



J L Murphy Reserve, Port Melbourne

Traffic Impact Assessment Report

Client:

Port Phillip City Council

Project No. 166147

Draft Report – 18/07/17

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EXECUTIVE SUMMARY

Trafficworks has been engaged by Port Phillip City Council to undertake a traffic impact assessment of the proposed upgrade of the pavilion facilities at J L Murphy Reserve in Port Melbourne.

A traffic impact assessment was undertaken to establish the impact of the proposed upgrade of the pavilion facilities, the existing traffic volumes along roads surrounding J L Murphy Reserve and identify the variability of traffic volumes between mid-week peak hours and weekend peak periods, both with and without visitors attending the reserve.

This assessment indicated that:

- the operation of the J L Murphy Reserve has only a minor impact on the traffic volumes along Plummer Street, Graham Street and Salmon Street (if any).
- the operation of the J L Murphy Reserve has a moderate impact on the traffic volumes along Williamstown Road (an increase of between 20-30%), however weekend traffic volumes remain significantly lower than midweek traffic volumes.

It is understood that the proposal does not include any changes to the number of participants playing sport at J L Murphy Reserve and therefore there is unlikely to be any change to the traffic to be generated by the reserve.

However, should additional sporting events occur and subsequently traffic be generated, it is considered that the increase in traffic volumes will be able to be accommodated by the existing road network as volumes will remain well below existing mid-week peak hour volumes.

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1 INTRODUCTION

Trafficworks has been engaged by Port Phillip City Council to undertake a traffic impact assessment of the proposed upgrade of the pavilion facilities at J L Murphy Reserve in Port Melbourne.

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2 EXISTING CONDITIONS

2.1 Site Location and Existing Land Use

The J L Murphy Reserve is a multi-sport hub located in Port Melbourne, bounded by Williamstown Road to the south, Plummer Street to the north and Graham Street to the east. The reserve currently comprises soccer, baseball and Australian Rules football / cricket grounds, a small playground and picnic area and general recreation passive open space.

The reserve is located within a Public Parks and Recreation Zone (PPRZ), with residential properties located to the south (general residential zone 1) and industrial / factory properties within a Capital City Zone (CCZ1) located to the north, east and west of the reserve.

The subject site and surrounding area is shown in Figure 1, with land use zoning within Port Phillip City Council shown in Figure 2.

Figure 1: Location Plan (reproduced with permission from Melway Publishing Pty Ltd)

