



12-20 Berry Road & 11-19 Holdsworth Avenue, St Leonards

Reference: 21.519r02v03 Date: June 2022



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# DOCUMENT VERIFICATION

Job Number	21.519				
Project	12-20 Berry Road & 11-19 Holdsworth Avenue, St Leonards				
Client	Aqualand				
Revision	Date	Prepared By	Checked By	Signed	
v03	15/06/2022	Hasnat Khan	Hayden Dimitrovski	Winntane.	

# TRAFFIC CONTROL PLAN CERTIFICATES

Prepare a Work Zone Traffic Management Plan					
Name	Hayden Dimitrovski	Certificate No.	TCT 0028714		



# CONTENTS

1.	Introduction	1
2.	CTMP Requirements	2
3.	Existing Conditions	3
	3.1 Location and Site	3
	3.2 Road Network	6
	3.3 Public Transport	8
4.	Overview of Construction Program	10
	4.1 Times of Operation	10
	4.2 Overview of Construction Works	10
	4.3 Truck Routes	11
	4.4 Vehicle Access	16
	4.5 Road Alignment Works	16
	4.6 Pedestrian Control	16
	4.7 Traffic Control Plans	16
	4.8 Employee Vehicles	17
5.	Conclusion	18
Ar	ppendices	

Appendices

Appendix A: Site Establishment Plans

Appendix B: Swept Path Analysis
Appendix C: Traffic Control Plans



### 1. INTRODUCTION

TRAFFIX has been commissioned by Aqualand to undertake a Construction Traffic Management Plan (CTMP) in support of a development application (DA) relating to a proposed residential, child care and community hall development at 12-20 Berry Road & 11-19 Holdsworth Avenue, St Leonards. The development is located within the Lane Cove Municipal Council Local Government Area (LGA) and has been assessed under that Council's controls.

A detailed Construction Traffic Management Plan (CTMP) will be prepared and submitted to Council, in response to any Conditions of Consent stipulated following approval of the development. The below commentary addresses the overall management principles for the site during the construction process. It is noted that the preparation of a detailed CTMP requires significant input from the appointed builder and would heavily rely upon the construction methodology, which at this point cannot be confirmed.

This CTMP relates to the demolition, bulk excavation, structure, fitout and finishes stages of construction. It is noted that the following information is indicative and will be subject to change.

The report is structured as follows:

- Section 2: Outlines the PCTMP requirements
- Section 3: Documents existing traffic conditions
- Section 4: Describes the overall construction program
- Section 5: Describes the proposed traffic management arrangements
- Section 6: Concludes the report



## 2. CTMP REQUIREMENTS

The Traffic Control Plans (TCP) that are included in this report are indicative and may be subject to changes once a builder is engaged and the building methodology is confirmed. The final TCPs should be implemented taking due account of on-site conditions as will occur over the construction period. Accordingly, construction crews are expected to respond in a pro-active manner to ensure that this plan is implemented to maximum effect and with no obvious safety issues being overlooked. In particular, the following matters are considered noteworthy:

- All signs are to be placed where clear visibility is available; and
- Installations should be checked intermittently during the course of the day/s.

It is noted that TRAFFIX is responsible for the preparation of this CTMP only and not for its implementation.



## 3. EXISTING CONDITIONS

### 3.1 Location and Site

The subject site is known as 12-20 Berry Road & 11-19 Holdsworth Avenue, St Leonards NSW 2065 and is located on the northern side of River Road, about 120 metres south of Marshall Avenue. It is also located about 425 metres west of St Leonards Railway Station and 5.1 kilometres northwest of the Sydney CBD.

The site has a total site area of approximately 5,015m<sup>2</sup> and consists of 10 residential dwellings. It has a eastern frontage of 76 metres to Holdsworth Avenue and a western frontage of 61 metres to Berry Road. It is bounded to the north, south by residential developments.

Vehicular access to the site is currently provided via driveways to the residential properties along Holdsworth Avenue and Berry Road.

A Location Plan is presented in Figure 1, with a Site Plan presented in Figure 2.



