



**STANBURY**  
TRAFFIC PLANNING

TRAFFIC, PARKING & TRANSPORT CONSULTANTS

29 March 2022

Campbelltown City Council  
PO Box 57  
Campbelltown  
NSW 2560

Attention: The General Manager

Dear Sir/Madam,

**ASSESSMENT OF PARKING, TRAFFIC & TRANSPORT IMPACTS**  
**ASSOCIATED WITH PLANNING PROPOSAL TO SUBDIVIDE A PARCEL OF LAND FRONTING ST**  
**ANDREWS ROAD & SPITFIRE DRIVE, VARROVILLE**

This Practice has been engaged by Catholic Education Office of the Diocese of Wollongong to undertake an assessment of the potential parking, traffic and transport impacts associated with a planning proposal seeking a modification to Campbelltown Local Environmental Plan (CLEP 2015) with respect to a large parcel of land fronting both St Andrews Road and Spitfire Drive, Varroville.

**SITE DETAILS & EXISTING DEVELOPMENT**

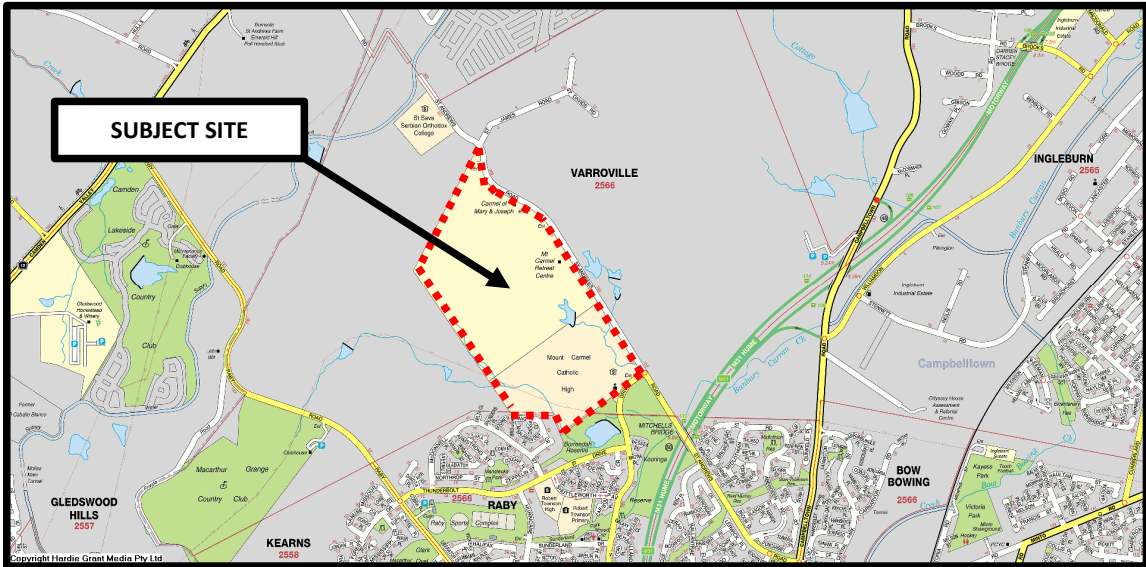
The site is situated on the western side of St Andrews Road, to the north of Spitfire Drive, Varroville. This location is illustrated overleaf within a local and aerial context by **Figures 1** and **2**, respectively.

The subject site comprises two allotments, as follows:

- Lot 20 DP 712018; and
- Lot 1 DP 121046.