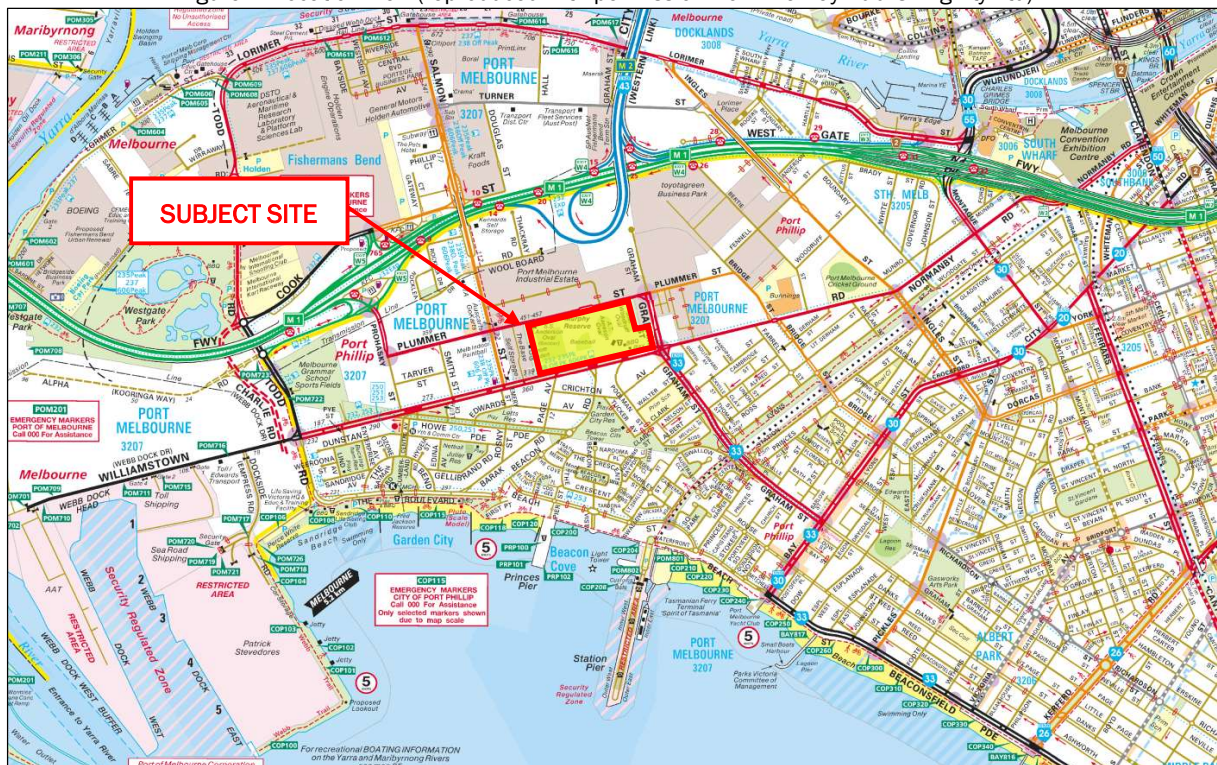
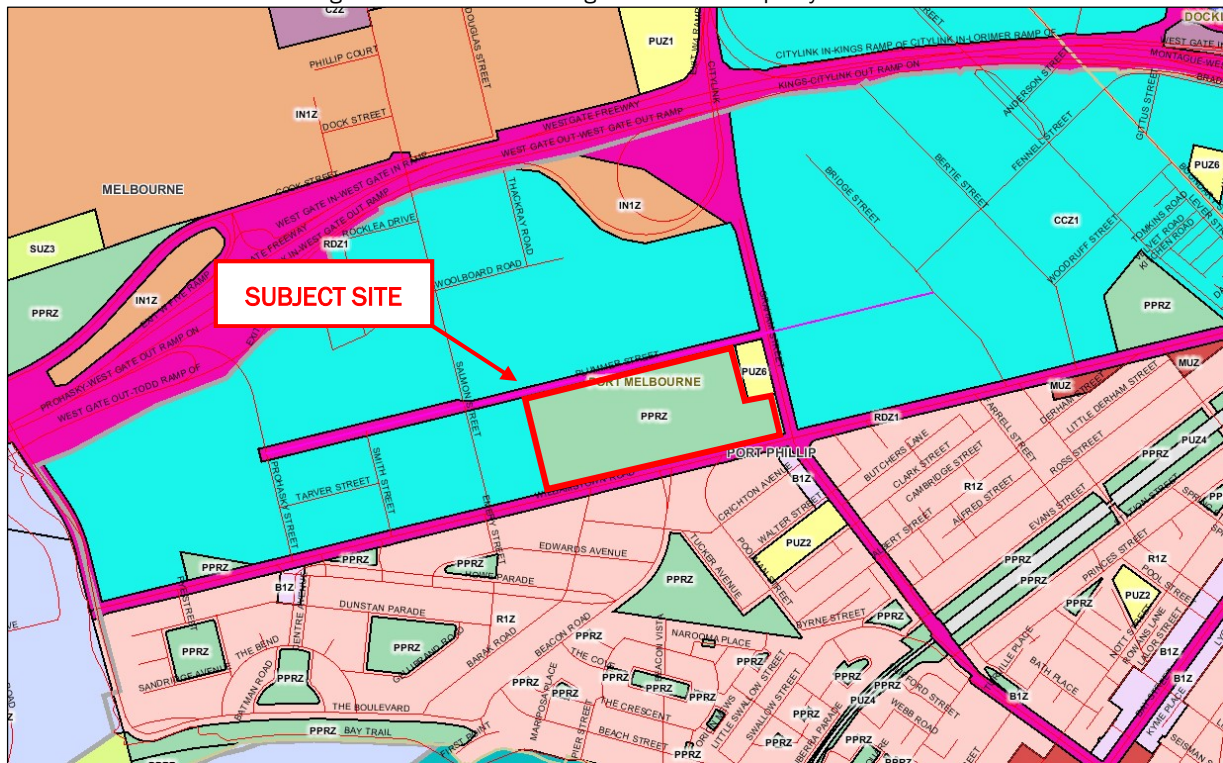