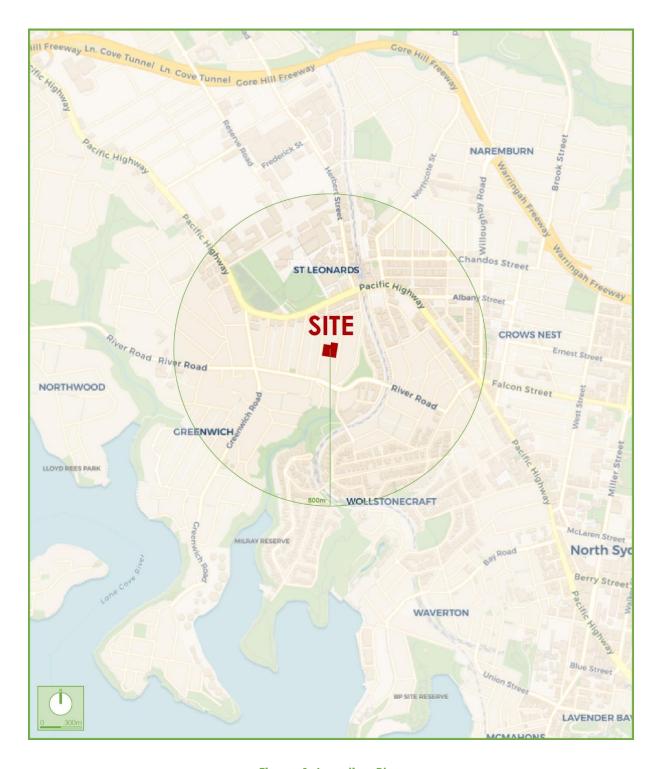


Figure 1: Location Plan



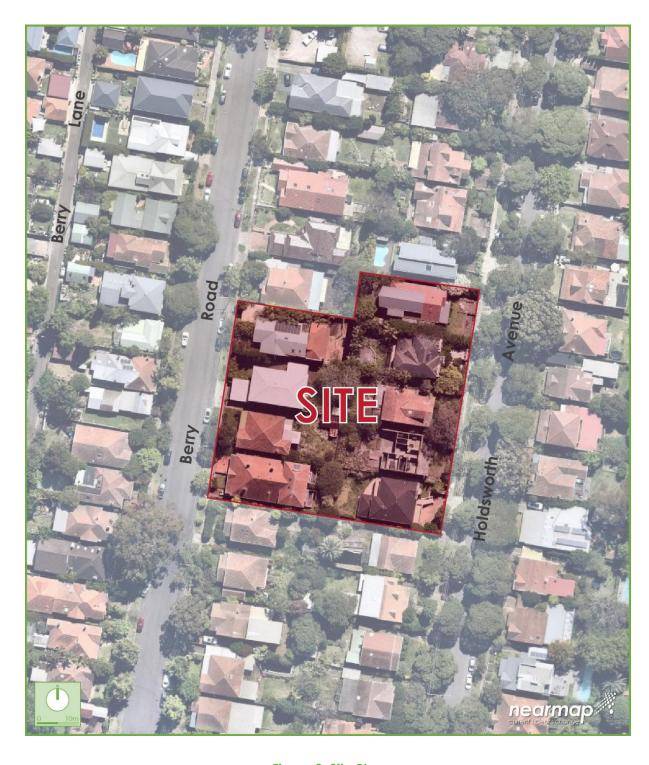


Figure 2: Site Plan



### 3.2 Road Network

The road hierarchy in the vicinity of the site is shown in **Figure 3** with the following roads of particular interest:

Pacific Highway:

an RMS Highway (HW 10) that traverses north-south between the Queensland border in the north and Bradfield Highway in the south. Pacific Highway accommodates three (3) lanes of traffic in each direction with a T3 transit lane on the northern kerbside lane in the morning peak and clearway in the southern kerbside lane in the evening peak. It is subject to a 60km/h speed zoning. Within the vicinity of the site, Pacific Highway permits time limited kerbside parking on the southern kerbside only outside of clearway restrictions.

Marshall Avenue:

a local road that traverses east west between Canberra Avenue in the east and Berry Road in the west. Marshall Avenue has a speed limit of 50 km/h and accommodates a single lane of traffic in each direction. Within the vicinity of the site, Marshall Avenue permits time limited kerbside parking along both kerbsides.

Berry Road:

a local road that traverses north-south between Pacific Highway in the north and a cul de sac in the south. Berry Road generally accommodates a single of traffic in each direction and is subject to a 50km/h speed zoning. Within the vicinity of the site, kerbside parking is permitted along both kerbsides of Berry Road.

Holdsworth Avenue:

a local road that traverses north-south between Marshall Avenue in the north and a cul de sac in the south. Holdsworth Avenue generally accommodates a single of traffic in each direction and is subject to a 50km/h speed zoning. Within the vicinity of the site, kerbside parking is permitted along both kerbsides of Holdsworth.

Avenue

It can be seen from **Figure 3** that the site is conveniently located with respect to the Pacific Highway, the major arterial road servicing the region.



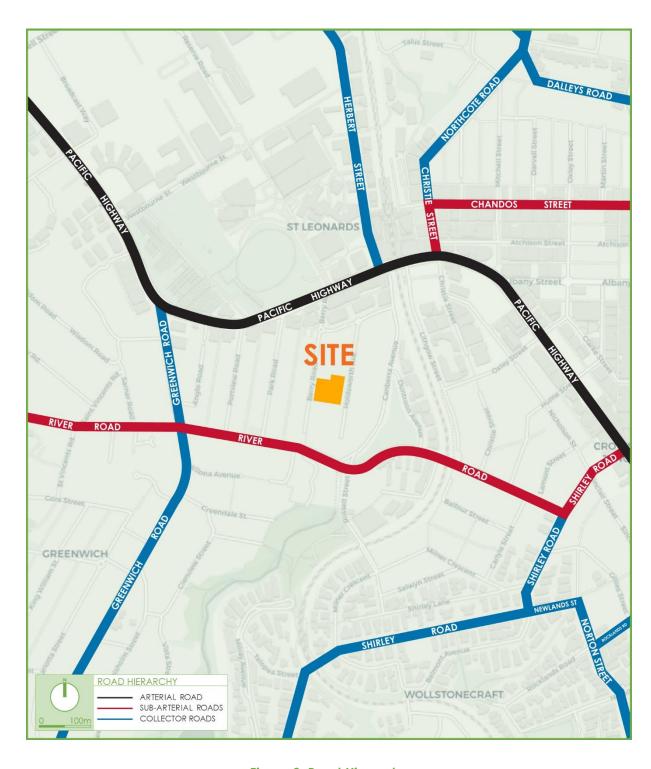


Figure 3: Road Hierarchy



### 3.3 Public Transport

The existing bus services that operate in the locality are shown in **Figure 4**. It is evident that the development benefits from good bus services with bus stops in either direction being situated within 400 metres of the site along River Road. These bus services are presented in Figure 4 and are summarised as follows:

- 114 Balmoral to Royal North Shore Hospital
- 114 Manly to Chatswood
- 200 Bondi Junction to Gore Hill
- 252 Gladesville to City King Street Wharf
- 254 Riverview to McMahons Point
- 261 Lane Cove to City King Street Wharf
- 265 Lane Cove to North Sydney
- 286 Denistone East to Milsons Point
- 287 Ryde to Milsons Point
- 290 Epping to City Erskine St
- 291 Epping to McMahons Point
- 320 Green Square to Gore Hill
- 602X Bella Vista Station to North Sydney (Express Service)
- 612X Castle Hill to North Sydney (Express Service)
- 622 Dural to Milsons Point

St Leonards Railway Station is located approximately 470 metres north of the site with Wollstonecraft Railway Station 700 metres south of the site. These stations provide services on the, T1 North Shore and Western Line, T2 Northern Line and Central Coast and Newcastle Intercity Line connecting the site to the Chatswood, North Sydney, Sydney CBD and the wider rail network.

It is evident that the site is serviced by excellent public transport options providing workers with an alternative and sustainable transport mode over private vehicle use.



