

Attention: Mr Roy Syne
c/o Linden Thorley
Workshop 1
Dunn + Hilliam Architects
33 Salisbury Street
BOTANY NSW 2019

2 December 2008

Dear Linden

**Re: Revised Traffic and Parking Assessment
3 Clyde Street, Batemans Bay**

The purpose of this letter is to provide additional information in response to traffic and parking issues raised in submissions to the Department of Planning collected during the exhibition of the proposal. Submissions were received from the NSW Roads and Traffic Authority, Eurobodalla Council and a member of the public.

Proposed Development

The key features of the proposed development with regards to traffic and parking are:

- 27 x studio and 19 x one bedroom serviced apartments.
- 2 x one bedroom, 6 x two bedroom and 2 x three bedroom permanent residential units.
- Vehicle access from North Street wholly within the site boundaries.
- Retail premises with a gross floor area of 105m².
- A restaurant with a GFA of 300m² (216m² of public area¹).
- 46 parking spaces for the 46 serviced apartments.
- 2 parking spaces for staff.
- 2 parking spaces external to the building for drop off, valet parking and service vehicle parking
- 10 parking spaces for the 10 residential units.
- Revised car stacker model and specifications.
- A peak staff demand of 10 staff.

¹ Estimated based on the RTA Guide to Traffic Generating Developments definition of 'public area' for a restaurant

A plan showing the application design of the car park and access arrangements is provided in **Appendix A** of this report.

Strategic Context

Eurobodalla Council adopted on 22 April 2008 the Batemans Bay Town Centre Structure Plan. This plan will inform the draft comprehensive Eurobodalla Local Environment Plan and a new Development Control Plan for Batemans Bay.

The structure plan states the following on matters pertaining future traffic management and parking provision for developments.

Book 1 – Strategy

Section 2.5 Access, Transport and Parking

Although there are peak periods when the centre experiences over-demand parking issues, in comparable terms Batemans Bay enjoys a high level of parking facilities and access. Akin to a good road infrastructure, adequate convenient and safe parking is crucial for the health of the commercial activities in the centre. Although a significant portion of parking currently accommodated on the foreshore will be removed as the town Park emerges, other parking options will come on stream, both through private and public development.

One way to encourage more efficient mixed-use of both existing and new development is to reduce the necessary on-site car parking requirement. New developments within the Foreshore Precinct, can reduce the provision of on-site parking for retail and commercial use and only provide the parking component for residential use.

Section 3.7 Access, Transport and Parking

- Amend Councils parking code and Section 94 Plan, to remove requirements for commercial parking in the foreshore Precinct;*
- Inclusion of tourist accommodation within mixed-use developments will still require the provision of on-site parking;*
- Council will prepare an amended developer contribution Section 94 plan to collect funds for the construction of public parking in respect to sites within the Foreshore Precinct where a reduced parking requirement has been identified;*

It is noted that Section 2.5 of the Structure Plan suggests the removal of the off street parking provision requirement from Eurobodalla's Parking DCP (DCP 130) for new 'commercial' and 'retail' uses. However, Section 3.7 of the structure plan, which Incorporates recommendations to achieve these desirable outcomes, recommends that only the commercial use off street parking provision requirement be removed from DCP 130.

It is unclear whether this discrepancy is a reporting error or whether there was a decision made to retain the off street parking provision requirement for retail uses in the DCP.

Response to Issues Raised

The following provides additional information and responses to issues raised in the submissions relating to traffic and parking matters.

NSW Department of Planning (DoP)

1. Retail traffic generation rate (section 3)

Rather than stating that the existing and proposed retail components do not generate any traffic (notwithstanding complementary uses on the site), a RTA or council rate should be used as a general guide.

Agreed that the RTA Guidelines do not specify a retail rate, however, they specify a 'drive in/take away food outlet'. They also specify a shopping centre rate based on various retail components (rates available in other RTA documents). Either of these could be used as a guide. Council's Parking DCP specifies a 'Commercial premises - Retail' rate which could be used.

Response

There is currently a 171m² Dominos Pizza take away store on site and a 215m² restaurant above it which is currently vacant in anticipation of the redevelopment of the site. The Roads and Traffic Authority guidelines² does not specifically cover take away pizza restaurants. However rates that it does provide give some indication of the potential traffic generated by the existing retail on site.

The RTA guidelines provide the following indicator of traffic generation for such a use:

- Fast Food (Kentucky Fried Chicken typical)
 - o 100 vehicles / hour in the PM peak hour for the average development
- Restaurant
 - o 5 vehicles per hour per 100m² gross floor area.

The proposed restaurant has a public service area that is very similar to the existing restaurant above the Domino's takeaway on site. Therefore the net traffic generation increase of this component would be negligible.

For small shops as part of a retail precinct, the RTA suggests a traffic generation rate of 46 vehicles per 1,000m² in the Thursday evening peak. Therefore applying this rate to the 105m² of retail would equate to some 5 vehicle trips.

From this it will be seen that the proposal would reduce the retail space on the site and this would have the potential to produce something between a moderate and a large reduction in traffic generation.

In our analysis, no account was taken of the reduction and hence the findings that the increase in traffic generated by the site would be low and still valid.

² Roads and Traffic Authority of New South Wales (1993) *Guide to Traffic Generating Developments*, December 1993.

2. Car Park Design (section 6)

"Please clarify the 'required aisle width' for the car stacker of 6.95m, versus the effective aisle widths of 5.9m and 6m."

The proposed car stacking system for the development is the Klaus Single Vario 2061. A copy of the technical specifications of this car stacker is provided in **Appendix B** of this report. A plan showing the proposed car stackers within the car park is provided in **Figure 1** of this report.

The system includes a 5.2m long, 2.3m wide tray which accommodates one vehicle per tray. Each tray is supported on either side by thin columns. To ensure a vehicle does not travel over the outside edges of the tray, the tray is formed with 200mm high upturns on each side. These upturns extend for the full length of the tray. The clear width of each tray between upturns is 2.3m and the clear width of the at-grade space between the support columns is 2.4m.

Once a vehicle has parked on the tray, the tray is elevated to then allow another car to park underneath. The car stacker allows vehicles up to 1.8m in height to park on ground and up to 1.5m in height to park on the tray.

The available aisle width between car stacker trays on either side of each aisle was measured to be 6.50m. This is also shown in **Figure 1**. Assuming the at-grade space is 5.4m long, the effective aisle width of at-grade spaces would be 6.10m.

The parking space dimensions and adjacent aisle widths for the at-grade and tray parking spaces within the car stackers are summarised below:

Parking Space	Length	Width	Effective Adjacent Aisle Width
At Grade	5.4m	2.4m	6.10m
Trays	5.2m	2.3m	6.50m

Whilst the Australian Standard for Off Street Parking Facilities – AS2890.1 can be applied to the at-grade spaces, the standard does not cover parking within car stacker trays.

Cars would not be parked on car stacker trays unless all at-grade spaces were occupied. Car stacker platforms would remain in the elevated position allowing the ground floor spaces to operate as 'standard' spaces. A standard car space (5.4m long x 2.4m wide) represents the minimum parking space dimensions which can accommodate the 99th percentile design vehicle.

For long stay (residential, domestic, employee) parking, the Australian Standard recommends 2.4m wide, 5.4m long spaces with a minimum adjacent aisle width of 5.8m. The at grade car space dimensions and adjacent aisle width comply with the standard and are therefore considered satisfactory.

As stated in our traffic report, an issue with the proposed car stacker is the upturns on the sides of the trays (platforms) which restrict the angle at which a vehicle can enter them. The effect of the tray upturns is to deny vehicles the opportunity of turning across the adjacent space, meaning that a wider aisle width is necessary to allow a vehicle to access the space at an angle of close to 90 degrees.

The Australian Standard for Off Street Parking Facilities – AS2890.1, suggests that small car spaces can be provided at a width of 2.3m and a length of 5.0m. Therefore as a minimum the trays of the car stacker could be considered ‘small car’ spaces. The standard specifies the following design vehicle characteristics.

- | | |
|---|-----------------------------|
| • 50 th percentile vehicle (small car space) | 4,450mm long x 1,700mm wide |
| • 85 th percentile vehicle | 4,910mm long x 1,870mm wide |
| • 99 th percentile vehicle | 5,200mm long x 1,940mm wide |

Therefore the size of the car stacker trays have the potential to accommodate vehicles larger than the 50th percentile vehicle.

We have tested an 85th percentile vehicle reversing into a car stacker tray using the AutoTURN vehicle swept path computer program. This turning path is shown in **Figure 2** attached. From **Figure 2** it can be seen that an 85th percentile vehicle could reverse into the car space tray and thus the stacker trays could be used for vehicles up to this size as well the 85th percentile vehicle is equivalent to a large family sedan such as a Ford Falcon or Holden Commodore.

It is noted that Section B6 of the standard states the following:

“the height of all passenger cars and station wagons is below 1.5 metres.”

Therefore the available height clearance of the at-grade spaces would not restrict access by a 99th percentile vehicle. These are equivalent to a Holden or Falcon station wagons or a Holden Statesman sedan. Vehicles up to 1.8m tall can be accommodated in the at grade spaces which include vehicles such as a BMW X5 or a Nissan X Trail.

Overall the parking spaces within the car stackers would be able to accommodate a large proportion of the Australian vehicle fleet. As the parking of vehicles within the car stackers will be strictly controlled by a valet, the parking layout is considered acceptable.

The remainder of the car park is proposed as standard at grade parking spaces. These spaces and their associated adjacent aisle widths have been reviewed for their compliance with AS2890.1. All at-grade non stacker car spaces comply with this standard and are considered satisfactory.

“Last paragraph, section 6: clarify the dimensions of ‘standard’ at grade parking spaces.”

The Australian Standard suggests minimum parking space dimensions for a ‘standard’ space of 2.4m and 5.4m long³. This minimum sized space can accommodate a 99th percentile vehicle.

3. Servicing (section 7)

“From Figures 2 and 4, it appears that simultaneous entry and exit on the driveway will be tight. Please clarify this especially given that the valet system will be used for the serviced apartments only.”

The Australian Standard suggests that an 85th and 99th percentile vehicle should be able to pass where aisles intersect, on curved sections of ramp or where vehicle turning is required. We have tested an 85th and 99th percentile vehicle passing each other at the car park entrance. These turning paths are shown in **Figure 3** attached. From **Figure 3** it can be seen that there is adequate width for these two vehicles to pass concurrently. Therefore the proposed car park entry width and approach driveway complies with the Australian Standard and is considered satisfactory.

“Height clearance: Appendix B does not indicate the height clearance for the Bantam truck.”

The height clearance where car stackers are located is 3.5m. In all other areas of the car park a height clearance of 2.5m is provided.

We have been advised the garbage room adjacent to the car park entrance will house 240L bins. In addition, the private waste collection contractor which currently services the existing Clyde River Motor Inn operates a small garbage truck with a capacity of 4.5m³.

We have sourced from a waste vehicle manufacturer the vehicle dimensions and operating height clearance requirements for a similar type of waste vehicle. A copy of the technical specifications are provided in **Appendix C** of this report. The rear loading compaction units are placed on an Isuzu NFP 400 vehicle.

It is noted that a waste vehicle which has a capacity of 4.5m² to 7m³ would be typically 2.4m high and require an operating height clearance of 2,780mm. The overall length of such a vehicle including the compactor overhang would be 6.4m. We have tested a 6.4m Small Rigid Truck entering and exiting the car park. This turning path is shown in **Figure 4** attached. As the height clearance outside the garbage room would be 3.5m and the car park can accommodate a 6.4m long truck travelling through it, the design of the car park is considered suitable for a small 4.5m³ – 7.0m³ rear loading waste vehicle to enter and exit in a forward direction.

