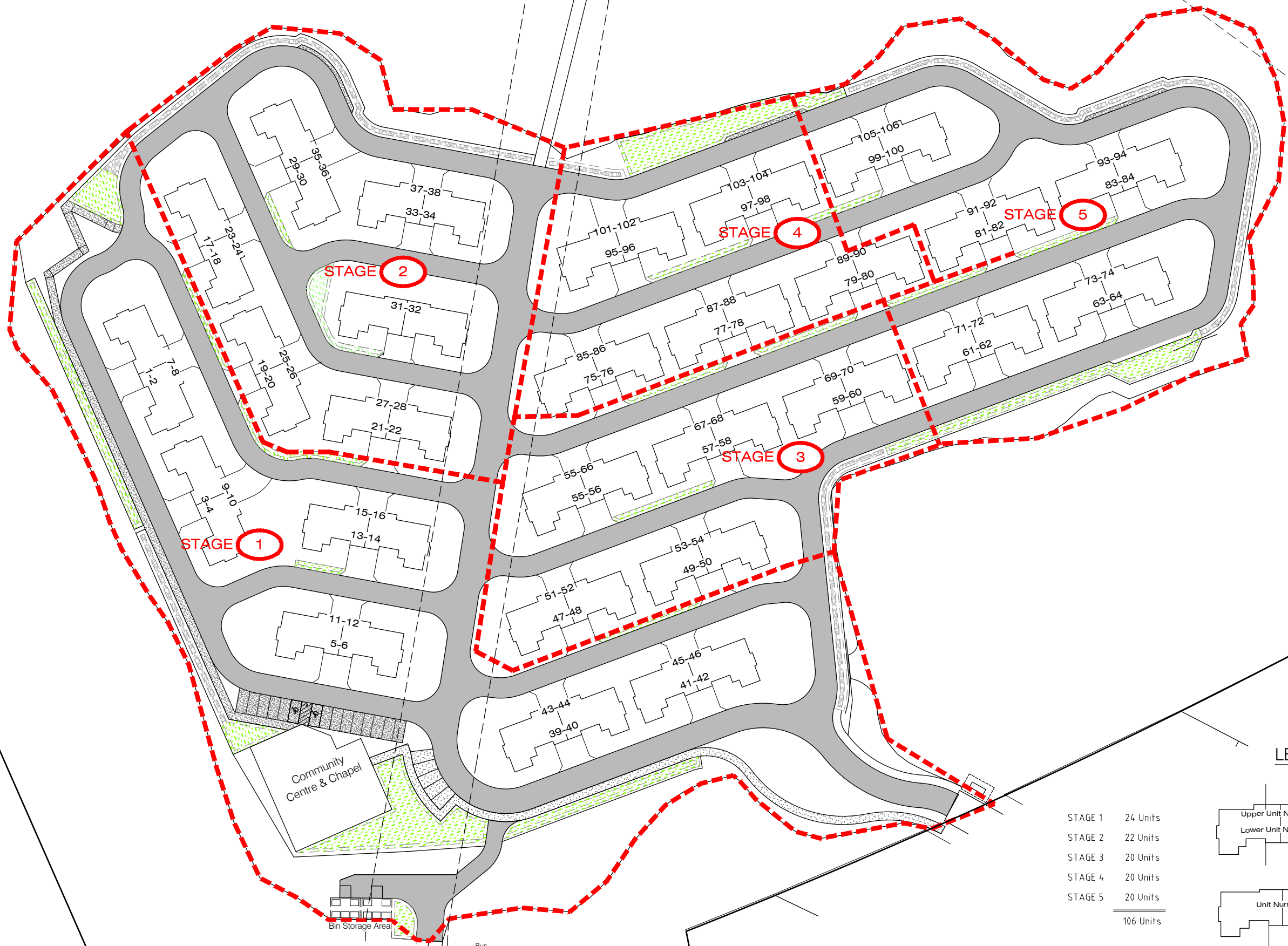
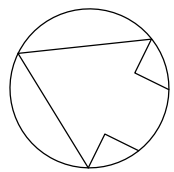
CLIENT:

JOB No.: 215329

COMPUTER FILE : S:\Clients\2015\215329\DWG\215329 DA Design.dwg

|                           |                       |
|---------------------------|-----------------------|
| COUNCIL<br>LAKE MACQUARIE | REFERENCE<br>21600094 |
| PARISH                    | SHEET<br>SIZE<br>A1   |
| SCALE<br>1500 on A1       | SHEET No.<br>2        |
| DATE :<br>16/30 12/05/17  |                       |

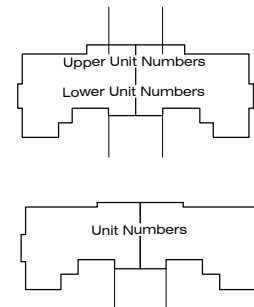




PUBLIC  
Open Space  
RESERVE  
DP 399984

LEGEND

- STAGE 1 24 Units
- STAGE 2 22 Units
- STAGE 3 20 Units
- STAGE 4 20 Units
- STAGE 5 20 Units
- 106 Units



TWO STOREY  
'QUAD-PLEX'  
29 buildings, 116 units

SINGLE STORY  
DUPLEX  
1 building, 2 units

|     |                                                |          |       |         |          |      |  |
|-----|------------------------------------------------|----------|-------|---------|----------|------|--|
| D   | Southern Footprint Reduced                     | AV       | AV    |         |          |      |  |
| C   | Additional Information Re Council Comments     | AV       | AV    |         |          |      |  |
| B   | Revised Footprint to Reduce Tetrahedra Impacts | AV       | AV    |         |          |      |  |
| A   | Original Issue                                 | AV       | AV    |         |          |      |  |
| REV | DETAILS OF AMENDMENT                           | DESIGNED | DRAWN | CHECKED | APPROVED | DATE |  |

\* Denote the original signature and date when revision was issued.

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2 Bourke St. P.O. Box 580  
RAYMOND TERRACE 2324  
Fax (02) 49871733 Phone (02) 49871500



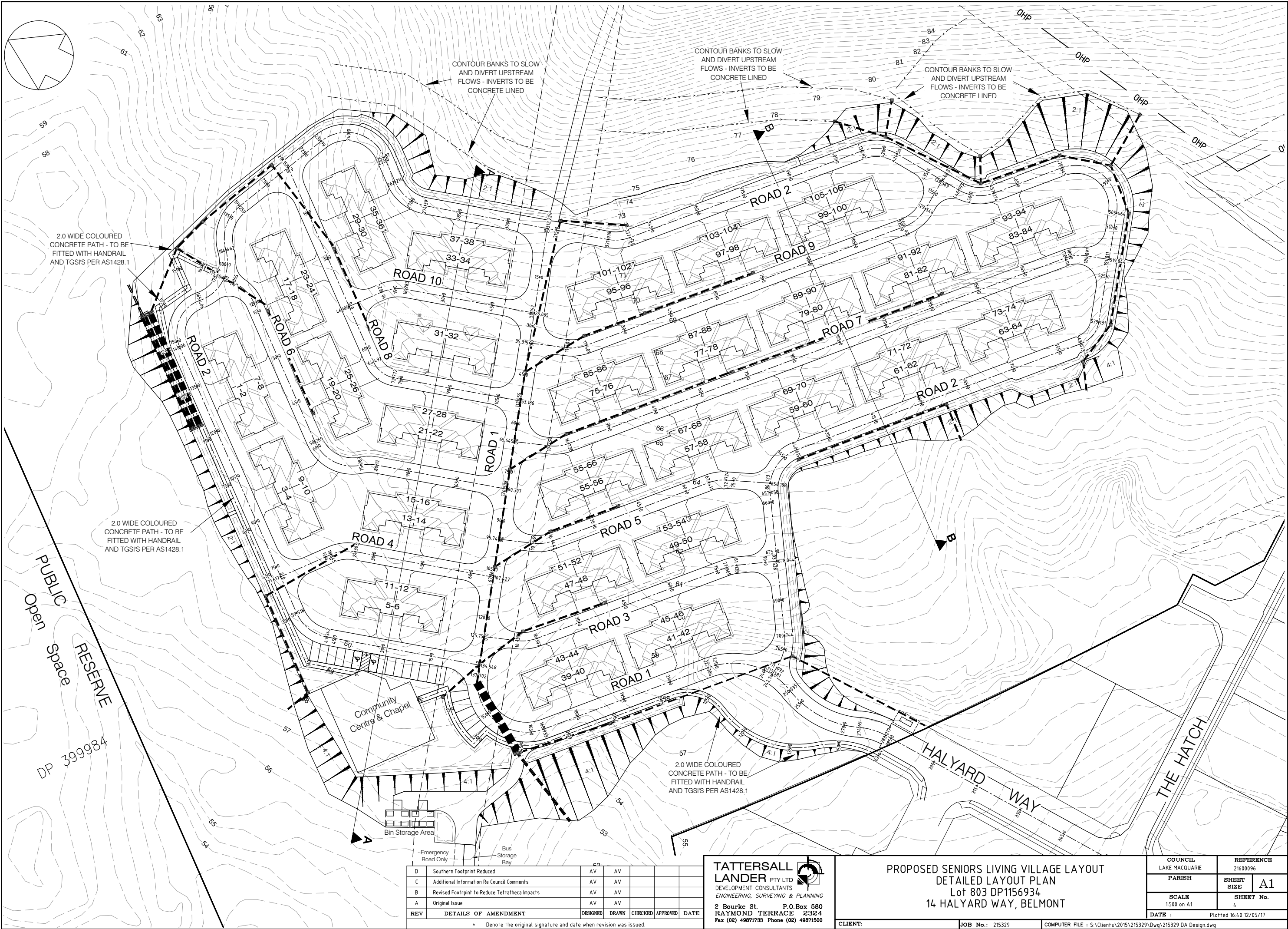
PROPOSED SENIORS LIVING VILLAGE STAGING PLAN  
STAGING PLAN  
Lot 803 DP1156934  
14 HALYARD WAY, BELMONT

CLIENT:

JOB No.: 215329

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|                           |                       |
|---------------------------|-----------------------|
| COUNCIL<br>LAKE MACQUARIE | REFERENCE<br>21600095 |
| PARISH                    | SHEET<br>SIZE<br>A1   |
| SCALE<br>1500 on A1       | SHEET No.<br>3        |
| DATE :<br>16/30 12/05/17  |                       |



|     |                                               |          |       |         |          |      |
|-----|-----------------------------------------------|----------|-------|---------|----------|------|
| D   | Southern Footprint Reduced                    | AV       | AV    |         |          |      |
| C   | Additional Information Re Council Comments    | AV       | AV    |         |          |      |
| B   | Revised Footprint to Reduce Tetraheca Impacts | AV       | AV    |         |          |      |
| A   | Original Issue                                | AV       | AV    |         |          |      |
| REV | DETAILS OF AMENDMENT                          | DESIGNED | DRAWN | CHECKED | APPROVED | DATE |

\* Denote the original signature and date when revision was issued.

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DEVELOPMENT CONSULTANTS  
ENGINEERING, SURVEYING & PLANNING  
2 Bourke St. P.O.Box 580  
RAYMOND TERRACE 2324  
Fax (02) 49871733 Phone (02) 49871500

PROPOSED SENIORS LIVING VILLAGE LAYOUT  
DETAILED LAYOUT PLAN  
Lot 803 DP1156934  
14 HALYARD WAY, BELMONT

CLIENT: JOB No.: 215329 COMPUTER FILE : S:\Clients\2015\215329\DWG\215329 DA Design.dwg

|         |                        |            |          |
|---------|------------------------|------------|----------|
| COUNCIL | LAKE MACQUARIE         | REFERENCE  | 21600096 |
| PARISH  |                        | SHEET SIZE | A1       |
| SCALE   | 1500 on A1             | SHEET No.  | 4        |
| DATE :  | Plotted 16/40 12/05/17 |            |          |

## ATTACHMENT 3 – DISCUSSION ON ZONE OBJECTIVES AND SOCIAL BENEFIT

### **Zone objectives**

As reported by Council, the entire property is located within a site that is covered by two land use zones, E2 - Environmental Conservation and E4 - Environmental Living. The overarching objectives of both land use zones are listed within the LEP are for Environmental Protection. The site is not however, identified as being protected for "biodiversity" on the LEP Terrestrial Biodiversity Maps within the LEP or "environmentally sensitive" land as detailed in clauses 7.5 and 7.20.

Seniors Housing is also a permissible land use in these zones permitted by Clause 7.12 of the LEP creating an in-principle support for the land use.

The LEP therefore clearly requires a balance between the ecological objectives of the zone against the social benefit to the community and the public interest.

As discussed in point 2, significant studies have been undertaken to advise on the most suitable location of the development to ensure the ecological impact is minimised. In fact the latest revised development footprint provides suitable connectivity for species, protection of specific flora species and locks away substantial areas of bushland that forms part of a larger bushland area for management in perpetuity which would meet the objectives of the zone.

The proposal provides low-impact residential development which has been adequately and strategically located within the greater site to ensure the proposal provides for opportunities to continue to maintain and enhance areas of ecological importance. Accordingly, the proposal complies with the relevant objectives of the E2 and E4 zone whilst providing social benefit.

### **Social Benefit**

This proposed land use holds tremendous community benefit, as it provides an opportunity for additional high quality seniors housing in a strategic area identified as having a shortfall of such housing. It is a land use that has been made permissible by the Council's LEP and the footprint is limited to a small area of the broader site to

allow the balance of the site to be returned and maintained for ecological management and overall public benefit.

A significant amount of work has been undertaken to ensure the environmental objectives are met as discussed in point 3 and in the attached revised and additional information.

The Council's report to the JRPP provides detailed discussions around environmental ecological objectives, but provides very little discussion having regard to the social benefits. These documents were provided with the application in support of the proposal, but in our opinion have not been given adequate consideration in the report to the JRPP.

John McNaughton of Palmer Bruyn correctly identifies that two Lake Macquarie City Council Reports dated October 2012 and April 2013 on Seniors Housing supply identify the shortfall in Belmont.

He reports:

The Report of October 2012 is entitled: "Seniors Housing Strategy" (SHS) and the Report of 2013 is entitled "Availability of Land for Seniors Housing in Lake Macquarie" (ALSH).

The first of the above report (SHS) notes at Page 21 that:

- *"Location – remaining in the same neighbourhood is more important than remaining in the same house. Social and support networks built up over time contribute greatly to the health and wellbeing of an older person. Access to transport, retail/commercial and health services are vitally important in maintaining independence."*

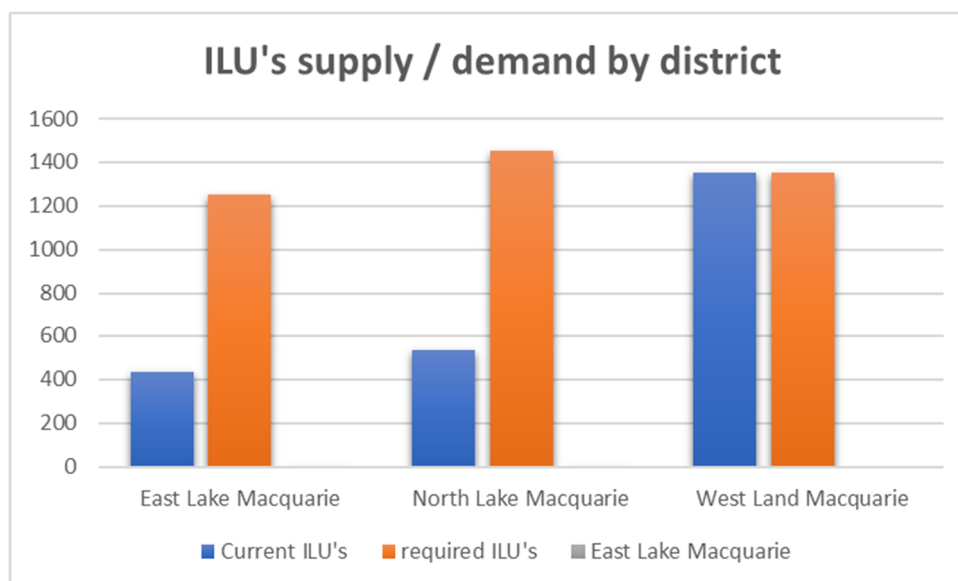
There are many other parts of this Report which supports the proposal which is being advanced by the land owner (WH Hudson Developments Pty Ltd), but, of particular relevance to this Development Application is the Table set out in Appendix 1 of this Report.

This Table is in Annexure 1 to Council's Report and the particular numbers of relevance are as follows:

The populations of the three divisions of the City of persons over 65 years of age and existing Independent Living Units (ILU's) are:

|                      | Population<br>(over 65 years of age) | ILU's |
|----------------------|--------------------------------------|-------|
| East Lake Macquarie  | 11,635                               | 432   |
| North Lake Macquarie | 11,941                               | 532   |
| West Land Macquarie  | 11,271                               | 1,355 |





You will note that the populations of each of the three areas are almost the same but only West Lake Macquarie has adequate (although, according to the Report, not an excess) supply of Independent Living Units.

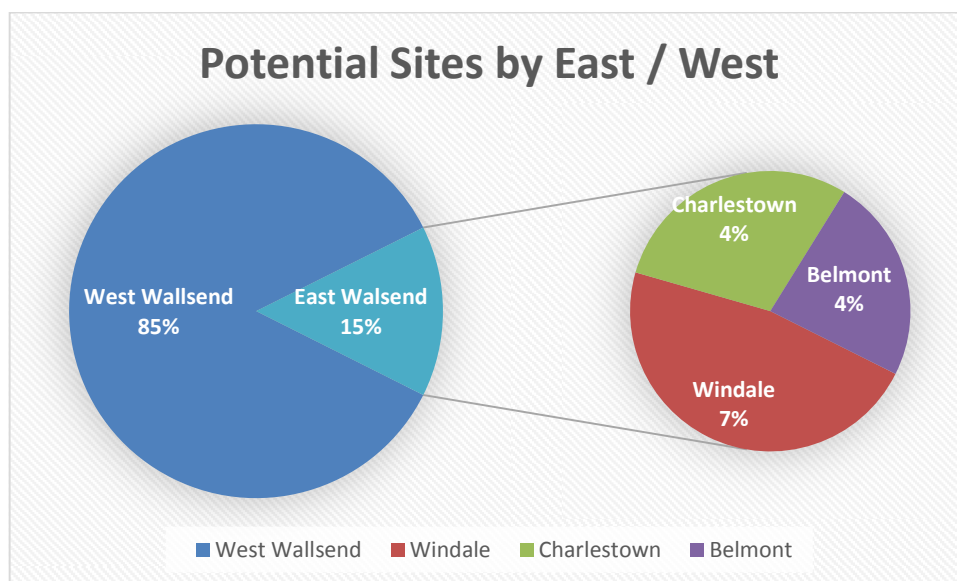
This Graph indicates that the shortage of Independent Living Units in East and North Lake Macquarie are 823 units and 923 units respectively.