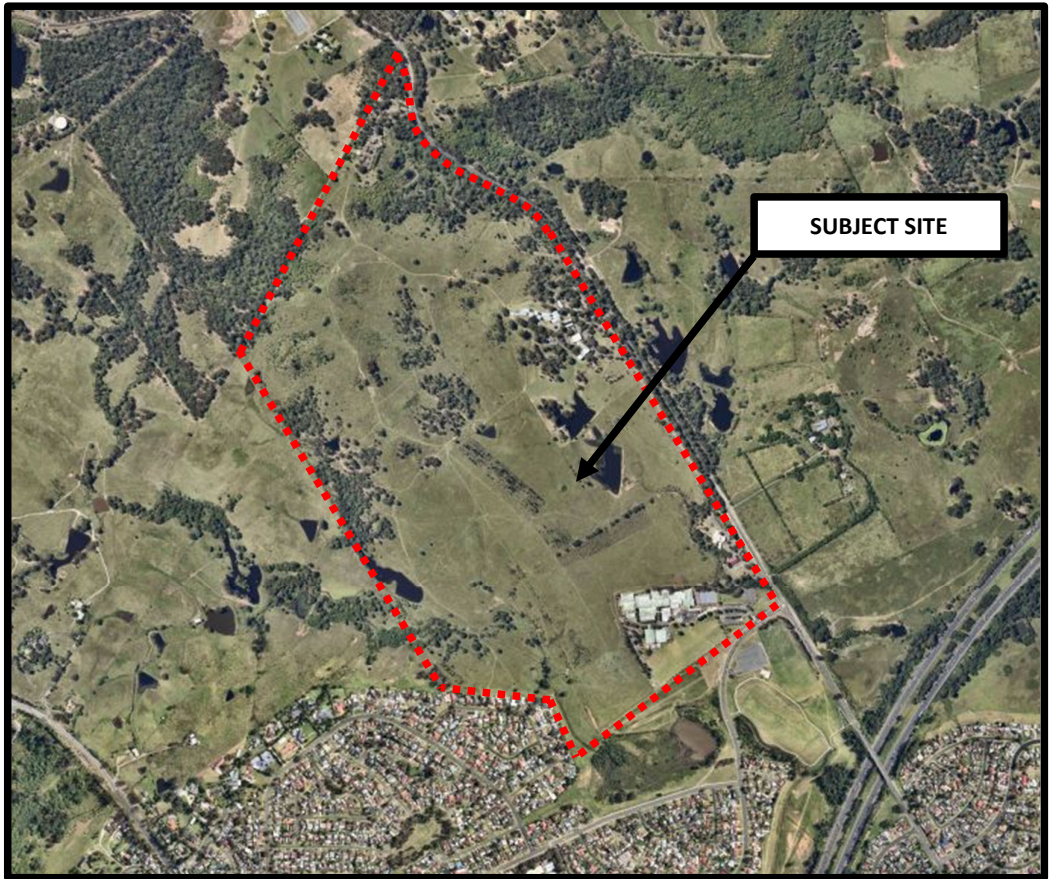
Collectively, the allotments form an irregularly shaped parcel of land providing approximate frontages of 1900m and 300m to St Andrews Road and Spitfire Drive. The parcel of land provides an approximate area of 143.4ha.

**FIGURE 1**  
**SITE LOCATION WITHIN A LOCAL CONTEXT**



Source: UBD's Australian City Streets – Version 8

**FIGURE 2**  
**SITE LOCATION WITHIN AN AERIAL CONTEXT**



Source: Nearmap – Image Date 17/2/22



The parcel of land accommodates a range of separate uses, described within the following sub-sections.

#### Mount Carmel College

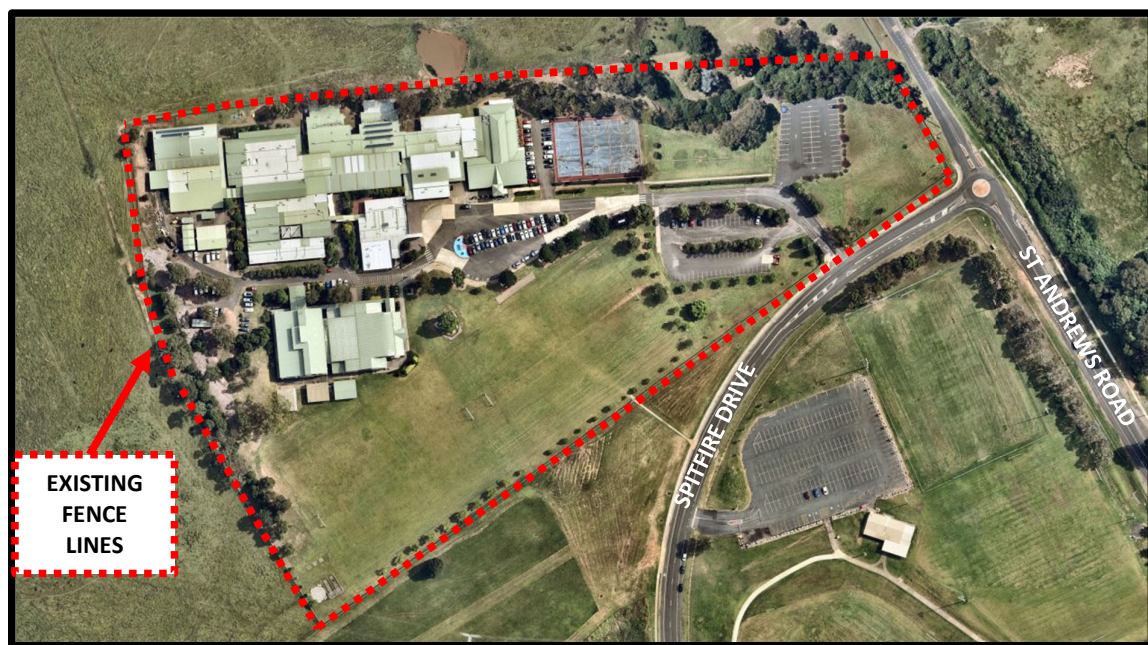
Mount Carmel College is situated within the southern portion of the overall site, providing a street address of 210 Spitfire Drive.

Mount Carmel College is a systemic Catholic co-educational secondary school, providing the following approximate population:

- 1,100 students, including approximately 130 year 12 students; and
- 80 staff.

Figure 3 below provides an aerial image of the existing College.

**FIGURE 3**  
**MOUNT CARMEL COLLEGE AERIAL IMAGE**



Source: Nearmap – Image Date 17/2/22

The school comprises a number of buildings largely situated within the north-western portion of the fenced college area, including various classroom and administration buildings.