The two parking spaces on the northern side of the car parking entrance provide additional valet waiting bays for arriving / departing guests and an area to stand a waste vehicle if it chooses not to enter the car park. There are no height restrictions in the vicinity of these two car spaces. These spaces are shown in **Appendix A**.

³ AS2890.1 – Figure 2.2

4. Comments on Director-General Requirements (Section 9)

"Para 2: Figures 2 - 4 appear to indicate an obstruction (adjacent to spaces 11/12, 21/22). Please clarify adequacy of swept paths."

As stated above, the swept path of a 6.4m Small Rigid Truck has been prepared and overlayed onto the revised car park design. The manoeuvring space within the car park can accommodate this vehicle type which is expected to be the largest vehicle which would access the car park. The proposed layout of the car park is accordingly considered satisfactory.

"Para 4: Discussion of sight distances between vehicles and pedestrians should be included."

The Australian Standard provides recommendations for the areas adjacent to driveways which should be kept clear of obstruction to allow clear sight lines to pedestrians walking along the footpath. These requirements are shown in Figure 3.3 of the standard.

These minimum requirements have been accommodated in the design of the driveway and therefore the design meets the Australian Standard requirements.

"Para 6: Address level of existing public transport provision, location of bus stops and likely patronage/demand by proposal."

Prior Buses operate bus services between Nowra and Batemans Bay which travel through the Batemans Bay town centre. Through consultation with the bus operator, we have been advised that buses stop in Clyde Street on the northern side of the development and in both Perry Street (outside the Stockland development) and North Street.

A plan showing the existing bus routes and bus stop locations is provided in **Appendix D** of this report.

The site is thus located close to existing bus routes and within easy walking distance of existing bus stops.

"Para 7: Nominate 'existing pedestrian facilities', fact that the shared access way will be a pedestrian route, and tactile/other architectural treatment of shared access way will be used to maximise safety/reduce conflicts if any."

The revised access driveway is now located wholly within the subject site and no shared zone is proposed. Therefore this comment is not longer applicable.

5. Section 10 - RTA letter

"The text refers to an RTA letter at Appendix C which is a letter from Masson Wilson Twiney."

To provide context to the copy of the letter provided in Appendix C of this report, a summary of dealings between the proponent, the RTA and Masson Wilson Twiney Pty Limited is provided below.

Ms Nicole Stevenson of the RTA advised by email to Workshop 1 Pty Ltd dated 1 August 2006 that consideration should be given to undertaking intersection modelling as part of the assessment of traffic impacts of the development. A letter dated 12 September 2006 from MWT (copy attached in **Appendix E**) was sent to the RTA seeking reconsideration of this request given the small scale of the development. Ms Nicole Stevenson advised verbally by phone on 18 January 2007 that no intersection modelling would be required.

6. Disabled Parking

“the traffic report does not refer to disabled parking”

All non residential parking will be managed by a valet. Therefore infirm or wheelchair bound guests would alight from their vehicle in North Street or with the proposed two car spaces north of the access driveway and make their way to reception. Accessible pathways are provided from these parking locations to reception. Their vehicle would then be parked within the car park by the valet.

The DCP does not have an adaptable unit requirement and therefore no adaptable units and consequently no accessible parking spaces are proposed for residents.

7. Parking numbers

“could you please provide the following information/justification in the traffic report: assessment against Council's parking requirements and justification for amount of proposed parking - based on factors such as the likely occupancy rates for the serviced and permanent apartments, and provision and likely usage by occupants of nearby public parking areas.”

In relation to this, it is noted that three submissions have included comments / concerns on the matter of on site parking provision, one from Council and two submissions from a member of the public.

We set out below our interpretation of the DCP 130 requirements and thereafter our reasoning why application of this is not appropriate.

7.1 DCP 130 Requirements

The table below summarises each proposed use of the development, the associated parking rate from DCP 130 and overall parking provision requirements.

Use	No. / Area	DCP 130 Parking Rate	
Serviced Apartments	46 serviced apartments	1 space per each accommodation unit or similar, plus 1 space per 4 units for visitors parking, plus 1 space per managers/owners residence, plus 1 space per employee or fulltime equivalent, plus 1 space per 4 units for trailer/caravan/boat parking (maximum 3 spaces, soft stand). Additional parking will be assessed on an individual basis having regard to the facilities proposed within the development.	46 spaces + 12 spaces for visitors + 5 staff spaces**** +3 boat trailer parking spaces
Medium Density Residential	2 x one bedroom, 6 x two bedroom 2 x three bedroom	1 space per 1 bedroom unit 1.5 spaces per 2 bedroom unit 2 spaces per 3 bedroom unit Plus 0.25 spaces per unit for visitor parking. (parking to be rounded up to nearest whole number of spaces).	15 spaces + 3 visitor spaces
Retail	105m ²	1 space per 30m ² GFA*	4 spaces
Restaurant	248m ² ***	1 space per 8m ² GFA**	31 spaces
Total			116 + 3 boat trailer spaces

* Retail outlet rate assumed

** Isolated rate adopted

*** area of publicly usable space in accordance with DCP definition

**** assumes a peak staff of 10

Therefore the development would require 121 car parking spaces if the DCP was strictly observed. For the reasons set out below this amount of parking is considered to be excessive and the proposed provision of 56 spaces is considered to be satisfactory.

7.2 Proposed Approach to Parking Provision

Retail Parking

The Batemans Bay Town Centre Structure Plan seeks to improve parking efficiency in the town centre by the removal of the commercial and retail parking provision requirements from the DCP 130. In addition, the structure plan recommends increased intensification of residential development within areas where access to a wide range of services / facilities is possible without the need to use a private vehicle.

In accordance with the Structure Plan intention to delete the DCP requirement for retail parking it is proposed to provide no parking for these components.

Restaurant Parking

The development incorporates a restaurant which would cater for residents in the serviced apartments, and to a lesser extent, the permanent residents. A tourist accommodation related restaurant in Batemans Bay away from the waterfront would not generally be a major draw at lunchtimes. Thus the peak demand for parking at the restaurant by persons not living on the site would typically occur on weekday and weekend evenings. At these times shopper and business parking demands in the area are greatly reduced and public parking for visitors to the restaurant would be readily available.

Residential Parking

In relation to the residential parking requirements, data from the 2006 Census of Population and Housing indicates the number of vehicles parked overnight of different dwelling type. A copy of vehicle parking demand by dwelling type for the Eurobodalla Statistical Local Area (SLA) and for the Shoalhaven SLA is provided in **Appendix F** of this report. Batemans Bay is included in the Eurobodalla SLA.

This data indicates an average car parking demand for flats, units and apartments of 0.9 vehicles per dwelling for Eurobodalla SLA and 0.7 vehicles per dwelling for Shoalhaven SLA. The Shoalhaven SLA has a higher extent of urban areas than Eurobodalla and is thus considered to be more representative of the situation in the heart of Batemans Bay than in Eurobodalla as a whole.

Nevertheless the census data indicates that, based on actual parking requirements in both SLA's, there is a need for only one space per unit. The proposal to provide one car space per permanent dwelling is considered reasonable as residents would only need one space per unit for themselves and visitors would be able to park on the surrounding streets or nearby public parking areas. It is thus proposed to allocate one parking space to each of the 10 apartments.

Serviced Apartment Parking

The serviced apartments will all be studio or one bedroom units. These would at most require one space per unit. However, in many instances groups would arrive in one car and require two serviced apartments (e.g. two couples or a couple with an older parent or a parent with children).

It is proposed that 46 parking spaces be allocated to the serviced apartments, i.e. one space per unit. These would only be likely to be needed late at night when all guests were in their rooms. It is also noted that this type of accommodation is considered to be operating at capacity when 75% - 80% of the rooms are in use. Therefore the provision of at least one space per unit allows for additional parking.

Visitor parking would not normally be needed for the serviced apartments because of the casual way in which they would be used by people from out of town.

Staff Parking

Two spaces within the car park will be set aside for staff parking. Access to these spaces would be managed by the development. Whilst the service apartment parking areas within the car park offer further opportunities to park staff vehicles when not in use, the intention is to not allow any more than two staff vehicles within the car park at any one time.

Boat Parking

In relation to boat parking it is noted that the nature of the development is such that it could not readily accommodate the manoeuvring needed to park a boat. In this regard it would not be appropriate that the need to park a boat should dictate the building design. Rather developments that are aimed at clientele that would need to park a boat should be so developed. Other developments aimed at another market sector should be allowed to achieve an efficient design without having to compromise such by having to accommodate boats. To require otherwise would unnecessarily constrain holiday accommodation types and architectural diversity in the area.

Accordingly to not providing boat parking space on the site is that advice should be given to all prospective guests at the time of booking that boat parking was not available on the site. Such a requirement would be an appropriate condition of consent for the development. Boat parking is available in the recently completed upgrade of the boat ramp and public parking areas at the northern end of Clyde Street.

Proposed Overall Parking Provision

From the above we conclude that the proposed parking provision is satisfactory as it will cater for all persons living on the site (temporary and permanent). The Batemans Bay Town Centre Structure Plan suggests that DCP 130 should be modified to not require any more parking for transient (short term) needs and employees in the town centre as there is enough parking already and this could be used more efficiently. The proposed parking provision on the site is in the spirit of this.

Overall the proposed car park design and parking provision are considered to be satisfactory.

7.3 Comparison of Parking Provision Rates

In the interest of completeness and as requested by the Department of Planning the table below compares the proposed parking provision with that indicated by the existing DCP 130, the Structure Plan and the Roads and Traffic Authority guidelines⁴ and the proposed provision for each use. The parking rates applicable to each calculation method area provided in **Appendix G** of this report.

⁴ Roads and Traffic Authority of New South Wales (1993) *Guide to Traffic Generating Developments*, December 1993.

Use	No. / Area	DCP 130 Requirement	Structure Plan Parking Requirement	RTA Guide Requirement	Proposed Parking Provision
Serviced Apartments	46 serviced apartments	46 spaces + 12 spaces for visitors + 5 staff spaces ⁽⁴⁾ +3 boat trailer parking spaces	46 spaces + 12 spaces for visitors + 5 staff spaces ⁽⁴⁾ +3 boat trailer parking spaces	46 spaces + 5 spaces for staff ⁽⁵⁾	46 spaces + 2 staff spaces + 2 valet / loading spaces
Medium Density Residential	2 x one bedroom, 6 x two bedroom 2 x three bedroom	15 spaces + 3 visitor spaces	15 spaces + 3 visitor spaces	12 spaces	10 spaces
Retail	105m ²	4 spaces ⁽¹⁾	0 spaces	5 spaces ⁽⁶⁾	0 spaces
Restaurant	248m ² ⁽³⁾	31 spaces ⁽²⁾	0 spaces	0 – 45 spaces ⁽⁷⁾	0 spaces
		116 + 3 boat trailer spaces	81 spaces + 3 boat trailer spaces	68 – 113 spaces	60 spaces

1 retail outlet rate assumed

2 isolated rate adopted

3 area of public space in accordance with DCP definition

4 assumes a peak staff of 10

5 'motel' rate applied assuming a peak staff demand of 10 persons

6 speciality shop rate applied

7 the RTA guide states that if the restaurant primarily serves patrons, then additional parking may not be required

In relation to the RTA parking rates it is noted that they are general ones and do not apply in areas where parking is constrained, already well supplied or not desirable for transport management policy reasons. In this case the Council Strategy for Batemans Bay suggest that the second two considerations are applicable and hence it would not be appropriate to require parking for the subject site to be provided in accordance with the RTA's generic parking provision rates.

8 Conclusion

We conclude that the modified design:

- no longer presents an issue with site traffic and pedestrians mixing in a shared zone;
- does not present any undue impact from traffic generation;
- provides appropriate geometry for the proposed parking spaces;
- will satisfactorily accommodate a service vehicle; and
- provides an appropriate level of parking on the site.