This demonstrates that in the vicinity of the subject Development Application the population of the Eastern Area of Lake Macquarie require 923 more Independent Living Units, just to “catch up” on present requirements for this type of accommodations.

The present proposal cannot supply this total, but it can make a significant contribution.

The second Report (ALSH) shows the availability of sites across Lake Macquarie. This Report disclosed that there were 116 sites of more than 2 hectares, available in the City and the spacial distribution of these sites are, as shown in Table 3 of ALSH, namely:

|                  |    |
|------------------|----|
| Morrisset        | 56 |
| Glendale/Cardiff | 22 |
| Toronto          | 10 |
| West Wallsend    | 10 |
| Windale          | 8  |
| Charlestown      | 5  |
| Belmont          | 4  |



Note that only seventeen (17) sites are in East Lake Macquarie and only three (3) in Belmont, one of which is the subject land.

With the savings provisions in the LEP preventing the future consideration of this site, refusing this application means that the citizens of Belmont and surrounding suburbs will not have the opportunity to move to an Independent Living Unit to enjoy the benefits of these facilities in their retirement years.

This will obviously exacerbate the already huge deficiency in independent living units in the East Lake Macquarie section of the City.



ATTACHMENT 4 - SUBMISSION FROM TATTERSALL LANDER UNDERTAKING  
DETAILED RESPONSES TO EACH OF COUNCIL'S ORIGINAL MATTERS

12<sup>th</sup> April 2017

**OUR REF: 215329-L001006**  
**COUNCILS REF: DA 1443/2016**

The General Manager  
Lake Macquarie Council  
Box 1906  
Hunter Region Mail Centre 2310

**Attention: Andrew Leese**

Dear Andrew,

**RE: RETIREMENT VILLAGE LOT 803 IN DP 1156934, 14 HALYARD WAY,  
BELMONT – COUNCIL ISSUES No 1**

Further to the issues raised by Council on the 16<sup>th</sup> November 2016, the following responses are relevant:-

**1. Lake Macquarie LEP Clause 7.12**

City Plan Services submitted the updated slope analysis plan on the 28<sup>th</sup> November 2016 which demonstrated compliance with the required clause in the LEP. This plan was created utilising up to date LIDAR data and was ground truthed.

The advice to the JRPP appears to have not included this latest plan.

The revised building footprint now reduces the amount of work being undertaken which further reduces the footprint within slopes >20%.

The latest relevant slope analysis plan has yet to be prepared but will be part of the amended updated planset. Given that we had compliance already as indicated above, the reduction in the footprint will further extend these compliance requirements of the LEP clause.

**2. NSW Rural Fire Service (RFS)**

Matter previously addressed in correspondence forwarded on the 28<sup>th</sup> November 2016. No response has been received from Council as to any response from the RFS however on reviewing their 100B Authorisation on the Council website, which is merely a formalisation of the proposal consistent with the Application, compliance with their requirements is expected and will be fundamental with the commencement of the Village.

**DEVELOPMENT CONSULTANTS IN ENGINEERING, SURVEYING, PLANNING & ENVIRONMENTAL**



Tattersall Lander Pty Limited ABN 41 003 509 215  
2 Bourke Street, RAYMOND TERRACE 2324 **All mail to:** PO Box 580  
**Telephone:** (02) 4987 1500 **Fax:** (02) 4987 1733 **Email:** admin@tatland.com.au  
www.tatland.com.au

### **3. NSW Department of Industry - Lands**

The issues raised by DPI Lands have been addressed by an Application for Closure of Road. Please find attached relevant correspondence from DPI Lands indicating the process is well underway.

### **4. Mines Subsidence Board (MSB)**

Additional geotechnical investigations have been sought by the MSB and we are working with the MSB to confirm that compliance with their GTA's can be achieved. It is noted that the revised footprint now avoids some of the worst land affected by Mine Subsidence.

### **5. Ausgrid**

Whilst it is far too early in the development cycle to undertake a detailed electrical design it is acknowledged that an electrical kiosk will be needed to service the development. The proposed site for this kiosk is indicated on the amended layout plan with specific details to be provided as part of the revised planset.

### **6. Erosion and Sediment Control**

We are undertaking an amended Soil and Water Management Plan. In response to the numbered issues in Appendix A of the Council letter, the following clarifications are considered relevant and note that the details indicated below will be fully provided with the amended planset:-

1. Staging of earthworks – It is true that the application was not made for a staged development, due to additional administrative/planning requirements this would create. However, the application does state the works will be constructed in stages, and a staging plan has been provided. It is not proposed to undertake earthworks across the whole site at one time – this is because earthworks will involve cut and fill, including the extensive (and expensive) retaining wall construction. It is not financially feasible to undertake all retaining wall works upfront, and the cut/fill is not possible without also building the walls. Further, stages have generally been arranged from the bottom of the site to the top, which means there is no need for lead in roads, or services outside the stage currently under construction. Earthworks will be done generally in accordance with the submitted staging plan, which the ESCP has been prepared to reflect.
2. The LMCC assess the Mill Gully as particularly sensitive is now noted. Amendments to basins with respect to the amended layout are being undertaken.



3. Type D soils – Jute lining replaced with geofabric lining, geofabric lining also added to temporary diversion berms. Note added to concrete line inverts of permanent upstream diversions on DA design plans.
4. Flocculant – Not sure why this is a DA issue? Gypsum was nominated in the SWMP as the preferred flocculant (Page 14), applied per manufacturer's instructions. It is understood that this is commonly accepted by LMCC in sensitive catchments. Note now amended to state use of any other flocculant must first be approved by Council.
5. Note added to plan (Page 13).
6. Note added to plan (Page 13).
7. This is a dynamic situation during earthworks and drainage network construction that is considered impractical and unrealistic to define on a piece of paper. The basins are positioned in the natural drainage points for their catchments so water will naturally drain in these directions. Downstream sediment fences are shown to run slightly down the contour and will divert water at the extent of each stage towards the basins. The note *"Ensure all concentrated flows are appropriately tailed out or conveyed to the basins via a stabilised flow route"* was already included in each stages detailed Works Schedule instructions. The Site Inspection and Maintenance section also includes the instruction *"All sediment detention systems will be kept in good, working condition. In particular, attention will be given to recent works to ensure that they have not resulted in diversion of sediment laden water away from them"*. Additional note now added to general notes Page 13 - *"Drainage paths within each stage of works to be agreed onsite between the certifier, superintendent and contractor, and reviewed as necessary as the site evolves"*.
8. This is related to Point 1 above. Mulched windrows to be placed during Stage 0 – Clearing, when this area is not a 'no-go zone'. They will simply remain in the area which will then become off limits to construction activity in the subsequent stages, until the time that each stage is finally developed. They remain in these areas to assist with stabilising between the initial clearing, and ultimate construction of each stage. No change required.
9. This is again related to Point 1 above. Diversion banks are on the upstream edge of each stages proposed earthworks extents, and all upstream land will be undisturbed (apart from initial clearing works). No change required.
10. Note amended.
11. Notes used were generally taken direct from the Blue Book. Notes have now been replaced as requested.

## 7. Flora and Fauna

It is understood that Council has received a report that has been undertaken by Biosis that has effectively indicated that an alternative arrangement to the Council nominated *Species Impact Statement* is available and that under a Biobank arrangement, the site is generally capable of providing a satisfactory compromise to the ecological issues.

Recommendations by Biosis have been incorporated into the amended layout plan.

Reconsideration of Council's position is requested and movement forward on this matter would appear to be appropriate and logical.

## 8. Trees

As mentioned in (7) above, Biosis has undertaken a Biobank Assessment of the project and has quantified the ecological impacts with respect to the clearing operations within the actual site and then the expected impact within the Asset Protection Zones. The results of this Biobank Assessment does not appear to reach the same conclusions that Council are indicating in their issues letter. The Biobank Assessment concludes that habitat destruction would be manageable and quantifiable.

Any clearing undertaken with this development would be restricted to the minimal required to achieve the APZ requirements and tree retention was the fundamental basis and primary consideration of the structure of the APZ impacts.

Given the acknowledged extensive existing tree coverage, it is suggested that the nominated requirement to have individual trees marked and recorded on a plan at this stage of the Application is excessive and unnecessary. A more logical and practical approach has already been provided in the Wildthing report that would/could also be included in the Biobank Assessment for the retention of habitat trees and specimens that are structurally sound and robust with an understanding that linkages would be arranged to achieve an ecological outcome.

## 9. Traffic and Parking

***Traffic Generating Development and Road Design*** – Reference is made to the attached addendum undertaken by SECA Solutions who have investigated the impacts of the Spinnaker Ridge Way/ Croudace Bay Road intersection. Even allowing for 100% of the development traffic to utilise this intersection in peak periods, the intersection has a satisfactory level of performance. Any splitting of traffic for vehicles from the development and then travelling east towards the Pacific Highway will have a reduced impact on the Spinnaker Ridge Way/ Croudace Bay Road intersection over that which has been assessed.



The initial application did not mention a private bus service (as the application was not made under the SEPP), but this is now to be included in amended documentation. Plans have been updated to include a bus storage bay near the bin storage area.

It is not considered the Community Centre & Chapel is a standard 'place of worship' that will generate traffic movements from the local community. This is an all-purpose village community building that will be used for numerous internal activities, such as meetings, social activities, and religious services if the demand is there within the residents. Generally, the centre will be used exclusively by village residents, and local experience with similar developments is that most residents will walk/mobility scooter to the community centre. The private village bus will also be available for a shuttle service to scheduled community events and chapel services.

**Public Transport** – Addressed above.

**Vehicle Parking Provision** – Addressed above and it is considered that no additional parking around the community precinct will be required.

## 10. Landscaping

An appropriate landscape plan to adequately cater for the concerns of council is being prepared by Moir.

Council's concerns about cut/fill are noted and the revised scheme has reduced the building footprint in the steepest part of the site. The cut and fill is necessary to provide an accessible site and to minimise the overall development footprint. Elmore Glen Retirement Village is identical and has achieved excellent levels of landscaping and amenity.

The application site is not identified in the LMCC LEP 2014 as being a Sensitive Aboriginal Landscape, Environmentally Sensitive, within a foreshore location or terrestrial biodiversity.

Moir Architecture found that views to the site are limited and the proposal would be in keeping with the existing character of the residential area surrounding with the proposal likely to be viewed as an extension to the existing residential development of the area. The property is largely screened from surrounding properties due to topography, vegetation and local screening. Importantly, the development is not likely to be visible from Lake Macquarie.

The report notes that the greatest visual impact would be from the residential areas immediately adjoining to the south. Overall the report concludes that the development is likely to have a low visual impact on the existing surrounding environment in terms of landscape and scenic values. The recommendations of the report to further assist in reducing any visual impact have been implemented



in the design by retaining significant existing vegetation, ensuring the development does not exceed the ridge or tree line

## 11. Geotechnical

An additional geotechnical assessment has been undertaken and is very close to completion to advise of suitable construction techniques to ensure the site is suitable for the proposed development with regard to structural stability. The report author, Cardno Geotech Solutions, undertook a site analyses including a number of surface pits and sink wells to confirm the soil type and structure. A copy of this report will be made immediately that it is available.

Based upon the Tattersall Lander engineering drawings provided by the client and brief enquiries to the NSW Mine Subsidence board it is anticipated that the east and south east parts of the site are affected by abandoned mine workings and are likely to require investigation and remediation works. Further correspondence with the Mine Subsidence Board has been undertaken and will continue.

## 12. Cut and Fill

Minimising cut/fill outside the building footprint may be an admirable 'goal' for standard development, but rarely achievable in high density/high amenity facilities such as the current proposal. Overshadowing, amenity and drainage issues have all been carefully considered and addressed in the application.

In regard to the 2:1 batters, runoff from upstream catchments to be intercepted/diverted via contour drains (see Sheet 4 of design plans). These have now been further expanded to the south around the largest cut batter and the details will be included in the amended planset.

### 13. Stormwater Management

In reference to the Catchment Plan in the Stormwater Management Report, Catchment C does discharge to 56C Spinnaker Ridge Way. It is unclear why Council does not support discharge onto this property as currently 1.98Ha already drains to this lot off the development site via a natural gully (is actually the '1st order stream' Council mentions in Point 19).

It is true that the contributing catchment is increased (up to 2.63Ha), but significant detention is also proposed in this catchment with large underground tanks and cross linked low flow to Catchment D (seen on Sheet 4 of Design Plans) that will actually reduce the peak discharge rates. All waters will also have been appropriately treated by the WSUD treatment train, so no detrimental impacts are expected.





## 16. Acoustics

## 17. Food Preparation

## 18. Contamination

A geotechnical investigation was undertaken by Cardno for the site to provide advice on ground conditions which has been submitted with the application. Whilst not focusing primarily on contaminated land, they identified in their investigations, multiple instances of dumping of household waste and building materials. Tattersall Lander further note in the Statement of Environmental Effects that the area has been previously logged for pit props in the past. The applicant and owner confirmed no known evidence of past contaminating activities as identified in Table 1 of the 'Managing Land Contamination



Guidelines' and a review of the recent history from aerial photographs confirm Cardno's findings. This report will be made available immediately that it is available.

As reported in the submitted Flora Assessment by Anne Clements, the site to the immediate north west is a disused rubbish tip and is now zoned Recreation in Council's LEP. A rubbish tip is included within Table 1 of the Guidelines, however, the extent of the tip boundary appears to have stopped at the site boundary. Geotechnical investigations by Cardno do not indicate that this tip extended into the site. Specifically, Cardno undertook 11 surface test pits and 5 shrink wells identifying some areas of shallow fill only in the centre of the site.

It is therefore concluded that the site is not likely to be contaminated other than areas of surface materials deposited by minor illegal dumping activities and the site can be made suitable for its intended purpose.

Nevertheless, a contamination report has been commissioned.

## **19. Natural Water Systems**

It is understood that City Plan Services has already provided plans and details to DPI Water, and resulting discussions have determined that DPI Water do not consider the drainage paths in question to be Watercourses under the Water Management Act and therefore Controlled Activity Approvals will not be required.

Claims by Council that the Application did not identify that the matter was integrated are incorrect and a copy of the Application page taken from the original Application is attached and it is noted that it differs from Council's website version that indicates that WMA is crossed out.

## **20. Crime Prevention**

A Crime Prevention Report has been commissioned.

## **21. Access**

The 'limited' extent of the internal footpaths is actually a deliberate design aspect, one that is a common feature in this sort of development – pedestrian access throughout the majority of the site is via the 'roads', which are designed as shareways. There is no need to separate pedestrians and vehicles in a private, low speed environment. In fact, the presence of pedestrians on the roadways helps to reinforce the low speed environment, increases interaction between residents and adds to the overall amenity of the village.

In relation to accessibility, the requirement under the SEPP is that *an* accessible pathway is provided, not that *every* pathway be accessible. As discussed and agreed at Pre-DA meetings with Council officers, providing optional non-accessible pathways is actually desirable and often sought out by residents as

part of their exercise regime. Furthermore, on this site (where the proportion of the site <10% slope is only 30%) the SEPP only requires 50% of the dwellings have a continuous accessible path of travel. The proposed development achieves 100%, albeit not always the most direct path.

The submitted plans already show an accessible footpath to the front of the development, linking to the existing footpath on the adjacent public road. This arrangement will continued to apply in the amended drawings.

## **22. Social Impacts**

It is confirmed that the community building will be for the purposes of the future residents only. An internal design is being provided.

As regards the additional information that is being sought:-

- a) The facility will be managed under the Retirement Villages Act 1999 and Retirement Villages Regulation 2009. The Title of the land will be accordingly endorsed.
- b) Matters relating to the management of the Village and a comprehensive package of available local services that will be made available and/or organised will be developed with the Village operators. It is expected that a not-for-profit organisation will run the Village and their usual comprehensive services portfolio will be installed into the Village. Proposed activities for the Community Centre and other multi use spaces will be the subject of a proactive operator. Matters relating to the maintenance of the whole Village footprint is to be a matter of Village Management.
- c) The Site Manager that would be appointed for this Village will be a matter for the expected not-for-profit organisation.
- d) Access to meals will be made to all residents and that will include home deliveries.
- e) Access to cleaning services will be made available to all residents.
- f) Access to personal medical alerts will be made available to all residents.
- g) Access to General Practitioners will be made available to all residents.
- h) A Village Bus will be provided with the first stage of the development. A realistic timetable to suit residents needs will be developed with residents.
- i) Welcome Packs will be provided and it is a usual practice of Village information that is provided by operators.
- j) The Welcome Pack will provide specific details of services that will be provided as well as the appropriate contact details for all Village services including community support and local medical and allied health professionals.
- k) An extensive activity program will be included in the Welcome Pack and Village Newsletters as required.
- l) The Welcome Pack will detail the respective activity programs. Community activities are an important building stone for the successful operation of



the Village and the proposed not-for-profit organisation is well versed in the development and running of the Village.

- m) The engagement of residents in the decision-making process for the provision of Village services will be part of the usual Village operations.
- n) It is expected that the residents will form both Village and outside contacts with relevant community organisations. Given the usual skill level of residents in these sorts of facilities, the resource base is extensive and is a valuable source of volunteer activity.
- o) Dialogue with both residents and the adjoining residential properties will be an ongoing activity and clear lines of communications will be established at the commencement of the Village.
- p) Emergency response intercoms will be installed in each dwelling. Management of the network will be provided by the not-for-profit organisation.

### 23. SEPP Housing for Seniors or People with a Disability 2004 (SEPP HSPD)

A compliance table has been prepared and attached to this advice.

**24. Local Cycle Path – FYI – noted.**

## 25. Issues raised by Neighbours

- a. **Why is vehicular access not provided off Croudace Bay Road** – The geometry of any intersection has to comply with relevant standards. It would not be possible to construct a safe intersection at the sites frontage with Croudace Bay Road - given the geometry (tight radius) of the existing road, Safe Intersection Sight Distance (as required by Austroads guides) would not be able to be achieved. The proposed access has been assessed for compliance with relevant standards and capacity and the current road system has been determined to provide the necessary proposed access requirements.
- b. **Water pressure is inadequate in the area to handle additional demand issues** – Comment has been discussed with HWC and they have advised that there are no service issues with the current existing residents. HWC will require that the development undertake any additional servicing upgrades for the development and that should address any local perception that the current service levels are inadequate. The standard HWC Section 50 process will ensure proper assessment of any upgrades required to service the new development, and the required upgrades may also result in improvements to the existing customers.