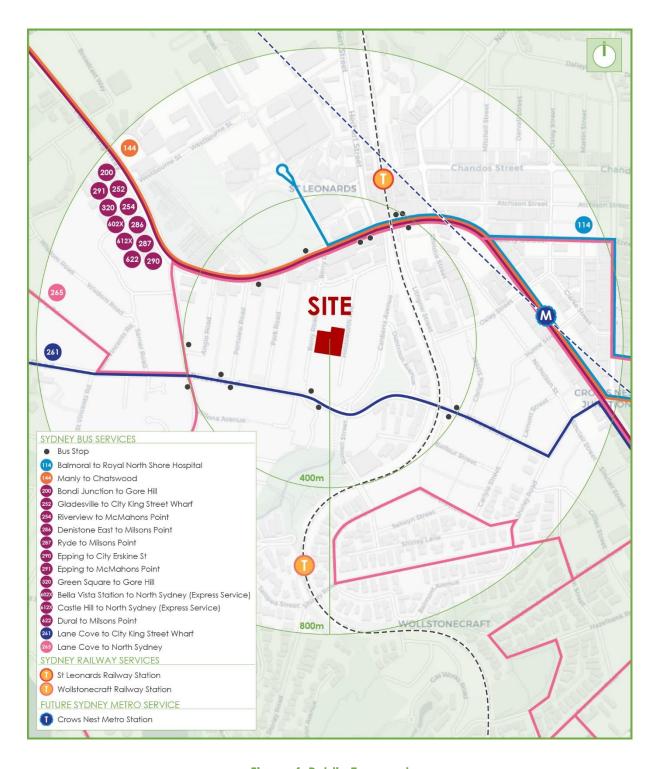


Figure 4: Public Transport



## 4. OVERVIEW OF CONSTRUCTION PROGRAM

### 4.1 Times of Operation

The total construction period will be confirmed once the Notice of Determination is provided. However, the anticipated hours of operation are summarised as follows:

Monday to Friday 7:00am to 6:00pm;

Saturday 7:00am to 1:00pm; and

Sunday or Public Holiday
No building activities are to be carried out at any time.

### 4.2 Overview of Construction Works

The anticipated truck volumes will be provided in detail during CC stage with the final CTMP. The anticipated period of each stage of construction will be confirmed after a builder is appointed. Reference should be made to the Site Establishment Plans provided in **Appendix A**. The general overview of works is summarised below.

### 4.2.1 Demolition

The maximum sized truck to be utilised during this stage is anticipated to be 19.6m truck and dogs. It is proposed that all demolition works will occur within the site, with access provided via the proposed entry at the Berry Road frontage and exit via the Holdsworth Avenue frontage.

The number of truck movements and number of workers on site for this stage of development will be confirmed at a later stage.

### 4.2.2 Bulk Excavation Stage

The maximum sized truck to be utilised during this stage is anticipated to be 19.6m truck and dogs. It is proposed that all bulk excavation works will occur within the site, with access provided via the Holdsworth Avenue frontage.

The number of truck movements and number of workers on site for this stage of development will be confirmed at a later stage.



### 4.2.3 Structure Stage

The maximum sized truck to be utilised during this stage is anticipated to be 12.5m heavy rigid vehicles. It is proposed that all structural works will occur within the site and the works zones along Berry Road and Holdsworth Avenue frontages.

The number of truck movements and number of workers on site for this stage of development will be confirmed at a later stage.

### 4.2.4 Fitout and Finishes Stage

The maximum sized truck to be utilised during this stage is anticipated to be 12.5m heavy rigid vehicles. It is proposed that all structural works will occur within the site and the works zones along Berry Road and Holdsworth Avenue frontages.

The number of truck movements and number of workers on site for this stage of development will be confirmed at a later stage.

### 4.3 Truck Routes

It is noted that all truck routes will start or finish on the Pacific Highway or River Road. A swept path analysis has been undertaken for the maximum sized vehicles demonstrating satisfactory entry and egress movements at the site access. This analysis is provided in Appendix B.

### 4.3.1 Demolition Truck Routes

The proposed demolition truck route is presented in Figure 4, with the route summarised as follows:

or southbound.

- Routes to the subject site (IN):
- 1. Trucks will arrive from the Pacific Highway northbound
- 2. Turn left into Berry Road.
- 3. Continue on to Berry Road and turn left into site.
- Routes from the subject site (All vehicles): 1. Trucks will turn left from subject site onto Holdsworth Avenue northbound.
  - 2. Turn right on to Marshall Avenue
  - 3. Turn right on to Canberra Avenue
  - 4. Turn left on to River Road



- Routes from the subject site (MRV Only):
- 1. Trucks will turn left from subject site onto Holdsworth Avenue northbound.
- 2. Turn left on to Marshall Avenue.
- 3. Turn right on to Berry Road.
- 4. Turn left or right on to Pacific Highway.

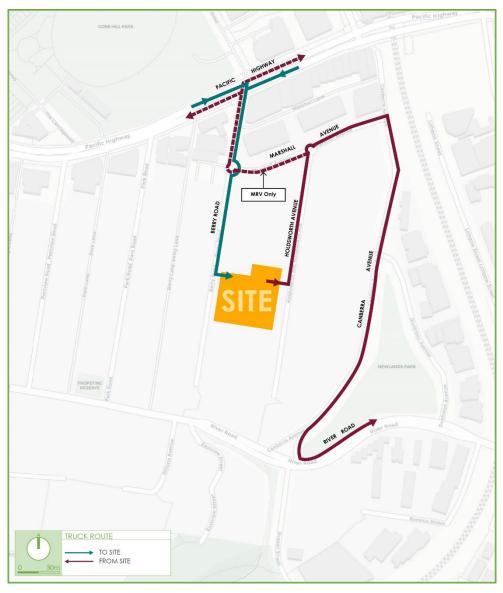


Figure 5: Demolition Truck Route





Figure 6: Excavation Truck Route

### 4.3.2 Excavation Truck Routes

The proposed excavation truck route is presented in **Figure 6**, with the route summarised as follows:

Routes to the subject site (IN):

- 1. Trucks will arrive from the Pacific Highway northbound or southbound.
- 2. Turn left into Berry Road.
- 3. Turn left into Marshall Avenue
- 4. Turn right into Holdsworth Avenue
- 3. Turn right into site.