We trust this advice assists you in your planning. Please contact me if you wish to discuss anything above.

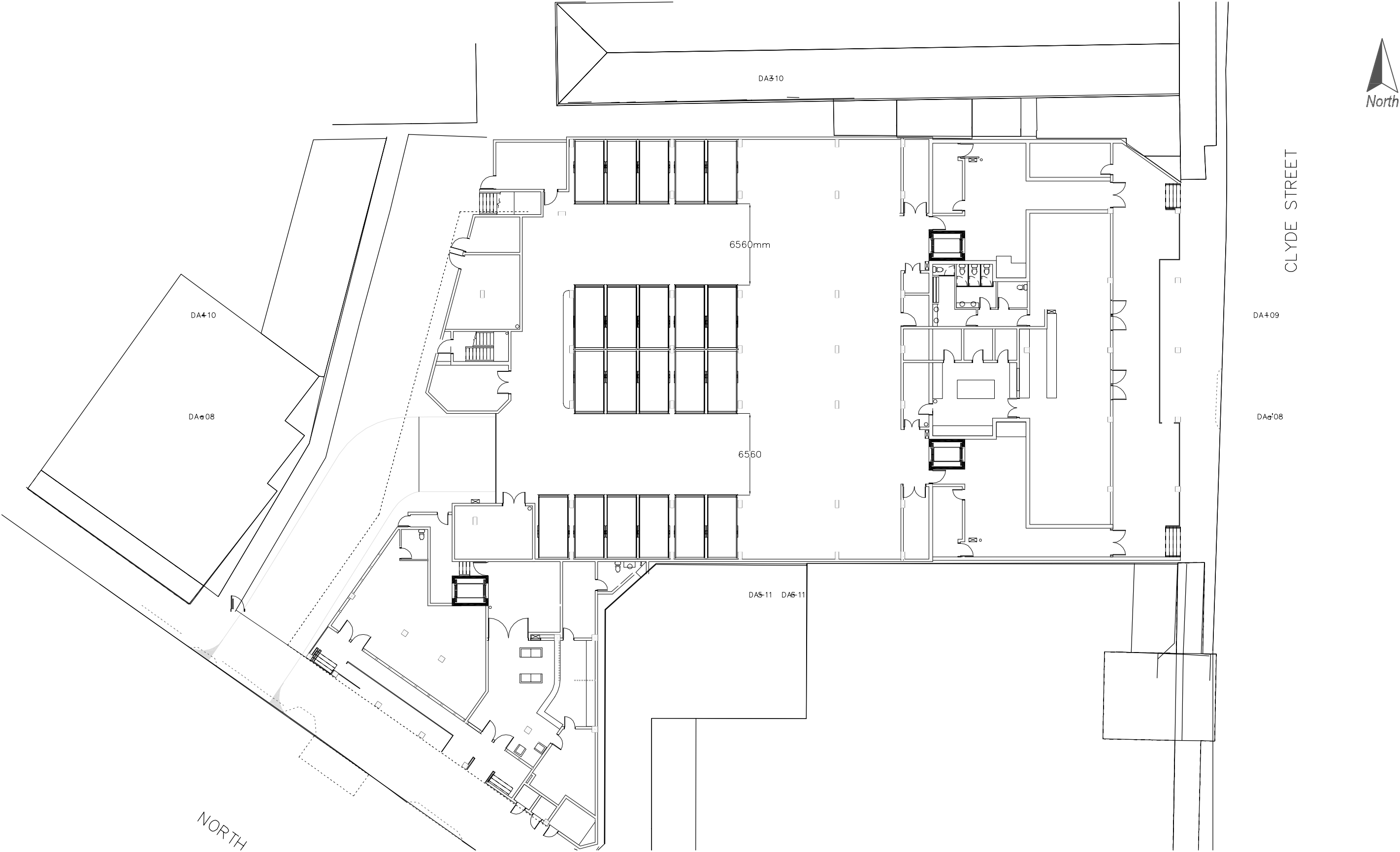
Yours faithfully,

A handwritten signature in black ink, appearing to read 'Dean Brodie', with a horizontal line underneath.

Dean Brodie
Principal Consultant
Transport Planning

PROPOSED AISLE WIDTHS ADJACENT TO CAR STACKERS

CLYDE RIVER MOTOR INN



Scale: 1:300@A3



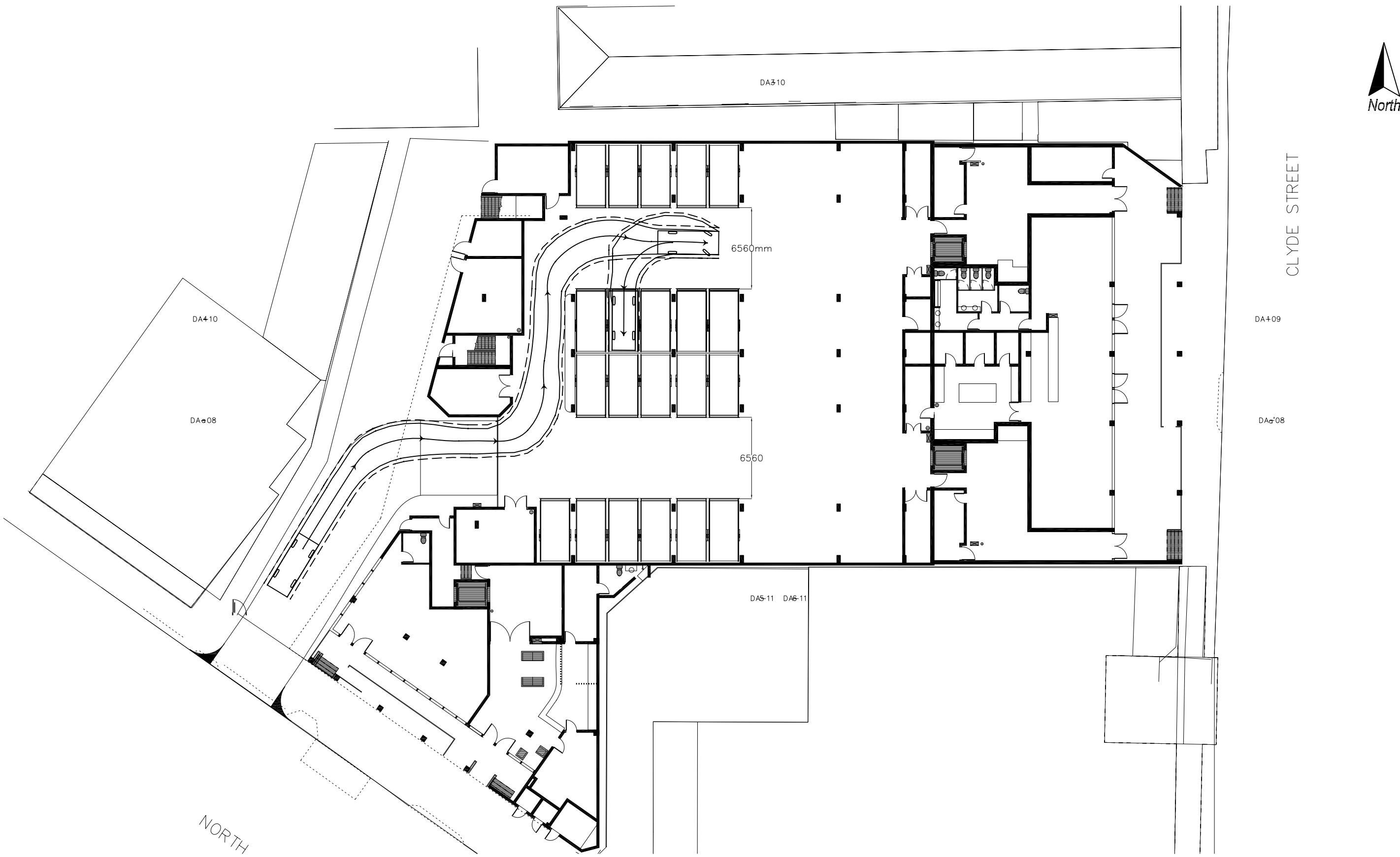
Filename: 052849da09

Figure 1

Date: 22 December 2009

85th PERCENTILE VEHICLE REVERSING INTO CAR STACKER TRAY

CLYDE RIVER MOTOR INN



Scale:1:300@A3



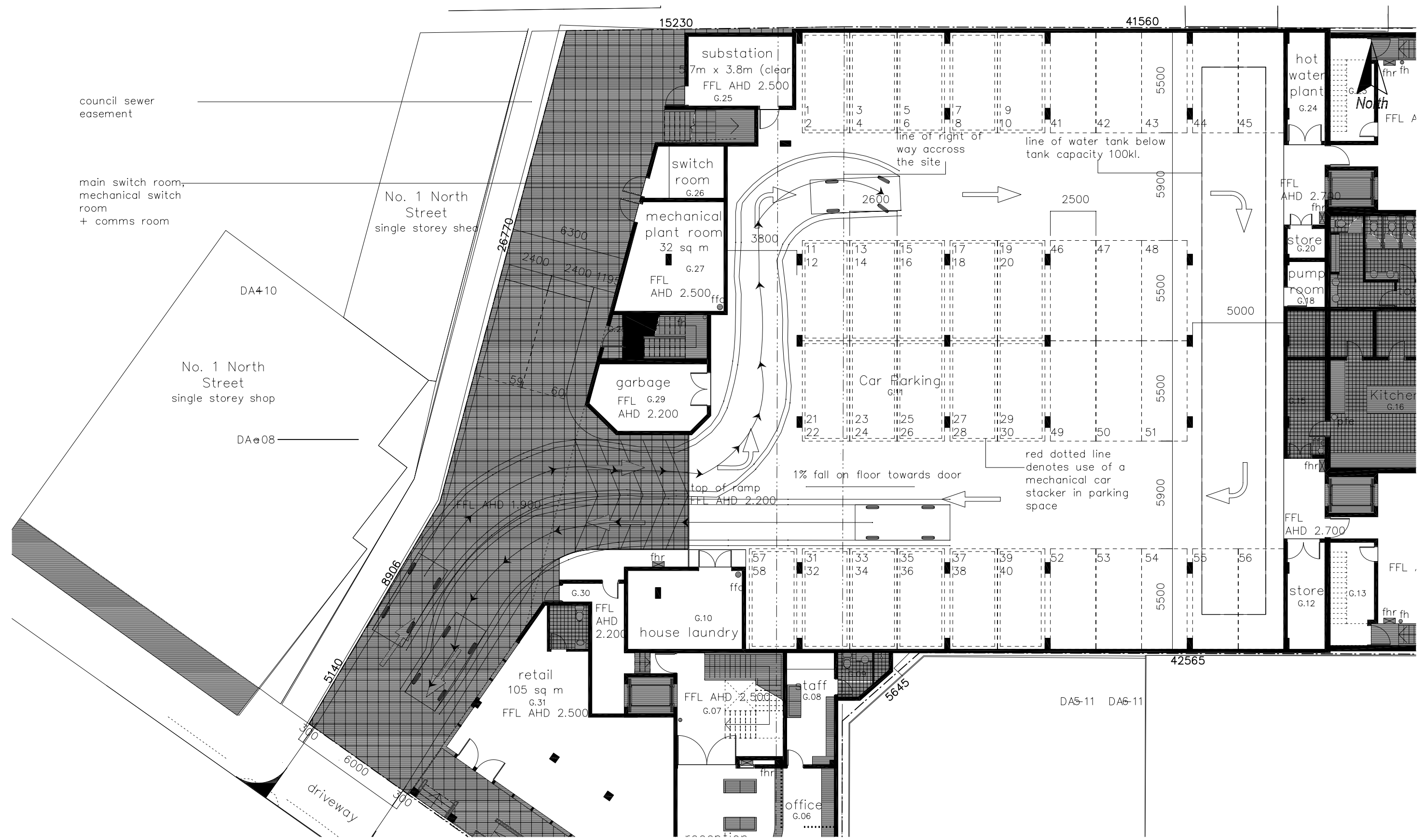
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Figure 2