HWC response to our enquiry is indicated below:

1) Existing Condition:

Water modelling suggests a node with low pressure ( $<20$  m) under peak day demand but the node is not part of customer connections. Water



*modelling suggests no existing customers with low pressure around the development.*

2) *Impact With the Development:*

*Water modelling suggests a small amount of existing customers on the South-East of the proposed development site will experience low pressure during peak day demand.*

*Under existing conditions, water modelling suggests there are no customers receiving low pressure from surrounding properties. **However, the water servicing strategy should incorporate neighbouring properties and any potential future surrounding developments for the impact of proposed development on the water system.** If the solution to providing adequate pressure above RL 58m AHD is booster pumps, the strategy should also look at how pressure on existing properties may be affected by the use of booster pumps.*

**Ganesh Sharma**

*Engineer - Planning Support*

- c. **The proposal fails to satisfy the Lake Macquarie E2 and E4 Zone objectives** – The objectives of both zones are achieved by the proposed development.
- d. **Design and restrictive covenants in locality affect the size and design of dwellings. How will such a large number of identical buildings impact on the character of the area** - design and restrictive covenants are private restrictions that do not apply to the subject land. In saying this, the proposed development has high architectural merit, functionality and will be a superior aged care residential facility. The development in itself will be hidden from the general residential areas that surround the development but even if the development was able to be actively or passively viewed from adjoining residences or public areas it will present itself as neat, attractive and an example of high quality living.
- e. **Will felines/cats be prohibited from the development, as occurs in the surrounding localities** – matter yet to be discussed with Council but given that this development is a retirement village, a companion animal like a cat is considered relevant and the keeping of a cat can be managed by Village Management to ensure that containment rules will be enforced.
- f. **How will residents cross Croudace Bay Road and what public transport will they access** – Residents that are able to, will access Croudace Bay Road like any other adjoining resident. Access to the 318 bus route is on Spinnaker Ridge Way and will not need crossing of Croudace Bay Road. Additionally, village Management will be providing a private Village bus for the use of residents that have the need.

- g. How will construction traffic and dust etc be managed during any development of the site** - Both the construction activity and dust as well as a multitude of other issues will be addressed with a Construction Management Plan (CMP) at the time of the commencement of the development.
- h. How will dumped rubbish and any asbestos found on the site be removed** – Rubbish will be collected as per a Waste Management Plan. Asbestos will be handled as per the (CMP) or if required an Asbestos Management Plan.
- i. How will the development deal with any sink holes at the site generated by mine workings on the site** – All mine workings that are intercepted by the development will be rehabilitated.

**26. Height Variation and Joint Regional Planning Panel (JRPP) – FYI** – it is noted that Council has not provided any advice that either the Council or the JRPP has any issues with the requested variation to the LEP height controls. The variation to the height clause will allow the design of the up/down buildings to provide accessible paths to 100% of the dwellings and allow that a financially viable number of dwellings can be located within the village on the smallest possible footprint. Acceptance of the request for a height variation is essential to the progression of this proposal and an acknowledgement that by accepting the variation, the smallest footprint possible has been achieved.

Should you require any further information or have any questions, please do not hesitate to contact this office.

Kind regards

**TATTERSALL LANDER PTY LTD**



**Bob Lander**

**Director**

encl.

**SEPP Housing for Seniors or People with a Disability 2004 (SEPP HSPD)**

| Relevant Clause                                                                               | Sub- Clause(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Comments                                                                                                                                                                                |
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| <p><b>Clause 17 Development on land adjoining land zoned primarily for urban purposes</b></p> | <p><i>Subject to subclause (2),</i></p> <p>(1) <i>A consent authority must not consent to a development application made pursuant to this Chapter to carry out development on land that adjoins land zoned primarily for urban purposes unless the proposed development is for the purpose of any of the following:</i></p> <ul style="list-style-type: none"> <li><i>(a) a hostel,</i></li> <li><i>(b) a residential care facility,</i></li> <li><i>(c) serviced self-care housing.</i></li> </ul> <p>(2) <i>A consent authority must not consent to a development application made pursuant to this Chapter to carry out development for the purposes of serviced self-care housing on land that adjoins land zoned primarily for urban purposes unless the consent authority is satisfied that the housing will be provided:</i></p> <ul style="list-style-type: none"> <li><i>(a) for people with a disability, or</i></li> <li><i>(b) in combination with a residential care facility, or</i></li> </ul> | <p>The subject site adjoins land zoned for urban purpose, however, given this proposal and the existing village is a Retirement Village under the Act, the proposal is permissible.</p> |



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|                                                                        | (c) as a retirement village (within the meaning of the <a href="#">Retirement Villages Act 1999</a> ).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Clause 18 Restrictions on Occupation of Seniors Housing Allowed</b> | <p>(1) Development allowed by this Chapter may be carried out for the accommodation of the following only:</p> <ul style="list-style-type: none"> <li>(a) seniors or people who have a disability,</li> <li>(b) people who live within the same household with seniors or people who have a disability,</li> <li>(c) staff employed to assist in the administration of and provision of services to housing provided under this Policy.</li> </ul> <p>(2) A consent authority must not consent to a development application made pursuant to this Chapter unless:</p> <ul style="list-style-type: none"> <li>(a) a condition is imposed by the consent authority to the effect that only the kinds of people referred to in subclause (1) may occupy any accommodation to which the application relates, and</li> </ul> | <p>The proposed Retirement Village is to be utilised by seniors, people with a disability, people living within the same household as either seniors and/or person(s) with a disability, or staff employed to administer the provision of this housing. Relevant restrictions shall be put in place via the relevant instrument under the Conveyancing Act 1919.</p> |

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|                                                  | <p>(b) <i>the consent authority is satisfied that a restriction as to user will be registered against the title of the property on which development is to be carried out, in accordance with section 88E of the <a href="#">Conveyancing Act 1919</a>, limiting the use of any accommodation to which the application relates to the kinds of people referred to in subclause (1).</i></p> <p>(3) <i>Subclause (2) does not limit the kinds of conditions that may be imposed on a development consent, or allow conditions to be imposed on a development consent otherwise than in accordance with the Act.</i></p> |                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Clause 24 Site Compatibility Certificates</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <p>The site is recognised as being compatible for this use under the LEP and therefore a site compatibility certificate is not required as per subclause (1A), which states <i>"this clause does not apply to a development application made pursuant to this Chapter in respect of development for the purposes of seniors housing if the proposed development is permissible with consent on the land</i></p> |

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|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <i>concerned under the zoning of another environmental planning instrument"</i>                                                                                                                                                                                                                                                                                                           |
| <b>Clause 26 Location and Access to Facilities</b> | <p>1) A consent authority must not consent to a development application made pursuant to this Chapter unless the consent authority is satisfied, by written evidence, that residents of the proposed development will have access that complies with subclause (2) to:</p> <ul style="list-style-type: none"> <li>(a) shops, bank service providers and other retail and commercial services that residents may reasonably require, and</li> <li>(b) community services and recreation facilities, and</li> <li>(c) the practise of a general medical practitioner.</li> </ul> | Residents of the Retirement Village shall have access to shops, banks, community services and recreational facilities, and general medical practitioners. These services are available at the Belmont Shopping Centre (3.4 kilometres via the existing road network).                                                                                                                     |
|                                                    | <p>2) Access complies with this clause if:</p> <ul style="list-style-type: none"> <li>(a) The facilities and services referred to in subclause (1) are located at a distance of not more than 400 metres from the site of the proposed development that is a distance accessible by means of a suitable access pathway and the overall average gradient for the pathway is no more than 1:14, although the following gradients along the pathway are also acceptable:</li> </ul>                                                                                               | A sheltered bus stop shall be constructed, along with a suitable access path to comply with this requirement. The cost of this bus stop shall be borne by the developer and it is anticipated that the exact location shall be determined following communications with and direction from Lake Macquarie Council. This bus stop shall also benefit existing residents in the local area. |

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|  | <ul style="list-style-type: none"> <li>(i) a gradient of no more than 1:12 for slopes for a maximum of 15 metres at a time,</li> <li>(ii) a gradient of no more than 1:10 for a maximum length of 5 metres at a time,</li> <li>(iii) a gradient of no more than 1:8 for a distance of no more than 1.5 metres at a time, or</li> </ul> <p>(c) In the case of a proposed development on land in a local government area that is not within the Sydney Statistical Division-there is a transport service available to the residents who will occupy the proposed development:</p> <ul style="list-style-type: none"> <li>(i) that is located at a distance that is not more than 400 metres from the site of the proposed development and the distance is accessible by means of a suitable access pathway, and</li> <li>(ii) that will take those residents to a place that is located at a distance of not more than 400 metres from the facilities and services referred to in subclause (1), and</li> <li>(iii) that is available both to and from the proposed development during daylight</li> </ul> |  |
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|  | <p>hours at least once each day from Monday to Friday (both days inclusive), and the gradient along the pathway from the site to the public transport services (and from the transport services to the facilities and services referred to in subclause (1)) complies with subclause (3).</p>                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                        |
|  | <p>(3) For the purpose of subclause (2) (b) and (c), the overall average gradient along a pathway from the site of the proposed development to the public transport services (and from the transport services to the facilities and services referred to in subclause (1)) is to be no more than 1:14, although the following gradients are also acceptable:</p> <ul style="list-style-type: none"> <li>(i) a gradient of no more than 1:12 for slopes for a maximum of 15 metres at a time,</li> <li>(ii) a gradient of no more than 1:10 for a maximum length of 5 metres at a time,</li> <li>(iii) a gradient of no more than 1:8 for a distance of no more than 1.5 metres at a time.</li> </ul> | <p>The gradient along the pathway from the development to the public transport shall be in accordance with the above stated.</p>                       |
|  | <p>(4) For the purpose of subclause (2):</p> <p>(a) a "suitable access pathway" is a path of travel by means of a</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <p>The suitable access pathway shall be a concrete pathway which shall be constructed to a suitable and safe standard to allow for wheelchair use,</p> |

|                                       |                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                               |
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|                                       | <p><i>sealed footpath or other similar and safe means that is suitable for access by means of an electric wheelchair, motorised cart or the like, and</i></p> <p><i>(b) distances that are specified for the purposes of that subclause are to be measured by reference to the length of any such pathway</i></p> | motorised carts, and pedestrians.                                                                                                                                                                                                                                                                                             |
| <b>Clause 27 Bush Fire Prone Land</b> |                                                                                                                                                                                                                                                                                                                   | Given that this site is identified as being Bushfire Prone on the Lake Macquarie bush fire prone land map, a separate bush fire assessment has been prepared for this development. In summary, this report identifies that the proposal should be considered acceptable from a planning for bush fire protection perspective. |
| <b>Clause 28 Water and Sewer</b>      |                                                                                                                                                                                                                                                                                                                   | Sewer and water are both connected to the site and each of the proposed dwellings shall be connected to the relevant reticulated system. The relevant plans have been stamped by Hunter Water Corporation prior to DA lodgement.                                                                                              |
| <b>Clause 30 Site Analysis</b>        |                                                                                                                                                                                                                                                                                                                   | <p>3) (a) <i>Site dimension</i> – Refer previously submitted Site Plan</p> <p>(b) <i>Topography</i> – Refer previously submitted Site Plan</p> <p>(c) <i>Services</i> – All services shall be made available to the site as part of the development.</p>                                                                      |

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|  |  | <p>(d) <i>Existing vegetation</i> – the relevant existing native vegetation on the site has been identified on the plan at included in the ecological reports; this plan identifies which parts of this vegetation cover are to be removed in order for the development to proceed.</p> <p>(e) <i>Micro climates</i> – The site is subject to the predominant cooling north easterly breezes in the summer months. Winter brings westerly winds.</p> <p>(f) <i>Location of:</i></p> <p><i>Buildings and other structures</i> – the previously submitted plans clearly show the location of all buildings and structures on the site.</p> <p><i>Heritage features and items including archaeology</i> – there are no heritage (including archaeological) features or items relevant to the site.</p> <p><i>Fences</i> – there will be fencing around the proposed dwellings and this fencing is to be 1500 high colorbond</p> <p><i>Property boundaries</i> – property boundaries are clearly identified on the Site Plan.</p> <p><i>Pedestrian and vehicular access</i> – Pedestrian access to the site is currently off Croudace Bay Road,</p> |
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|  |  | <p>but shall be off Halyard Way post development. The proposal includes an internal road network and a series of pedestrian pathways and all of this relevant detail has been included on the submitted plans.</p> <p>(g) <i>Views to and from the site</i> – the site is visible from Croudace Bay Road and also Halyard Way and some adjoining properties. Views from the site shall overlook Croudace Bay Road and the adjacent residential subdivision. It is firmly considered that the proposal shall not have a detrimental impact upon views in the location.</p> <p>(h) <i>Overshadowing by neighbouring structures</i> – there is adequate separation distance with the site between the proposed villas to ensure there is no significant overshadowing resulting from the proposal. There shall be no overshadowing from or to neighbouring residential dwellings in the adjacent subdivision.</p> <p>4) (a) <i>Neighbouring buildings:</i><br/> <i>Location</i> – The site has a residential subdivision located</p> |
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|  |  | <p>adjacent to the general southern direction.</p> <p><i>Height</i> – The height of the buildings on the adjacent properties has not been measured as they are approved structures and therefore it may be assumed that they are compliant with the requirements of the LEP and DCP.</p> <p><i>Use</i> – Refer above.</p> <p><i>Balconies on adjacent properties</i> – There are balconies on some of the adjacent properties, however, it is considered that they are sufficiently distant from the proposal such that they shall not impact upon, nor be impacted upon by the proposal.</p> <p><i>Pedestrian and vehicular access to adjacent properties</i> – Access to adjacent properties shall not be affected by or otherwise impacted upon by the proposal.</p> <p><i>(b) Privacy:</i></p> <p><i>Adjoining private open spaces</i> – each of the proposed villas will have their own private outdoor space and the design of this is in line with the villas and their open space already approved and constructed.</p> <p><i>Living room windows overlooking site</i> – the living room windows will</p> |
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|  |  | <p>overlook the site to a degree, allowing for passive surveillance of the site whilst maximising views and maximum privacy.</p> <p><i>Location of any facing doors and/or windows</i> – the design of the villas and the proposed layout is such that there will not be any issue with regard to facing doors or windows.</p> <p>(c) <i>Walls built to the site's boundary</i> – There are no walls which are proposed to be built in close proximity to the site's boundary.</p> <p>(d) <i>Difference in levels between the site and adjacent properties at their boundaries</i> – given the location of the proposed works, there are no changes in levels proposed at the site boundary.</p> <p>(e) <i>Views and solar access enjoyed by neighbouring properties</i> – the proposal is situated such that there will be no impingement upon either views or solar access of neighbouring properties.</p> <p>(f) <i>Major trees on adjacent properties</i> – the proposal shall not in any way impact upon trees on adjacent properties.</p> <p>(g) <i>Street frontage features</i> – The proposed Retirement Village, shall effectively be set back from the</p> |
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|  |  | <p>street and therefore it may be stated that the proposal will not have any impact upon street frontage features.</p> <p>(h) <i>The built form and character of adjacent development</i> – the proposal will not impact upon the built form or character of adjacent development.</p> <p>(i) <i>Direction and distance to local facilities:</i></p> <p><i>Local shops</i> – As previously stated, the local shopping centre (Belmont) is located 3.3 kilometres away. Additionally, there is a BP service station which is located approximately 1.4 kilometres away at Valentine.</p> <p><i>Schools</i> – there are several schools in the vicinity, with the nearest being located approximately 1.2 kilometres away at Valentine.</p> <p><i>Public transport</i> – Due to the isolation of the proposed development to the public transport system a private bus will be made available to the Village by Village Management.</p> <p><i>Recreation and community facilities</i> Recreation and community facilities are to be located on the site as part of the development. It is also noted that</p> |
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|  |  | <p>there are many community facilities, such as Bowling clubs, swimming pools etc located throughout Valentine and Belmont and the general area.</p> <p>(k) <i>Public open space</i> – the overall development allows for significant Public Open Space within the site and this is considered adequate. The area considered as being most appropriate is the general area adjoining the Village and within the APZ areas.</p> <p>(l) <i>Adjoining bushland or environmentally sensitive land</i> – there is bushland within and adjoining this site and this has been addressed in the ecological reports as submitted with the original application.</p> <p>(m) <i>Sources of nuisance</i> – there are no sources of nuisance relevant to this proposed development.</p> <p>(n) <i>Adjoining land uses and activities</i> – as mentioned above, the adjoining land is predominantly residential. There is also an old tip adjoining the site and large lifestyle lots to the general north (some of which are developed and some which are not).</p> |
|  |  | <p>The previously submitted plans provide an indication of the amenity and</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |



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| <b>Clause 33 Neighbourhood Amenity and Streetscape</b> |  | streetscape within the village. It is considered that this amenity and streetscape will be consistent with the amenity and streetscape within the adjacent subdivision.                                                                                                                                                                                                                                                                       |
| <b>Clause 34 Visual and Acoustic Privacy</b>           |  | This is a continuation from the previous stages of the development. Significant care has been taken with the design of this proposal and specifically with the internal design of each dwelling and the external location of private open spaces. The proposed dwellings shall have a high quality amenity and individual privacy (visual and acoustic) arrangements such that it is considered that there are no relevant issues of concern. |
| <b>Clause 35 Solar Access and Design for Climate</b>   |  | Basix certification is to be provided prior to construction and this shall ensure there is adequate solar access and consideration of the local climate in the design and locating of all dwellings.                                                                                                                                                                                                                                          |
| <b>Clause 36 Stormwater</b>                            |  | Stormwater shall be disposed of as per the previously submitted stormwater drainage plans. These plans propose various measures to slow and treat stormwater and minimise runoff, and these measures include on-site detention.                                                                                                                                                                                                               |
| <b>Clause 37 Crime Prevention</b>                      |  | A Crime Prevention Through Environmental Design (CPTED) report has been prepared and submitted with the original application to address this clause. In summary of this report, measures to help ensure crime                                                                                                                                                                                                                                 |

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|                                                                            |  | prevention are to include maintenance of clear sightlines within the village, adequate lighting, appropriate landscaping, fencing, security doors and appropriate high quality locks for all doors and windows.                                                                                                                                                                                                                                                                                                                                                               |
| <b>Clause 38 Accessibility</b>                                             |  | <p>There is adequate and safe access throughout the site via a series of pathways, as well as private road ways which are designed in such a way to ensure safe interaction with pedestrians. Internally, all dwellings shall be BCA compliant. A disability access report was submitted with the original application and this further demonstrates accessibility compliance.</p> <p>As regards accessibility throughout the site, the relevant details indicating compliance are included in the detailed engineering plans titled Roads, Drainage and Associated Works</p> |
| <b>Clause 39 Waste Management</b>                                          |  | The proposed development will be provided with waste and recycle bins to ensure compliance in this regard. The Village Management is to undertake regular waste collections with the waste then being stored in large waste bins for collection by a waste contractor. Details of waste bin locations have been included on the plans for assessment.                                                                                                                                                                                                                         |
| <b>Clause 40 Development Standards – Minimum Sizes and Building Height</b> |  | The proposal is compliant with the minimum site area of 1000 square metres.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