- Routes from the subject site (OUT):
- 1. Trucks will turn left from subject site onto Holdsworth Avenue northbound.
- 2. Turn right on to Marshall Avenue
- 3. Turn right on to Canberra Avenue
- 4. Turn left or on to River Road
- Routes from the subject site (MRV Only):
- 1. Trucks will turn left from subject site onto Holdsworth Avenue northbound.
- 2. Turn left on to Marshall Avenue.
- 3. Turn right on to Berry Road.
- 4. Turn left or right on to Pacific Highway.



Figure 7: Structure Truck Route



### 4.3.3 Structure Truck Routes

The proposed excavation truck route is presented in **Figure 7**, with the route summarised as follows:

Routes to the Berry WZ (IN):

- 1. Trucks will arrive from the Pacific Highway northbound or southbound.
- 2. Turn left into Berry Road.
- 3. Turn into the Works Zone.
- Routes from the Berry WZ (OUT):
- Trucks will exit the works zone on to Berry Road and reverse into the on-site turning area.
- 2. Turn right on to Berry Road
- 3. Turn left or right on to Pacific Highway
- Routes to the Holdsworth WZ (IN):
- 1. Trucks will arrive from the Pacific Highway northbound or southbound.
- 2. Turn left into Berry Road.
- 3. Turn left into Marshall Avenue
- 4. Turn right into Holdsworth Avenue
- 5. Reverse into the turning area on-site.
- 6. Turn left into Holdsworth Avenue
- 3. Turn into the Works Zone.
- Routes from the Holdsworth WZ (OUT):
- Trucks will exit the Works Zone onto Holdsworth Avenue northbound.
- 2. Turn right on to Marshall Avenue
- 3. Turn right on to Canberra Avenue
- 4. Turn left or on to River Road
- Routes from the Holdsworth WZ (MRV Only): 1. Trucks will exit the Works Zone onto Holdsworth Avenue northbound.
  - 2. Turn left on to Marshall Avenue.
  - 3. Turn right on to Berry Road.
  - 4. Turn left or right on to Pacific Highway.



### 4.4 Vehicle Access

All trucks will be linked via CB radio and/or hands-free mobile and will only be called onto site when required and when there is sufficient capacity to accommodate the proposed trucks. No trucks will be allowed to queue in public roadways during construction.

### 4.5 Road Alignment Works

To allow larger vehicles to access the site some minor amendment to the roundabout medians are required to allow trucks to access the development. The following amendments have been identified based on the swept path analysis provided in **Appendix B**:

- The median on the Marshall Avenue approach to its intersection with Berry Road is to be removed to allow trucks to enter Marshall Avenue from the Pacific Highway.
- The median on the eastern approach of Marshall Avenue to its intersection with Holdsworth Avenue is to be cut back to allow for vehicles to turn right out of Holdsworth Avenue and exit via River Road.

All changes to the road network will be restored to the original condition once construction is completed. This is considered an appropriate solution to construction vehicle access particularly as a number of neighbouring developments will also be under construction in the next few years. Therefore, the changes proposed as part of the construction methodology for this project may assist with access for other developments under construction. In addition, allowing for larger vehicles with minor amendments to the intersections will reduce the number of truck movements during excavation and the timeframe of these works which will minimise the overall impact of construction on other road users and surrounding residents.

### 4.6 Pedestrian Control

Construction fencing will surround all construction areas during demolition and excavation with Class A pedestrian hoarding provided along the pedestrian footpath for the length of the site's boundary along Berry Road and Holdsworth Avenue. During structure and fitout stages Class B hoarding will eb provided along both frontages.

### 4.7 Traffic Control Plans

The TCP included in **Appendix C** demonstrate the proposed signage to be adopted during all stages of construction.



TCP01: Demolition Works

TCP02: Excavation Works

TCP03: Structure, Fit-out and Finishes Works

The TCP has been designed in accordance with the requirements of the RMS *Traffic Control at Work Sites Manual* and is recommended for adoption. In addition, it is noted that copies of the TCPs are to be kept on-site at all times.

### 4.8 Employee Vehicles

Parking will be limited on-site during construction with no vehicles permitted to parking within the Works Zone. In addition, the parking within the vicinity of the site is under time restrictions which will not allow for workers to park their vehicles during the day. As such construction workers are encouraged to use public transport with the site being conveniently located near St Leonards station and the bus routes along the Pacific Highway. As construction progresses, workers will be permitted to park within the on-site car park. As such, there is expected to be no impact on the on-street parking provision in the area.