Figure 2: Land Use Planning within Port Phillip City Council



There are currently two pavilions located within the reserve, utilised by the Port Melbourne Soccer Club and the Port Melbourne Baseball Club / Port Melbourne Football Club. Each pavilion provides change rooms and amenities for umpires and players of organised sporting activities.

There is an off-street car parking area accessed from Plummer Street, which provides 24 formalised car parking spaces. This car parking area is gated and is for the use of Port Melbourne Soccer Club officials only (refer to Figure 3). There is also additional informal car parking within the gated area located adjacent to the pavilion (assumed to accommodate approximately 15 vehicles). It is assumed that this car parking area is used by players of the Port Melbourne Soccer Club (refer to Figure 4).

Figure 3: Existing gated car parking area for Port Melbourne Soccer Club officials



Figure 4: Informal car parking area adjacent to Port Melbourne Soccer Club pavilion



There is no off-street car parking provided at the Port Melbourne Baseball Club / Port Melbourne Football Club pavilion, however there is a one-way circular driveway access, which may accommodate the player and equipment drop-offs (refer to Figure 5).

Figure 5: Driveway access at the Port Melbourne Baseball Club / Port Melbourne Football Club pavilion



2.2 Road Network

2.2.1 Williamstown Road

Williamstown Road is a secondary arterial road generally aligned in an east-west direction. It provides a connection to Clarendon Street in Southbank to the east (as Normanby Road) and a connection to the Westgate Freeway via Todd Road and the Port of Melbourne via Webb Dock Drive to the west.

Williamstown Road is configured as a four-lane two-way divided road and provides bicycle lanes and kerbside car parking lanes in each direction. Bus services operate along Williamstown Road, with bus stops located along the J L Murphy Reserve frontage. A speed limit of 60km/h applies to Williamstown Road.

2.2.2 Plummer Street

Plummer Street is a secondary arterial road generally aligned in an east-west direction. It provides a connection to Graham Street to the east and a connection to the Westgate Freeway via Prohasky Street to the west.

In the vicinity of J L Murphy Reserve, Plummer Street is configured as a three-lane two-way undivided road, providing two eastbound traffic lanes and one westbound traffic lane. A kerbside car parking lane is provided on the northern side of the carriageway with kerbside parking restricted on the southern side of the carriageway. A speed limit of 60km/h applies to Williamstown Road.

2.2.3 Graham Street

Graham Street is a secondary arterial road generally aligned in a north-south direction. It provides a connection to Plummer Street to the north and a connection to Bay Street and Pickles Street to the south. Graham Street is configured as a four-lane two-way divided road and provides kerbside car parking lanes in each direction. A speed limit of 60km/h applies to Williamstown Road.

2.3 Traffic Volumes

The VicRoads Open Data portal provides an indication of the Annual Average Daily Traffic (AADT) along arterial roads in Victoria. Existing traffic volumes were obtained from the portal along Plummer Street, Graham Street and Williamstown Road, in close vicinity to the subject site. Review of the available data indicates daily traffic volumes (AADT), as follows.