The school also contains grassed and paved sports fields / courts situated to the south and east of the abovementioned school buildings.

The school is serviced by a series of formal parking and student set-down / pick-up areas situated within the central and eastern portions of the campus, as follows:

- A parking area containing approximately 45 spaces within the north-eastern portion of the campus;

- A parking area containing approximately 55 spaces within the south-eastern portion of the campus;
- A parking area containing approximately 50 spaces, in conjunction with a dedicated student set-down / pick-up area, within the central portion of the campus; and
- A series of informal parking and servicing areas within the north-western portion of the campus capable of accommodating up to 30 parked vehicles.

The off-street vehicular parking and circulation areas are serviced by a single access road, which forms a T-junction with Spitfire Drive approximately 85m to the west of St Andrews Road, operating under a seagull arrangement, whereby dedicated right turn storage lanes are provided within Spitfire Drive assisting school access / egress movements. Notwithstanding this, internal campus signage prohibits right turn egress movements to Spitfire Drive during weekday school start and finish periods, whereby motorists wishing to exit the campus and travel to the west along Spitfire Drive are required to turn left and then circulate around the roundabout at St Andrews Road to access the westbound Spitfire Drive travel lane.

Pedestrian access to the school is provided via a pathway connecting with the northern Spitfire Drive footpath, approximately central to the southern campus boundary.

#### Our Lady of Mount Carmel Church and Kindergarten

Our Lady of Mount Carmel Church and Kindergarten is situated within the south-eastern portion of the overall site, providing a street address of 193 St Andrews Road.

The Church provides a seating capacity of 400 people.

The Church provides the following Mass times:

- Monday, Tuesday, Wednesday and Friday at 9:00am;
- Thursday at 7:30pm;
- Saturday at 6:00pm; and
- Sunday at 9:30am and 5:00pm.

This Practice has been advised that the weekend services typically accommodate approximately 220 parishioners (although recent spatial separation requirements associated with Covid have restricted attendances to 110 people), whilst weekday services tend to generate in the order of 30 parishioners.

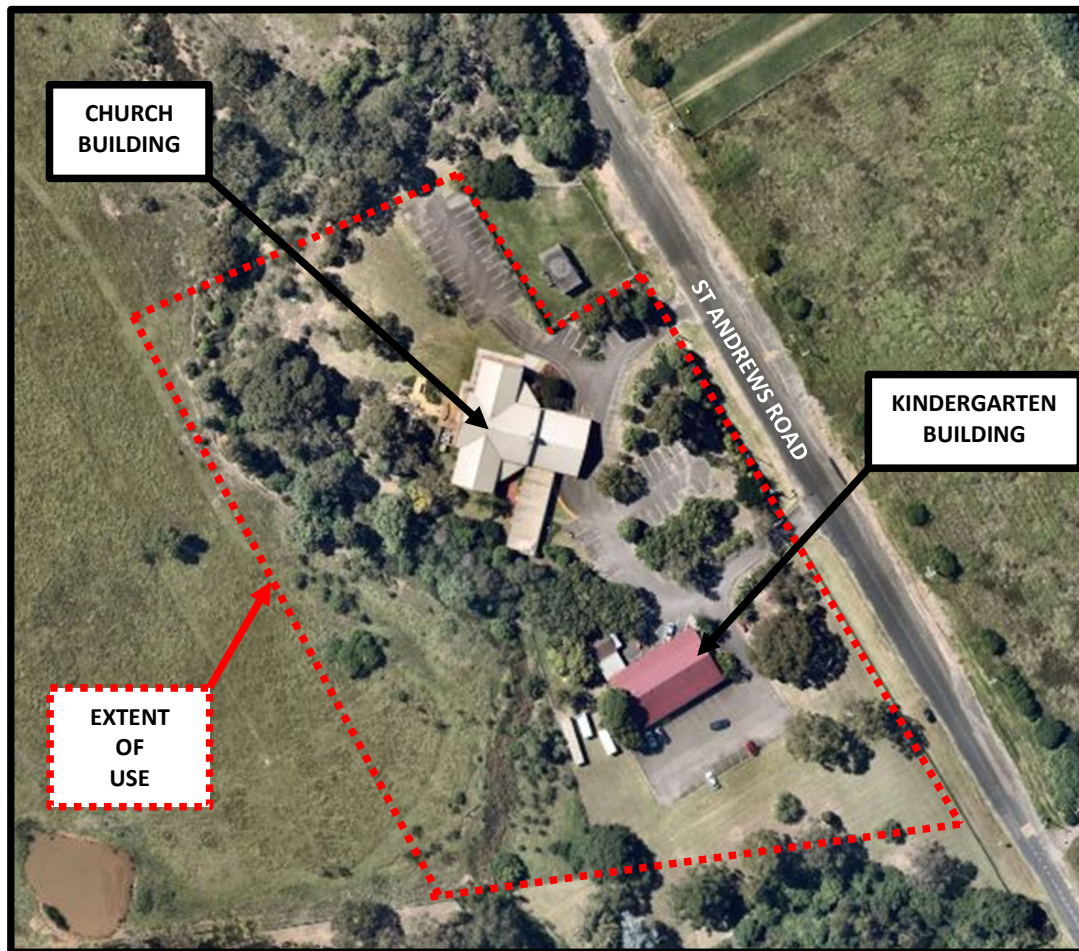
Bambi Kindergarten provides the following population:

- 40 children aged between three and five years old; and
- 10 staff.