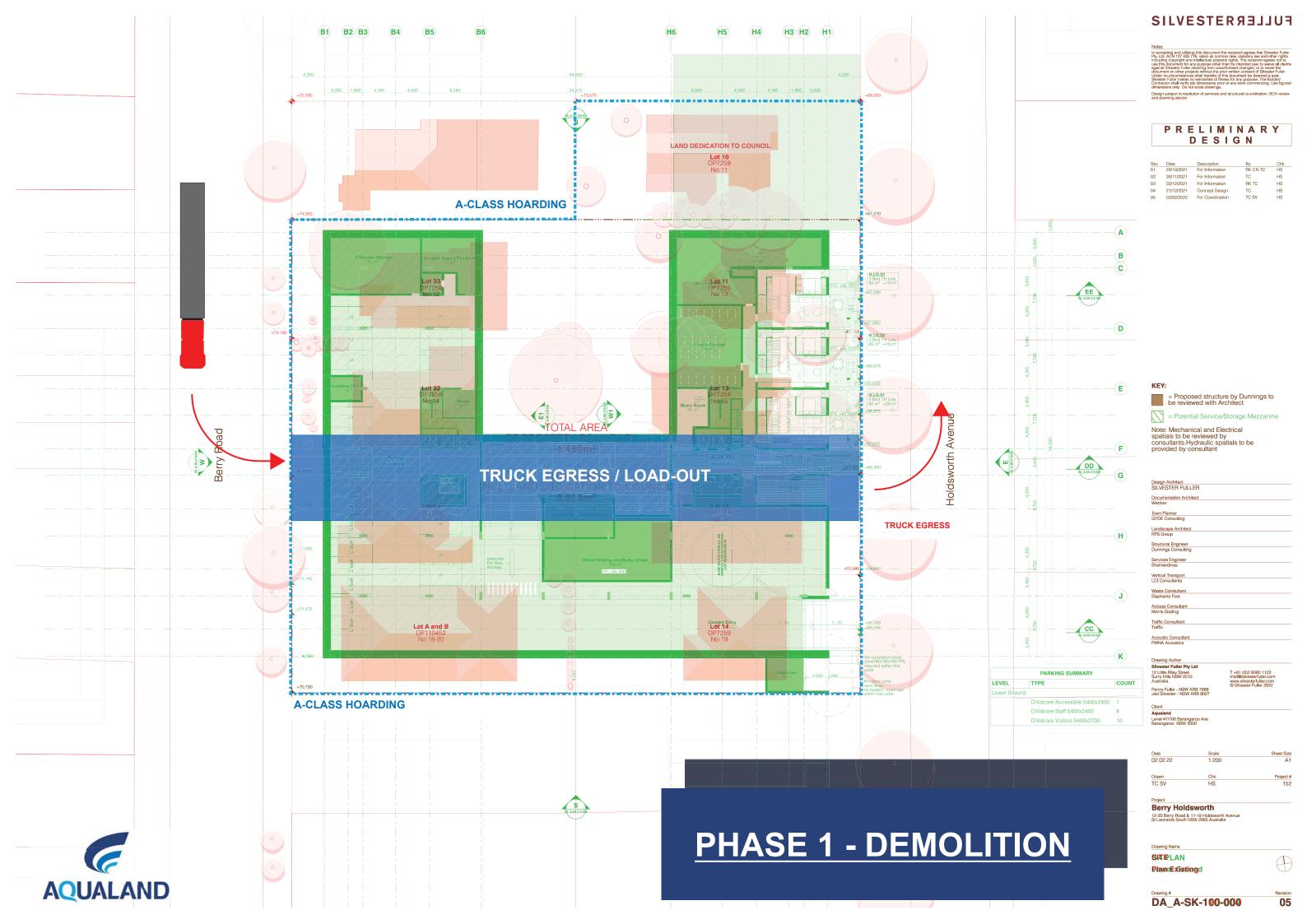


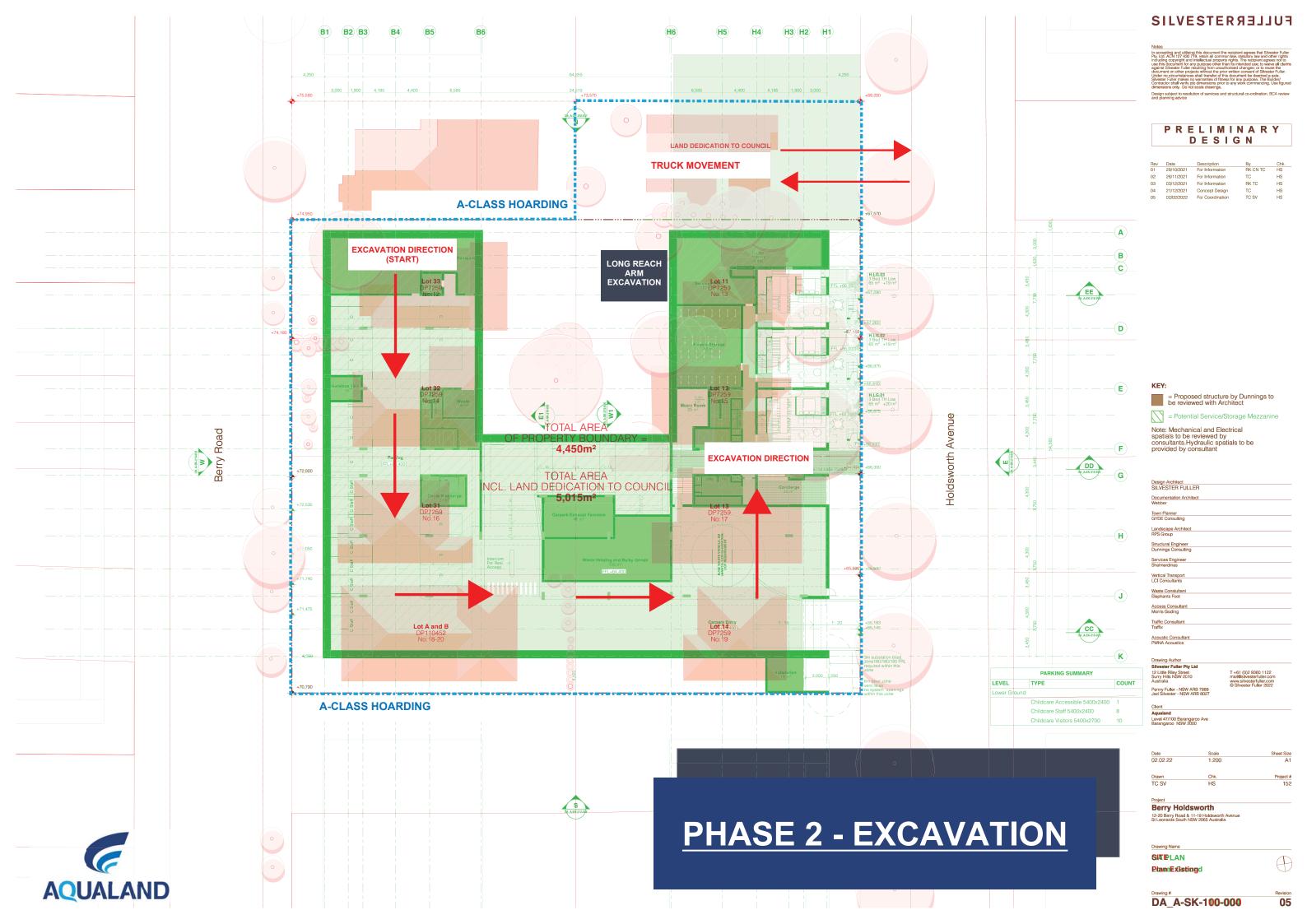
## 5. CONCLUSION

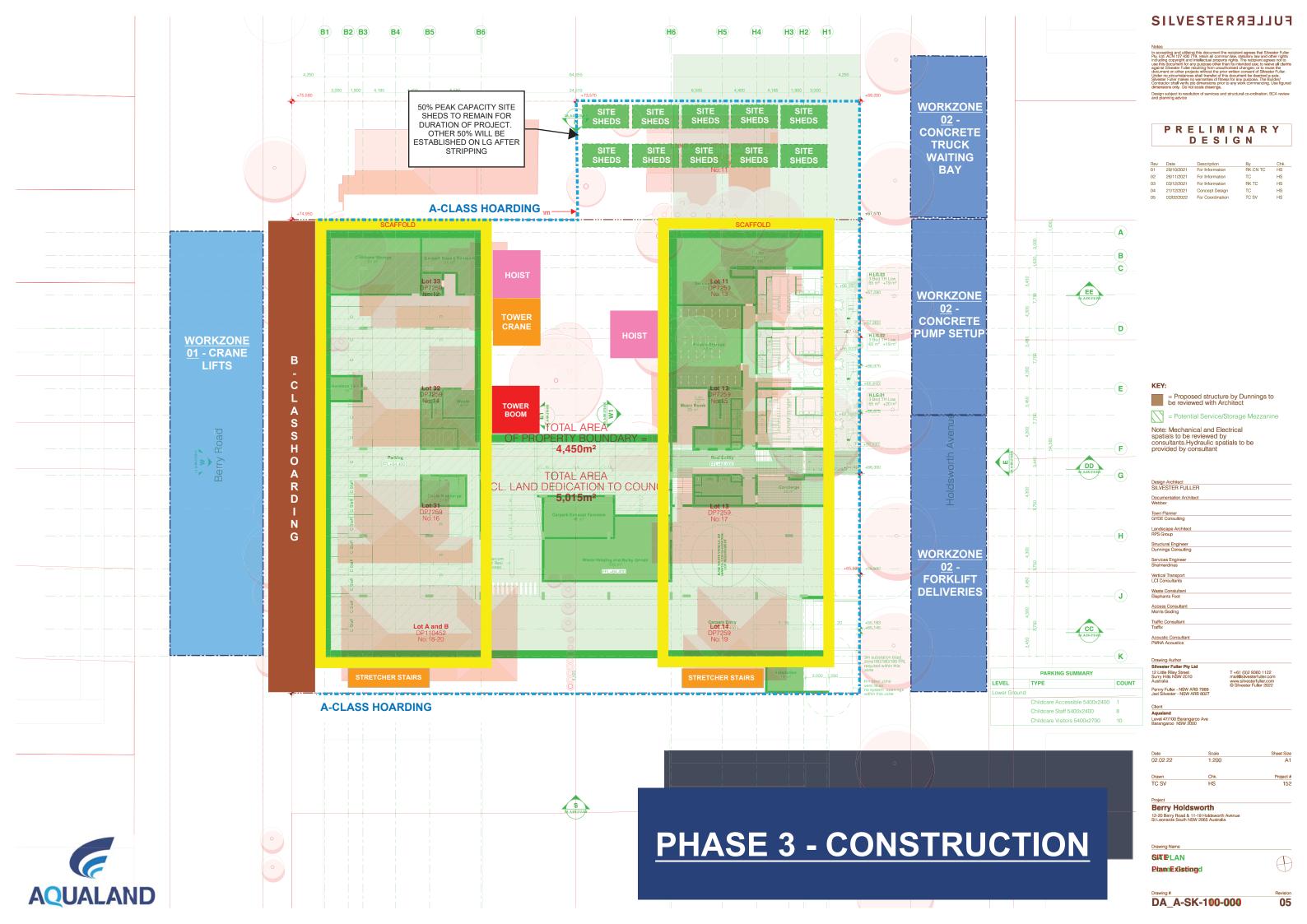
This report is preliminary in nature and it is emphasised that it will be subject to change once the notice of determine is provided and a builder is appointed. The preliminary plan outlined above is considered satisfactory and will minimise any disruptions to the neighbouring developments. This plan meets all requirements of the RMS *Traffic Control at Work Sites Manual* and is recommended for adoption.