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|                                                                                                                    |  | <p>The proposal is compliant with the minimum 20 metre frontage as measured at the building line. The proposal is not located in a residential zone and therefore the height restriction under this clause does not apply.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <p><b>Clause 50 (Standards that cannot be used to refuse development consent for self-contained dwellings)</b></p> |  | <p>(a) <i>Building Height</i> – the issue of building height is not relevant as the site is not zoned residential. It is noted that no buildings are to exceed 2 storeys.</p> <p>(b) <i>Density and Scale</i> – the proposal will not result in a development with a FSR of 0.5:1 or greater.</p> <p>(c) <i>Landscaped areas</i> – the overall landscaping of the site will exceed the 30% requirement when including the native bush land area to remain within the site.</p> <p>(d) <i>Deep soil zones</i> – there are significant deep soil zones within and surrounding the site such that the deep soil zones shall significantly exceed the minimum 15% requirement.</p> <p>(e) <i>Solar access</i> – the solar access for at least 70% of the dwellings is such that the relevant areas will receive at least 3 hours of direct sunlight between 9am and 3pm in mid winter.</p> |

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|                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <p>(f) <i>Private open space for in-fill self-care housing</i> – the requirements of private open space have been met, for both ground floor and first storey units.</p> <p>(g) <i>Repealed.</i></p> <p>(h) <i>Parking</i> – The overall parking will comply with the basic standard required by the SEPP (ie in excess of 0.5 car parks per bedroom).</p> |
| <b>Schedule 3 Standards concerning accessibility and useability for hostels and self-contained dwellings (of the SEPP).</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                            |
| <b>Siting Standards</b>                                                                                                     | <p>(1) Wheelchair access. If the whole of the site has a gradient of less than 1:10, 100% of the dwellings must have wheelchair access by a continuous accessible path of travel (within the meaning of AS 1428.1) to an adjoining public road.</p> <p>(2) If the whole of the site does not have a gradient of less than 1:10:</p> <p>(a) the percentage of dwellings that must have wheelchair access must equal the proportion of the site that has a gradient of</p> | <p>The disability access report as submitted with the original application demonstrates compliance with this standard.</p>                                                                                                                                                                                                                                 |

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|  | <p>less than 1:10, or 50%, whichever is the greater, and</p> <p>(b) the wheelchair access provided must be by a continuous accessible path of travel (within the meaning of AS 1428.1) to an adjoining public road or an internal road or a driveway that is accessible to all residents.</p> <p>Note.<br/>For example, if 70% of the site has a gradient of less than 1:10, then 70% of the dwellings must have wheelchair access as required by this subclause. If more than 50% of the site has a gradient greater than 1:10, development for the purposes of seniors housing is likely to be unable to meet these requirements.</p> <p>(3) Common areas Access must be provided in accordance with AS 1428.1 so that a person using a wheelchair can use common areas and</p> |  |
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|                                  | common facilities associated with the development.                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                               |
| <b>Security</b>                  | <p>Pathway lighting:</p> <p>(a) must be designed and located so as to avoid glare for pedestrians and adjacent dwellings, and</p> <p>(b) must provide at least 20 lux at ground level.</p>                                                                                                                                                                                                                                                                       | Lighting shall be installed appropriately throughout the development to ensure compliance with this standard. |
| <b>Letterboxes</b>               | <p>Letterboxes:</p> <p>(a) must be situated on a hard standing area and have wheelchair access and circulation by a continuous accessible path of travel (within the meaning of AS 1428.1), and</p> <p>(b) must be lockable, and</p> <p>(c) must be located together in a central location adjacent to the street entry or, in the case of self-contained dwellings, must be located together in one or more central locations adjacent to the street entry.</p> | The location and design of letterboxes shall be compliant with this clause                                    |
| <b>Private car accommodation</b> | <p>If car parking (not being car parking for employees) is provided:</p> <p>(a) car parking spaces must comply with the requirements for parking for persons with a disability set out in AS 2890, and</p>                                                                                                                                                                                                                                                       | All garages shall be 3.8 metres in width and fitted with a power-operated door.                               |

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|                          | <p>(b) 5% of the total number of car parking spaces (or at least one space if there are fewer than 20 spaces) must be designed to enable the width of the spaces to be increased to 3.8 metres, and</p> <p>(c) any garage must have a power-operated door, or there must be a power point and an area for motor or control rods to enable a power-operated door to be installed at a later date.</p> |                                                                    |
| <b>Accessible Entry</b>  | Every entry (whether a front entry or not) to a dwelling, not being an entry for employees, must comply with clauses 4.3.1 and 4.3.2 of AS 4299.                                                                                                                                                                                                                                                     | The accessibility report demonstrates compliance with this clause. |
| <b>Interior: General</b> | <p>(1) Internal doorways must have a minimum clear opening that complies with AS 1428.1.</p> <p>(2) Internal corridors must have a minimum unobstructed width of 1,000 millimetres.</p> <p>(3) Circulation space at approaches to internal doorways must comply with AS 1428.1.</p>                                                                                                                  | The internal arrangements comply with this clause.                 |
| <b>Bedroom</b>           | <p>At least one bedroom within each dwelling must have:</p> <p>(a) an area sufficient to accommodate a wardrobe and a bed sized as follows:</p>                                                                                                                                                                                                                                                      | The bedrooms as proposed comply with this clause.                  |

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|                 | <ul style="list-style-type: none"> <li>(i) in the case of a dwelling in a hostel—a single-size bed,</li> <li>(ii) in the case of a self-contained dwelling—a queen-size bed, and</li> <li>(b) a clear area for the bed of at least: <ul style="list-style-type: none"> <li>(i) 1,200 millimetres wide at the foot of the bed, and</li> <li>(ii) 1,000 millimetres wide beside the bed between it and the wall, wardrobe or any other obstruction, and</li> </ul> </li> <li>(c) 2 double general power outlets on the wall where the head of the bed is likely to be, and</li> <li>(d) at least one general power outlet on the wall opposite the wall where the head of the bed is likely to be, and</li> <li>(e) a telephone outlet next to the bed on the side closest to the door and a general power outlet beside the telephone outlet, and</li> <li>(f) wiring to allow a potential illumination level of at least 300 lux.</li> </ul> |                                                    |
| <b>Bathroom</b> | (1) At least one bathroom within a dwelling must be on the ground (or main) floor and                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | All bathrooms as proposed comply with this clause. |

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|  | <p>have the following facilities arranged within an area that provides for circulation space for sanitary facilities in accordance with AS 1428.1:</p> <ul style="list-style-type: none"> <li>(a) a slip-resistant floor surface,</li> <li>(b) a washbasin with plumbing that would allow, either immediately or in the future, clearances that comply with AS 1428.1,</li> <li>(c) a shower that complies with AS 1428.1, except that the following must be accommodated either immediately or in the future: <ul style="list-style-type: none"> <li>(i) a grab rail,</li> <li>(ii) portable shower head,</li> <li>(iii) folding seat,</li> </ul> </li> <li>(d) a wall cabinet that is sufficiently illuminated to be able to read the labels of items stored in it,</li> <li>(e) a double general power outlet beside the mirror.</li> </ul> <p>(2) Subclause (1) (c) does not prevent the installation of a shower screen that can easily</p> |  |
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|                                              | be removed to facilitate future accessibility.                                                                                                                           |                                                                            |
| <b>Toilet</b>                                | A dwelling must have at least one toilet on the ground (or main) floor and be a visitable toilet that complies with the requirements for sanitary facilities of AS 4299. | All toilets as proposed comply with this clause.                           |
| <b>Surface Finishes</b>                      | Balconies and external paved areas must have slip-resistant surfaces.<br>Note. Advice regarding finishes may be obtained from AS 1428.1.                                 | All balconies and external paved areas are to have slip resistant surfaces |
| <b>Door Hardware</b>                         | Door handles and hardware for all doors (including entry doors and other external doors) must be provided in accordance with AS 4299.                                    | All door hardware shall be compliant with this clause.                     |
| <b>Ancillary Items</b>                       | Switches and power points must be provided in accordance with AS 4299. Part 2 Additional standards for self-contained dwellings.                                         | All switches and power points shall be compliant with this clause.         |
| <b>Application of Standards in this Part</b> | The standards set out in this Part apply in addition to the standards set out in Part 1 to any seniors housing consisting of self-contained dwellings                    | Noted.                                                                     |
| <b>Living Room and Dining Room</b>           | (1) A living room in a self-contained dwelling must have:<br>(a) a circulation space in accordance with clause 4.7.1 of AS 4299, and                                     | The proposal is compliant in this regard.                                  |



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|                | <p>(b) a telephone adjacent to a general power outlet.</p> <p>(2) A living room and dining room must have wiring to allow a potential illumination level of at least 300 lux.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                      |
| <b>Kitchen</b> | <p>A kitchen in a self-contained dwelling must have:</p> <ul style="list-style-type: none"> <li>(a) a circulation space in accordance with clause 4.5.2 of AS 4299, and</li> <li>(b) a circulation space at door approaches that complies with AS 1428.1, and</li> <li>(c) the following fittings in accordance with the relevant subclauses of clause 4.5 of AS 4299: <ul style="list-style-type: none"> <li>(i) benches that include at least one work surface at least 800 millimetres in length that comply with clause 4.5.5 (a),</li> <li>(ii) a tap set (see clause 4.5.6),</li> <li>(iii) cooktops (see clause 4.5.7), except that an isolating switch must be included,</li> <li>(iv) an oven (see clause 4.5.8), and</li> </ul> </li> <li>(d) "D" pull cupboard handles that are located towards the</li> </ul> | <p>All kitchens as proposed shall be compliant with this clause.</p> |

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|                                                             | <p>top of below-bench cupboards and towards the bottom of overhead cupboards, and</p> <p>(e) general power outlets:</p> <p>(i) at least one of which is a double general power outlet within 300 millimetres of the front of a work surface, and</p> <p>(ii) one of which is provided for a refrigerator in such a position as to be easily accessible after the refrigerator is installed.</p> |                                                                                                                        |
| <b>Access to Kitchen, Main Bedroom, Bathroom and Toilet</b> | In a multi-storey self-contained dwelling, the kitchen, main bedroom, bathroom and toilet must be located on the entry level.                                                                                                                                                                                                                                                                   | Whilst each building is two storey, each dwelling unit is in fact single storey and hence this clause is not relevant. |
| <b>Lifts in Multi-Storey Buildings</b>                      | In a multi-storey building containing separate self-contained dwellings on different storeys, lift access must be provided to dwellings above the ground level of the building by way of a lift complying with clause E3.6 of the Building Code of Australia.                                                                                                                                   | Each dwelling is accessible from ground level and hence this clause is not relevant.                                   |
| <b>Laundry</b>                                              | <p>A self-contained dwelling must have a laundry that has:</p> <p>(a) a circulation space at door approaches that complies with AS 1428.1, and</p> <p>(b) provision for the installation of an automatic washing machine</p>                                                                                                                                                                    | Each dwelling shall have a laundry which is compliant with this clause.                                                |

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|                          | <p>and a clothes dryer, and</p> <p>(c) a clear space in front of appliances of at least 1,300 mm</p> <p>(d) a slip-resistant floor surface,</p> <p>(e) an accessible path of travel to any clothes line provided in relation to the dwelling.</p> |                                                                                                                                                                                                                |
| <b>Storage for Linen</b> | A self-contained dwelling must be provided with a linen storage in accordance with clause 4.11.5 of AS 4299.                                                                                                                                      | Each dwelling shall have a linen storage area compliant with this clause                                                                                                                                       |
| <b>Garbage</b>           | A garbage storage area must be provided in an accessible location.                                                                                                                                                                                | Garbage storage is to be provided for each dwelling in an accessible location, and also for the village overall as a central collection point. Details of garbage storage are provided on the submitted plans. |

## INTEGRATED DEVELOPMENT

Section 91 EP&A Act 1979 - *This question only applies to Development Applications (DA).*

*Integrated development refers to proposals that require development consent (from the council) and approval from one or more State Government bodies. Please refer to Council's Guide to Integrated Development to determine if this question applies to your proposal.*

Is your application for integrated development?

☐ No.

☒ Yes. If yes, tick each approval below that applies to your application:

### **Fisheries Management Act 1994 – Department of Industry and Investment NSW (Fisheries)**

☐ s.144

☐ s.201

☐ s.205

☐ s.219

### **Heritage Act 1977 – Office of Environment and Heritage**

☐ s.58

### **Mine Subsidence Compensation Act 1961 – Mines Subsidence Board**

☒ s.15

### **Mining Act 1992 – NSW Department of Industry, Investment, Minerals & Petroleum**

☐ s.63 & s.64

### **National Parks and Wildlife Act 1974 – Office of Environment and Heritage**

☐ s.90

### **Petroleum (Onshore) Act 1991 – NSW Department of Industry, Investment, Minerals & Petroleum**

☐ s.9

### **Protection of the Environment Operations Act 1997 – Office of Environment and Heritage**

☐ s.43(a), s.47 & s.55

☐ s.43(b), s.48 & s.55

☐ s.43(d), s.55 & s.122

### **Roads Act 1993 – NSW Department of Transport - Roads & Maritime Service**

☐ s.138

### **Rural Fires Act 1997 – NSW Rural Fire Service**

☒ s.100B

### **Water Management Act 2000 - NSW Office of Water**

☒ s.89, s.90 & s.91

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Is your application for integrated development?

☐ No.

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## Fisheries Management Act 1994 – Department of Industry and Investment NSW (Fisheries)

☐ s.144

☐ s.201

☐ s.205

☐ s.219

## Heritage Act 1977 – Office of Environment and Heritage

☐ s.58

## Mine Subsidence Compensation Act 1961 – Mines Subsidence Board

☐ s.15

## Mining Act 1992 – NSW Department of Industry, Investment, Minerals & Petroleum

☐ s.63 & s.64

## National Parks and Wildlife Act 1974 – Office of Environment and Heritage

☐ s.90

## Petroleum (Onshore) Act 1991 – NSW Department of Industry, Investment, Minerals & Petroleum

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## Protection of the Environment Operations Act 1997 – Office of Environment and Heritage

☐ s.43(a), s.47 & s.55

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☐ s.138

## Rural Fires Act 1997 – NSW Rural Fire Service

☒ s.100B

## Water Management Act 2000 - NSW Office of Water

☒ s.89, s.90 & s.91





File Reference: 16/10274  
Account No: W574460

PO Box 2215, DANGAR NSW 2309  
Phone: 1300 886 235 (Option 2)  
Fax: (02) 4925 3517  
[roads.newcastle@crowmland.nsw.gov.au](mailto:roads.newcastle@crowmland.nsw.gov.au)  
[www.crowmland.nsw.gov.au](http://www.crowmland.nsw.gov.au)

7 December 2016

Tattersall Lander Pty Ltd  
PO Box 580  
RAYMOND TERRACE NSW 2324

Dear Sir/Madam

**Re: Acknowledgement of receipt of application for closure of road – C/- W H Hudson Development Pty Ltd – Lot 803 DP 1156934**

Acknowledgement is made of your application to close Crown/Council roads. Your application has been assigned account number W574460.

Due to the number of applications on hand, processing of your application may take considerable time. It is not expected that you will be disadvantaged by a delay in processing because the purchase price for the land, if the road is approved, will be established as at the date of your application to close the road. Any rent paid in advance for the enclosure permit will also be refunded if closure is completed prior to the end of the rent period.

Please note the following points:

- Acceptance of the application does not constitute any guarantee by the Department of Industry - Lands that the application for closure of the road will be successful;
- If your application is successful, the land will remain public road until the closure of the road is formally notified in the Government Gazette;
- Any enclosure permit held over the road will be retained until the closure of the road is formally notified in the Government Gazette. Termination of the enclosure permit will be carried out as at the date of notification of closure and termination advice will be issued to you for your records; and
- You should continue to pay the rent of the enclosure permit as it is called for, pending the outcome of your application.

If you have any queries in relation to your application please contact our office.

Yours faithfully

A handwritten signature in blue ink, appearing to read 'm. batten'.

Michelle Batten  
Department of Industry - Lands Business Centre

File Reference: 16/10274  
Account No: 576869

PO Box 2215, DANGAR NSW 2309  
Phone: 1300 886 235 (Option 2)  
Fax: (02) 4925 3517  
[roads.newcastle@crowland.nsw.gov.au](mailto:roads.newcastle@crowland.nsw.gov.au)  
[www.crowland.nsw.gov.au](http://www.crowland.nsw.gov.au)

9 December 2016

W.H. Hudson Developments Pty. Limited  
C/- Mr Bob Lander  
Tattersall Lander Pty Ltd  
PO Box 580  
RAYMOND TERRACE NSW 2324

Dear Sir / Madam

**Re: Application to Close Road No. W574460**

The Department of Industry - Lands (the department) is currently considering the closure and sale of Crown roads in the general locality of your property. Your application is included in this process.

Your property(ies) and those of adjoining landholders are displayed on the attached diagram. All Crown roads applied for purchase within that area are shown by black hatch on orange fill, Council roads applied for purchase are shown by black hatch on yellow fill. The corresponding road closure account is labelled for your reference.

Any additional Crown roads proposed for closure are shown in orange. Additional roads under the local Councils control proposed for closure are shown in yellow.

**Important Information**

The department intends to process the closing and sale of the roads indicated on the diagram at the same time. If closed, the purchase price of the roads which you have made application for will be determined from an external valuation at your costs. The valuation instruction will be issued after an expression of interest is received and the road closure is approved.

Should the road closures be approved, an opportunity for you to purchase further roads shown in orange and/or yellow may exist. Generally, this land will be sold to landholders whose property incorporates, or adjoins these roads. Preference may be given to those landholders who hold an Enclosure Permit over the road.

**What should you do now?**

You should carefully consider your position and:

1. Forward any comments you have on the proposed road closings, generally by completing the enclosed 'Comments on the proposed road closure' form.
2. Confirm if you wish to purchase the roads within or adjoining your property, by completing the enclosed 'Expression of interest' form.
3. Indicate any additional roads that you wish to purchase by way of highlight, hatching or circling on the attached diagram titled 'Diagram for Return'.

Please return these three (3) documents by 31 January 2017.

## **What happens next?**

Once the 28 day\*\* expression of interest period expires, the department will consider all comments relating to the proposed road closure and expressions of interest to purchase roads. Should approval be received to close the roads, a purchase offer, including purchase price, will be forwarded to relevant landholders.

