

Kurnell Wharf Infrastructure Upgrade Traffic and Access Management Plan

CALTEX REFINERIES (NSW) PTY LTD

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1 INTRODUCTION

Caltex Refineries (NSW) Pty Ltd (Caltex) proposes to undertake port and berthing facility works off Silver Beach in Botany Bay, NSW (the Project). There are two main elements to the (Project):

- Dredging.
- Upgrading existing elements of the berthing infrastructure.

Environmental management requirements for the Project are set out in the following documents:

- Dredge and Sediment Disposal Management Plan (DSDMP)
- Wharf Upgrade Construction Environmental Management Plan (Wharf Upgrade CEMP)
- Installation of a Sheet Pile Wall and Rock Revetment Construction Environmental Management Plan (Sheet Pile Wall and Rock Revetment CEMP).

This management plan has been prepared to support the DSDMP and the CEMPs.

1.1 Location

The Project works are located in the waters of Botany Bay off Silver Beach (Figure 3 -1).

The works are located in close proximity to places with important ecological and heritage values. These include:

- Towra Point Nature and Aquatic Reserves, which contain an internationally important Ramsar-listed wetland habitat (3.5 km to the west)
- Areas of seagrass beds, which support a range of threatened species (100 m to the south)
- Both Taren and Dolls Point (5 km to the west), which both contain important and protected shorebird communities

Kamay Botany Bay National Park is located approximately 700 m to the east. The National Park contains important Aboriginal and historic heritage; which includes the landing place of Captain James Cook. The National Park also serves as a valued recreational and educational asset. The nearest residents to the Project Site are the Rangers House (Alpha House) in Kamay Botany Bay National Park (700 m to the east) and the properties along Prince Charles Parade, Kurnell (800 m to the south).

2 OBJECTIVES

The objective of the Traffic and Access Management Plan is to minimise traffic interactions and appropriately manage traffic interfaces. This includes the management of marine vessels and land based vehicles.

To address this objective, the Management Plan documents:

- The management measures, actions and associated performance indicators, that will be implemented throughout the Project;
- The proposed monitoring program that will be implemented; and
- Key project management roles and responsibilities and reporting requirements.

3 PROJECT OVERVIEW

The Kurnell Wharf Port and Berthing Facility is the sole entry point for feedstock of crude oil and other finished petroleum product imports to the Kurnell Refinery. At present, it is also used as the distribution point for refined products, which are either shipped interstate or overseas.

The existing facility has operated since 1956. It comprises the Kurnell Wharf (a 1 km jetty structure), at the end of which are two fixed shipping berths (fixed berth #1 and fixed berth #2) located either side of a breasting island. The facility also includes a submarine berth (sub berth), located to the west of the fixed berths, as well as a ship turning circle and associated approaches that interface with the main Botany Bay Shipping Channel.

On the northern side of the wharf, a crude oil submarine pipeline connects the refinery's storage tanks to the sub berth (Figure 3 - 1). Starting adjacent to the wharf, south of the fixed berths, are a series of additional submarine pipelines that transport fuel under Botany Bay. These pipelines head west then north and connect to terminals at Banksmeadow, Silverwater and Newcastle, whilst also servicing Sydney (Kingsford Smith) Airport.

Kurnell Wharf is located, in part, on Lot 456 DP 1413279, within the Sutherland Shire Local Government Area (LGA) and in part on unincorporated land (i.e. not part of any LGA) that is leased to Caltex by the State Government.

Dredging of approximately 153,000 m³ is required from spot locations within the berths, approaches and turning circle over a total area of approximately 178,000 m², to improve shipping access and capacity. Infrastructure works will also be carried out to upgrade mooring and berthing equipment in the sub berth and fixed berth #1. Other ancillary works will include an upgrade to the fire system on the Wharf and construction of a rock revetment and a sheet-piled wall at the southern end of fixed berth #1.