- Williamstown Road, between Graham Street and Salmon Street
 - 18,500 vehicles per day (vpd), two-way
 - 8,500 vpd, eastbound
 - 10,000 vpd, westbound
 - 12% heavy vehicles
- Graham Street, between Williamstown Road and Plummer Street
 - 16,200 vehicles per day (vpd), two-way
 - 7,700 vpd, south-eastbound
 - 8,500 vpd, north-westbound
 - 12% heavy vehicles
- Plummer Street, between Graham Street and Prohasky Street
 - 16,200 vehicles per day (vpd), two-way
 - 7,700 vpd, north-eastbound
 - 8,500 vpd, south-westbound
 - 12% heavy vehicles
- Salmon Street, between Williamstown Road and Cook Street
 - 8,900 vehicles per day (vpd), two-way
 - 3,200 vpd, northbound
 - 5,700 vpd, southbound
 - 4% heavy vehicles

Additional traffic volume data has been extracted from SCATS at the signalised intersections at Williamstown Road / Graham Street, Graham Street / Plummer Street and Plummer Street / Salmon Street.

Traffic volumes have been extracted for Wednesday 21 June 2017 to represent a typical weekday and for Sunday 25 June 2017 to represent a typical weekend day with organised sporting activities scheduled at J L Murphy Reserve. Traffic volumes have also been extracted for Sunday 16 October 2016 to represent a typical weekend day without organised sporting activities scheduled at the reserve.

Total daily two-way traffic volumes along each road surrounding the J L Murphy Reserve obtained from SCATS indicate similar midweek traffic volumes to the AADT identified via the portal, whereas weekend (Sunday) volumes are seen to be approximately half of the midweek volume.

2.4 Public Transport and Bicycle Facilities

The J L Murphy Reserve is well located in respect to public transport, with the Port Melbourne Light Rail located within 650m of the reserve and bus routes operating along Williamstown Road, with bus stops located along the J L Murphy Reserve frontage. Public transport services operating in close proximity to the reserve are as follows:

- Light Rail line 109, between Port Melbourne and Box Hill
- Bus route 234, between Garden City and Queen Victoria Market
- Bus route 235, between Queen Victoria Market and Fishermans Bend
- Bus route 606, between Elsternwick Station to Fishermans Bend

Furthermore, there are on-street bicycle lanes located along Williamstown Road which connect with the wider on-road and off-road bicycle network. Bicycle facilities provide connections to Southbank, Melbourne CBD, Docklands and Melbourne's south-eastern suburbs (via the Bay Trail). Additional wider connections from Melbourne's east along the Capital City Trail and Yarra Trail are also available via Southbank.

Figure 6 shows the Travel Smart map for Port Phillip City Council, inclusive of public transport routes and bicycle facilities.

Figure 6: Port Phillip City Council - Travel Smart Map



The public transport and bicycle facilities located in close vicinity to J L Murphy Reserve reduces the reliance on cars and facilitates the use of alternative modes of transport to access the reserve for organised sport competitions and general recreation purposes.

3 PROPOSED DEVELOPMENT

3.1 Proposed Development Summary

The proposal is to upgrade to existing pavilion at the J L Murphy Reserve.

In recent times, there has been growth in the amount of formal sport played at the reserve, with a new soccer pitch and the introduction of a winter baseball competition. This growth has highlighted the lack of player and umpire facilities provided at the existing pavilion.

Hence, the proposed pavilion extension will include:

- new player change rooms (for male and female use)
- new umpire facilities
- new externally accessible storage
- refurbishment of the existing change rooms, umpires' facilities, office and storage areas to comply with DDA and health regulations.

Note that these upgrades are proposed at the existing pavilion centrally located in the reserve. This pavilion is currently used by the Port Melbourne Baseball Club (Mariners), Port Melbourne Football Club (Colts) and Port Melbourne Cricket Club.

There are no changes proposed to the existing pavilion located at the western end of the reserve, which is solely used by Port Melbourne Soccer Club (Sharks). Furthermore, no changes are proposed to the reserve access or to the off-street car parking provided within the gated soccer club area.