**\*\*Note:** Extension has been given due to our office's Christmas / New Year closedown period. The notification (expression of interest) period will be expired on 31 January 2017.

Details of all costs and fees are on the attached 'Information Sheet'.

## **Who knows about the proposed closure?**

Notification letters have been forwarded to all landholders adjoining the roads indicated on the diagram.

Lake Macquarie Council and Government Agencies are being consulted to ensure that they have no issues with the closing of the roads.

The proposal to close the roads will be advertised in the Newcastle Star on 14 December 2016 and also online at: [www.crownland.nsw.gov.au](http://www.crownland.nsw.gov.au), calling for general comment from interested parties.

## **What happens if I do not proceed with the purchase of the road(s)?**

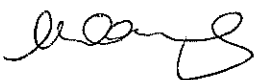
The department will consider that you do not wish to proceed with the application if it does not receive the signed expression of interest by 31 January 2017.

Your application for closure of road(s) will be terminated and following completion of this process the department will undertake a review of Crown roads. Where roads are enclosed in private property, Enclosure Permits will be issued under the Crown Lands Act, 1989. These permits will attract market rental, which is subject to change

If you require assistance in completing the application or have any further enquiries in this matter, please contact our office. Relevant information is also available on our website at [www.crownland.nsw.gov.au](http://www.crownland.nsw.gov.au) under Roads.

Enquiries in relation to this matter can be directed to Miao Wang, who can be contacted on 02 4925 4138 or via email at [Miao.Wang@crownland.nsw.gov.au](mailto:Miao.Wang@crownland.nsw.gov.au).

Yours faithfully



Miao Wang  
Department of Industry - Lands Business Centre



## **The Purchase Price**

The purchase price is determined from an external valuation. The valuation instruction will be issued after an expression of interest is received and the road closure is approved.

## **Purchase by Instalment**

You may choose to pay the purchase price by way of three (3) instalments over two (2) years. The first of these instalments will be payable upon settlement (along with the GST on the full purchase price and the balance of any costs payable on the account) with the remaining two (2) instalments payable by the due date for payment which will be one (1) year and two (2) years respectively from the date of approval of the purchase.

If payment is to be made by instalments, the title to the land will be encumbered by a registered Memorandum to protect the Crown interest in the land until such time as the purchase money is paid in full. Providing the instalment amount is paid by the due date, no interest will be charged on the purchase price amount still due. If the instalment is not paid by the due date, normal penalty interest will apply (currently 9.76%).

The Memorandum provides that the property cannot be transferred prior to all instalments being paid. If a sale of the property is proposed, the balance of the purchase money will become payable in full upon transfer.

Please note purchase by instalment is not available for the associated fees and GST. These amounts are payable upfront.

## **Associated Costs and Fees**

The following charges are also payable as part of this application:

- Purchase application fee of \$220.00.  
This is a reduced fee to cover the department's administrative costs in completing this application.
- Plan preparation fee of \$250.00 (incl GST);  
This fee is payable should you choose to have the department prepare a Deposited Plan for the creation of first title to be lodged with Land and Property Information. The alternate to this is for you to engage a private surveyor to prepare the plan.
- Plan registration fee of \$287.00 (plus an additional fee of \$287.00 for each lot after the first lot within the plan);  
This is the fee for the lodgement of the Deposited Plan with Land and Property Information and is subject to increase on 1 July each year.
- Dealing Fee of \$136.30 for transfer;  
This is the fee for the lodgement of the Dealing to Transfer the land from the State of New South Wales to you – required by Land and Property Information and is subject to increases by the Land and Property Information Office on 1 July each year.
- Dealing Fee of \$136.30 for removal of notification from title;  
This fee is payable when instalments are selected. When the final instalment has been paid the Dealing is lodged with Land and Property Information to remove from the Land and Property Information register the notification for balance of purchase money. It is subject to increases by the Land and Property Information Office on 1 July each year.
- GST on purchase price  
This is the Goods and Services Tax on the purchase price. This will not generally be payable for land that is to be used for farming purposes, existing residential premises or unimproved land. It will generally be payable for all other proposed uses of the land.

- **Stamp Duty**  
Stamp Duty is payable on the transfer of title. A transfer dealing will be prepared following registration of the road plan and will be forwarded to you to arrange payment and stamping by the Office of State Revenue.
- **S88B Instrument Fee of \$136.30;**  
This fee is payable for each easement that may be required over the land to be purchased and is subject to increases by the Land and Property Information Office on 1 July each year.

### **What do I get if I purchase?**

Following completion of closing of road and sale, the department will issue freehold title in your name.

If the plan is compiled by the department (\$250.00) then the title will have a limitation in the second schedule pursuant to Section 28T (4) of the *Real Property Act, 1900* indicating the boundaries of the land comprised therein have not been investigated by the Registrar General. The limitation may be removed by any future survey of the land for subdivision etc.

Part 6A of the *Real Property Act, 1900* dealing with Possessory Title may be relevant to the parcel of land where fencing is not located on the boundary after the road is closed, sold and becomes freehold land.

### **The Tax Invoice**

On the return of the agreement a Tax Invoice will be issued calling for payment of the purchase price (or first instalment) + GST and associated fees.

**This information is yours to keep**

File Reference: 16/10274  
Account No: 576869:W574460

Miao Wang  
Department of Industry - Lands  
Roads Business Centre  
PO Box 2215, DANGAR NSW 2309

**Expression of interest for the purchase of road(s) proposed to be closed**

Dear Sir / Madam

I/We W. H. Hudson Developments Pty. Limited wish to express an interest in the purchase of roads proposed to be closed within and/or adjacent to my/our property and

☐ As marked on the attached 'Diagram for Return'.

Please note that it is only roads with black hatch on orange fill, orange, yellow or black hatch on yellow fill that are being considered for closure with this case.

☐ I/We understand the title to the land will contain the following:

- (i) Title to the land purchased will be subject to exclusion of minerals. This condition is imposed on sale of all Crown land.
- (ii) Easements to cover existing infrastructure (Powerlines etc) and access requirements negotiated for adjoining landholders, where required. Roads with significant environmentally sensitive characteristics may require a covenant for protection of environmental values.

Signed: \_\_\_\_\_

Title: \_\_\_\_\_

(Applicable if signing on behalf of a Company e.g. Director)

☐ ABN/Company seal

Date: \_\_\_\_\_

**Contact details**

Home phone: \_\_\_\_\_

Mobile: \_\_\_\_\_

Email: \_\_\_\_\_

**PLEASE RETURN THIS AGREEMENT TO THE ABOVE ADDRESS BY 31 JANUARY 2017**



File Reference: 16/10274  
Account No: 576869;W574460

Miao Wang  
Department of Industry - Lands  
Roads Business Centre  
PO Box 2215, DANGAR NSW 2309

**Comments on proposed road closure**

Dear Sir / Madam

I/We W. H. Hudson Developments Pty. Limited wish to provide my/our opinion in relation to the proposed road closures.

We:

- ☐ Are in favour of the road closure  
OR  
☐ Object to closure of the following roads for the reasons noted below.

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Signed: \_\_\_\_\_

Title: \_\_\_\_\_

(Applicable if signing on behalf of a Company e.g. Director)

ABN/Company seal

Date: \_\_\_\_\_

**Contact details**

Home phone: \_\_\_\_\_

Mobile: \_\_\_\_\_

Email: \_\_\_\_\_

**PLEASE RETURN THIS AGREEMENT TO THE ABOVE ADDRESS BY 31 JANUARY 2017**

## ic Roads

LAKE MACQUARIE  
VALENTINE  
KAHIBAH  
NORTHUMBERLAND

### Legend

ROSS & MARY SPENCER  
W.H. HUDSON DEVELOPMENTS  
PTY. LIMITED  
CROWN ROADS UNDER APPLICATION  
& PROPOSED FOR CLOSURE



Department  
of Industry  
Lands

17 March 2017

P0844 TL Belmont Seniors Living

Tattersall Lander Pty Ltd  
2 Bourke Street  
Raymond Terrace NSW 2324

**Attn: Bob Lander**

Dear Bob,

**Proposed Seniors Living Residential Development, 14 Halyard Way, Belmont.**

Further to your request we have now completed our traffic surveys and review of the documentation provided for the proposed seniors living village located at the northern end of Halyard Way, Belmont.

The site is subject to an existing development application (DA 1443/2016) submitted to Lake Macquarie City Council which included a traffic impact assessment completed by McLaren Traffic Engineering (September 2016). Following a preliminary assessment of this application, Council has requested additional information to clarify issues raised around traffic and parking. The following assessment has been prepared in accordance with the RTA Guide to Traffic Generating Developments and is intended to form an addendum for the previous traffic report in response to the matters raised by Council for the proposed development.

### Proposed Development

The proposal allows for the development of a new seniors living village consisting of 118 independent living units at 14 Halyard Way (Figure 1). A community centre and chapel will also be provided at the site which will allow for internal use only by future residents.

All vehicle access will be provided from Halyard Way with an emergency vehicle access to be provided via an additional gated access.

A community bus will be provided for future residents with a suitable parking spaces provided adjacent to the community centre.

A site plan for the proposed development is shown in Attachment A.

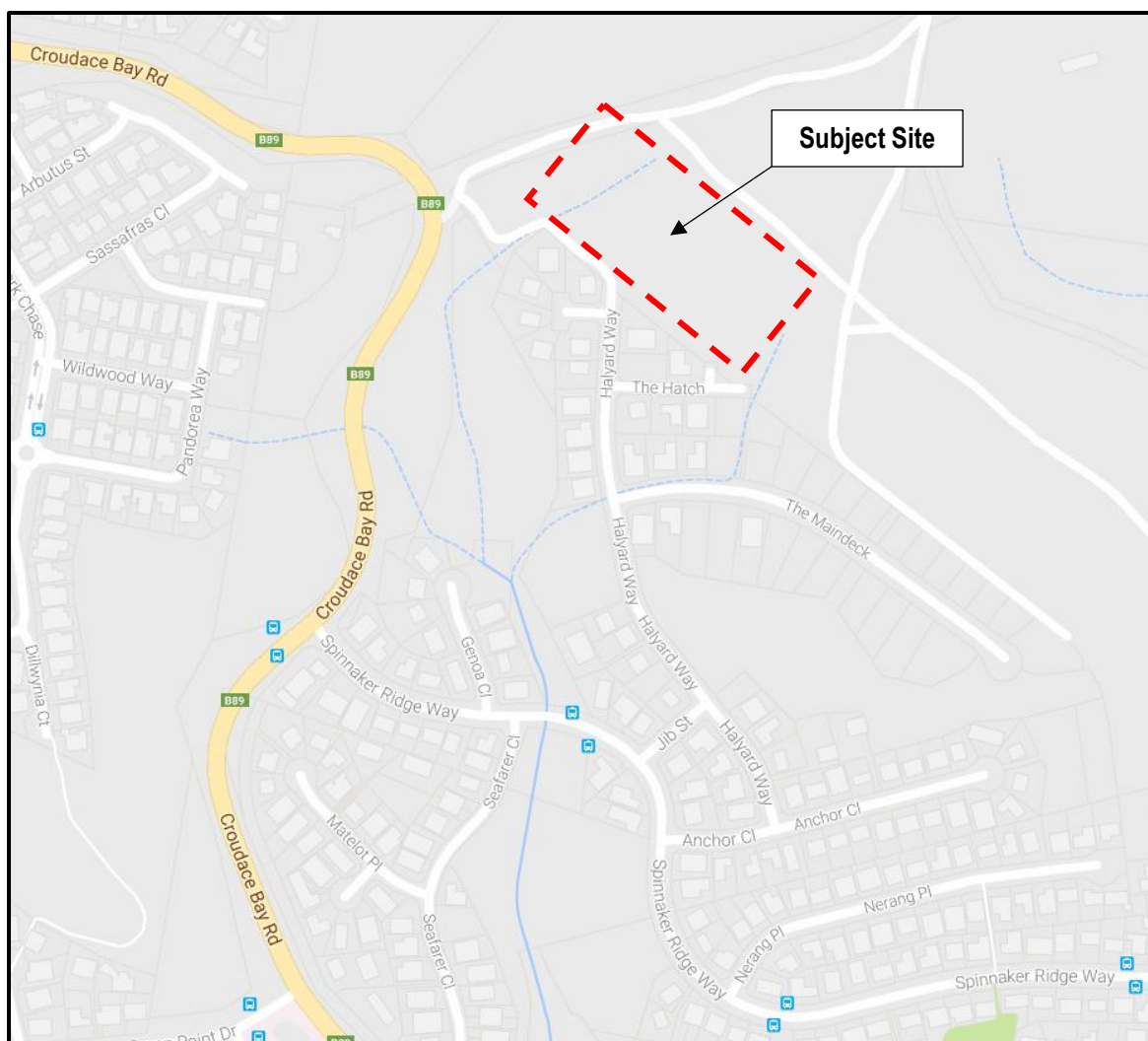


Figure 1 - Location of the subject site within the context of the local road network (Source: Nearmap).

### Current Traffic Flows

As part of the project work Seca Solution collected traffic data at the intersection of Croudace Bay Road / Spinnaker Ridge Way during the morning (8:00am to 9:00am) and afternoon (3:30pm to 5:00pm) to determine the current operation and traffic flows along these roads. These surveys were completed on Wednesday 8<sup>th</sup> March 2017. The morning peak hour was selected to coincide with the AM peak determined in the surveys previously undertaken for the proposal whilst the evening peak period was assessed to determine the PM peak hour. The RMS Guide to Traffic Generating Developments nominates the PM peak as being the suitable assessment for seniors living as the peak demands of such developments do not typically coincide with the AM peak. A summary of the current peak hour traffic flows is provided in Table 1.



Table 1 – Current Traffic Flows along Croudace Bay Road and Spinnaker Ridge Way

| Location                                                    | Direction    | Morning Peak<br>(8am - 9am) | Afternoon Peak<br>(3:30pm - 4:30pm) |
|-------------------------------------------------------------|--------------|-----------------------------|-------------------------------------|
| <b>Croudace Bay Road<br/>(south of Spinnaker Ridge Way)</b> | Northbound   | 506                         | 527                                 |
|                                                             | Southbound   | 509                         | 664                                 |
|                                                             | <b>Total</b> | <b>1,015</b>                | <b>1,191</b>                        |
| <b>Croudace Bay Road<br/>(north of Spinnaker Ridge Way)</b> | Northbound   | 574                         | 521                                 |
|                                                             | Southbound   | 521                         | 703                                 |
|                                                             | <b>Total</b> | <b>1,095</b>                | <b>1,224</b>                        |
| <b>Spinnaker Ridge Way<br/>(east of Croudace Bay Road)</b>  | Eastbound    | 36                          | 42                                  |
|                                                             | Westbound    | 92                          | 75                                  |
|                                                             | <b>Total</b> | <b>128</b>                  | <b>117</b>                          |

Detailed survey data is provided in Attachment B.

The previous report completed by McLaren Traffic Engineering provided traffic flows for Spinnaker Ridge Way and Jib Street based upon traffic surveys completed in October 2013. These surveys indicate that the current flows on Jib Street could be in the order of 49 vehicles during the morning peak, with flows on Spinnaker Ridge Way (west of Jib Street) being 114 vehicles per hour.

There has been minimal growth in this area since these surveys were completed and therefore it is considered that the existing traffic flows within the immediate vicinity of the site would be similar to those previously observed.

### Development Traffic

The previous assessment calculated development traffic flows based upon the rates provided within the RTA Guide to Traffic Generating Developments for housing for aged and disabled persons. It is recognised however that revised traffic generation rates for housing for seniors have subsequently been issued within a technical direction by the RMS (TDT 2013/04a), based upon updated traffic surveys completed for this type of development. These rates provide a higher peak hour trip rate although the daily trip rates remain the same.

To ensure a complete and robust assessment of the traffic impacts associated with this development, these updated rates have been applied throughout the remainder of this assessment.

The RTA Guide provides the following updated traffic generation rates for housing for seniors:

- Weekday daily vehicle trips: 2.1 per dwelling
- Weekday peak hour vehicle trips: 0.4 per dwelling

Note that the morning site peak hour does not generally coincide with the network peak hour.

For the 118 independent living units, this corresponds to 248 vehicles per day with up to 48 vehicles during the evening peak. While no rates are provided for the morning peak hour, this assessment has allowed for similar traffic flows to those generated in the evening peak (48 vehicles).

It is assumed that 80% of vehicle trips would be outbound during the morning and inbound during the evening, consistent with best practice and the previous assessment completed by McLaren Traffic Engineering.

The proposed chapel and community centre will provide for internal use only and therefore do not generate external traffic demands.

### Sidra Analysis

Sidra analysis has been completed for the intersection of Croudace Bay Road and Spinnaker Ridge Way to determine its current operation and capacity to support the additional traffic demands associated with the proposed development. Three scenarios were considered being:

- Existing traffic flows through this intersection;
- Existing traffic flows with development traffic; and
- 2027 traffic flows with development allowing for 10% growth along Croudace Bay Road.

#### Existing Traffic Flows

The current operation of this intersection was determined based upon the existing traffic flows during both the morning and afternoon peak. The Sidra modelling shows that the intersection currently operates well within its capacity providing minimal delays and queuing, consistent with the observation on site. The worst leg is the approach on Spinnaker Ridge Way which operates at Level of Service (LoS) B with minor delays for vehicles turning right onto Croudace Bay Road.

A summary of the Sidra results for the existing situation is provided in Table 2.

Table 2 – Sidra results, Croudace Bay Road / Spinnaker Ridge Way - existing situation (AM/PM).

| Approach                  | Level of Service | Ave Delay (s) | Queue (m) |
|---------------------------|------------------|---------------|-----------|
| Croudace Bay Road (south) | A / A            | 0.4 / 1.0     | 1.5 / 3.6 |
| Spinnaker Ridge Way       | B / B            | 20.2 / 19.9   | 9.6 / 4.3 |
| Croudace Bay Road (north) | A / A            | 0.3 / 0.4     | 0 / 0     |

#### Existing Traffic Flows with Development

Sidra modelling has also been completed for the existing traffic flows together with traffic associated with the development based upon the revised rates above. While the previous assessment has not allowed for any vehicles to pass through the intersection of Croudace Bay Road and Spinnaker Ridge Way, this assessment has allowed for a worst-case being 100% of development passing through this intersection (48 vehicles).

It is assumed that 75% of vehicles would travel north along Croudace Bay Road with the balance travelling south towards the Belmont Town Centre. This distribution is consistent with the existing travel patterns in the locality.