The majority of work is marine based and will be carried out within the existing Marine Security (exclusion) Zone around the Kurnell Wharf. This marine based work includes dredging, piling and rock revetment construction. Dredging activities will generate minimal traffic as access will be predominantly by boat. However up to approximately 10 cars a day may be needed to transport personnel to and from the site. Similarly piling and rock revetment work will generate minimal traffic as access to the site will be by boat although there could be an additional 10 cars for transport of personnel. There would be minimal traffic from the Right of Way to the Wharf and vice versa. However, in the event the public roadway would be obstructed, Traffic Management Personnel would be deployed. This is not expected to be required.

There will also be some works conducted on the existing wharf which will include:

- Decommissioning of existing berthing facilities associated with fixed berth #1 which will include isolation and cleaning of the existing fuel lines and dismantling redundant loading arms. The fuel lines cut into 6m sections and along with the redundant loading arms removed from the wharf on semi-trailers. This will generate approximately 20 truck movements.
- Installation of hydraulic loading arms and replacement of bollards with quick release hooks which will be mounted onto a prefabricated steel structure that will be anchored to the existing wharf top deck. This will generate a further 20 truck movements.
- Installation of breasting and bow mooring dolphins. The breasting dolphins will be constructed on piles. Piles will be delivered by boat but there will be up to 200 truck movements over a 20 week period and up to 40 additional personnel accessing the site.

The Project site and its context are shown in Figure 3 – 1.