Date: 22 December 2009

85th & 99th PERCENTILE VEHICLES PASSING AT CAR PARK ENTRANCE

CLYDE RIVER MOTOR INN



Scale: 1:300@A3



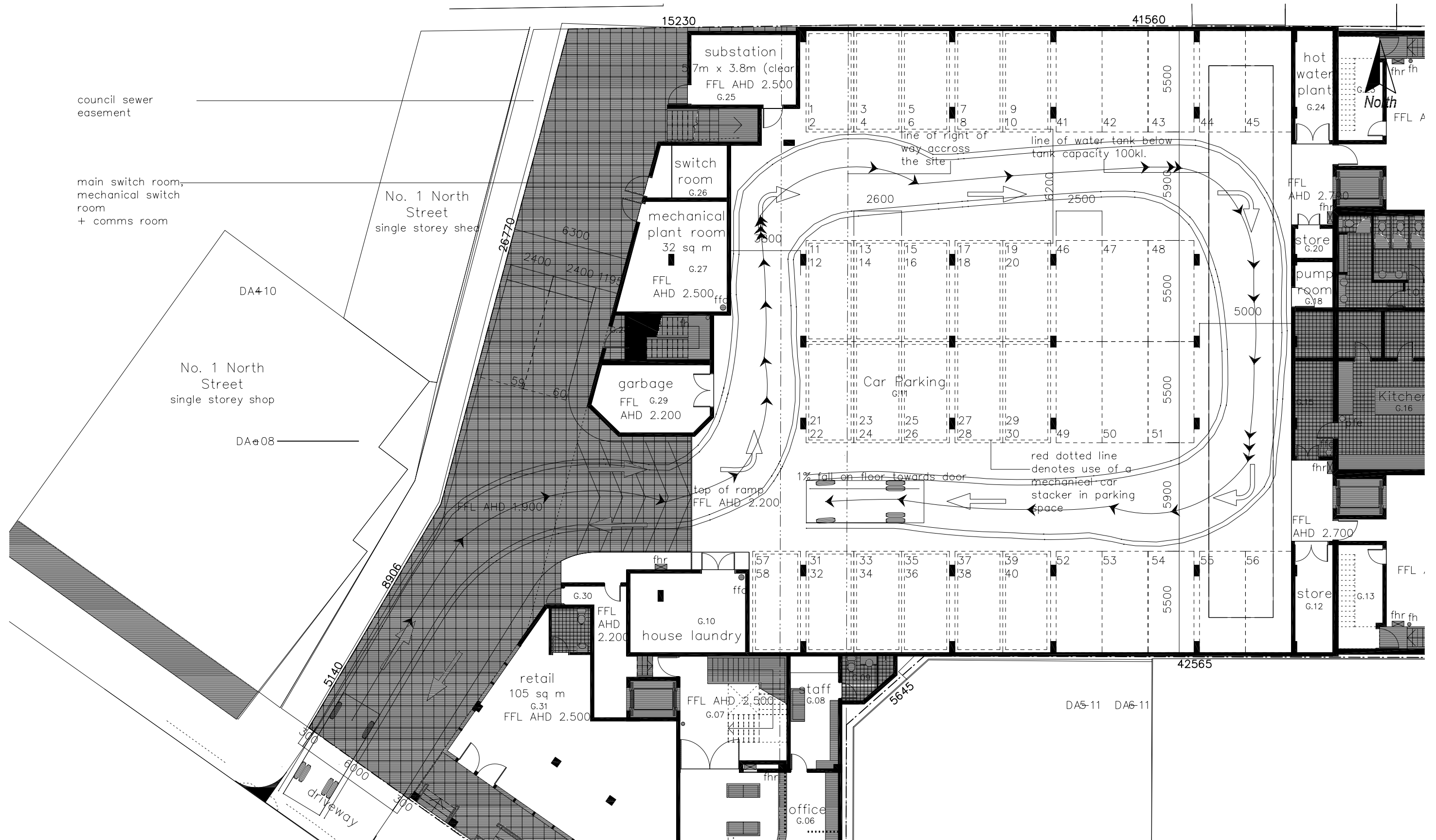
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Figure 3