# APPENDIX A

Site Establishment Plans



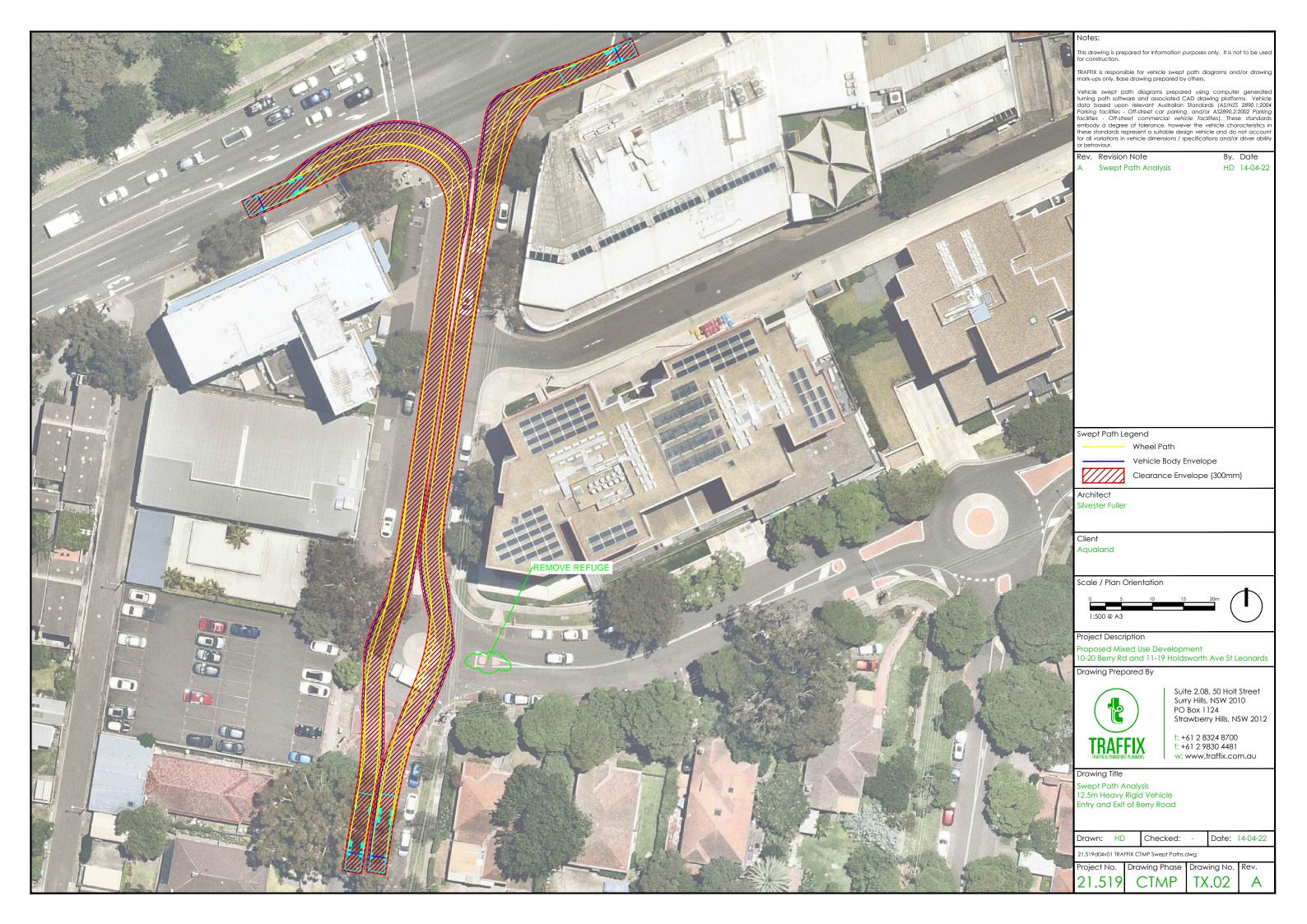




# APPENDIX B

Swept Path Analysis







Top: Entry to Holdsworth Avenue Bottom: Exit of Holdsworth Avenue

Checked:

Project No. Drawing Phase Drawing No. Rev. 21.519 CTMP

Drawn: HD

TX.03

Date: 14-04-22



Suite 2.08, 50 Holt Street Surry Hills, NSW 2010 PO Box 1124

By. Date

HD 14-04-22

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### Drawing Title

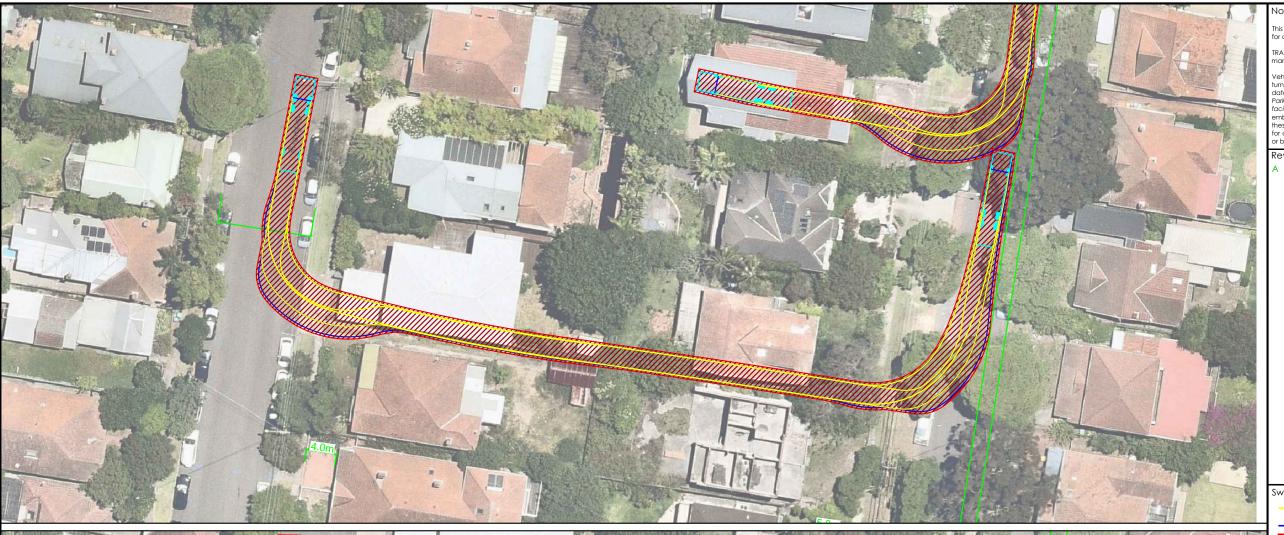
Swept Path Analysis Truck and Dog Top: Entry to Holdsworth Avenue Bottom: Exit of Holdsworth Avenue

Drawn: HD

Checked: Date: 14-04-22

Project No. Drawing Phase Drawing No. Rev. 21.519 CTMP

TX.04



This drawing is prepared for information purposes only. It is not to be used for construction.

TRAFFIX is responsible for vehicle swept path diagrams and/or drawin nark-ups only. Base drawing prepared by others.

Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (AS/NIZS 2890.1:2004 Parking facilities - Off-street car parking, and/or AS2890.2:2002 Parking facilities - Off-street commercial vehicle facilities). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.

Rev. Revision Note

By. Date

A Swept Path Analysis

HD 14-04-22

Swept Path Legend

Wheel Path

Vehicle Body Envelope

Clearance Envelope (300mm)

Architect

Silvester Fuller

Client Aqualand

Scale / Plan Orientation



Project Description

Proposed Mixed Use Development 10-20 Berry Rd and 11-19 Holdsworth Ave St Leonards

### Drawing Prepared By



Suite 2.08, 50 Holt Street Surry Hills, NSW 2010 PO Box 1124 Strawberry Hills, NSW 2012