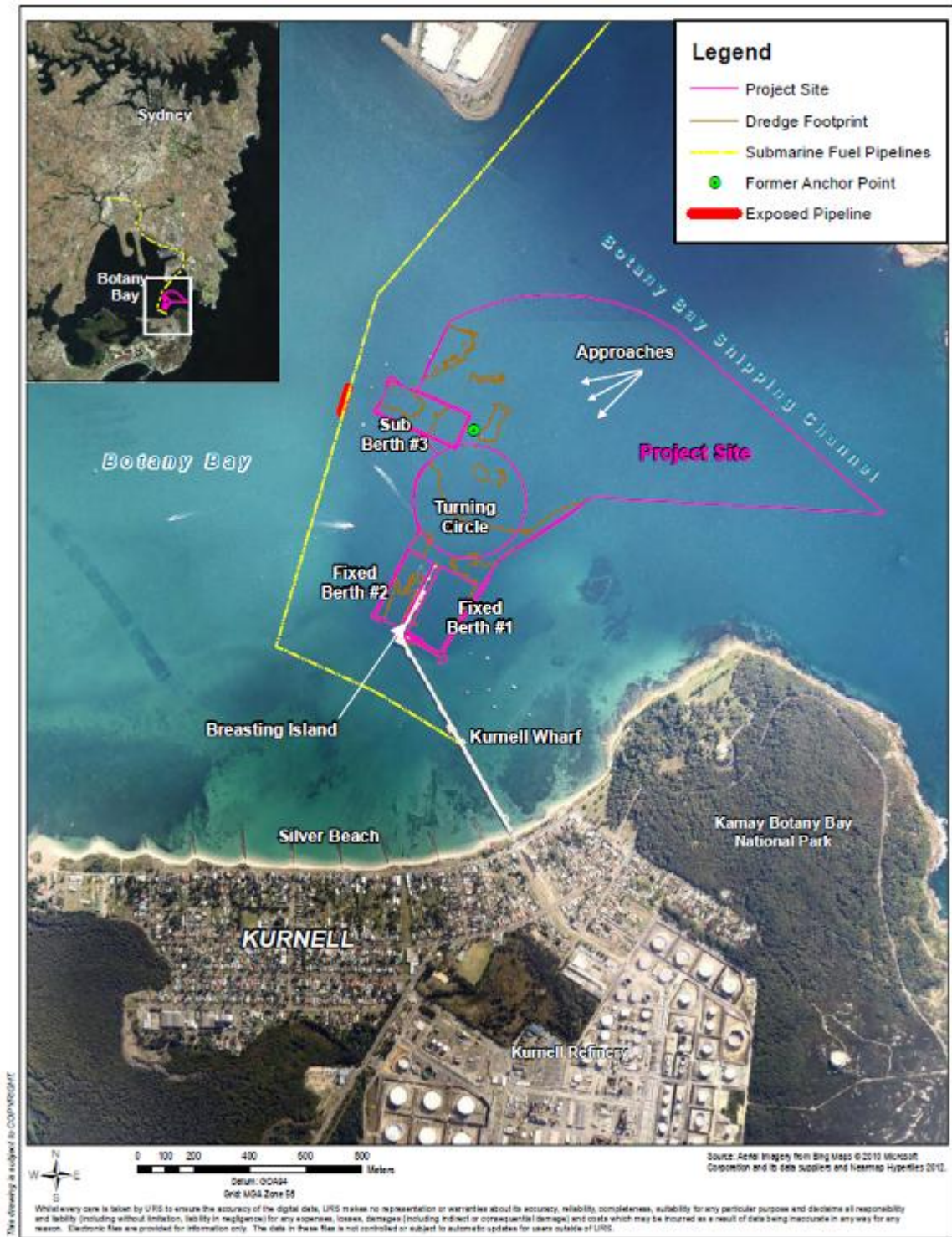


Figure 3 - 1: Project Site and Context (source: URS 2013)

3.1 Project Program

The approximate Project program is shown in Table 3 - 1.

Table 3 - 1: Approximate Project program

Works	Duration	2013			2014			2015		
		Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Dredging Works (including one week mobilisation / demobilisation)	25 weeks		■	■	■					
Reuse Works	1 week		■							
Sheet Piling Works	3 weeks		■							
Rock Revetment and Scour Protection Works	4 weeks			■	■					
Kurnell Wharf Infrastructure Upgrade Works										
Loading Arms Installation and Manifold Installation	12 weeks			■	■					
Mechanical Loading Arm Removal and New Tie-ins	12 weeks							■	■	
Quick Release Hooks	16 weeks			■						
Fire System	8 weeks						■	■		
Installation of Dolphins, Moorings and Piling	20 weeks (approx.)						■	■	■	■
Sub Berth Upgrade Works	20 weeks (approx.)				■	■				

4 IMPLEMENTATION

4.1 Responsibilities

Overall responsibility for the implementation of this Management Plan rests with Caltex. All employees and the Contractor will meet the requirements of this Management Plan and associated procedures. Management actions set out in this Management Plan may be delegated in writing by Caltex to the specific Contractor.

Key Project personnel including the Caltex Project Manager, Caltex Dredging Supervisors, Caltex EMR, Contractor Project Manager and each Contractor's Environment / HSE Representative, will ensure that all management actions are undertaken to a satisfactory standard and that all personnel are aware of their responsibilities with respect to environmental matters. There will be dedicated staff to manage environmental issues (or integrated HSE matters) during dredging. A general outline of responsibilities in relation to environmental management is provided below:

Caltex Project Manager

- Overall accountability for the environmental management of the Project.
- Implementation of the Caltex Environmental Policy with respect to the Project.
- Overall responsibility for development, implementation, maintenance and compliance with this Management Plan.

Caltex Environmental Management Representative (EMR)

- Accountable for environmental matters on the Project.
- Provide support to Caltex personnel and the Contractor as required to ensure this Management Plan is implemented and complied with.
- Review effectiveness and implementation of this Management Plan.
- Monitor the implementation of all required environmental management actions and compliance with legislation.
- Undertake environmental auditing as required.
- Implement *Protection of the Environment Operations Act 1997* (POEO Act) notification requirements in the event of a pollution incident (these requirements can be delegated to appropriate personnel by the EMR).

All Personnel (Caltex and the Contractor)

- Comply with the requirements of this Management Plan.
- Report all environmental incidents as they occur.
- Attend environmental inductions or any other training as required.

4.2 Induction

Caltex has a site induction program that all contractors and employees are required to complete prior to undertaking any work.

All Caltex employees and the Contractor are required to undertake the Caltex Project Induction before they can commence work on the Project.