Date: 22 December 2009

SRV ENTERING / EXITING CAR PARK

CLYDE RIVER MOTOR LODGE



Scale: 1:300@A3

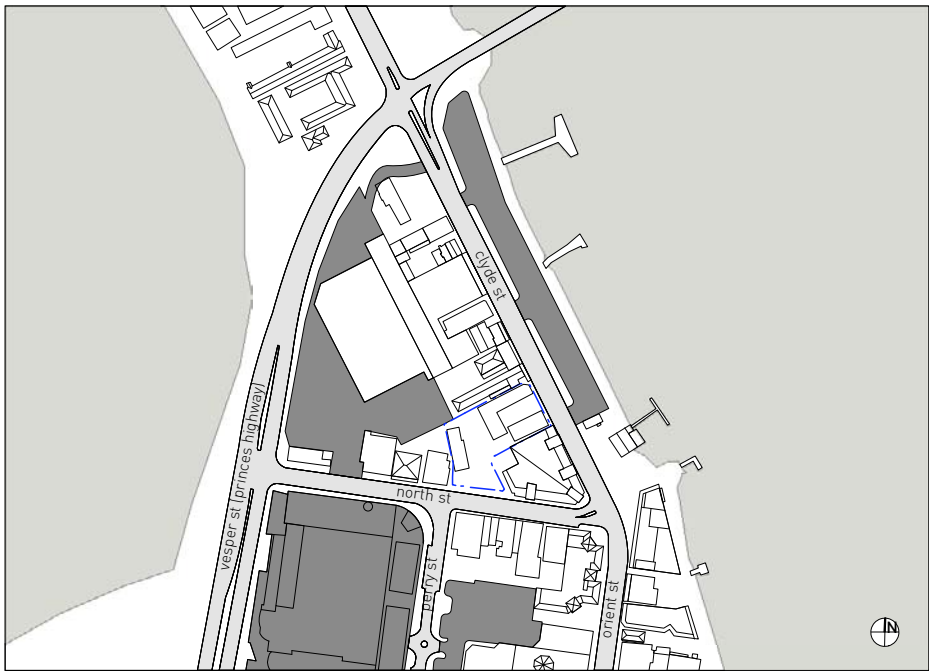
Halcrow MWT

Filename: 052849da09

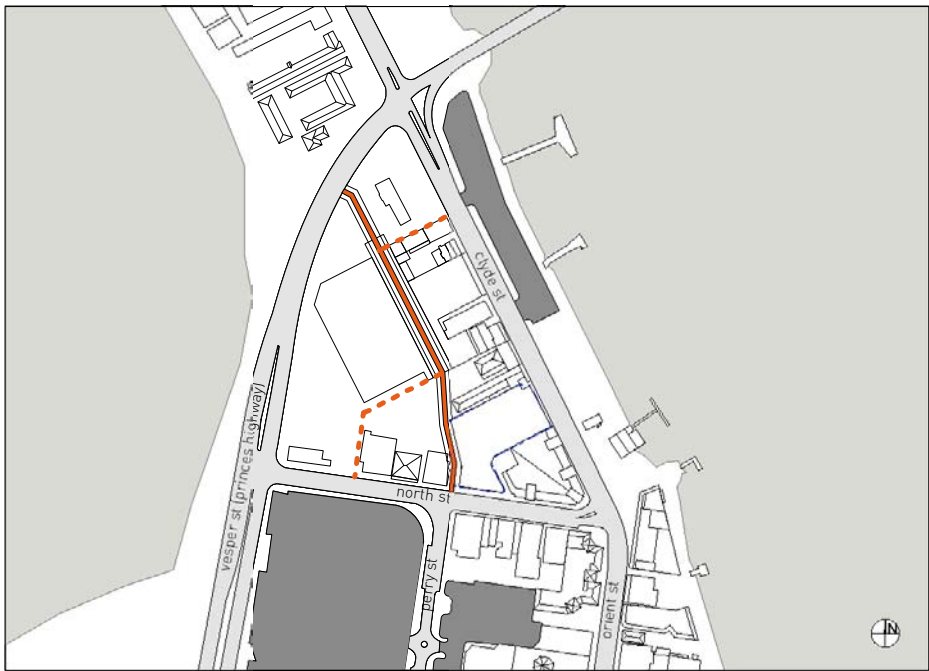
Figure 4

Date: 22 December 2009

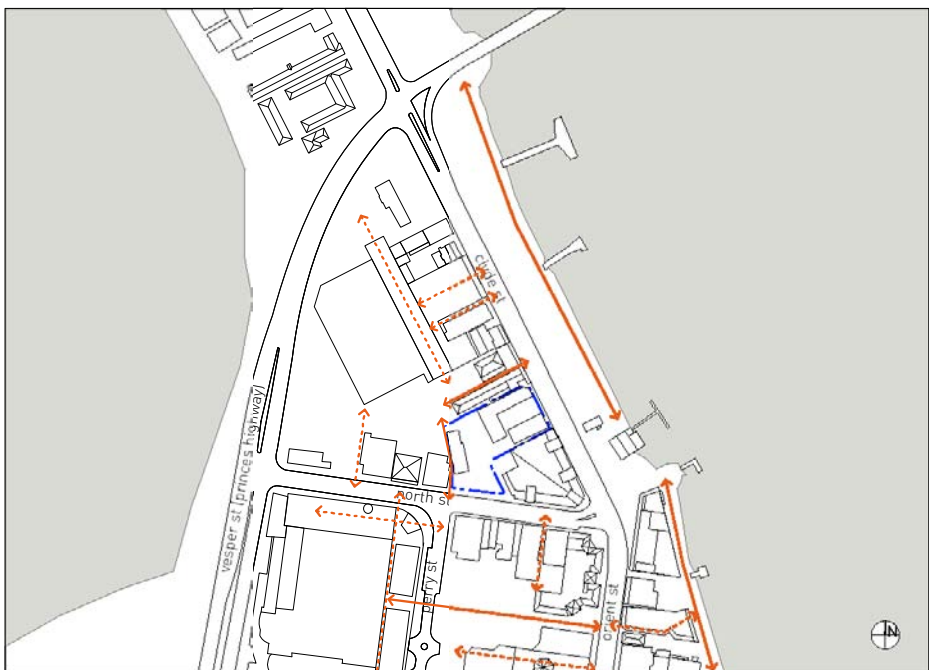
Appendix A – Site Plan



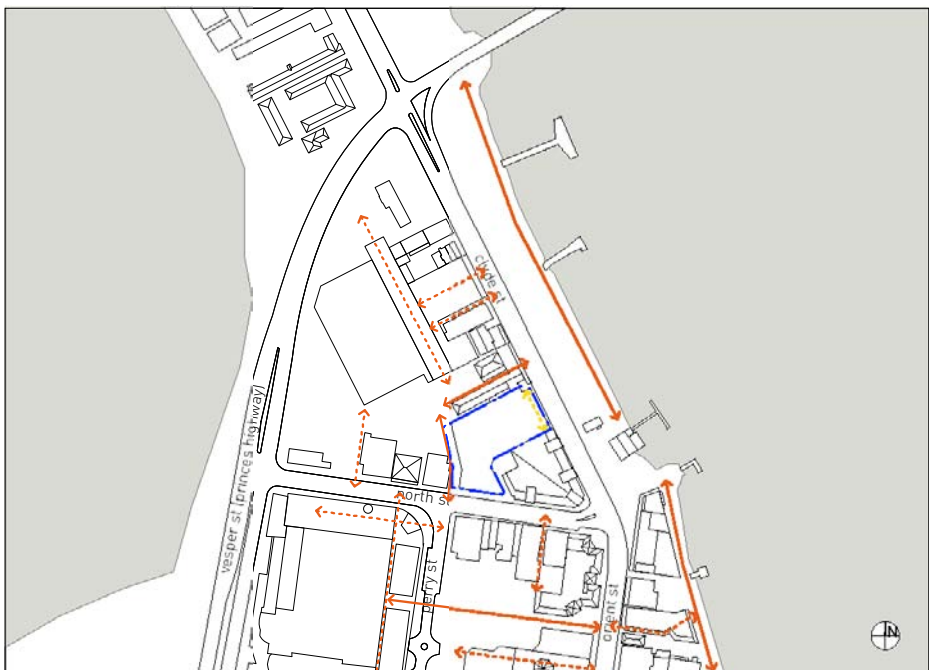
Road Network - Existing scale 1:5000



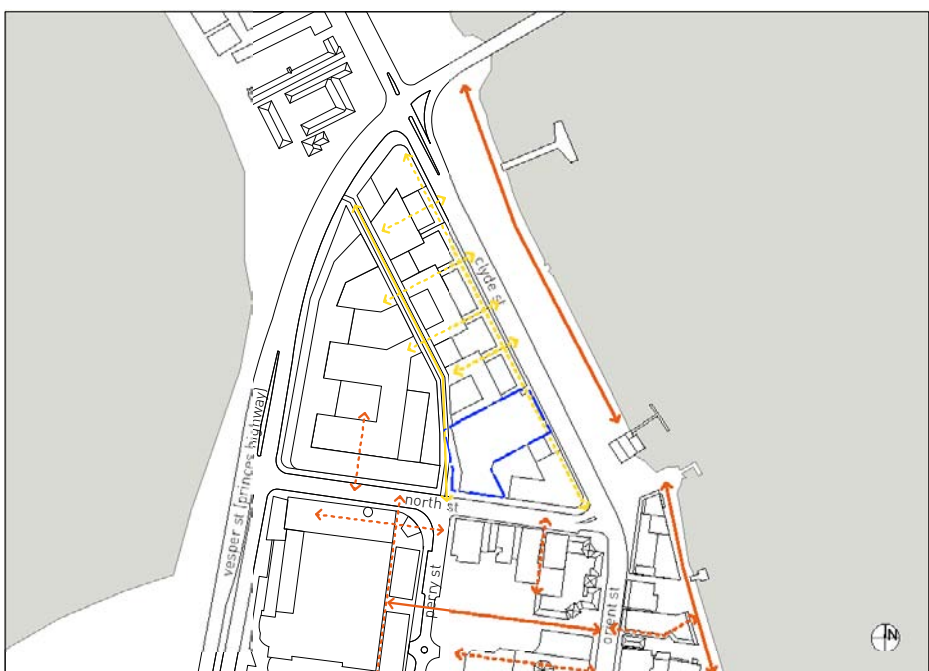
Road Network - Future scale 1:5000



Pedestrian Network - Existing Scale 1:5000



Pedestrian Network - Proposed Scale 1:5000



Pedestrian Network - Future Scale 1:5000

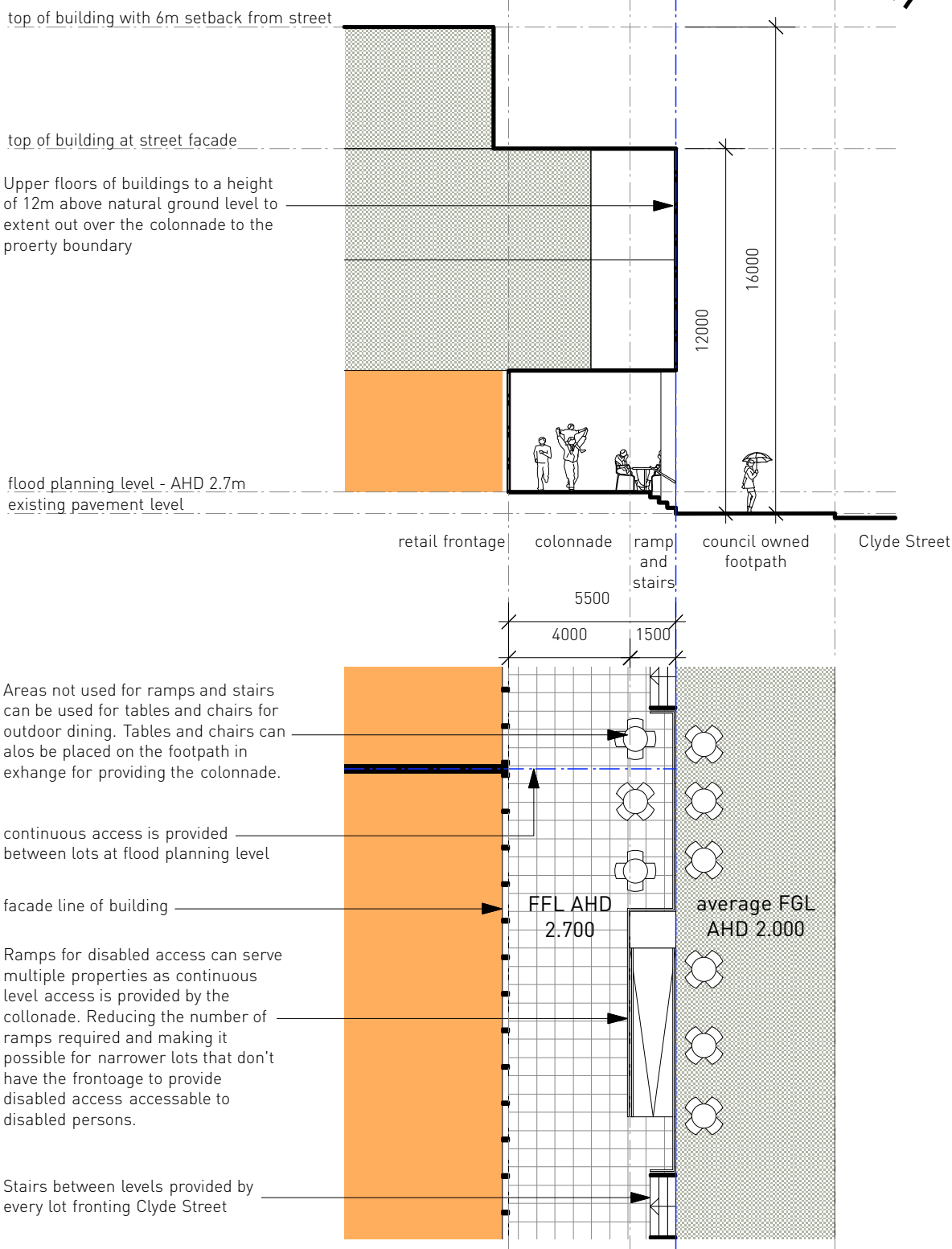
Vehicle Driveway
A driveway is proposed running along the western boundary of the site. This will provide vehicle access to the car park and pedestrian access to the rear of the building on 3 Clyde Street. Public pedestrian access through to the shopping centre car park to the north of the site remains as is on adjacent council owned property.

The building setbacks have been calculated to allow the possibility of a future laneway as proposed in the Batemans Bay Town Centre Structure Plan.

- alternative future lane
- future lane
- car parking

Pedestrian Links.
Batemans Bay Town Centre has an existing network of pedestrian linkages through private sites, either through open space, easements and car parks or in covered arcades and malls. It is considered desirable to continue that pattern in all new development. The pedestrian link on council property, along the western boundary of 3 Clyde St is to be remain as is.

- new pedestrian linkages - private land
- pedestrian linkages - public land
- pedestrian linkages - private land



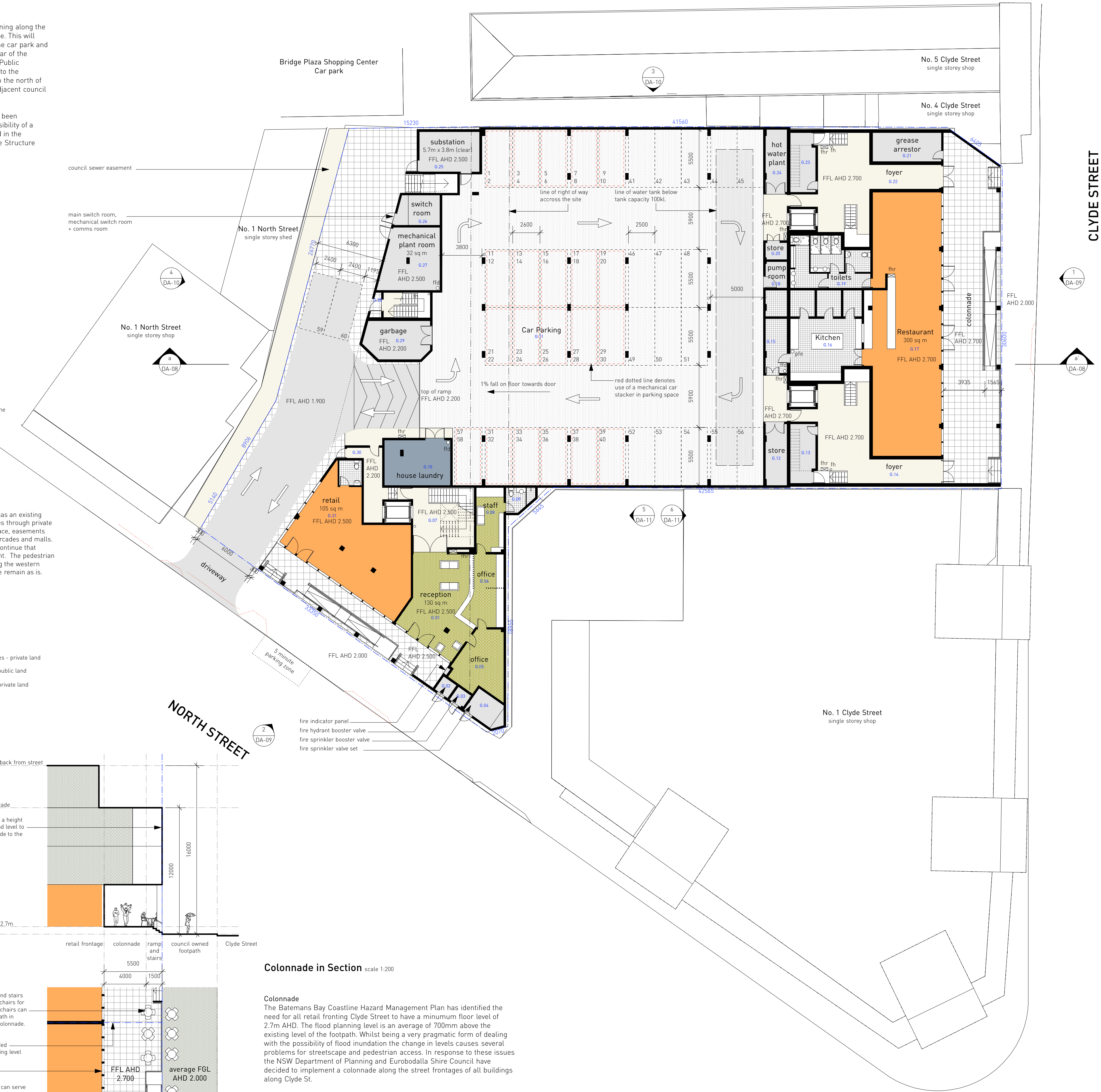
Colonnade in Section scale 1:200

Colonnade
The Batemans Bay Coastline Hazard Management Plan has identified the need for all retail fronting Clyde Street to have a minimum floor level of 2.7m AHD. The flood planning level is an average of 700mm above the existing level of the footpath. Whilst being a very pragmatic form of dealing with the possibility of flood inundation the change in levels causes several problems for streetscape and pedestrian access. In response to these issues the NSW Department of Planning and Eurobodalla Shire Council have decided to implement a colonnade along the street frontages of all buildings along Clyde St.