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### Drawing Title

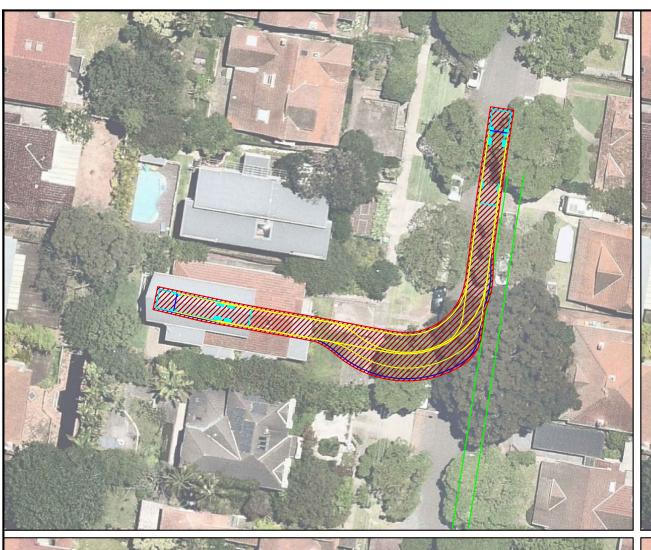
Swept Path Analysis 12.5m Heavy Rigid Vehicle Top: HRV Drive Through Site sottom: HRV Three Point Turn on-site

Drawn: HD Checked:

Project No. Drawing Phase Drawing No. Rev. 21.519 CTMP

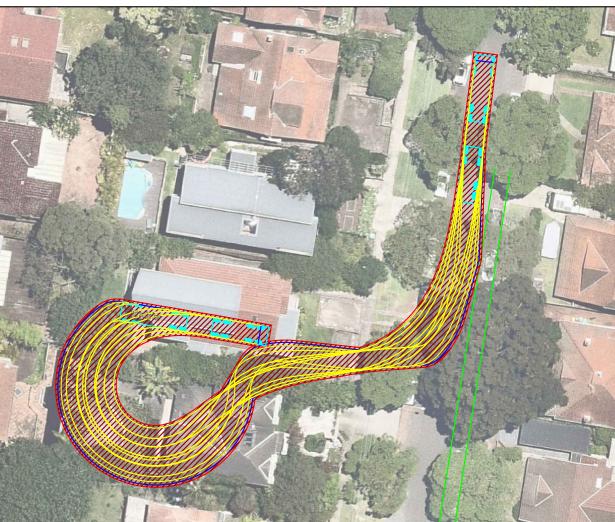
TX.05

Date: 14-04-22









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Rev. Revision Note

A Swept Path Analysis

HD 14-04-22

Swept Path Legend

Wheel Path

Clearance Envelope (300mm)

Vehicle Body Envelope

Architect Silvester Fuller

Client Aqualand

Scale / Plan Orientation



Project Description

Proposed Mixed Use Development 10-20 Berry Rd and 11-19 Holdsworth Ave St Leonards

### Drawing Prepared By



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w: www.traffix.com.au

### Drawing Title

Drawn: HD

Swept Path Analysis Top Left: HRV entering site Bottom Left : HRV exiting site Top Right: Truck and Dog entering site Bottom Right: Turck and Dog exiting site

Checked:

21.519d04v01 TRAFFIX CTMP Swept Paths.dwg

Project No. Drawing Phase Drawing No. Rev. 21.519 CTMP

TX.06

Date: 14-04-22

# APPENDIX C

Traffic Control Plans



# **TR \rightarrow FFIX**

TRAFFIC AND TRANSPORT PLANNERS

Suite 2.08, 50 Holt Street Surry Hills, NSW 2010

**(**02) 8324 8700

☑ info@traffix.com.au

→ Truck Movements to Site Truck Movements from Site

- NOTES Plan not to scale.
  - All signage dimension D shall comply with the minimum requirements of AS 1742.3 CI 4.1.5 as per TCAWS 2018 (2.11).
  - Qualified personnel to undertake a site inspection prior to implementation.
  - It must be noted that TRAFFIX is not responsible for the implementation of this TCP, which is the responsibility of the on-site qualified traffic controller.

10-20 BERRY RD & 11-19 HOLDSWORTH AVE. ST LEONARDS

PROJECT NUMBER

DATE

21.519 13.04.2022

### CLIENT

AQUALAND

### **DEMOLITION STAGE**

### PREPARED BY

HAYDEN DIMITROVSKI

### APPROVED BY

HAYDEN DIMITROVSKI TCT0028714

SAFEWORK NSW CARD NUMBER

Monitore.

SIGNATURE



# **TR \rightarrow FFIX**

TRAFFIC AND TRANSPORT PLANNERS

Suite 2.08, 50 Holt Street Surry Hills, NSW 2010

**(**02) 8324 8700

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→ Truck Movements to Site Truck Movements from Site

- NOTES Plan not to scale.
  - All signage dimension D shall comply with the minimum requirements of AS 1742.3 Cl 4.1.5 as per TCAWS 2018 (2.11).
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10-20 BERRY RD & 11-19 HOLDSWORTH AVE. ST LEONARDS

PROJECT NUMBER

DATE

21.519 13.04.2022

### CLIENT

AQUALAND

### **EXCAVATION STAGE**

### PREPARED BY

HAYDEN DIMITROVSKI

### APPROVED BY

HAYDEN DIMITROVSKI TCT0028714

SAFEWORK NSW CARD NUMBER

Monitore.

SIGNATURE





TRAFFIC AND TRANSPORT PLANNERS

Suite 2.08, 50 Holt Street Surry Hills, NSW 2010

**(**02) 8324 8700

☑ info@traffix.com.au

Works Zone ■ B-Class Hoarding

- NOTES Plan not to scale.
  - All signage dimension D shall comply with the minimum requirements of AS 1742.3 Cl 4.1.5 as per TCAWS 2018 (2.11).
  - Qualified personnel to undertake a site inspection prior to implementation.
  - It must be noted that TRAFFIX is not responsible for the implementation of this TCP, which is the responsibility of the on-site qualified traffic controller.

10-20 BERRY RD & 11-19 HOLDSWORTH AVE. ST LEONARDS

PROJECT NUMBER

DATE

21.519 13.04.2022

CLIENT

AQUALAND

### STRUCTURE, FITOUT AND FINISHES STAGES

PREPARED BY

HAYDEN DIMITROVSKI

APPROVED BY

SAFEWORK NSW CARD NUMBER HAYDEN DIMITROVSKI TCT0028714

SIGNATURE Monitore.