4.3 Training

All Project personnel will have the experience and necessary training to carry out their required tasks, including in the use of equipment and the implementation of this Management Plan.

Caltex and the Contractor will each maintain a Training Register that records all environmental training completed by its personnel, including records of attendance at awareness training and toolbox talks, as well as competency assessments.

4.4 Incident Management

Caltex will continue to implement its existing incident management procedures, including for response to, investigation and reporting of incidents.

A comprehensive Emergency Management System is currently implemented at the Kurnell Refinery, with associated response and safety equipment held on site. Key personnel are trained to support the implementation of the system. Regular training exercises are carried out by Caltex

4.5 Compliance Management

Caltex has a complaint management procedures for the investigation, response and reporting of complaints.

Caltex manages all community complaints in accordance with the requirements of EPL 837, including:

- Reporting complaints in the Annual Return for EPL 837
- Keeping a legible record of all complaints made to Caltex and its Contractors, including:
 - The date and time of the complaint
 - The method by which the complaint was made
 - Any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect
 - The nature of the complaint
 - The action taken by Caltex in relation to the complaint, including any follow-up contact with the complainant
 - If no action was taken by Caltex, the reasons why no action was taken

Caltex will continue to operate its 24-hour hotline number (1800 802 385 toll free) to receive feedback and complaints associated with the Project. All feedback and complaints will be relayed to the EMR

and relayed to the Refinery Manager, Community Relations Manager and the Environmental Protection Superintendent, as relevant depending on their nature.

Any feedback and complaint records will be logged in the Complaints Register, tracked and where relevant, responded to. Responses to complaints will be made, where reasonably possible, within 48 hours of receiving the complaint.

5 TRAFFIC MANAGEMENT PROCEDURES

Specific control measures required to undertake the Project including the Performance Objectives, Management Actions, Performance Indicators, Monitoring, Reporting and Corrective Actions set out in the following sections.

Suitable equipment, facilities, training, work practices and other necessary precautions will be taken to minimise impacts to the environment and the risk of pollution.

All Caltex and Contractors personnel will implement reasonable and practicable measures to avoid or minimise impacts to the environment that may arise from the Project.

5.1 Management Actions

5.1.1 Vessel Management Actions

The management actions proposed to minimise traffic interactions and appropriately manage traffic interfaces include:

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- Caltex will revise its Shipping and Planning Procedure to accommodate the Project.
- The movement of ships related to dredging works will be managed by Caltex in accordance with its standard management shipping schedules and operations.
- All shipping required for the Project will comply with the safety and management policies of Sydney Ports Corporation (SPC) and NSW Roads and Maritime Services (RMS), including implementation of general navigational safety controls to ensure no risks to any other users of the area. This would be most significant where the ships travel to and from the Project Site in the main shipping channel.
- Caltex will make all the Contractor aware of the management and interfacing requirements with shipping and the port operations resulting from its discussions with NSW Roads and Maritime Services (RMS) and SPC.
- Caltex will make all the Contractor aware of current practices and standard controls for shipping activities, including SPC Harbour Control being notified of all shipping movements.
- The Contractor will be familiar with and adhere to Caltex's current practices and standard controls for shipping activities.
- Caltex will liaise with the Harbour Master throughout the Project to communicate its intended shipping schedules, movements, timings and pilotage requirements .