Each new building fronting Clyde Street is required to use the first 1.5 meters of their site along the Clyde Street frontage at ground level to provide stairs and or disabled access ramps to allow pedestrians to negotiate the change in levels. The next 4 meters of the site are to be used to provide a continuous covered walkway between sites at retail flood planning level.

In exchange for providing the colonnade Council has agreed to allow retailers to us an equivalent area of footpath to that used for the provision of ramps and stairs for tables and chairs to allow outdoor dining along Clyde Street.

Colonnade in Plan scale 1:200



Ground Floor Plan scale 1:200

Revisions

00	Issued for Development Approval	13.08.08
01	Issued for Development Approval	15.12.08
- Vehical access revised to fit within the site.		
- Car stacker revised.		
- Car park and storage spaces revised to accommodate vehicle access and car stacker revisions.		
- Turn bay for loading and temporary valet car standing spaces added in laneway		
- Additional 2 car parking spaces provided.		

key

- studio apartment
- 1 bed apartment
- 1 bed terrace apartment
- 2 bed terrace apartment
- 3 bed terrace apartment
- reception + conferencing
- back of house
- retail
- circulation
- plant and storage zones
- fh fire hydrant
- fhr fire hose reel
- pfe portable fire extinguisher
- ffs first flush diverter
- dp down pipe
- hp heat pump hot water service
- AHD australian height datum
- FFL finished floor level
- FRL finished roof level
- FGL finished ground level

Consultants

Surveyor - The Lawrence Group
Ph: 02 9557 2299
Structural Engineer - Simpson Design Associates
Ph: 02 9810 6911
Geotechnical Engineer - Douglas Partners
Ph: 02 9271 1838
Building Services Engineers + Consultants - GHD Pty Ltd
Ph: 02 4479 9501
Civil and Hydraulic Engineer - Whippo-Wood Consulting
Ph: 02 8923 8444
Acoustical Consultant - Wilkinson Murray Pty Ltd
Ph: 02 9437 4611
Landscape Architect - Ayling + Drury Landscape Architecture
Ph: 02 4432 9701
Planner - SPD Town Planners
Ph: 02 9212 5999
Environmental Engineer - Peter Spurnay + Associates
Ph: 02 4473 8662
BASIX Assessor - Building Sustainability Assessments
Ph: 02 4762 3439
Traffic - Transport Consultant - Masson Wilson Twiney
Ph: 02 9410 4100
Traffic Construction Management Plan - John Condon and Associates - Ph: 02 4411 7755
BCA Consultant - BCA Logic Pty Ltd
Ph: 02 9411 5360
Quantity Surveyor - BDA Pty Ltd
Ph: 02 9281 7944

workshop
dunn + hilliam architects

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T +61 2 9316 7715
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E studio@workshop1.com.au
Nominated architect ARB No. 7547
This drawing, the information and design in it are copyright to Workshop 1 Pty Ltd.

Project Clyde River Motor Inn
Lot 4 DP 585 556

Issue Preliminary

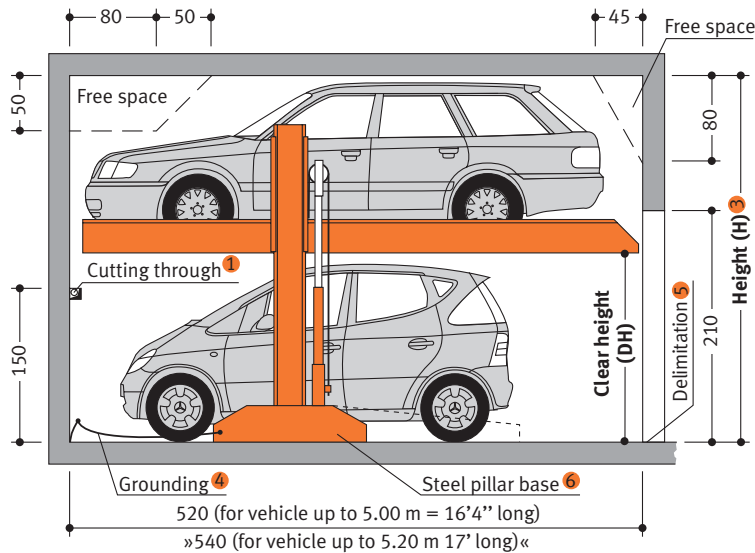
Date Monday, 15 December
2008 12:09:10 PM
Scale 1:200 @ A1

Drawing Ground Floor Plan

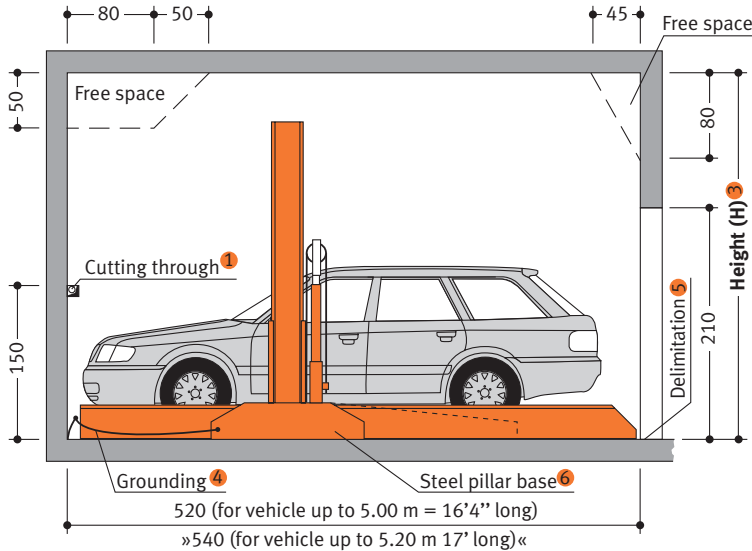
Dwg No. pDA 03 - 02 01

Appendix B – Klaus Single Vario 2061 Specifications

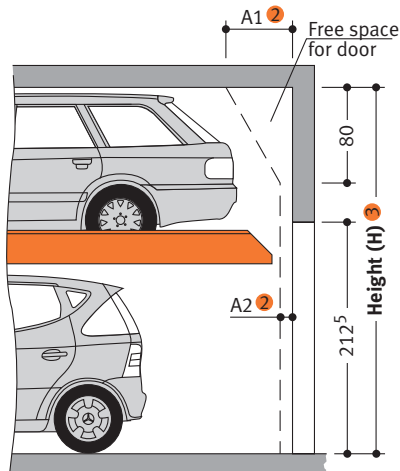
SingleVario 2061



Before lowering the platform, the vehicle parked in the lower parking space must be driven off!



Garage with door in front of the car parking system



Notes

- For dividing walls: cutting through 10 x 10 cm (for pipes).
- Dimensions A1, A2 and A3 must be coordinated with the door supplier.
- If the total height is greater, the max. vehicle height for the upper parking space increases accordingly.
- Potential equalization from foundation grounding connection to system.
- In compliance with DIN EN 14 010, 10 cm wide yellow-black markings compliant to ISO 3864 must be applied by the customer to the edge of the platform in the access area to mark the danger zone in front of the supporting surface of the upper platform edge (see »Load Plan«, Page 3)
- Variable steel pillar bases in two sizes (see »Load Plan«, Page 3).
- Maximum load of 2,500 kg for extra charge.

Product Data SingleVario 2061



Loadable
up to 2,500 kg
A system for
any height
subsequently adjustable!

Dimensions:

All space requirements are minimum finished dimensions. Tolerances for space requirements $\pm 3_0$. Dimensions in cm.

EB (single platform) = 2 vehicles

Type	H	DH**
2061-160	320	160
2061-170*	330	170
2061-180	340	180
2061-190	350	190
2061-200	360	200
2061-210	370	210

* = standard type ** = without car

Suitable for:

Standard passenger car,
station wagon/Van/SUV.
Height and length
according to contour.

Type	H	car height	
		upper	lower
2061-160	320	150	150
2061-170*	330	150	160
2061-180	340	150	170
2061-190	350	150	180
2061-200	360	150	190
2061-210	370	150	200

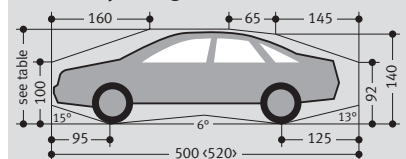
* = standard type

width 190 cm

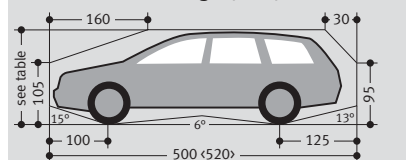
weight 7 max. 2000/2500 kg

wheel load max. 500/625 kg

Standard passenger car



Standard station wagon/Van/SUV



Standard passenger cars are vehicles without any sports options such as spoilers, low-profile tyres etc.

KLAUS
multiparking

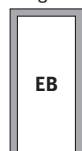
Klaus Multiparking GmbH
Hermann-Krum-Straße 2
D-88319 Aitrach

Phone +49-75 65-5 08-0

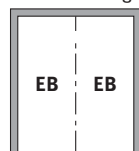
Fax +49-75 65-5 08-88

E-Mail info@multiparking.com

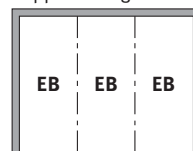
Internet www.multiparking.com

Width for basement garage**Dividing walls****Single Platform (EB)**

usable platform width	B1
230 *	260
240	270
250	280
260	290
270	300

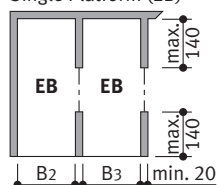
Double arrangement (2 x EB)

usable platform width	B1
230 *	520
240	540
250	560
260	580
270	600

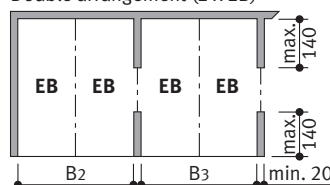
Tripple arrangement (3 x EB)

usable platform width	B1
230 *	780
240	810
250	840
260	870
270	900

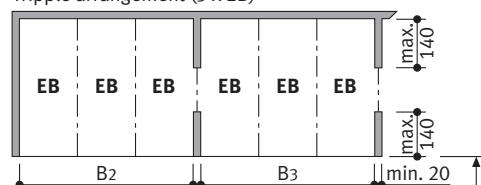
Carriageway in
accordance with
local regulations

Columns in system zone**Single Platform (EB)**

usable platform width	B2	B3
230 *	255	250
240	265	260
250	275	270
260	285	280
270	295	290

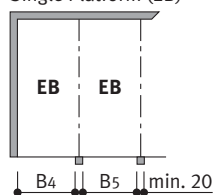
Double arrangement (2 x EB)

usable platform width	B2	B3
230 *	515	510
240	535	530
250	555	550
260	575	570
270	595	590

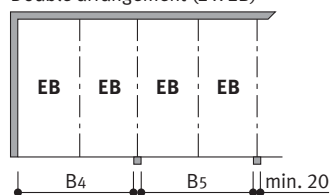
Tripple arrangement (3 x EB)

usable platform width	B2	B3
230 *	775	770
240	805	800
250	835	830
260	865	860
270	895	890

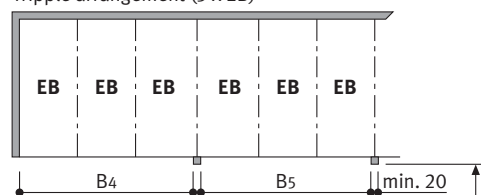
Carriageway in
accordance with
local regulations

Columns outside of system zone**Single Platform (EB)**

usable platform width	B4	B5
230 *	250	240
240	260	250
250	270	260
260	280	270
270	290	280

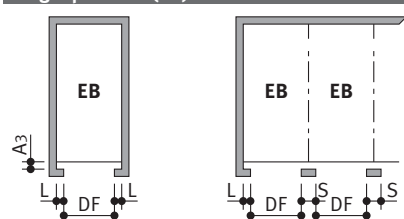
Double arrangement (2 x EB)

usable platform width	B4	B5
230 *	510	500
240	530	520
250	550	540
260	570	560
270	590	580

Tripple arrangement (3 x EB)

usable platform width	B4	B5
230 *	770	760
240	800	790
250	830	820
260	860	840
270	890	860

Carriageway in
accordance with
local regulations

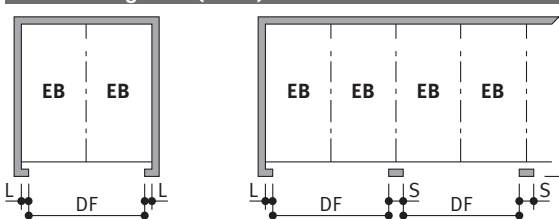
Widths for garage with door in front of car parking system**Single platform (EB)**

usable platform width	door entrance width DF	L	S
230 *	237 ⁵	12 ⁵	25
240	250	12 ⁵	25
250	250	15	30
260	260	15	30
270	270	15	30

* = standard width (parking space width 2.30 m)

A3 = seat-engaging
surface (dimensions
require coordination
with door supplier.)