The kindergarten operates between 8:30am and 4:00pm on weekdays during school term.

**Figure 4** overleaf provides an aerial image of the existing Church and Kindergarten.

**FIGURE 4**  
**OUR LADY OF MOUNT CARMEL CHURCH & KINDERGARTEN AERIAL IMAGE**



Source: Nearmap – Image Date 17/2/22

The church building is situated within the central northern portion of the precinct whilst the kindergarten is situated within the central southern portion of the precinct.

The buildings are serviced by the following off-street parking areas:

- A parking area containing approximately 28 spaces is situated to the south of the kindergarten building;
- A parking area containing 12 spaces is situated to the north of the kindergarten building;
- A parking area containing 16 spaces is situated to the east of the church building; and
- A parking area containing 25 spaces is situated to the north of the church building.

The off-street vehicular parking and circulation areas are serviced by separate ingress and egress driveways, connecting with St Andrews Road to the east of the kindergarten and church buildings, respectively.



### Mount Carmel Retreat Centre & Priory

Mount Carmel Retreat Centre & Priory is situated within the central eastern portion of the overall site, providing a street address of 247 St Andrews Road.

Mount Carmel Retreat Centre is used for day events as well as mixed duration retreats. It caters for schools, church groups, youth retreats, Christian renewal and reflection programs and ad hoc conferences.

The centre provides food and dining areas, conference rooms, breakout spaces and a chapel and prayer room.

The centre has a capacity for up to 105 guests, with provision for 31 bedrooms of mixed configurations and two cabin-style cottages.

The retreat centre provides approximately 15 staff, largely employed on a casual basis, required to be on-duty during the holding of specific retreats.

The Priory accommodates up to seven people, one of which is the parish priest serving Our Lady of Mount Carmel Church.

**Figure 5** provides an aerial image of the existing retreat centre and priory.

**FIGURE 5**  
**MOUNT CARMEL RETREAT CENTRE & PRIORY AERIAL IMAGE**



Source: Nearmap – Image Date 17/2/22

The retreat centre buildings are situated within the eastern portion of the precinct whilst the priory buildings are situated within the north-western portion of the precinct.

The centre manager resides within a stand-alone residence situated to the north of the centre and priory buildings.

The retreat centre is serviced by the following:

- A circular set-down / pick-up area to the east of the centre buildings; and
- A dedicated parking area containing approximately 30 spaces to the west of the centre buildings.

The priory is serviced by an internal access roadway and dedicated enclosed parking garage, capable of accommodating five cars.

The off-street vehicular parking and circulation areas are serviced by separate ingress and egress driveways, connecting with St Andrews Road to the south-east and north-east of the retreat centre buildings, respectively.