4 TRAFFIC IMPACT

To assess the existing impact of traffic generated by visitors/patrons accessing J L Murphy Reserve on the surrounding network, the traffic volumes on nearby roads obtained from SCATS have been compared. The dates chosen related to the following key scenarios for comparison:

- Wednesday 21 June 2017 – to determine the peak traffic volumes mid-week during the commuter peak periods
- Sunday 25 June 2017 – to determine the peak traffic volumes on a weekend during the peak period for visitors/patrons attending organised sporting activities
- Sunday 16 October 2016 – to determine the peak traffic volumes on a weekend when organised sporting activities are not scheduled.

The two-way peak hour traffic volumes along each road surrounding J L Murphy reserve for each identified time period are shown in Table 1, with Figures 7 – 10 providing a graphical representation of the daily variance in traffic volumes along each road.

Table 1: Two-way peak hour traffic volumes from SCATS

Road	Wednesday 21 June 2017	Sunday 25 June 2017	Sunday 16 October 2016
Williamstown Road	1,450 – 1,550 vph	800 – 820 vph	600 – 700 vph
Graham Street	850 – 900 vph	450 – 480 vph	400 – 430 vpd
Plummer Street	850 – 1,000 vph	440 – 460 vph	400 – 450 vph
Salmon Street	680 – 750 vph	120 – 130 vph	130 – 140 vph