Allround door
dimensions require
coordination between
door supplier and
local agency of
Klaus Multiparking.

Double arrangement (2 x EB)

usable platform width	door entrance width DF	L	S
230 *	475	22 ⁵	45
240	500	20	40
250	520 ①	20	40
260	540 ①	20	40
270	560 ①	20	40

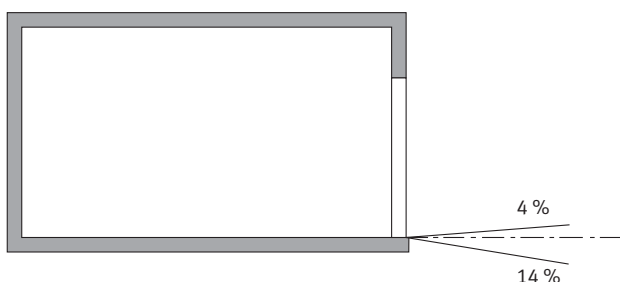
① = no standard width for doors!

Carriageway in
accordance with
local regulations

Please note:

End parking spaces are generally more difficult to drive into. Therefore we recommended for end parking spaces our wider platforms. Parking on standard width platforms with larger vehicles may make getting into and out of the vehicle difficult. This depends on type of vehicle, approach and above all on the individual driver's skill.

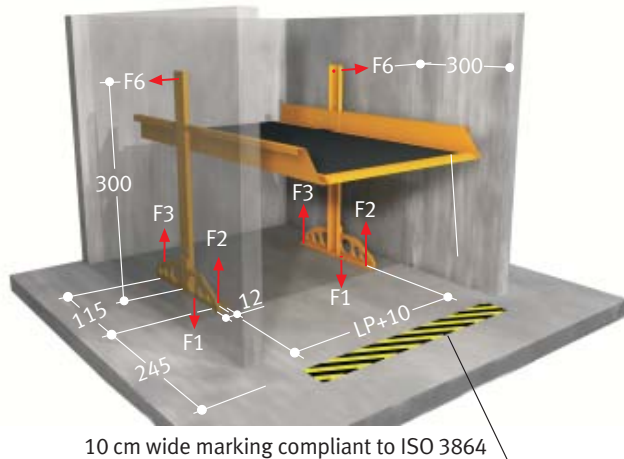
Approach



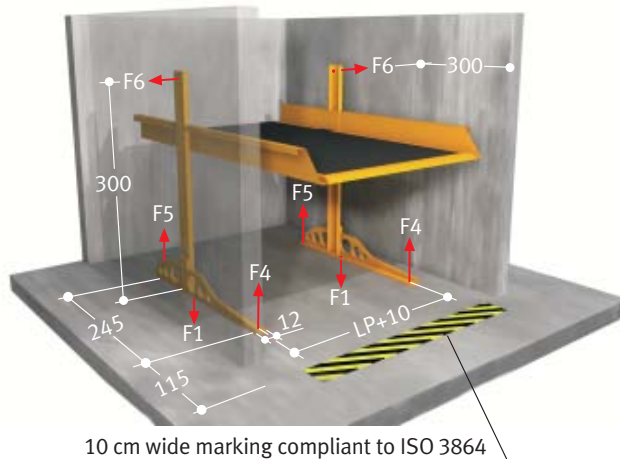
! The illustrated maximum approach angles must not be exceeded. Incorrect approach angles will cause serious manoeuvring & positioning problems on the parking system for which the local agency of Klaus accepts no responsibility.

Load plan

Option 1: short steel pillar base



Option 2: long steel pillar base



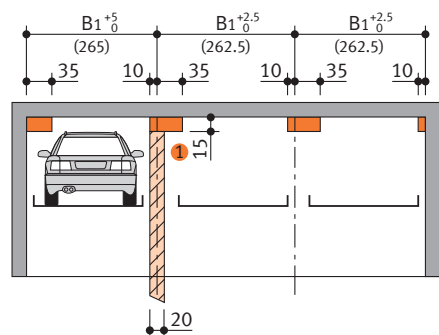
platform load	F1	F2	F3	F4	F5	F6
2,000 kg	30	1.1	7.4	0.4	3.8	±1
2,500 kg	35	1.3	8.9	0.6	4.7	±1

Forces in kN

! The steel pillar base can be selected optionally (short or long). Please make sure to note the corresponding forces that apply!
Units are dowelled to the floor. Drilling depth: approx. 15 cm.
Floor and walls are to be made of concrete (quality minimum C20/25)!

Installation data

Free space for longitudinal and vertical ducts (e.g. ventilation)

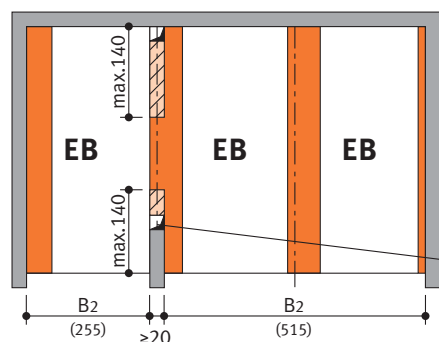


B1, B2 = (see table on page 2)

Free space for vertical pipelines, ventilation branch canals

Free space for horizontal ducting

Approach level



1 Size 15 cm is reduced to 5 cm for type 2061-160

Free space only applicable if vehicle is parked forwards = FRONT FIRST and driver's door on the left side.

() = Dimensions in brackets illustrate an example for usable platform width 230 cm.

Example for ventilation branch canal and/or vertical pipelines.

Appendix C – Small Waste Vehicle Specifications



Overview

Front lift compactors

Rear lift compactors

Mini rear lift compactors

Side lift compactors

Mini side lift compactors

Recycling

Roll on/roll off frames

Hooklift frames

On-site compactors

Containers

Tipper bins

Bin Lifters

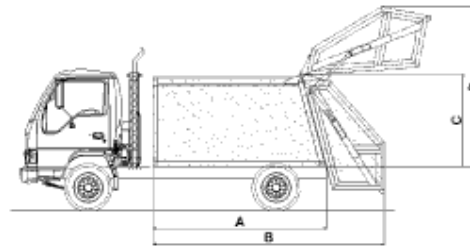
Vehicle servicing platforms

Equipment rentals

New equipment warranty

Mini Rear Loaders

 Mini Rear Loading
 Compaction Unit

 Standard Basic
 Specifications


	Description	4.5m ³	6m ³	7m ³	8m ³
A	Body floor length	2330mm	3170mm	3590mm	3590mm
B	Overall length (no lifters or steps)	3265mm	4105mm	4525mm	4525mm
C	Height above chassis	1630mm	1630mm	1630mm	1830mm
D	Height above chassis tailgate open	2780mm	2780mm	2780mm	2980mm
	Overall width	2010mm	2010mm	2010mm	2010mm
	Approx weight basic unit	2300kg	2400kg	2500kg	2700kg
	Hopper capacity	0.6m ³	0.6m ³	0.6m ³	0.6m ³
	Hopper opening width	1500mm	1500mm	1500mm	1500mm
	Hopper loading height in relation to chassis height	+50mm	+50mm	+50mm	+50mm
	Cab/chassis GVM	6.0 – 7.0kg	7.0 – 9.0kg	8.5 – 10.4kg	9.0 – 10.4kg
	Wheelbase requirements – to be used as a guide only	3350mm	3350mm	4200mm	4200mm

Construction and operational details	
Body - Floor	5mm GR350 hi-tensile
- Sides	5mm GR350 hi-tensile
- Roof	5mm GR350 hi-tensile
- Ejector blade face	5mm GR350 hi-tensile
Tailgate - Floor	5mm Bialloy 360
- Sides	3mm GR350 hi-tensile
- Sweep blade face	5mm GR350 hi-tensile
Ejection cylinder	101.6mm telescopic
Slide cylinders	(2) 76.2mm
Sweep cylinders	(2) 76.2mm
Tailgate cylinders - Raise/lower	(2) 76.2mm with built in hose burst
- Lock/unlock	(2) 63.5mm
Hydraulic pump	45cc gear pump
Oil reservoir	120 litre baffled
Filtration	10 micron return line
Operating pressure	138 bar
Cycle time @ 1000rpm	Half
(subject to PTO ratio)	Full
	7.5 – 10 Seconds
	15 – 20 Seconds

Standard Features

- Radius construction for greater strength
- Telescopic ejection system standard with adjustable load density control
- Full exterior continuous body welds
- High tensile steel construction
- Low loading height
- Automatic locking/unlocking rear door
- Rear door safety props.
- Positive rear door seal
- Push button/selector switch controls
- PLC or Relay control electrical system
- 2 Pack polyurethane paint
- Lighting to ADR requirements.
- Complies or exceeds WorkSafe OH&S requirements.

Selection of optional features

 Bin lifters up to 660 litre capacity
 Load sensing piston pump
 Rotating/strobe lights
 LED lighting

 Hopper surrounds
 Cabin controls for ejector/tailgate operation
 Weighing systems
 Rear view camera systems

 Storage tray/enclosures
 Hopper flood lights
 Greasing systems
 Fire extinguishers
 Container deodorising

Spare wheel carrier
Power take off's
Toolboxes

Pressure washers
High mount rear lights
Sullage tank under hopper

systems
Roofracks
Hinged rear steps

NOTE: Due to continued improvements in technology, Papas Transport Engineering Pty Ltd reserve the right to alter any/ all of the above specifications and website text without prior notice.