#### Carmelite Monastery

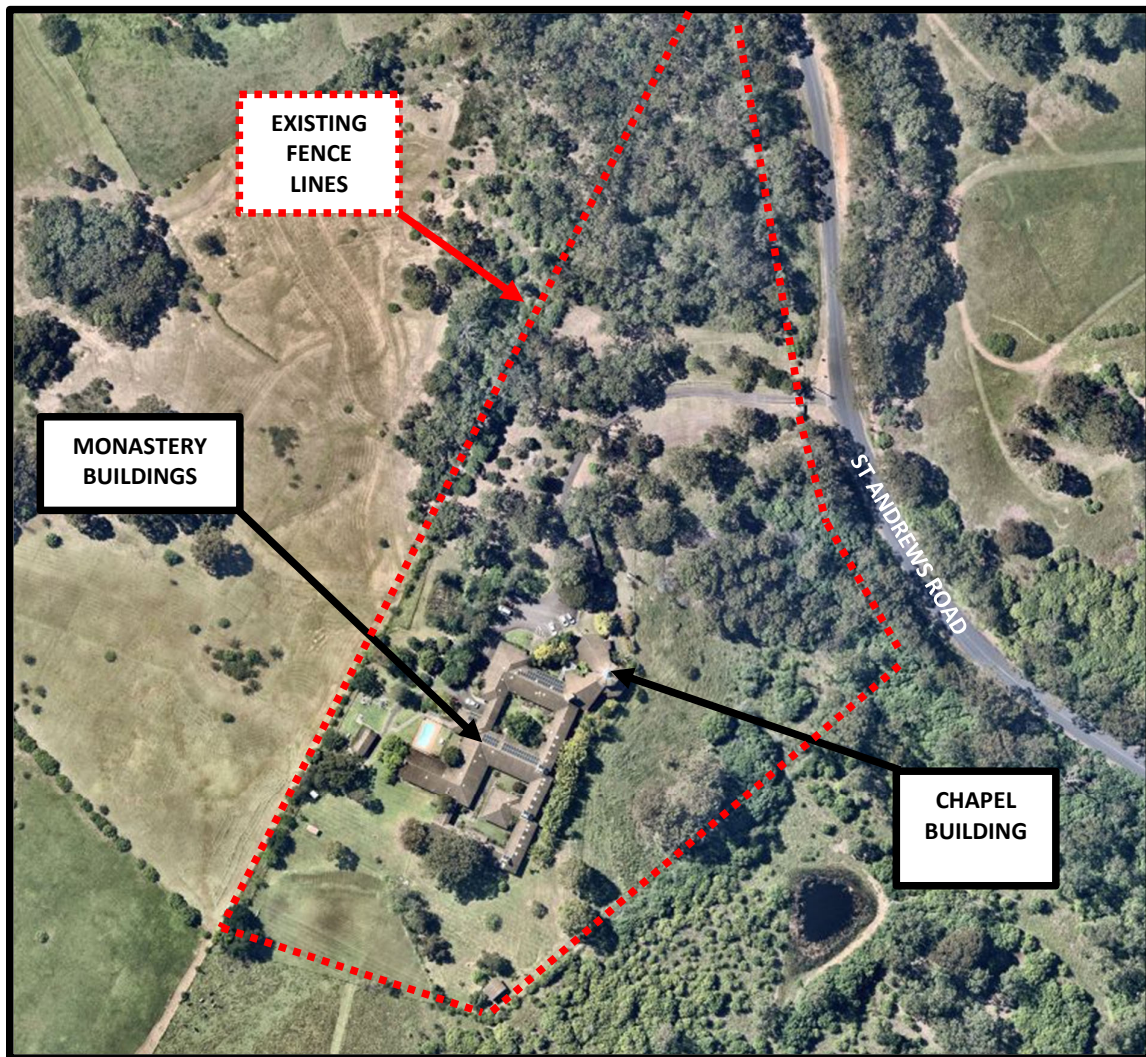
The Carmelite Monastery is situated within the north-eastern corner of the overall site, providing a street address of 345 St Andrews Road.

The Monastery provides living and serving accommodation for up to six nuns.

The Monastery accommodates a chapel, largely servicing the on-site occupants, rather than being open to public events and worship.

**Figure 6** provides an aerial image of the existing Monastery.

**FIGURE 6**  
**CARMELITE MONASTERY AERIAL IMAGE**



Source: Nearmap – Image Date 17/2/22

The Monastery buildings are situated approximately central to the precinct, with the chapel building being situated at the northern end of the buildings.

The Monastery is serviced by the following:

- A dedicated parking area containing approximately 10 spaces to the west of the chapel building; and
- An access road extending to the south of the abovementioned car parking area linking with informal and enclosed garage car parking, capable of accommodating up to four vehicles.

The off-street vehicular parking and circulation areas are serviced by a single access roadway, linking with St Andrews Road to the north-east of the buildings.



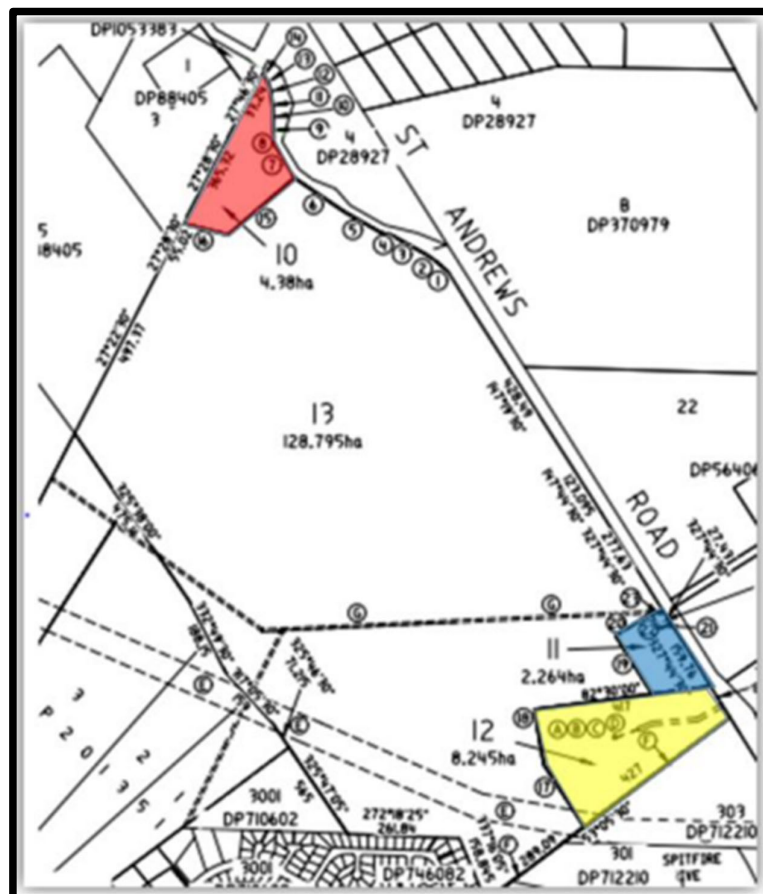
**DESCRIPTION OF PLANNING PROPOSAL**

The Planning Proposal seeks to subdivide the existing overall parcel of land to create four separate legal titles, as follows:

- 210 Spitfire Road, Varroville, containing Mount Carmel Catholic College, providing a land area of 8.245ha;
- 193 St Andrews Road, Varroville, containing Our Lady of Mount Carmel Church and Kindergarten, providing a land area of 2.264ha;
- 247 St Andrews Road, Varroville, containing Mt Carmel Retreat Centre & Priory, providing a land area of 128.5ha; and
- 345 St Andrews Road, Varroville, containing Carmelite Monastery, providing a land area of 4.38ha.