- The Contractor will make its shipping schedules available to Caltex for use in liaison with the Harbour Master.
- All ships used for the Project will hold current certifications in accordance with their class and function.
- All ship crew will be fully qualified and trained for their respective roles.
- All ships will be operated in full accordance with international, Commonwealth and State navigational safety and environmental protection standards and regulations.
- A Port Operating Procedure (POP) will be developed by the Contractor in accordance with the relevant regulations and in conjunction with SPC and RMS.
- The POP will incorporate information on the prevailing weather conditions and situations when works will not be permitted to take place within Botany Bay.
- A Marine Works Management Plan (MWMP) will be developed by the Contractor to support the POP.
- The MWMP will include appropriate safety controls that accord with the requirements of the Harbour Master and the SPC Port Procedures Guide to ensure the safety of waterway traffic during dredging works.
- Marine vessels not in use will be moored to the east of the Kurnell Wharf on the edge of the Marine Security Zone.
- Ships will be lit at night in accordance with safety navigation requirements.
- The existing Marine Security (exclusion) Zone around the Kurnell Wharf will remain in place throughout dredging works.
- Where works take place outside the existing Marine Security (exclusion) Zone, a Temporary Marine Works Security Zones of a 50 m radius around the BHD, tugs and hoppers during dredging and reuse activities will be established by Caltex in consultation with SPC and RMS.
- Recreational and commercial vessels will be required to remain outside the Temporary Marine Security Zones.
- Temporary Marine Security Zones will be managed by Caltex, in consultation with RMS, SPC and the NSW Water Police.
- Caltex will communicate the timing and location of the Temporary Marine Security Zones to the public via the methods set out in the Community Consultation Plan and through a Notice to Mariners (via SPC and RMS).
- Where practicable, dredging works will be timed by Caltex to avoid activities and events identified by sailing, diving and recreational user groups that are likely to occur within or close to the Project Site during the dredging works, or activities and events relocated.

5.1.2 Vehicle Management Actions

- All vehicle access associated with the Project including cars and trucks will follow the designated route to and from the site using Captain Cook Drive and Prince Charles Parade as presented in red on Figure 1. This route is the main road access into Kurnell and passes by a preschool that is also marked on Figure 1. No vehicles are to access the project site or leave the project site along any other roads.
- All vehicles entering the site will turn left off Prince Charles Parade into the Caltex owner property known as the Right of Way (ROW) as shown on Figure 2. This Caltex property will be used for truck turning and for parking.
- All vehicle access to the Wharf will be from the ROW in a forward direction.
- All vehicles will enter and leave the site in a forward direction.
- Traffic Controllers with Stop/Go signs will control traffic movements along Prince Charles Parade when vehicles are entering or leaving the Wharf.
- All vehicles will observe the sign-posted speed limits. The speed limit along the wharf is 25km. The speed limit on Prince Charles Parade is 50km.
- Vehicles will only be parked in designated areas along the western boundary of the ROW. Parking or temporary standing of vehicles including all cars and truck, is not permitted on public roadways.
- Vehicle shift changes and delivery times will be restricted to standard working hours (between 7:00 and 18:00) where possible however shift changes for dredging activities will be midnight and midday. Any out-of-hours work including vehicle movements and deliveries must comply with the Construction Noise and Vibration Management Plan.

5.2 Performance Indicators

The following performance indicators will be implemented during the project:

- No collisions caused by Project vessels.
- No vehicle incidents associated with land based site access
- Harbour Master provided with advance copies of all Project related shipping schedules.
- POP and MWMP developed and implemented by relevant the Contractor.

5.3 Monitoring

The key monitoring requirements for this Project:

- The Caltex EMR will monitor compliance with the management and interfacing requirements with shipping and the port operations.
- The Caltex EMR will monitor vehicle access to the site.

5.4 Reporting

The reporting requirements for waste management include;

- Collisions or near misses will be reported in accordance with incident reporting procedures.

5.5 Corrective Action

The access requirements by road to the site are relatively low over the duration of the project with only approximately 20 cars required for personnel and 200 truck movements over a 20 week period. The increase in road access is not expected to require any specific management strategies other than traffic control when oversize vehicles cross Prince Charles Parade.

Caltex owns land on Prince Charles Parade that is currently used for vehicle parking and for truck parking and turning. This property will be used for all vehicle parking and turning associated with the Project. There is no requirement for any road occupancy permits.

There are no requirements for additional management controls to ensure safe pedestrian access and movement around work sites. All work sites are either marine based or at the end of the wharf beyond normal vehicle access limits.

The corrective actions to be implemented during the Project include:

- Collisions will be managed in accordance with incident management procedures.