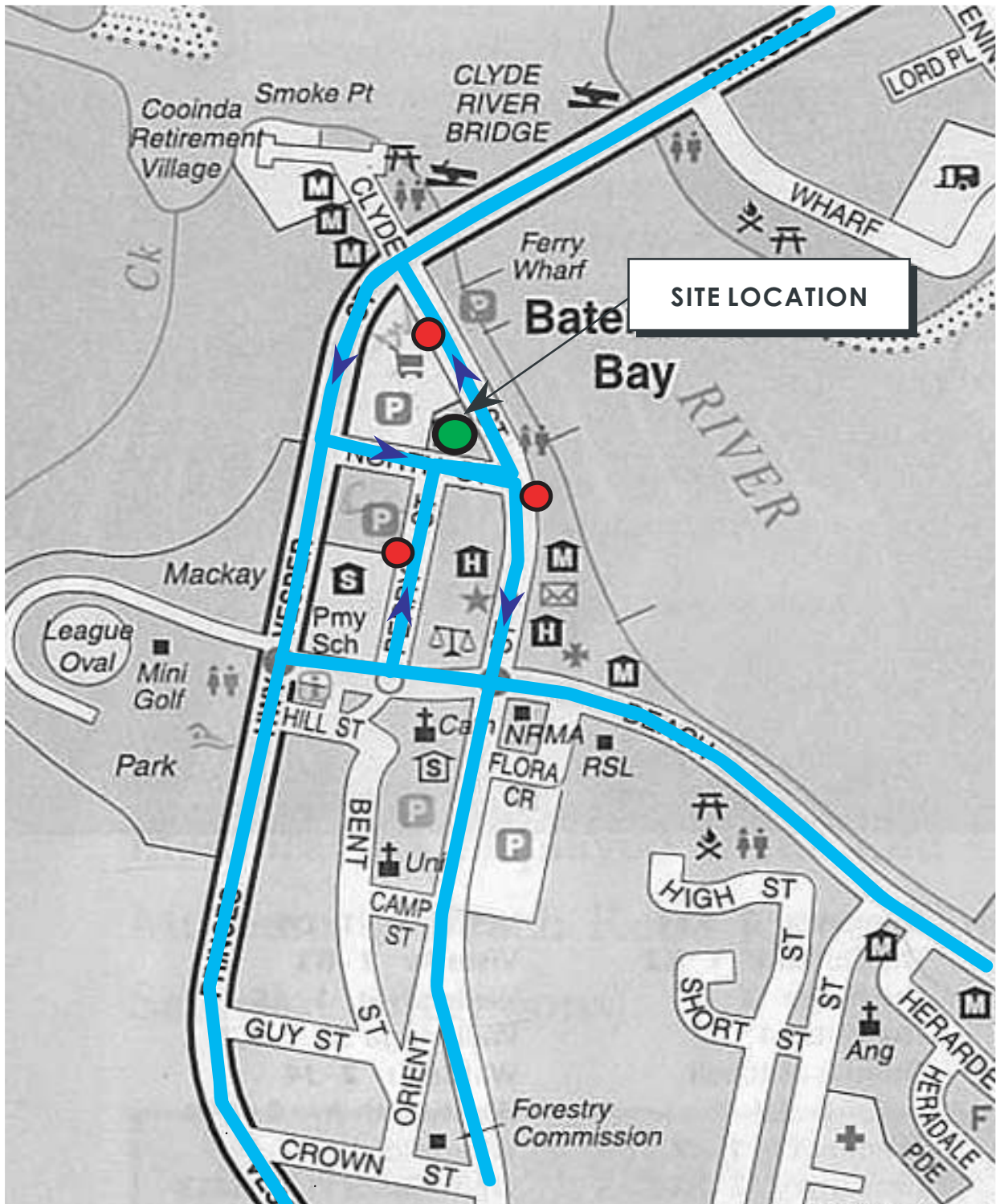
main menu

[products](#) - [contact](#) - [our company](#) - [newsletter](#) - [links](#) - home

Appendix D – Existing Bus Routes

EXISTING BUS ROUTES & BUS STOP LOCATIONS

CLYDE RIVER MOTOR INN



 Bus Stops

Appendix E – RTA Letter

Mr Chris Millet
Roads and Traffic Authority
PO Box 447
WOLLONGONG EAST NSW 2520

Ref: 052849L01_REVISED.DOC

12 September 2006

Dear Chris,

Re: Proposed Redevelopment of the Clyde River Motor Lodge

We refer to the site at No. 3 Clyde Street, Batemans Bay. We act on behalf of the owner of this property in relation to a Major Projects Application which was recently submitted to the Department of Planning. Please disregard our previous correspondence of 24 August 2006 in relation to this matter.

We have been advised by Mr Ashley Dunn of Workshop 1 Architects (representing the Applicant), that preliminary discussions have been held with Nicole Stevenson from your office. These preliminary discussions with Nicole were held to determine potential issues that the RTA may have with the proposal.

For your information the proposed development consists of an expansion of the existing motel from 29 units to 78 units along with construction of a small restaurant to mainly serve hotel patrons. A small retail premise is also proposed.

Ms Stevenson advised via email that consideration should be given to undertaking traffic counts at the intersection of Princes Highway / North Street. She also requested that this intersection, which is the closest intersection under the care and control of the RTA, should be modelled for existing and future traffic conditions.

It is our opinion that given the minor traffic generation of the redeveloped site, intersection counts and modelling are not required.

As stated in our traffic report¹, the current development generates some 12 morning and afternoon peak hour vehicle trips using the rates specified in RTA Guide to Traffic Generating Developments.

¹ Redevelopment of Clyde River Motor Inn – Traffic and Parking Assessment Report, MWT July 2006

The proposed development has the potential to generate an additional 19 morning peak hour trips and 30 evening peak hour vehicle trips. This assumes the full restaurant traffic generation rate in accordance with the RTA guide. No discount has been applied to restaurant component to account for the high proportion of hotel patrons which will use the restaurant and not travel by car to the site. Also, the majority of restaurant patrons who will travel by car would do so outside the general road network peak (i.e. after 6pm as lunch time trade in motel restaurants is generally low.) In addition full occupancy at the hotel would typically only occur on weekends or during school holidays when traffic patterns in the town centre are different to normal periods.

It should also be noted that not all traffic travelling to and from the site would travel through the intersection of Princes Highway / North Street. Traffic travelling to/from areas along the Batemans Bay coast or areas to the south would not have to use this particular intersection. We thus expect that the additional traffic through the intersection would most likely be only about 10 to 20 vehicle movements per hour. This compares with the traffic generation of the adjoining shopping centre of some hundreds of vehicle trips per hour at peak times.

Given the minor increase in site traffic generation, and the seasonal variations which would apply, undertaking costly intersection counts and modelling is considered unreasonable and unnecessary. We also note that conducting traffic counts at this time of the year would not yield a proper reflection of peak times.

Having regard to the information presented above, we submit that intersection modelling is not required for this low traffic generating development.

In view of this we request that the RTA form its response to the application without requiring traffic counts or formal intersection operational analysis.

If you have any queries regarding the above or require further information, please do not hesitate to contact me.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Dean Brodie', with a horizontal line underneath.

Dean Brodie

CC: Ashley Dunn – Workshop 1

Appendix F – 2006 Census Data



Australian Bureau of Statistics

Cat. No. 2068.0 - 2006 Census Tables

2006 Census of Population and Housing

Eurobodalla (A) (Statistical Local Area) - NSW

DWELLING STRUCTURE AND NUMBER OF MOTOR VEHICLES(a)

FOR LONE PERSON HOUSEHOLDS

Count of occupied private dwellings(b)

	Lone HH	Group HH	Family HH	Total Dwell	Est veh	Percentage with no motor vehicle
	Dwellings					
Separate house:						
No motor vehicles	345		21	219	585	0
1 motor vehicle	1,801		95	3,137	5,033	1
2 motor vehicles	230		129	3,895	4,254	2
3 motor vehicles or more	41		28	1,362	1,431	3
Number of motor vehicles not stated	171		17	229	417	
<i>Total</i>	<i>2,588</i>		<i>290</i>	<i>8,842</i>	<i>11,720</i>	<i>17,834</i>
					<i>11,303</i>	<i>1.6</i>
Semi-detached, row or terrace house, townhouse etc:						
No motor vehicles	101		9	30	140	0
1 motor vehicle	297		10	280	587	1
2 motor vehicles	10		10	114	134	2
3 motor vehicles or more	0		0	34	34	3
Number of motor vehicles not stated	32		0	22	54	
<i>Total</i>	<i>440</i>		<i>29</i>	<i>480</i>	<i>949</i>	<i>957</i>
					<i>895</i>	<i>1.1</i>
Flat, unit or apartment:						
No motor vehicles	158		0	38	196	0
1 motor vehicle	237		15	159	411	1
2 motor vehicles	15		10	79	104	2
3 motor vehicles or more	4		4	13	21	3
Number of motor vehicles not stated	36		4	9	49	
<i>Total</i>	<i>450</i>		<i>33</i>	<i>298</i>	<i>781</i>	<i>682</i>
					<i>732</i>	<i>0.9</i>
Other Dwelling:						
No motor vehicles	41		0	7	48	0
1 motor vehicle	119		5	91	215	1
2 motor vehicles	13		0	58	71	2
3 motor vehicles or more	8		0	15	23	3
Number of motor vehicles not stated	25		0	7	32	
<i>Total</i>	<i>206</i>		<i>5</i>	<i>178</i>	<i>389</i>	<i>426</i>
					<i>357</i>	<i>1.2</i>
Dwelling structure not stated:						
No motor vehicles	0		0	0	0	
1 motor vehicle	0		0	0	0	
2 motor vehicles	0		0	0	0	
3 motor vehicles or more	0		0	0	0	
Number of motor vehicles not stated	0		0	0	0	
<i>Total</i>	<i>0</i>		<i>0</i>	<i>0</i>	<i>0</i>	
Total	3,684		357	9,798		

(a) Excludes motorbikes/scooters.

(b) Excludes 'Family', 'Group', 'Visitors only' and 'Other not classifiable' households.

Appendix G – Roads and Traffic Authority guidelines Parking Rates

Motel

A *motel* is a building or buildings (other than a hotel, boarding-house or residential flat building) used substantially for overnight accommodation of travellers and their vehicles, whether or not the building or buildings is also used to provide meals to those travellers or the general public.

Parking

The recommended number of off-street car parking spaces is:

- 1 space for each motel unit, plus
- 1 space per 2 employees.

If a restaurant and / or function room is to be included as part of the development, then the amount of off-street parking must be reviewed and increased as necessary. If the restaurant primarily serves motel customers, then additional parking may not be required. However, the possibility of a future change in patronage of the restaurant must be considered.

The following parking options apply to situations where the restaurant and / or function room operates entirely independently of the motel:

- 15 spaces per 100m² gross floor area of restaurant / function room facility, or
- 1 space per 3 seats, whichever is the greater.

The total parking provision for motels with restaurants / function rooms may be reduced if it can be demonstrated that the peak parking demand of each facility will not coincide.

Medium Density Residential

A *medium density* residential flat building is a building containing at least 2 but less than 20 dwellings. This includes villas, town houses, flats, semi-detached houses, terrace or row houses and other medium density developments. This does not include aged or disabled persons' housing.

Parking.

The recommended minimum number of off-street, resident parking spaces is 1 space for each unit, plus an additional 1 space per each 5 x 2 bedroom unit or part thereof. Also, an additional 1 space per each 2 x 3 or more bedroom unit or part thereof is recommended.

An additional one space per each five units for visitor parking or part thereof is recommended.

Retail

The relative parking demand characteristics of different floor area types can be seen in the following indicative model:

$$\text{Peak Parking} = \frac{24 A(S) + 40 A(F) + 42 A(SM) + 45 A(SS) + 9 A(OM)}{\text{Demand (per 1,000m}^2\text{)}}$$

where:

- A(S): Slow Trade GLFA, includes major Department stores such as David Jones and Grace Brothers, furniture, electrical and utility goods stores.
- A(F): Faster Trade GLFA, includes discount department stores such as K-Mart and Target, together with larger specialist stores such as Fosseys.
- A(SM): Supermarket GLFA, includes stores such as Franklins and large fruit markets.
- A(SS): Speciality Shops and Secondary retail GLFA, includes speciality shops and take-away stores such as McDonalds. These stores are grouped since they tend not be primary attractors to the centre.
- A(OM): Offices, medical GLFA.

Restaurant

See above