The above is illustrated and within **Figure 7** and **Table 1** below and overleaf, respectively.

**FIGURE 7**  
**PROPOSED SUBDIVISION**



Source: Innova Capital

<b>TABLE 1 PROPOSED SUBDIVISION DETAILS</b>			
<b>Proposed Lot</b>	<b>Land Use</b>	<b>Colour in Figure 7</b>	<b>Area</b>
10	Carmelite Monastery	Red	4.4ha
11	Our Lady of Mount Carmel Church & Kindergarten	Blue	2.3ha
12	Mount Carmel College	Yellow	8.3ha
13	Mount Carmel Retreat Centre & Priory	White	128.5ha

The minimum permissible lot size under CLEP 2015 is currently 100ha.

The proposed subdivision represents a variation from CLEP 2015 as it involves the creation of three lots providing an area less than 100ha, essentially to create legal title specifically to accommodate:

- Carmelite Monetary;
- Our Lady of Mount Carmel Church & Kindergarten; and
- Mount Carmel College.

The proposed lot boundaries are consistent with the existing fenced-off or allocated areas / precincts designated for each of the above land-uses.

No alterations are proposed with respect to the following:

- The operational characteristics of the specific uses;
- The access arrangements servicing the specific uses; and
- The internal circulation, parking and servicing arrangements associated with the specific uses.

## **SCOPE OF ASSESSMENT**

The aim of this assessment is to investigate and report upon the potential impacts of the proposed site parking, traffic and transport considerations of the site uses and to recommend appropriate ameliorative measures where required. To this end, this assessment:

## **EXISTING TRAFFIC & TRANSPORT CONSIDERATIONS**

### Description of the Surrounding Road Network

The following provides a description of the adjoining public road network:

- St Andrews Road, to the south of Spitfire Drive, performs a collector road function under the care and control of Campbelltown City Council, linking Spitfire Drive in the north with Campbelltown Road in the south. The southern portion of this route is constructed to an urban standard, forming a dual carriageway, providing between one and two lanes in each direction.

St Andrews Road intersects with Campbelltown Road to the south under two lane circulating roundabout control. To the north, a further single lane roundabout control governs the junction of At Andrews Road and Ballantrae Drive (south). Further to the north, St Andrews Road forms signage-controlled junctions with Aberdeen Road and Midlothian Road (both intersecting under seagull control) and Ballantrae Drive (north), whereby St Andrews Road performs the priority route in each instance.

To the north of Ballantrae Drive (north), the St Andrews Road pavement is constructed to a rural standard providing one through lane of traffic in each direction between unsealed shoulders.

St Andrews Road forms a T-junction with Spitfire Drive, operating under single lane circulating roundabout control.

Traffic flow within St Andrews Road is governed by a sign posted speed limit of 60km/h, however a 40km/h school zone speed limit applies on approach to Spitfire Drive during prescribed start and finish periods associated with Mount Carmel College.

St Andrews Road, to the north of Spitfire Drive, performs a local access function, extending to the north approximately 2.5km, prior to informally terminating. This portion of St Andrews Road is constructed to a rural standard providing a pavement width of between 8 – 9m, providing one through lane of traffic divided by double barrier centre lines, between unsealed shoulders. Traffic flow within this portion of St Andrews Road is governed by a sign posted speed limit of 70km/h, with the exception of the abovementioned school zone speed limit applying on approach to Spitfire Drive.

- Spitfire Drive performs a collector road function under the care and control of Campbelltown City Council providing a connection between St Andrews Road in the north-east and Raby Road in the south-west.

Spitfire Drive is largely constructed to an urban standard, providing a 13m wide pavement, facilitating the provision of one through traffic lane in each direction in conjunction with marked parallel parking lanes along both kerb alignments. Kerb-side parking is prohibited within Spitfire Drive in the immediate vicinity of Mount Carmel College to facilitate dedicated turning lanes assisting College access and egress movements.

To the south of St Andrews Street, Spitfire Road forms T-junctions with a series of lower order access roads, under major / minor priority control, with Spitfire Drive performing the priority route.

To the south, Spitfire Drive forms a T-junction with Raby Road, operating under circulating roundabout control, which was in the process of being upgraded from a seagull type junction at the time of writing.

Traffic flow within Spitfire Drive is governed by a sign posted speed limit of 60km/h, with the exception of a 40km/h school zone speed limit applies on approach to St Andrews Road during prescribed start and finish periods associated with Mount Carmel College.