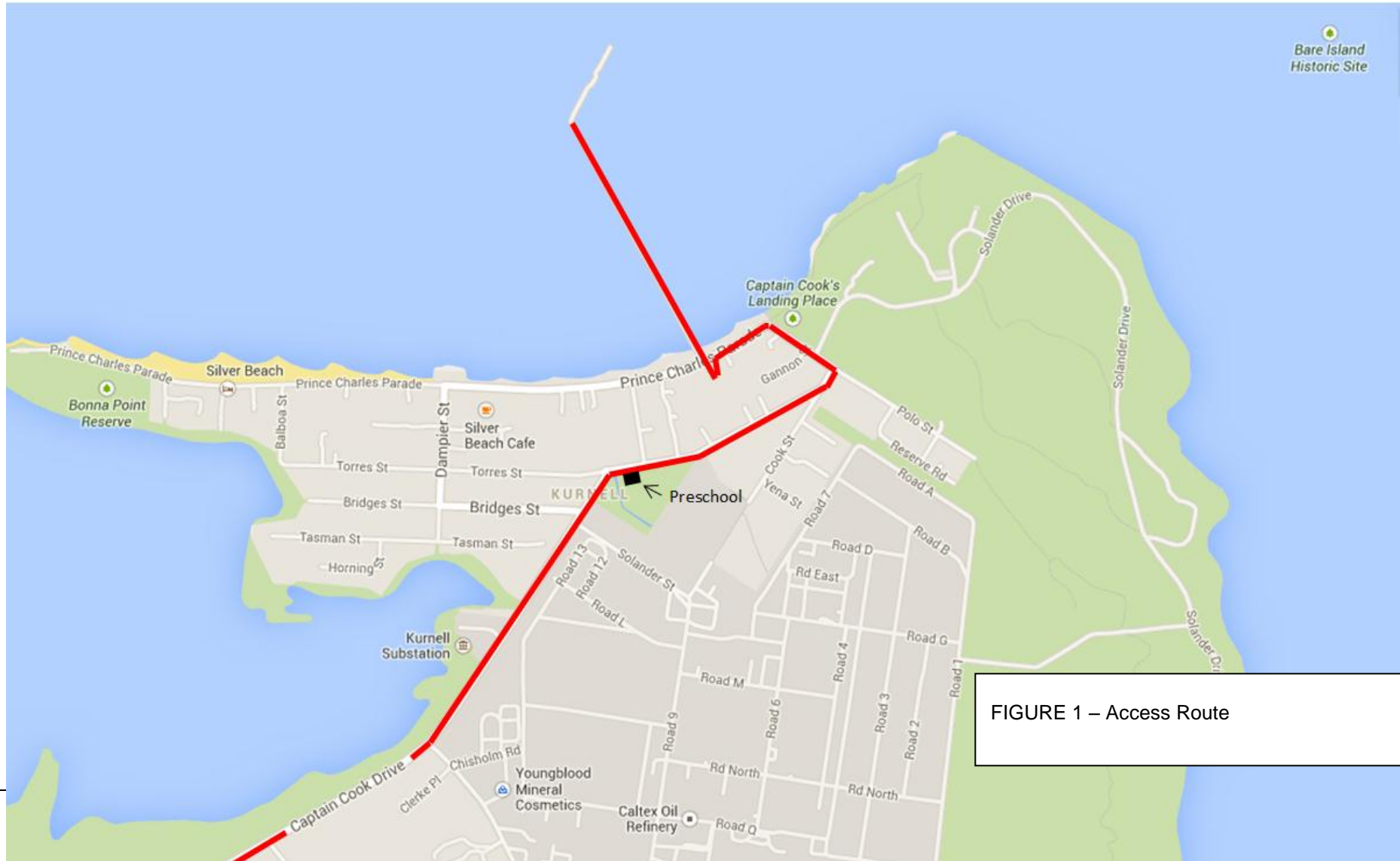


FIGURE 1 – Access Route