Figure 7: Two-way Daily Traffic Volumes along Williamstown Road

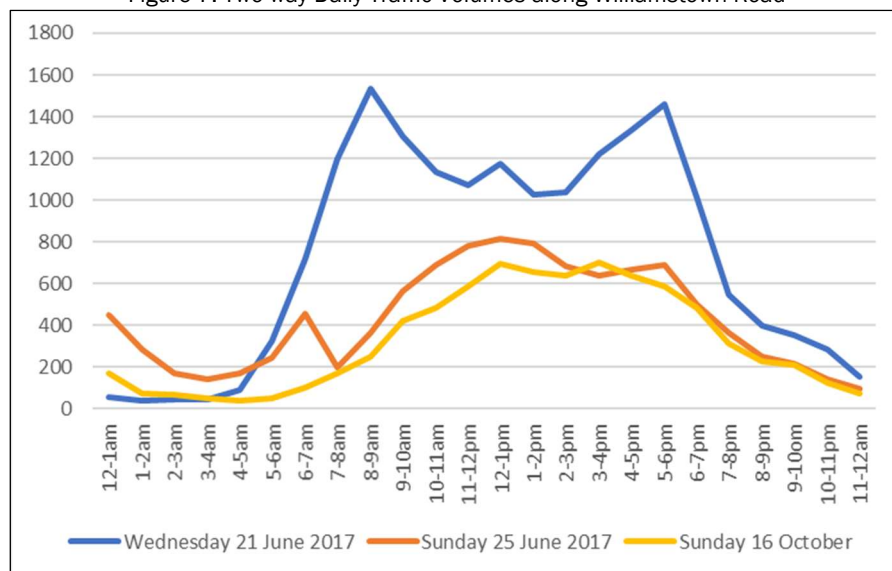


Figure 8: Two-way Daily Traffic Volumes along Graham Street

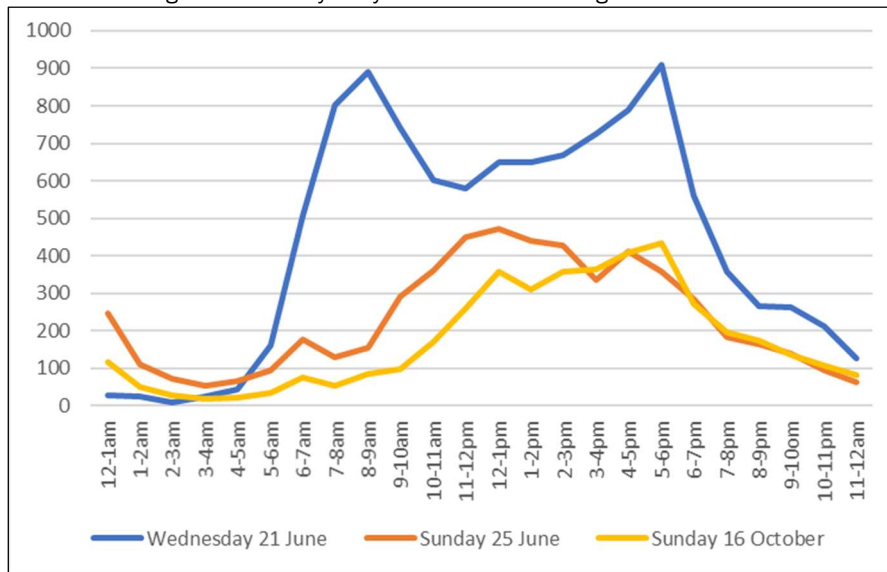


Figure 9: Two-way Daily Traffic Volumes along Plummer Street

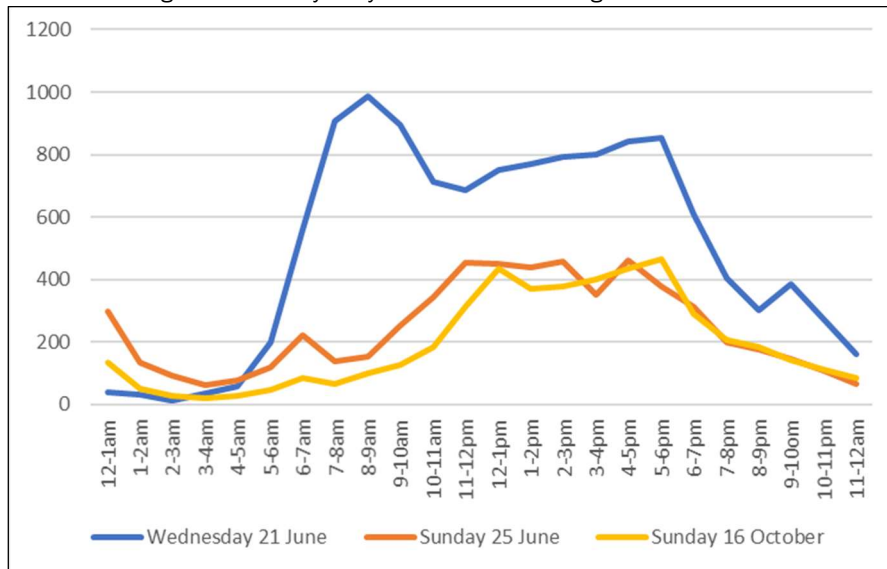
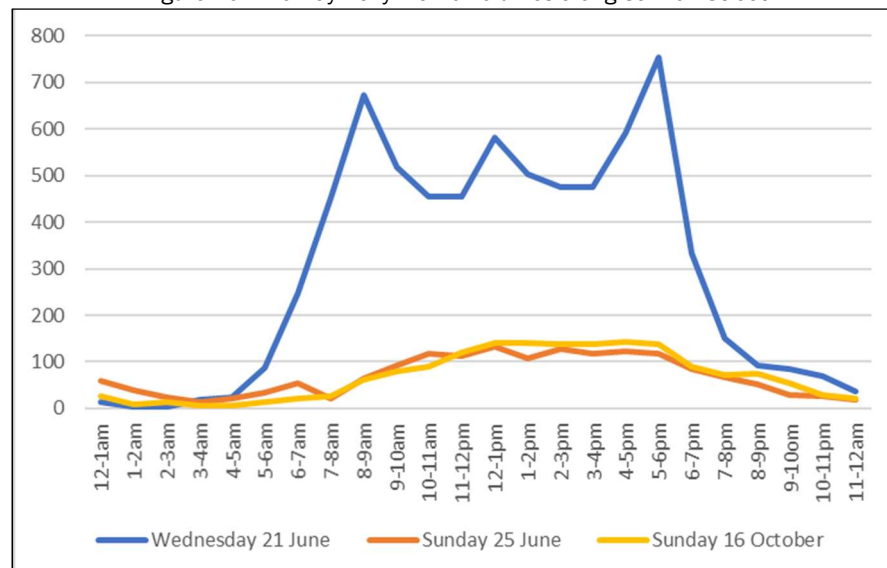