#### Traffic Demands and Conditions

Weekday commuter peak period traffic demands within St Andrews Road (to the south of Spitfire Drive) and Spitfire Drive are notable, commensurate with their collector road functions within the road hierarchy. Further, traffic demands in these roads in the immediate vicinity of Mount Carmel College are heavily influenced by the operation of the College. In this regard, some extent of queuing has been observed within both St Andrews Road and Spitfire Drive associated with College access / egress. The extent of this queuing is however short-lived being concentrated around school start and finish periods and is also assisted by the following:



- The provision of a dedicated right turn storage lane within Spitfire Drive servicing the College;
- The considerable extent of off-street queuing capacity within the College, to the north of Spitfire Drive; and
- The prohibition of right turn egress movements from the college to Spitfire Drive during school start and finish periods.

In regard to the above, impedance to through traffic movements within Spitfire Drive and St Andrews Drive were generally observed to not be unreasonable, such that motorists generally experience a reasonable level of service.

The positive intersection control at the primarily precinct access junctions (Campbelltown Road / St Andrews Road and Raby Road / Spitfire Drive) provide motorists with safe and efficient conditions with which to access the surrounding state road network.

St Andrews Road, to the north of Spitfire Drive accommodates significantly reduced traffic demands. In this regard, motorists within this portion of St Andrews Drive have been observed to be provided with a good level of service during all periods, whereby motorists are virtually unaffected by others in the traffic stream. Further, motorists have been observed to be able to enter and exit abutting developments without delay or impedance to adjacent public road through traffic movements.

#### Sustainable Transport Infrastructure

Bus Route routes service the surrounding precinct:

- Route 874 between Minto and Raby (loop service); and
- Route 875 between Minto and St Andrews (loop service)

Both the above routes run along St Andrews Road and Spitfire Drive.

Both routes provide an approximate service frequency of 30 minutes during weekday periods, extending to 60 minutes during weekend periods.

Further both routes provide services which directly service the Mount Carmel College grounds during school start and finish periods.

The above routes service Minto Railway Station, which provides regular services operating along the T2 and T5 Lines within the Sydney metropolitan train network. These lines provide interchanges at Campbelltown to the south and Glenfield, Liverpool, Cabramatta, Parramatta, Blacktown, Schofields, Wolli Creek, Sydenham, Redfern and the City to the north and north-east.

Spitfire Road forms an on-road bicycle route linking the subject precinct with St Andrews and beyond to the south-west.

## **SITE ACCESS CONSIDERATIONS**

The following provides a summary of the previously presented access arrangements servicing the land-uses within the subject parcel of land:

### Mount Carmel College

The college off-street parking and circulation areas are serviced by a single access road, which forms a T-junction with Spitfire Drive approximately 85m to the west of St Andrews Road, operating under a seagull arrangement, whereby dedicated right turn storage lanes are provided within Spitfire Drive assisting school access / egress movements. It has previously been presented that internal campus signage prohibits right turn egress movements to Spitfire Drive during weekday school start and finish periods, whereby motorists wishing to exit the campus and travel to the west along Spitfire Drive are required to turn left and then circulate around the roundabout at St Andrews Road to access the westbound Spitfire Drive travel lane.

Pedestrian access to the school is provided via a pathway connecting with the northern Spitfire Drive footpath, approximately central to the southern campus boundary.

### Our Lady of Mount Carmel Church and Kindergarten

The off-street vehicular parking and circulation areas associated with the church and kindergarten are serviced by separate ingress and egress driveways, connecting with St Andrews Road approximately 200m and 250m to the north of Spitfire Drive, respectively.

### Mount Carmel Retreat Centre & Priors

The off-street vehicular parking and circulation areas associated with Mount Carmel Retreat Centre & Priors are serviced by separate ingress and egress driveways, connecting with St Andrews Road approximately 800m and 950m to the north of Spitfire Drive, respectively.

### Carmelite Monastery

The off-street vehicular parking and circulation areas associated with the Carmelite Monastery are serviced by a single access roadway, linking with St Andrews Road approximately 1.75km to the north of Spitfire Drive.

### Assessment of Impacts

The Planning Proposal is not proposed to alter the existing access arrangements servicing the various land-uses within the subject land. Further, given that the Proposal does not involve any alterations to the operational requirements of the various land-uses, no impacts are envisaged with respect to the access arrangements.

## **OFF-STREET PARKING CONSIDERATIONS**

The following provides a summary of the previously presented off-street parking provision servicing the land-uses within the subject parcel of land:

- Mount Carmel College provides approximately 180 formal and informal off-street car parking spaces, in conjunction with formalised student bus and passenger vehicle set-down / pick-up areas;

- Our Lady of Mount Carmel Church and Kindergarten provides 81 formal off-street car parking spaces, in conjunction with a formalised parishioner passenger vehicle set-down / pick-up area;
- The Mount Carmel Retreat Centre & Priory provides 35 formal off-street car parking spaces, in conjunction with a formalised coach and passenger vehicle set-down / pick-up area; and
- The Carmelite Monastery provides 14 formal off-street car parking spaces.