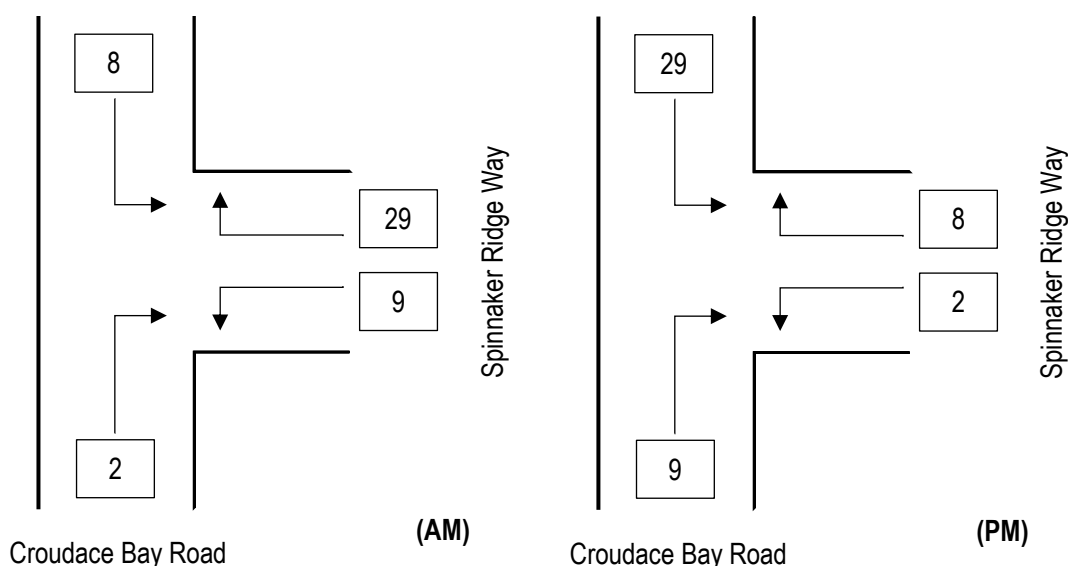


Figure 2 – Traffic Distribution & Assignments – Development traffic through the intersection of Croudace Bay Road / Spinnaker Ridge Way.



The Sidra modelling shows that the development will have an acceptable impact upon the intersection with no change to the existing level of service on each approach. The eastern leg (Spinnaker Ridge Way) will experience slight increases in delays and queuing associated with the additional traffic demands although these increases are minor and will not be noticeable for existing road users.

A summary of the Sidra results for the existing situation with development traffic is provided in Table 3.

Table 3 – Sidra results, Croudace Bay Road / Spinnaker Ridge Way - existing situation with development traffic (AM/PM).

| Approach                  | Level of Service | Ave Delay (s) | Queue (m)  |
|---------------------------|------------------|---------------|------------|
| Croudace Bay Road (south) | A / A            | 0.5 / 1.5     | 1.7 / 5.4  |
| Spinnaker Ridge Way       | B / B            | 23.0 / 23.1   | 15.4 / 6.1 |
| Croudace Bay Road (north) | A / A            | 0.4 / 0.7     | 0 / 0      |

### 2027 Traffic Flows

The operation of the intersection has also been modelled for the future traffic flows allowing for 10% background growth on Croudace Bay Road over the next 10 years. The assessment shows that the intersection currently provides sufficient capacity to accommodate any future increases in traffic demands with the worst approach (eastern leg) continuing to operate at an acceptable level of service in 2027.

A summary of the Sidra results allowing for future growth is provided in Table 4.

Table 4 – Sidra results, Croudace Bay Road / Spinnaker Ridge Way – 2027 flows with 10% growth on Croudace Bay Road (AM/PM).

| Approach                  | Level of Service | Ave Delay (s) | Queue (m)  |
|---------------------------|------------------|---------------|------------|
| Croudace Bay Road (south) | A / A            | 0.5 / 1.7     | 2.1 / 6.6  |
| Spinnaker Ridge Way       | C / C            | 30.2 / 30.9   | 19.2 / 7.9 |
| Croudace Bay Road (north) | A / A            | 0.4 / 0.6     | 0 / 0      |

Overall it can be seen that the proposed development would have minor impact upon the intersection of Croudace Bay Road and Spinnaker Ridge Way with the intersection currently providing adequate spare capacity to accommodate the additional traffic demands. While this assessment has allowed for 100% of development traffic to pass through this intersection, as originally determined by the McLaren report, there would be demands for vehicles travelling east towards the Pacific Highway, therefore having a reduced impact upon this intersection over that which has been assessed.

### Impact on Roads

While the RTA Guide does not provide specific limits for daily traffic flows it does provide performance standards for residential streets which are based upon maximum hourly traffic volumes with respect to safety and amenity.

For a local collector road, such as Spinnaker Ridge Way, these standards indicate an environmental goal of 300 vehicles per hour with a maximum capacity of 500 vehicles per hour. The existing traffic flows on Spinnaker Ridge Way (east of Croudace Bay Road) are 128 vehicles per hour during the morning peak (less in the evening) and the proposed development could increase these by up to 48 vehicles per hour. It can be seen that the existing flows on Spinnaker Ridge Way together with the development traffic would be less than 200 vehicles per hour, which is well within its environmental capacity and therefore the development would have an acceptable impact.

Similarly, for local streets, the RTA Guide specifies an environmental goal of 200 vehicles per hour with a maximum capacity of 300 vehicles per hour. The previous traffic assessment completed by McLaren Traffic Engineering suggests that the current flows on Jib Street could be in the order of 49 vehicles per hour during the morning peak and the proposed development could increase this to 97 vehicles per hour. This is less than the environmental capacity of the road and therefore the development will have an acceptable impact.

While no traffic surveys have been completed along Halyard Way, the traffic flows along this road would be similar to the traffic flows on Jib Street and are therefore below the environmental limit of this road.

### Conclusion

Allowing for the current traffic flows, together with future growth along the local roads, the proposed development would have an acceptable impact upon the local road network. Traffic flows along Spinnaker Ridge Way, Jib Street and Halyard Road are well within their environmental capacity as described in the RTA Guide to Traffic Generating Developments.

Sidra analysis has been completed for the intersection of Croudace Bay Road and Spinnaker Ridge Way for the existing flows, and allowing for development traffic together with future growth along Croudace Bay Road. This assessment has demonstrated that the additional traffic demands would have a negligible impact to the operation of this intersection, with the intersection continuing to provide an acceptable level of service with only minor increases in delays for existing road users.

Other concerns raised by Council have been addressed with the study team confirming that the Community Centre and Chapel is for the use of the village residents and as such would not generate external traffic demands. It would also not require additional parking.

The development will provide a suitable private bus service and parking for this will be provided on site as required by AS2890.

Overall it is considered that the proposed development should be approved on the ground of traffic and access.

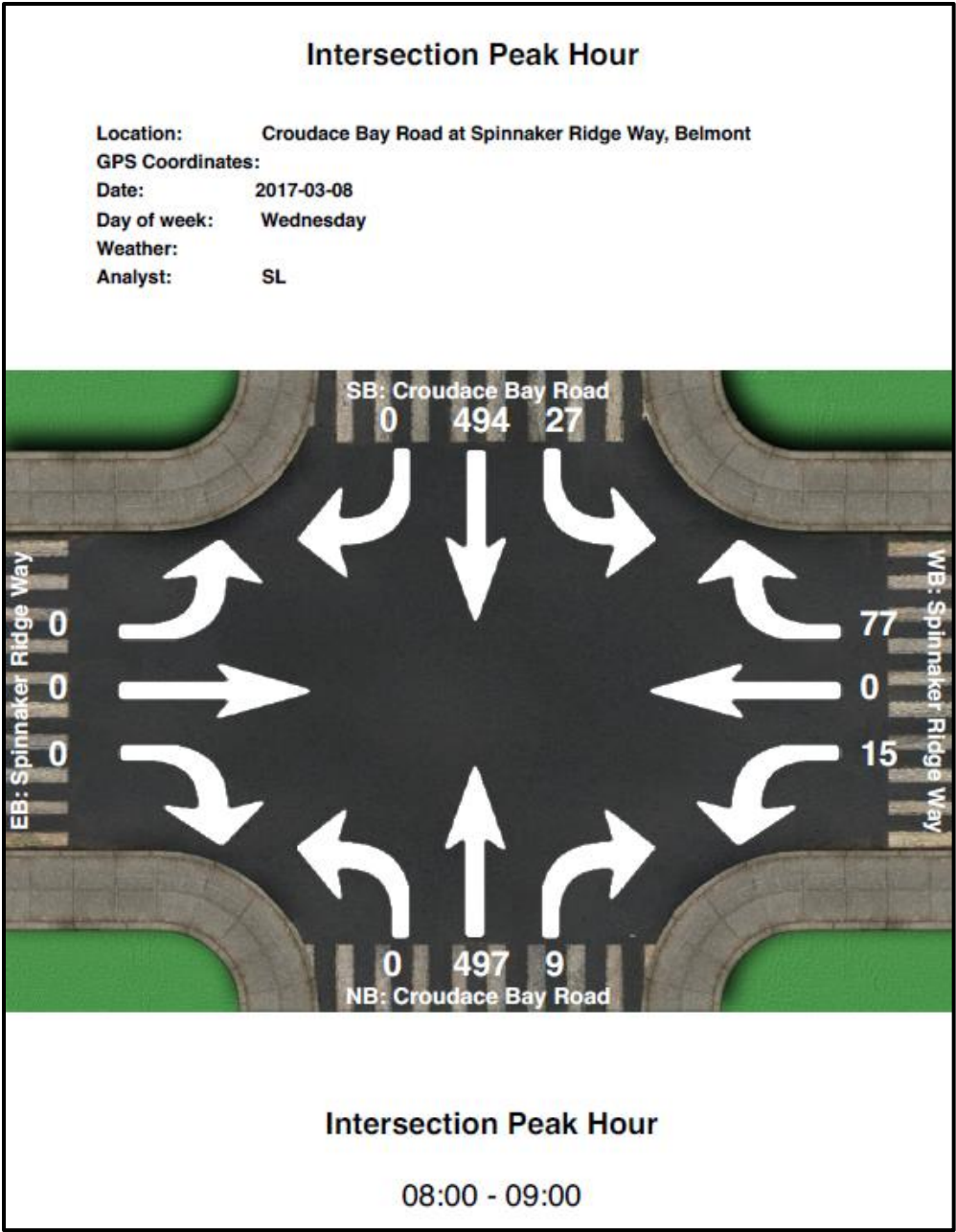
Please feel free to contact me on 4032, 7979, should you have any queries.

Yours sincerely,



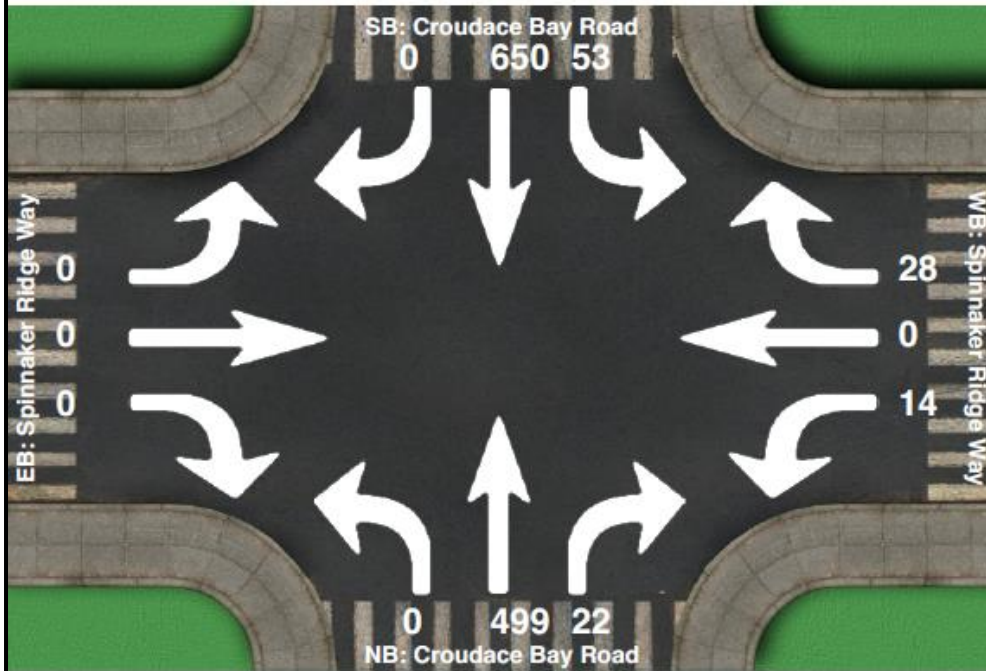
**Sean Morgan**  
Director

[illegible]



## Intersection Peak Hour

Location: Croudace Bay Road at Spinnaker Ridge Way, Belmont  
GPS Coordinates:  
Date: 2017-03-08  
Day of week: Wednesday  
Weather:  
Analyst: SL



## Intersection Peak Hour

15:30 - 16:30



## Attachment C: Criteria for interpreting results of SIDRA

### 1-Level of Service (LoS)

| LoS | Traffic Signals and Roundabouts                                        | Give Way and Stop Signs                     |
|-----|------------------------------------------------------------------------|---------------------------------------------|
| A   | Good                                                                   | Good                                        |
| B   | Good, with acceptable delays and spare capacity                        | Acceptable delays and spare capacity        |
| C   | Satisfactory                                                           | Satisfactory, but requires accident study   |
| D   | Operating near capacity                                                | Near capacity and requires accident study   |
| E   | At capacity, excessive delay: roundabout requires other control method | At capacity, requires other control mode    |
| F   | Unsatisfactory, requires other control mode or additional capacity     | Unsatisfactory, requires other control mode |

### 2-Average Vehicle Delay (AVD)

The AVD is a measure of operational performance of an intersection relating to its LoS. The average delay should be taken as a guide only for an average intersection. Longer delays may be tolerated at some intersections where delays are expected by motorists (e.g. those in inner city areas or major arterial roads).

| LoS | Average Delay / Vehicle (secs) | Traffic Signals and Roundabouts                                       | Give Way and Stop Signs                     |
|-----|--------------------------------|-----------------------------------------------------------------------|---------------------------------------------|
| A   | Less than 15                   | Good operation                                                        | Good operation                              |
| B   | 15 to 28                       | Good with acceptable delays and spare capacity                        | Acceptable delays and spare capacity        |
| C   | 28 to 42                       | Satisfactory                                                          | Satisfactory but accident study required    |
| D   | 42 to 56                       | Operating near capacity                                               | Near capacity, accident study required      |
| E   | 56 to 70                       | At capacity, excessive delays: roundabout requires other control mode | At capacity; requires other control mode    |
| F   | Exceeding 70                   | Unsatisfactory, requires additional capacity                          | Unsatisfactory, requires other control mode |

### 3-Degree of Saturation (D/S)

The D/S of an intersection is usually taken as the highest ratio of traffic volumes on an approach to an intersection compared with the theoretical capacity, and is a measure of the utilisation of available green time. For intersections controlled by traffic signals, both queues and delays increase rapidly as DS approaches 1.0. An intersection operates satisfactorily when its D/S is kept below 0.75. When D/S exceeds 0.9, queues are expected.

**MOVEMENT SUMMARY****Site: 101 [Croudace Bay Road / Spinnaker Ridge Way AM Base]**

| Croudace AM                     |        | Bay                   | Road          |                  | /                    | Spinnaker        |                                      | Ridge         |              | Way Flows                      |                       |
|---------------------------------|--------|-----------------------|---------------|------------------|----------------------|------------------|--------------------------------------|---------------|--------------|--------------------------------|-----------------------|
| Giveaway / Yield (Two-Way)      |        |                       |               |                  |                      |                  |                                      |               |              |                                |                       |
| Movement Performance - Vehicles |        |                       |               |                  |                      |                  |                                      |               |              |                                |                       |
| Mov ID                          | OD Mov | Demand Total<br>veh/h | Flows HV<br>% | Deg. Satn<br>v/c | Average Delay<br>sec | Level of Service | 95% Back of Queue<br>Vehicles<br>veh | Distance<br>m | Prop. Queued | Effective Stop Rate<br>per veh | Average Speed<br>km/h |
| South: Croudace Bay Road        |        |                       |               |                  |                      |                  |                                      |               |              |                                |                       |
| 2                               | T1     | 497                   | 3.6           | 0.230            | 0.2                  | LOS A            | 0.2                                  | 1.5           | 0.04         | 0.01                           | 59.6                  |
| 3                               | R2     | 9                     | 33.3          | 0.230            | 10.9                 | LOS A            | 0.2                                  | 1.5           | 0.05         | 0.01                           | 52.8                  |
| Approach                        |        | 506                   | 4.2           | 0.230            | 0.4                  | NA               | 0.2                                  | 1.5           | 0.04         | 0.01                           | 59.5                  |
| East: Spinnaker Ridge Way       |        |                       |               |                  |                      |                  |                                      |               |              |                                |                       |
| 4                               | L2     | 15                    | 0.0           | 0.339            | 7.1                  | LOS A            | 1.4                                  | 9.6           | 0.59         | 0.80                           | 41.0                  |
| 6                               | R2     | 77                    | 1.3           | 0.339            | 22.8                 | LOS B            | 1.4                                  | 9.6           | 0.59         | 0.80                           | 40.9                  |
| Approach                        |        | 92                    | 1.1           | 0.339            | 20.2                 | LOS B            | 1.4                                  | 9.6           | 0.59         | 0.80                           | 40.9                  |
| North: Croudace Bay Road        |        |                       |               |                  |                      |                  |                                      |               |              |                                |                       |
| 7                               | L2     | 27                    | 0.0           | 0.050            | 5.5                  | LOS A            | 0.0                                  | 0.0           | 0.00         | 0.17                           | 56.9                  |
| 8                               | T1     | 494                   | 2.0           | 0.221            | 0.0                  | LOS A            | 0.0                                  | 0.0           | 0.00         | 0.02                           | 59.7                  |
| Approach                        |        | 521                   | 1.9           | 0.221            | 0.3                  | NA               | 0.0                                  | 0.0           | 0.00         | 0.03                           | 59.6                  |
| All Vehicles                    |        | 1119                  | 2.9           | 0.339            | 2.0                  | NA               | 1.4                                  | 9.6           | 0.07         | 0.09                           | 57.4                  |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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## INTERSECTION SUMMARY

 **Site: 101 [Croudace Bay Road / Spinnaker Ridge Way AM Base]**

|                            |     |      |   |           |       |              |
|----------------------------|-----|------|---|-----------|-------|--------------|
| Croudace<br>AM             | Bay | Road | / | Spinnaker | Ridge | Way<br>Flows |
| Giveaway / Yield (Two-Way) |     |      |   |           |       |              |