Figure 10: Two-way Daily Traffic Volumes along Salmon Street



Reviewing the traffic volume data along each road to compare volumes on the two Sundays identified (one with and one without organised sporting activities occurring at the reserve) indicates that:

- Traffic volumes along Graham Street and Plummer Street are relatively consistent, with a minor variance in peak hour traffic volumes of up to 50 vehicles per hour.
 - This variance may have been influenced by vehicles accessing the reserve, given there is direct road frontage to the reserve, however a variance this low may also simply be reflecting natural fluctuations in daily traffic.
- Traffic volumes along Salmon Street are consistent, with a minor variance in peak hour traffic volumes of only 10 vehicles per hour.
 - It is considered reasonable that there is negligible impact from the reserve along Salmon Street due to the primarily industrial uses and no direct frontage to the reserve.
- Traffic volumes along Williamstown Road are moderately increased when organised sporting activities are scheduled at the reserve, with an increase in peak hour traffic volumes of between 100 – 200 vph.
 - While there may be other external factors influencing the traffic volumes along Williamstown Road, it is considered reasonable that J L Murphy Reserve may generate up to 200 vph for visitors/patrons attending organised sporting activities (football and soccer).
 - This indicates an approximate increase in Sunday traffic of between 20 – 30% as a result of organised sporting activities.

Reviewing the traffic volume data along each road to compare Sunday to Wednesday volumes reveals that the peak traffic volumes along each road is significantly higher on a Wednesday than on a Sunday, regardless of whether the reserve is in operation. It should be noted that along each road, the weekend peak volume remains approximately half of the peak volume experienced midweek.

Hence, in summary:

- the operation of the J L Murphy Reserve has only a minor impact on the traffic volumes along Plummer Street, Graham Street and Salmon Street (if any).
- the operation of the J L Murphy Reserve has a moderate impact on the traffic volumes along Williamstown Road (an increase of between 20-30%), however weekend traffic volumes remain significantly lower than midweek traffic volumes.

It is understood that the proposal does not include any changes to the number of participants playing sport at J L Murphy Reserve and therefore there is unlikely to be any change to the traffic to be generated by the reserve.

However, should additional sporting events occur and subsequently increase traffic as a result of the upgraded pavilion facilities, it is considered that any increase in traffic volumes will be able to be accommodated within the existing road network as volumes will remain well below the mid-week peak hour volumes.

5 CONCLUSIONS

Trafficworks has been engaged by Port Phillip City Council to undertake a traffic impact assessment of the proposed upgrade of the pavilion facilities at J L Murphy Reserve in Port Melbourne.

To assess the existing impact of traffic generated by visitors/patrons accessing J L Murphy Reserve on the surrounding network, the traffic volumes on nearby roads were obtained and compared on a mid-week day (Wednesday) and on two Sundays, one to coincide with peak organised sporting activities and one where organised sporting activities were not scheduled. This comparison indicated that:

- the operation of the J L Murphy Reserve has only a minor impact on the traffic volumes along Plummer Street, Graham Street and Salmon Street (if any).
- the operation of the J L Murphy Reserve has a moderate impact on the traffic volumes along Williamstown Road (an increase of between 20-30%), however weekend traffic volumes remain significantly lower than midweek traffic volumes.

It is understood that the proposal does not include any changes to the number of participants playing sport at J L Murphy Reserve and therefore there is unlikely to be any change to the traffic to be generated by the reserve.

However, should additional sporting events occur and subsequently traffic be generated, it is considered that the increase in traffic volumes will be able to be accommodated by the existing road network as volumes will remain well below existing mid-week peak hour volumes.