#### Assessment of Impacts

The Planning Proposal is not proposed to alter the existing off-street car parking and set-down / pick-up arrangements servicing the various land-uses within the subject land. Further, given that the Proposal does not involve any alterations to the operational requirements of the various land-uses, no impacts are envisaged with respect to the parking and set-down / pick-up arrangements.

#### **TRAFFIC GENERATION AND EXTERNAL ROAD NETWORK CONSIDERATIONS**

The following provides a summary of the traffic generating potential of the land-uses within the subject parcel of land:

##### Mount Carmel College

The traffic generating potential of Mount Carmel College is considerable, being estimated based on established traffic generation rates established by TfNSW to be approximately:

- 550 vehicle trips during weekday morning peak hours; and
- 330 vehicle trips during weekday afternoon peak hours.

It has previously been presented that the operational performance of St Andrews Road and Spitfire Road, directly adjacent to the College, is heavily influenced by the campus operation during school start and finish periods. The extent of this influence has however previously been presented to be short-lived, being concentrated around school start and finish periods and is also assisted by the following:

- The provision of a dedicated right turn storage lane within Spitfire Drive servicing the College;
- The considerable extent of off-street queuing capacity within the College, to the north of Spitfire Drive; and
- The prohibition of right turn egress movements from the college to Spitfire Drive during school start and finish periods.

In regard to the above, impedance to through traffic movements within Spitfire Drive and St Andrews Drive has generally been observed to not be unreasonable, such that motorists generally experience a reasonable level of service.



### Our Lady of Mount Carmel Church and Kindergarten

The traffic generating potential of Our Lady of Mount Carmel Church and Kindergarten is estimated as follows based on established traffic generation rates established by TfNSW:

- 80 vehicle trips in the single hourly period prior to and following weekend church services; and
- 30 vehicle trips during weekday morning and afternoon peak hours associated with the kindergarten.

The reduced traffic demands within the section of St Andrews Road to the north of Spitfire Drive are such that the abovementioned extent of traffic has been observed to be able to enter and exit the precinct in a safe and efficient manner, with little to no impedance on abutting public road through traffic movements.

### Mount Carmel Retreat Centre & Priory

The traffic generating potential of the Mount Carmel Retreat Centre and Priory is heavily influenced by the prevalence or otherwise of retreats being accommodated. During the holding of events, the single hourly traffic generating potential of the centre is envisaged to be in the order of 20 – 30 vehicle trips, reducing to negligible traffic demands outside of these periods.

The particularly low traffic demands within St Andrews Road adjacent to the retreat centre are such that the abovementioned extent of traffic has been observed to be able to enter and exit the precinct in a safe and efficient manner, with little to no impedance on abutting public road through traffic movements.

### Carmelite Monastery

The limited operational characteristics of the Carmelite Monastery are such that the traffic generating potential of the use is negligible.

The particularly low traffic demands within St Andrews Road adjacent to the Monastery are such that any traffic movements have been observed to be able to enter and exit the precinct in a safe and efficient manner, with little to no impedance on abutting public road through traffic movements.

### Assessment of Impacts

The Planning Proposal is not proposed to alter the existing operational characteristics and thus the traffic generating potential of the various land-uses. Accordingly, no impacts are envisaged with respect to the overall operation of the surrounding public road network.

## **SUSTAINABLE TRANSPORT CONSIDERATIONS**

The subject parcel of land is located within reasonably close proximity to bus services operating along St Andrews Road and Spitfire Drive. It is accordingly expected that a portion of the existing and future land-use visitors will utilise the surrounding public transport infrastructure to access the precinct and other destinations throughout the Sydney metropolitan area. The capacity of the existing public transport system is however not envisaged to be measurably affected the Planning Proposal as no alterations to the existing operational characteristics of the land-uses are proposed.

## CONCLUSION

This correspondence provides an assessment of the parking, traffic and transport impacts of a Planning Proposal associated with a large parcel of land situated on the western side of St Andrews Road, to the north of Spitfire Drive. Based on the findings of this preliminary assessment, the following conclusions are now made:

- The Planning Proposal involves the subdivision of a large parcel of land into four lots, primarily to create separate land titles to accommodate the following existing land-uses:
  - Mount Carmel College;
  - Our Lady of Carmel Church and Kindergarten;
  - Mount Carmel Retreat Centre and Priory; and
  - Carmelite Monastery.
- No alterations to the existing site access, internal circulation, parking, servicing and operational characteristics servicing the existing land-uses are proposed; and
- As no alterations to the existing operational characteristics of the various land-uses are proposed, no parking, traffic or transport impacts are envisaged associated with the Planning Proposal.

It is considered, based on the contents of this correspondence and the conclusions contained herein, there are no parking, traffic or transport related issues that should prevent approval of the subject Planning Proposal.

It would be appreciated if this correspondence could be incorporated within Council's assessment of the subject Proposal.

Submitted for your consideration.

Yours sincerely,

Morgan Stanbury  
**Director**  
**Traffic Engineer**