### Intersection Performance - Hourly Values

| Performance Measure                       | Vehicles        | Persons          |
|-------------------------------------------|-----------------|------------------|
| Travel Speed (Average)                    | 57.4 km/h       | 57.4 km/h        |
| Travel Distance (Total)                   | 1131.0 veh-km/h | 1357.2 pers-km/h |
| Travel Time (Total)                       | 19.7 veh-h/h    | 23.6 pers-h/h    |
| Demand Flows (Total)                      | 1119 veh/h      | 1343 pers/h      |
| Percent Heavy Vehicles (Demand)           | 2.9 %           |                  |
| Degree of Saturation                      | 0.339           |                  |
| Practical Spare Capacity                  | 136.1 %         |                  |
| Effective Intersection Capacity           | 3302 veh/h      |                  |
| Control Delay (Total)                     | 0.62 veh-h/h    | 0.74 pers-h/h    |
| Control Delay (Average)                   | 2.0 sec         | 2.0 sec          |
| Control Delay (Worst Lane)                | 20.2 sec        |                  |
| Control Delay (Worst Movement)            | 22.8 sec        | 22.8 sec         |
| Geometric Delay (Average)                 | 0.6 sec         |                  |
| Stop-Line Delay (Average)                 | 1.4 sec         |                  |
| Idling Time (Average)                     | 1.1 sec         |                  |
| Intersection Level of Service (LOS)       | NA              |                  |
| 95% Back of Queue - Vehicles (Worst Lane) | 1.4 veh         |                  |
| 95% Back of Queue - Distance (Worst Lane) | 9.6 m           |                  |
| Queue Storage Ratio (Worst Lane)          | 0.01            |                  |
| Total Effective Stops                     | 95 veh/h        | 115 pers/h       |
| Effective Stop Rate                       | 0.09 per veh    | 0.09 per pers    |
| Proportion Queued                         | 0.07            | 0.07             |
| Performance Index                         | 22.3            | 22.3             |
| Cost (Total)                              | 438.17 \$/h     | 438.17 \$/h      |
| Fuel Consumption (Total)                  | 76.3 L/h        |                  |
| Carbon Dioxide (Total)                    | 181.0 kg/h      |                  |
| Hydrocarbons (Total)                      | 0.013 kg/h      |                  |
| Carbon Monoxide (Total)                   | 0.216 kg/h      |                  |
| NOx (Total)                               | 0.204 kg/h      |                  |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

NA: Intersection LOS for Vehicles is Not Applicable for two-way sign control since the average intersection delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

## MOVEMENT SUMMARY

 **Site: 101 [Croudace Bay Road / Spinnaker Ridge Way PM Base]**

| Croudace PM                     |        | Bay                   | Road          |                  | / 2017               |                  | Spinnaker                            |                     | Ridge        |                                | Way Flows             |
|---------------------------------|--------|-----------------------|---------------|------------------|----------------------|------------------|--------------------------------------|---------------------|--------------|--------------------------------|-----------------------|
| Giveway / Yield (Two-Way)       |        |                       |               |                  |                      |                  |                                      |                     |              |                                |                       |
| Movement Performance - Vehicles |        |                       |               |                  |                      |                  |                                      |                     |              |                                |                       |
| Mov ID                          | OD Mov | Demand Total<br>veh/h | Flows HV<br>% | Deg. Satn<br>v/c | Average Delay<br>sec | Level of Service | 95% Back of Queue<br>Vehicles<br>veh | Queue Distance<br>m | Prop. Queued | Effective Stop Rate<br>per veh | Average Speed<br>km/h |
| South: Croudace Bay Road        |        |                       |               |                  |                      |                  |                                      |                     |              |                                |                       |
| 2                               | T1     | 499                   | 2.0           | 0.245            | 0.6                  | LOS A            | 0.5                                  | 3.6                 | 0.10         | 0.03                           | 59.0                  |
| 3                               | R2     | 22                    | 0.0           | 0.245            | 11.2                 | LOS A            | 0.5                                  | 3.6                 | 0.12         | 0.03                           | 52.8                  |
| Approach                        |        | 521                   | 1.9           | 0.245            | 1.0                  | NA               | 0.5                                  | 3.6                 | 0.10         | 0.03                           | 58.7                  |
| East: Spinnaker Ridge Way       |        |                       |               |                  |                      |                  |                                      |                     |              |                                |                       |
| 4                               | L2     | 14                    | 7.1           | 0.185            | 4.9                  | LOS A            | 0.6                                  | 4.3                 | 0.49         | 0.68                           | 41.0                  |
| 6                               | R2     | 28                    | 0.0           | 0.185            | 27.3                 | LOS B            | 0.6                                  | 4.3                 | 0.49         | 0.68                           | 41.1                  |
| Approach                        |        | 42                    | 2.4           | 0.185            | 19.9                 | LOS B            | 0.6                                  | 4.3                 | 0.49         | 0.68                           | 41.1                  |
| North: Croudace Bay Road        |        |                       |               |                  |                      |                  |                                      |                     |              |                                |                       |
| 7                               | L2     | 53                    | 0.0           | 0.068            | 5.5                  | LOS A            | 0.0                                  | 0.0                 | 0.00         | 0.24                           | 56.3                  |
| 8                               | T1     | 650                   | 3.1           | 0.300            | 0.0                  | LOS A            | 0.0                                  | 0.0                 | 0.00         | 0.03                           | 59.7                  |
| Approach                        |        | 703                   | 2.8           | 0.300            | 0.4                  | NA               | 0.0                                  | 0.0                 | 0.00         | 0.04                           | 59.4                  |
| All Vehicles                    |        | 1266                  | 2.4           | 0.300            | 1.3                  | NA               | 0.6                                  | 4.3                 | 0.06         | 0.06                           | 58.3                  |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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## INTERSECTION SUMMARY

 **Site: 101 [Croudace Bay Road / Spinnaker Ridge Way PM Base]**

Croudace Bay Road / Spinnaker Ridge Way  
PM 2017  
Giveway / Yield (Two-Way)

| Intersection Performance - Hourly Values  |                 |                  |
|-------------------------------------------|-----------------|------------------|
| Performance Measure                       | Vehicles        | Persons          |
| Travel Speed (Average)                    | 58.3 km/h       | 58.3 km/h        |
| Travel Distance (Total)                   | 1279.6 veh-km/h | 1535.5 pers-km/h |
| Travel Time (Total)                       | 22.0 veh-h/h    | 26.4 pers-h/h    |
| Demand Flows (Total)                      | 1266 veh/h      | 1519 pers/h      |
| Percent Heavy Vehicles (Demand)           | 2.4 %           |                  |
| Degree of Saturation                      | 0.300           |                  |
| Practical Spare Capacity                  | 226.5 %         |                  |
| Effective Intersection Capacity           | 4217 veh/h      |                  |
| Control Delay (Total)                     | 0.47 veh-h/h    | 0.56 pers-h/h    |
| Control Delay (Average)                   | 1.3 sec         | 1.3 sec          |
| Control Delay (Worst Lane)                | 19.9 sec        |                  |
| Control Delay (Worst Movement)            | 27.3 sec        | 27.3 sec         |
| Geometric Delay (Average)                 | 0.5 sec         |                  |
| Stop-Line Delay (Average)                 | 0.8 sec         |                  |
| Idling Time (Average)                     | 0.6 sec         |                  |
| Intersection Level of Service (LOS)       | NA              |                  |
| 95% Back of Queue - Vehicles (Worst Lane) | 0.6 veh         |                  |
| 95% Back of Queue - Distance (Worst Lane) | 4.3 m           |                  |
| Queue Storage Ratio (Worst Lane)          | 0.00            |                  |
| Total Effective Stops                     | 74 veh/h        | 89 pers/h        |
| Effective Stop Rate                       | 0.06 per veh    | 0.06 per pers    |
| Proportion Queued                         | 0.06            | 0.06             |
| Performance Index                         | 23.6            | 23.6             |
| Cost (Total)                              | 481.83 \$/h     | 481.83 \$/h      |
| Fuel Consumption (Total)                  | 84.2 L/h        |                  |
| Carbon Dioxide (Total)                    | 199.5 kg/h      |                  |
| Hydrocarbons (Total)                      | 0.015 kg/h      |                  |
| Carbon Monoxide (Total)                   | 0.242 kg/h      |                  |
| NOx (Total)                               | 0.196 kg/h      |                  |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

NA: Intersection LOS for Vehicles is Not Applicable for two-way sign control since the average intersection delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.



## MOVEMENT SUMMARY

▽ Site: 101 [Croudace Bay Road / Spinnaker Ridge Way AM Development]

| Croudace AM                     |        | Bay 2017              |               | Road Flows       |                      | / with           |                                      | Spinnaker Development |              | Ridge                          |                       | Way Traffic |  |
|---------------------------------|--------|-----------------------|---------------|------------------|----------------------|------------------|--------------------------------------|-----------------------|--------------|--------------------------------|-----------------------|-------------|--|
| Giveway / Yield (Two-Way)       |        |                       |               |                  |                      |                  |                                      |                       |              |                                |                       |             |  |
| Movement Performance - Vehicles |        |                       |               |                  |                      |                  |                                      |                       |              |                                |                       |             |  |
| Mov ID                          | OD Mov | Demand Total<br>veh/h | Flows HV<br>% | Deg. Satn<br>v/c | Average Delay<br>sec | Level of Service | 95% Back of Queue<br>Vehicles<br>veh | Distance<br>m         | Prop. Queued | Effective Stop Rate<br>per veh | Average Speed<br>km/h |             |  |
| South: Croudace Bay Road        |        |                       |               |                  |                      |                  |                                      |                       |              |                                |                       |             |  |
| 2                               | T1     | 497                   | 3.6           | 0.232            | 0.2                  | LOS A            | 0.2                                  | 1.7                   | 0.04         | 0.01                           | 59.6                  |             |  |
| 3                               | R2     | 11                    | 27.3          | 0.232            | 10.6                 | LOS A            | 0.2                                  | 1.7                   | 0.05         | 0.02                           | 52.8                  |             |  |
| Approach                        |        | 508                   | 4.1           | 0.232            | 0.5                  | NA               | 0.2                                  | 1.7                   | 0.04         | 0.01                           | 59.4                  |             |  |
| East: Spinnaker Ridge Way       |        |                       |               |                  |                      |                  |                                      |                       |              |                                |                       |             |  |
| 4                               | L2     | 24                    | 0.0           | 0.473            | 9.3                  | LOS A            | 2.2                                  | 15.4                  | 0.56         | 0.83                           | 39.8                  |             |  |
| 6                               | R2     | 106                   | 0.9           | 0.473            | 26.0                 | LOS B            | 2.2                                  | 15.4                  | 0.56         | 0.83                           | 39.7                  |             |  |
| Approach                        |        | 130                   | 0.8           | 0.473            | 23.0                 | LOS B            | 2.2                                  | 15.4                  | 0.56         | 0.83                           | 39.7                  |             |  |
| North: Croudace Bay Road        |        |                       |               |                  |                      |                  |                                      |                       |              |                                |                       |             |  |
| 7                               | L2     | 35                    | 0.0           | 0.051            | 5.5                  | LOS A            | 0.0                                  | 0.0                   | 0.00         | 0.21                           | 56.5                  |             |  |
| 8                               | T1     | 494                   | 2.0           | 0.224            | 0.0                  | LOS A            | 0.0                                  | 0.0                   | 0.00         | 0.03                           | 59.7                  |             |  |
| Approach                        |        | 529                   | 1.9           | 0.224            | 0.4                  | NA               | 0.0                                  | 0.0                   | 0.00         | 0.04                           | 59.5                  |             |  |
| All Vehicles                    |        | 1167                  | 2.7           | 0.473            | 2.9                  | NA               | 2.2                                  | 15.4                  | 0.08         | 0.12                           | 56.3                  |             |  |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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## INTERSECTION SUMMARY

▽ Site: 101 [Croudace Bay Road / Spinnaker Ridge Way AM Development]

Croudace Bay Road / Spinnaker Ridge Way  
AM 2017 Flows with Development Traffic  
Giveaway / Yield (Two-Way)

### Intersection Performance - Hourly Values

| Performance Measure                       | Vehicles        | Persons          |
|-------------------------------------------|-----------------|------------------|
| Travel Speed (Average)                    | 56.3 km/h       | 56.3 km/h        |
| Travel Distance (Total)                   | 1179.7 veh-km/h | 1415.6 pers-km/h |
| Travel Time (Total)                       | 20.9 veh-h/h    | 25.1 pers-h/h    |
| Demand Flows (Total)                      | 1167 veh/h      | 1400 pers/h      |
| Percent Heavy Vehicles (Demand)           | 2.7 %           |                  |
| Degree of Saturation                      | 0.473           |                  |
| Practical Spare Capacity                  | 69.3 %          |                  |
| Effective Intersection Capacity           | 2469 veh/h      |                  |
| Control Delay (Total)                     | 0.95 veh-h/h    | 1.14 pers-h/h    |
| Control Delay (Average)                   | 2.9 sec         | 2.9 sec          |
| Control Delay (Worst Lane)                | 23.0 sec        |                  |
| Control Delay (Worst Movement)            | 26.0 sec        | 26.0 sec         |
| Geometric Delay (Average)                 | 0.7 sec         |                  |
| Stop-Line Delay (Average)                 | 2.2 sec         |                  |
| Idling Time (Average)                     | 1.8 sec         |                  |
| Intersection Level of Service (LOS)       | NA              |                  |
| 95% Back of Queue - Vehicles (Worst Lane) | 2.2 veh         |                  |
| 95% Back of Queue - Distance (Worst Lane) | 15.4 m          |                  |
| Queue Storage Ratio (Worst Lane)          | 0.01            |                  |
| Total Effective Stops                     | 135 veh/h       | 162 pers/h       |
| Effective Stop Rate                       | 0.12 per veh    | 0.12 per pers    |
| Proportion Queued                         | 0.08            | 0.08             |
| Performance Index                         | 24.8            | 24.8             |
| Cost (Total)                              | 474.93 \$/h     | 474.93 \$/h      |
| Fuel Consumption (Total)                  | 80.8 L/h        |                  |
| Carbon Dioxide (Total)                    | 191.5 kg/h      |                  |
| Hydrocarbons (Total)                      | 0.014 kg/h      |                  |
| Carbon Monoxide (Total)                   | 0.227 kg/h      |                  |
| NOx (Total)                               | 0.207 kg/h      |                  |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

NA: Intersection LOS for Vehicles is Not Applicable for two-way sign control since the average intersection delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

## MOVEMENT SUMMARY

 **Site: 101 [Croudace Bay Road / Spinnaker Ridge Way PM Development]**

| Croudace PM                     |        | Bay 2017              |               | Road Flows       |                      | / with           |                          | Spinnaker Development  |              | Ridge                          |                       | Way Traffic |  |
|---------------------------------|--------|-----------------------|---------------|------------------|----------------------|------------------|--------------------------|------------------------|--------------|--------------------------------|-----------------------|-------------|--|
| Giveway / Yield (Two-Way)       |        |                       |               |                  |                      |                  |                          |                        |              |                                |                       |             |  |
| Movement Performance - Vehicles |        |                       |               |                  |                      |                  |                          |                        |              |                                |                       |             |  |
| Mov ID                          | OD Mov | Demand Total<br>veh/h | Flows HV<br>% | Deg. Satn<br>v/c | Average Delay<br>sec | Level of Service | 95% Back Vehicles<br>veh | of Queue Distance<br>m | Prop. Queued | Effective Stop Rate<br>per veh | Average Speed<br>km/h |             |  |
| South: Croudace Bay Road        |        |                       |               |                  |                      |                  |                          |                        |              |                                |                       |             |  |
| 2                               | T1     | 499                   | 2.0           | 0.259            | 0.9                  | LOS A            | 0.8                      | 5.4                    | 0.14         | 0.04                           | 58.6                  |             |  |
| 3                               | R2     | 31                    | 0.0           | 0.259            | 11.7                 | LOS A            | 0.8                      | 5.4                    | 0.17         | 0.05                           | 52.3                  |             |  |
| Approach                        |        | 530                   | 1.9           | 0.259            | 1.5                  | NA               | 0.8                      | 5.4                    | 0.14         | 0.04                           | 58.2                  |             |  |
| East: Spinnaker Ridge Way       |        |                       |               |                  |                      |                  |                          |                        |              |                                |                       |             |  |
| 4                               | L2     | 16                    | 6.3           | 0.250            | 6.2                  | LOS A            | 0.9                      | 6.1                    | 0.45         | 0.68                           | 39.6                  |             |  |
| 6                               | R2     | 36                    | 0.0           | 0.250            | 30.5                 | LOS C            | 0.9                      | 6.1                    | 0.45         | 0.68                           | 39.7                  |             |  |
| Approach                        |        | 52                    | 1.9           | 0.250            | 23.1                 | LOS B            | 0.9                      | 6.1                    | 0.45         | 0.68                           | 39.7                  |             |  |
| North: Croudace Bay Road        |        |                       |               |                  |                      |                  |                          |                        |              |                                |                       |             |  |
| 7                               | L2     | 82                    | 0.0           | 0.071            | 5.5                  | LOS A            | 0.0                      | 0.0                    | 0.00         | 0.36                           | 55.3                  |             |  |
| 8                               | T1     | 650                   | 3.1           | 0.313            | 0.0                  | LOS A            | 0.0                      | 0.0                    | 0.00         | 0.03                           | 59.7                  |             |  |
| Approach                        |        | 732                   | 2.7           | 0.313            | 0.7                  | NA               | 0.0                      | 0.0                    | 0.00         | 0.07                           | 59.1                  |             |  |
| All Vehicles                    |        | 1314                  | 2.4           | 0.313            | 1.9                  | NA               | 0.9                      | 6.1                    | 0.07         | 0.08                           | 57.6                  |             |  |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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## INTERSECTION SUMMARY

▽ Site: 101 [Croudace Bay Road / Spinnaker Ridge Way PM Development]

Croudace Bay Road / Spinnaker Ridge Way  
PM 2017 Flows with Development Traffic  
Giveway / Yield (Two-Way)

### Intersection Performance - Hourly Values

| Performance Measure                       | Vehicles        | Persons          |
|-------------------------------------------|-----------------|------------------|
| Travel Speed (Average)                    | 57.6 km/h       | 57.6 km/h        |
| Travel Distance (Total)                   | 1328.3 veh-km/h | 1593.9 pers-km/h |
| Travel Time (Total)                       | 23.1 veh-h/h    | 27.7 pers-h/h    |
| Demand Flows (Total)                      | 1314 veh/h      | 1577 pers/h      |
| Percent Heavy Vehicles (Demand)           | 2.4 %           |                  |
| Degree of Saturation                      | 0.313           |                  |
| Practical Spare Capacity                  | 213.2 %         |                  |
| Effective Intersection Capacity           | 4199 veh/h      |                  |
| Control Delay (Total)                     | 0.69 veh-h/h    | 0.82 pers-h/h    |
| Control Delay (Average)                   | 1.9 sec         | 1.9 sec          |
| Control Delay (Worst Lane)                | 23.1 sec        |                  |
| Control Delay (Worst Movement)            | 30.5 sec        | 30.5 sec         |
| Geometric Delay (Average)                 | 0.7 sec         |                  |
| Stop-Line Delay (Average)                 | 1.2 sec         |                  |
| Idling Time (Average)                     | 0.9 sec         |                  |
| Intersection Level of Service (LOS)       | NA              |                  |
| 95% Back of Queue - Vehicles (Worst Lane) | 0.9 veh         |                  |
| 95% Back of Queue - Distance (Worst Lane) | 6.1 m           |                  |
| Queue Storage Ratio (Worst Lane)          | 0.00            |                  |
| Total Effective Stops                     | 105 veh/h       | 126 pers/h       |
| Effective Stop Rate                       | 0.08 per veh    | 0.08 per pers    |
| Proportion Queued                         | 0.07            | 0.07             |
| Performance Index                         | 25.4            | 25.4             |
| Cost (Total)                              | 514.64 \$/h     | 514.64 \$/h      |
| Fuel Consumption (Total)                  | 88.9 L/h        |                  |
| Carbon Dioxide (Total)                    | 210.4 kg/h      |                  |
| Hydrocarbons (Total)                      | 0.016 kg/h      |                  |
| Carbon Monoxide (Total)                   | 0.254 kg/h      |                  |
| NOx (Total)                               | 0.202 kg/h      |                  |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

NA: Intersection LOS for Vehicles is Not Applicable for two-way sign control since the average intersection delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

## MOVEMENT SUMMARY

▽ Site: 101 [Croudace Bay Road / Spinnaker Ridge Way AM 2027 Flows]

|                  |     |          |            |                |       |                      |
|------------------|-----|----------|------------|----------------|-------|----------------------|
| Croudace AM      | Bay | Road     | /          | Spinnaker      | Ridge | Way                  |
| Allowing Giveway | 10% | growth / | 2027 along | Croudace Yield | Bay   | Flows Road (Two-Way) |

Design Life Analysis (Final Year): Results for 10 years

### Movement Performance - Vehicles

| Mov ID                    | OD Mov | Demand Total<br>veh/h | Flows HV % | Deg. Satn<br>v/c | Average Delay<br>sec | Level of Service | 95% Back of Queue<br>Vehicles veh | Distance<br>m | Prop. Queued | Effective Stop Rate<br>per veh | Average Speed<br>km/h |
|---------------------------|--------|-----------------------|------------|------------------|----------------------|------------------|-----------------------------------|---------------|--------------|--------------------------------|-----------------------|
| South: Croudace Bay Road  |        |                       |            |                  |                      |                  |                                   |               |              |                                |                       |
| 2                         | T1     | 547                   | 3.6        | 0.255            | 0.3                  | LOS A            | 0.3                               | 2.1           | 0.05         | 0.01                           | 59.5                  |
| 3                         | R2     | 11                    | 27.3       | 0.255            | 11.6                 | LOS A            | 0.3                               | 2.1           | 0.05         | 0.01                           | 52.8                  |
| Approach                  |        | 558                   | 4.1        | 0.255            | 0.5                  | NA               | 0.3                               | 2.1           | 0.05         | 0.01                           | 59.4                  |
| East: Spinnaker Ridge Way |        |                       |            |                  |                      |                  |                                   |               |              |                                |                       |
| 4                         | L2     | 24                    | 0.0        | 0.568            | 13.2                 | LOS A            | 2.7                               | 19.2          | 0.64         | 0.90                           | 36.9                  |
| 6                         | R2     | 106                   | 0.9        | 0.568            | 34.0                 | LOS C            | 2.7                               | 19.2          | 0.64         | 0.90                           | 36.8                  |
| Approach                  |        | 130                   | 0.8        | 0.568            | 30.2                 | LOS C            | 2.7                               | 19.2          | 0.64         | 0.90                           | 36.8                  |
| North: Croudace Bay Road  |        |                       |            |                  |                      |                  |                                   |               |              |                                |                       |
| 7                         | L2     | 35                    | 0.0        | 0.056            | 5.5                  | LOS A            | 0.0                               | 0.0           | 0.00         | 0.20                           | 56.7                  |
| 8                         | T1     | 543                   | 2.0        | 0.245            | 0.0                  | LOS A            | 0.0                               | 0.0           | 0.00         | 0.03                           | 59.7                  |
| Approach                  |        | 578                   | 1.9        | 0.245            | 0.4                  | NA               | 0.0                               | 0.0           | 0.00         | 0.04                           | 59.5                  |
| All Vehicles              |        | 1266                  | 2.7        | 0.568            | 3.5                  | NA               | 2.7                               | 19.2          | 0.09         | 0.11                           | 55.9                  |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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## INTERSECTION SUMMARY

▽ Site: 101 [Croudace Bay Road / Spinnaker Ridge Way AM 2027 Flows]

|                                                         |            |                     |                 |                                |              |                                   |
|---------------------------------------------------------|------------|---------------------|-----------------|--------------------------------|--------------|-----------------------------------|
| Croudace<br>AM<br>Allowing<br>Giveaway                  | Bay<br>10% | Road<br>growth<br>/ | / 2027<br>along | Spinnaker<br>Croudace<br>Yield | Ridge<br>Bay | Way<br>Flows<br>Road<br>(Two-Way) |
| Design Life Analysis (Final Year): Results for 10 years |            |                     |                 |                                |              |                                   |

### Intersection Performance - Hourly Values

| Performance Measure                       | Vehicles        | Persons          |
|-------------------------------------------|-----------------|------------------|
| Travel Speed (Average)                    | 55.9 km/h       | 55.9 km/h        |
| Travel Distance (Total)                   | 1279.8 veh-km/h | 1535.8 pers-km/h |
| Travel Time (Total)                       | 22.9 veh-h/h    | 27.5 pers-h/h    |
| Demand Flows (Total)                      | 1266 veh/h      | 1519 pers/h      |
| Percent Heavy Vehicles (Demand)           | 2.7 %           |                  |
| Degree of Saturation                      | 0.568           |                  |
| Practical Spare Capacity                  | 40.8 %          |                  |
| Effective Intersection Capacity           | 2229 veh/h      |                  |
| Control Delay (Total)                     | 1.22 veh-h/h    | 1.47 pers-h/h    |
| Control Delay (Average)                   | 3.5 sec         | 3.5 sec          |
| Control Delay (Worst Lane)                | 30.2 sec        |                  |
| Control Delay (Worst Movement)            | 34.0 sec        | 34.0 sec         |
| Geometric Delay (Average)                 | 0.7 sec         |                  |
| Stop-Line Delay (Average)                 | 2.8 sec         |                  |
| Idling Time (Average)                     | 2.3 sec         |                  |
| Intersection Level of Service (LOS)       | NA              |                  |
| 95% Back of Queue - Vehicles (Worst Lane) | 2.7 veh         |                  |
| 95% Back of Queue - Distance (Worst Lane) | 19.2 m          |                  |
| Queue Storage Ratio (Worst Lane)          | 0.02            |                  |
| Total Effective Stops                     | 145 veh/h       | 174 pers/h       |
| Effective Stop Rate                       | 0.11 per veh    | 0.11 per pers    |
| Proportion Queued                         | 0.09            | 0.09             |
| Performance Index                         | 27.5            | 27.5             |
| Cost (Total)                              | 519.73 \$/h     | 519.73 \$/h      |
| Fuel Consumption (Total)                  | 87.6 L/h        |                  |
| Carbon Dioxide (Total)                    | 207.6 kg/h      |                  |
| Hydrocarbons (Total)                      | 0.015 kg/h      |                  |
| Carbon Monoxide (Total)                   | 0.246 kg/h      |                  |
| NOx (Total)                               | 0.224 kg/h      |                  |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

NA: Intersection LOS for Vehicles is Not Applicable for two-way sign control since the average intersection delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.



## MOVEMENT SUMMARY

▽ Site: 101 [Croudace Bay Road / Spinnaker Ridge Way PM 2027 Flows]

|                  |     |          |            |                |       |                      |
|------------------|-----|----------|------------|----------------|-------|----------------------|
| Croudace PM      | Bay | Road     | /          | Spinnaker      | Ridge | Way                  |
| Allowing Giveway | 10% | growth / | 2027 along | Croudace Yield | Bay   | Flows Road (Two-Way) |

Design Life Analysis (Final Year): Results for 10 years

### Movement Performance - Vehicles

| Mov ID                    | OD Mov | Demand Total<br>veh/h | Flows HV % | Deg. Satn<br>v/c | Average Delay<br>sec | Level of Service | 95% Back of Queue<br>Vehicles | Queue Distance<br>m | Prop. Queued | Effective Stop Rate<br>per veh | Average Speed<br>km/h |
|---------------------------|--------|-----------------------|------------|------------------|----------------------|------------------|-------------------------------|---------------------|--------------|--------------------------------|-----------------------|
| South: Croudace Bay Road  |        |                       |            |                  |                      |                  |                               |                     |              |                                |                       |
| 2                         | T1     | 549                   | 2.0        | 0.285            | 1.0                  | LOS A            | 0.9                           | 6.6                 | 0.15         | 0.04                           | 58.4                  |
| 3                         | R2     | 31                    | 0.0        | 0.285            | 13.0                 | LOS A            | 0.9                           | 6.6                 | 0.18         | 0.05                           | 52.2                  |
| Approach                  |        | 580                   | 1.9        | 0.285            | 1.7                  | NA               | 0.9                           | 6.6                 | 0.15         | 0.04                           | 58.0                  |
| East: Spinnaker Ridge Way |        |                       |            |                  |                      |                  |                               |                     |              |                                |                       |
| 4                         | L2     | 16                    | 6.3        | 0.319            | 9.0                  | LOS A            | 1.1                           | 7.9                 | 0.55         | 0.74                           | 36.5                  |
| 6                         | R2     | 36                    | 0.0        | 0.319            | 40.7                 | LOS C            | 1.1                           | 7.9                 | 0.55         | 0.74                           | 36.5                  |
| Approach                  |        | 52                    | 1.9        | 0.319            | 30.9                 | LOS C            | 1.1                           | 7.9                 | 0.55         | 0.74                           | 36.5                  |
| North: Croudace Bay Road  |        |                       |            |                  |                      |                  |                               |                     |              |                                |                       |
| 7                         | L2     | 82                    | 0.0        | 0.078            | 5.5                  | LOS A            | 0.0                           | 0.0                 | 0.00         | 0.33                           | 55.6                  |
| 8                         | T1     | 715                   | 3.1        | 0.341            | 0.0                  | LOS A            | 0.0                           | 0.0                 | 0.00         | 0.03                           | 59.6                  |
| Approach                  |        | 797                   | 2.8        | 0.341            | 0.6                  | NA               | 0.0                           | 0.0                 | 0.00         | 0.06                           | 59.2                  |
| All Vehicles              |        | 1429                  | 2.4        | 0.341            | 2.1                  | NA               | 1.1                           | 7.9                 | 0.08         | 0.08                           | 57.4                  |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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## INTERSECTION SUMMARY

▽ Site: 101 [Croudace Bay Road / Spinnaker Ridge Way PM 2027 Flows]

| Croudace PM                                             | Bay             | Road     | / 2027           | Spinnaker      | Ridge | Way Flows      |
|---------------------------------------------------------|-----------------|----------|------------------|----------------|-------|----------------|
| Allowing Giveway                                        | 10%             | growth / | along            | Croudace Yield | Bay   | Road (Two-Way) |
| Design Life Analysis (Final Year): Results for 10 years |                 |          |                  |                |       |                |
| <b>Intersection Performance - Hourly Values</b>         |                 |          |                  |                |       |                |
| Performance Measure                                     | Vehicles        |          | Persons          |                |       |                |
| Travel Speed (Average)                                  | 57.4 km/h       |          | 57.4 km/h        |                |       |                |
| Travel Distance (Total)                                 | 1444.4 veh-km/h |          | 1733.2 pers-km/h |                |       |                |
| Travel Time (Total)                                     | 25.2 veh-h/h    |          | 30.2 pers-h/h    |                |       |                |
| Demand Flows (Total)                                    | 1429 veh/h      |          | 1715 pers/h      |                |       |                |
| Percent Heavy Vehicles (Demand)                         | 2.4 %           |          |                  |                |       |                |
| Degree of Saturation                                    | 0.341           |          |                  |                |       |                |
| Practical Spare Capacity                                | 151.1 %         |          |                  |                |       |                |
| Effective Intersection Capacity                         | 4195 veh/h      |          |                  |                |       |                |
| Control Delay (Total)                                   | 0.85 veh-h/h    |          | 1.02 pers-h/h    |                |       |                |
| Control Delay (Average)                                 | 2.1 sec         |          | 2.1 sec          |                |       |                |
| Control Delay (Worst Lane)                              | 30.9 sec        |          |                  |                |       |                |
| Control Delay (Worst Movement)                          | 40.7 sec        |          | 40.7 sec         |                |       |                |
| Geometric Delay (Average)                               | 0.6 sec         |          |                  |                |       |                |
| Stop-Line Delay (Average)                               | 1.5 sec         |          |                  |                |       |                |
| Idling Time (Average)                                   | 1.2 sec         |          |                  |                |       |                |
| Intersection Level of Service (LOS)                     | NA              |          |                  |                |       |                |
| 95% Back of Queue - Vehicles (Worst Lane)               | 1.1 veh         |          |                  |                |       |                |
| 95% Back of Queue - Distance (Worst Lane)               | 7.9 m           |          |                  |                |       |                |
| Queue Storage Ratio (Worst Lane)                        | 0.01            |          |                  |                |       |                |
| Total Effective Stops                                   | 108 veh/h       |          | 130 pers/h       |                |       |                |
| Effective Stop Rate                                     | 0.08 per veh    |          | 0.08 per pers    |                |       |                |
| Proportion Queued                                       | 0.08            |          | 0.08             |                |       |                |
| Performance Index                                       | 28.0            |          | 28.0             |                |       |                |
| Cost (Total)                                            | 562.36 \$/h     |          | 562.36 \$/h      |                |       |                |
| Fuel Consumption (Total)                                | 96.7 L/h        |          |                  |                |       |                |
| Carbon Dioxide (Total)                                  | 229.0 kg/h      |          |                  |                |       |                |
| Hydrocarbons (Total)                                    | 0.017 kg/h      |          |                  |                |       |                |
| Carbon Monoxide (Total)                                 | 0.276 kg/h      |          |                  |                |       |                |
| NOx (Total)                                             | 0.221 kg/h      |          |                  |                |       |                |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

NA: Intersection LOS for Vehicles is Not Applicable for two-way sign control since the average intersection delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

## ATTACHMENT 5 –TABLE OF KEY EVENTS ON THE ESTABLISHMENT OF THE CURRENT PROPOSAL

### Timeframes Summary:

The officers report commented that significant time has been made available to address the issues raised on this site. However, the report fails to consider the situation of the proposal relevant to the time period. The following table summarises some key time periods.

| Date              | Action                                                                                                                                                                                                         |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 26 February 2013  | Pre-DA attended with Council on early scheme involving a different part of the overall site                                                                                                                    |
| 6 February 2014   | Pre-DA attended with Council on early scheme involving a revised part of the site based on comments from last meeting                                                                                          |
| 18 June 2015      | Pre-DA attended with Council with amended scheme to take into consideration comments and changes in access arrangements                                                                                        |
| 29 September 2015 | Pre-DA attended with Council to discuss revised scheme based on the road reserve being altered                                                                                                                 |
| 20 September 2016 | Detailed application prepared and submitted to Council                                                                                                                                                         |
| 16 November 2016  | Council provided a letter identifying areas of concern and requested withdrawal of the application                                                                                                             |
| 28 November 2016  | Applicant responds by way of re-masterplanning the site in lieu of reviewing all current consultant reports and advice to date and presents to Council staff in letter with definitive timeframes for delivery |
| 5 December 2016   | Applicant presents masterplan to Council Staff                                                                                                                                                                 |
| 8 December 2016   | Council do not comment on masterplan and present briefing note to JRPP on shortcomings of original scheme. Council continues to reaffirm                                                                       |

|                               |                                                                                                                                                                                     |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                               | that they will recommend refusal and the application should be withdrawn.                                                                                                           |
| 10 January 2017               | Meeting with the environmental health officers on ecology, a discussion is held regarding broader benefits to the Community if surrounding land be considered.                      |
| 13 January 2017               | Council staff reiterate their early advice in their original letter and do not support the alternate options based on time frames and note that ecology remains the critical issue. |
| 19 January 2017               | Applicant addresses letter to GM of LMCC requesting additional time to review ecological aspects                                                                                    |
| 27 January 2017               | GM confirms no comment or involvement                                                                                                                                               |
| 3 February 2017               | Request of planning staff again to work with us and allow us the time to investigate the ecology aspects                                                                            |
| 15 February 2017              | Council advise that report unlikely to go to JRPP before late March                                                                                                                 |
| 15 February 2017              | Applicant resolves to not consider revised masterplan given Council's lack of direction or support                                                                                  |
| 21 February 2017              | Mayor granted additional time to submit ecology report                                                                                                                              |
| 24 February 2017              | Biosis engaged to undertake independent review of ecology reports on original scheme                                                                                                |
| 10 April 2017                 | Biosis report complete                                                                                                                                                              |
| 10 April 2017 – 18 April 2017 | Contact made with officers to advise of Biosis' findings                                                                                                                            |
| 18 April 2017                 | Biosis report submitted to Council                                                                                                                                                  |

|               |                                                                                |
|---------------|--------------------------------------------------------------------------------|
| 18 April 2017 | Council advises that the JRPP report has been finalised and submitted to JRPP. |
|---------------|--------------------------------------------------------------------------------|

As can be seen from the table, significant effort has been put into this project to attempt to work with Council staff to identify alternative options. Once the decision was made to find an alternative route, the documentation has been fast commissioned and is being placed as a priority. The following point discusses the projected timeframes to provide the additional information.

## ATTACHMENT 6 –PROJECTED TIMEFRAMES

### **Projected timeframes for revised information:**

The purpose of this information is to provide Council and the JRPP confidence that we are dedicated to the cause. The following summarised work planner, demonstrates the work program since 15 February 2017 - once a decision was made to progress the current scheme.

With ecology being the main point of discussion all revised reports and drawings were on hold until the Biosis report could be completed. As demonstrated, revised reports have been commissioned and are underway with delivery of all items due in the coming weeks.

The Biobanking assessment and report is expected to take the longest time as this would remain with OEH for consideration and approval.

We have demonstrated that the delivery of required information which remain in our control, are being undertaken promptly.



## Projected timeframes

### Halyard Way

Period Highlight: 3/05/2017

 Plan

Actual

% Complete

Actual (beyond plan)

[illegible]