

Exhibition Draft

**Expertise Building &
Construction Pty Ltd**

Prepared by
Expertise Building & Construction Pty Ltd (EBCPL)

Construction Management Plan

GAP BLUFF PRECINCT

OFFICERS MESS
THE ARMOURY
GAP BLUFF COTTAGE

CAMP COVE PRECINCT

CONSTABLE'S COTTAGE
33 CLIFF STREET
GREEN POINT COTTAGE

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1.0 Introduction

1.1 Purpose

This Construction Management Plan has been documented to describe how the Project Management team shall implement and conduct its allocated site management responsibilities during the Construction phase of the “Gap Bluff” Project (the Project).

A fundamental aim of this Plan is to ensure all construction is properly facilitated, integrated and coordinated so as to deliver certainty to the objectives of the Project.

This plan forms part of EBCPL Constructions Management System which is accredited to AS/NZS ISO 9001:2008 – Quality Management System, AS/NZS ISO 14001:2004 – Environmental Management System, and AS/NZS 4801:2001 – Occupational Health and Safety Management System.

1.2 Site Location

The proposed development site is bounded by Military Road, Cliff Street and Pacific Street. The site is known as “Gap Bluff” (refer Figure 1). For the purposes of this Construction Management Plan, Gap Bluff has been divided into 3 precincts -

1. Gap Bluff (refer Figure 2)
2. Camp Cove North (refer Figure 3)
3. Green Point Reserve (refer Figure 4)

Figure 1 – Site Location



The site area is located adjacent to the HMAS Watson, Camp Cove and Watsons Bay.

1.3 Scope of this Plan

This Plan provides a holistic approach that:

- advises how the project management team will comply with the requirements of the contract relating to construction as outlined in the –

Construction Assessment Procedures

Certification for new building and infrastructure works within lands reserved or acquired under the National Parks and Wildlife Act 1974

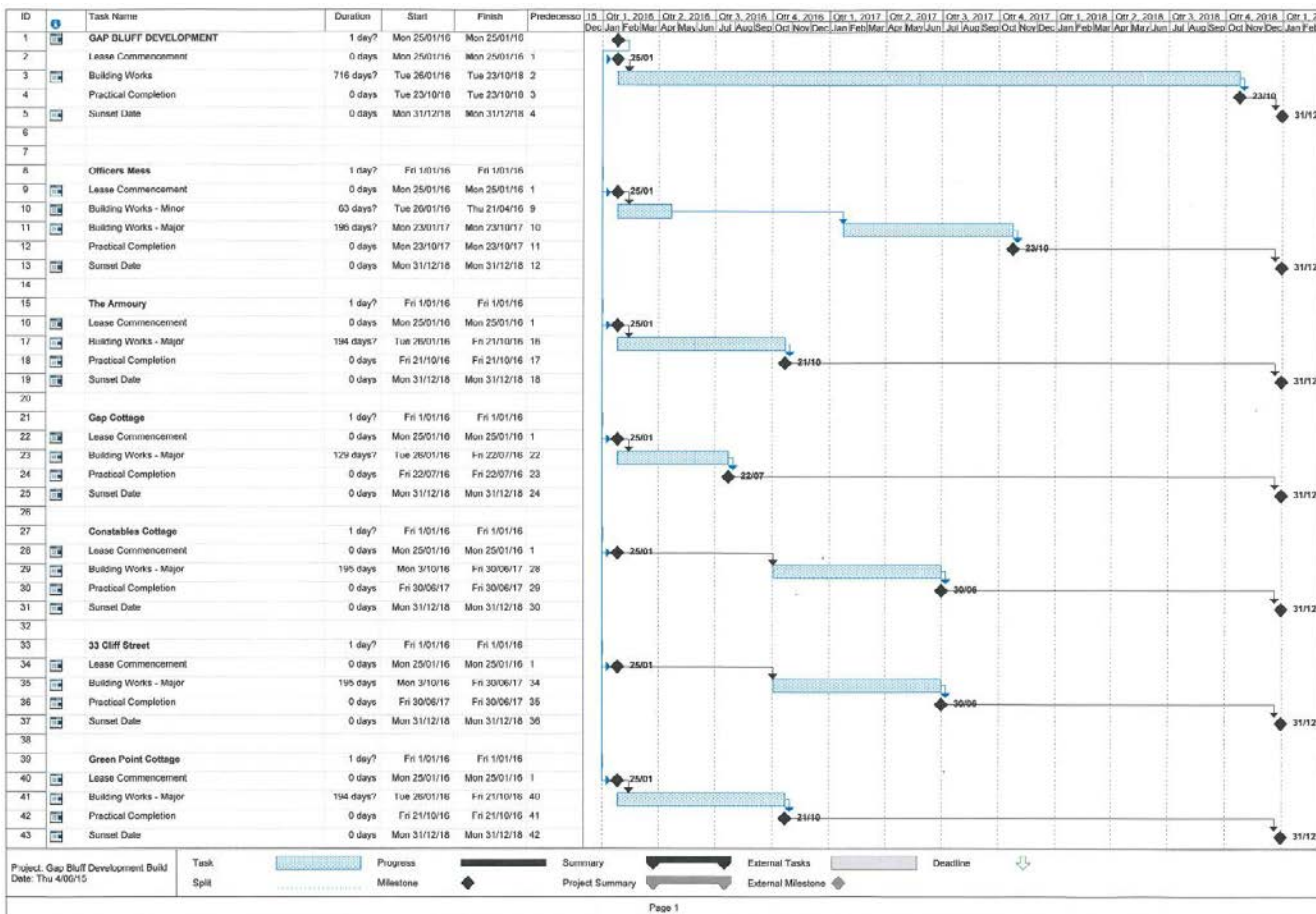
Revision November 2011

- defines the project objectives and targets of particular relevance to the construction phase;
- describes constraints specific to the construction phase and the project in general;
- describes the process for the identification and control of risks specific to the construction phase; and
- details the proposed strategy for the construction phase, with particular regard to establishment resourcing, site organisation and construction controls.

1.4 Proposed Works

The proposal is for the adaptation of six buildings at South Head, Sydney Harbour National Park, and associated landscaping. Further detail about the works proposed for each building and associated landscaping is set out below.

The proposed works will be staged commencing in January 2016 with The Armoury with expected completion of the Constable’s Cottage in June 2017. Refer to the following provisional program -



The proposed works in Summary:

OFFICERS MESS

January 2017 – October 2017

Replacement of Pitched Roof with Replica Original Flat Roof/Internal Renovations/Commercial Kitchen/Landscaping

THE ARMOURY

January 2016 – October 2016

Extension of Existing Building – Second Level/Internal Renovations/Commercial Kitchen/Landscaping

GAP BLUFF COTTAGE

January 2016 – July 2016

Internal Renovations/Landscaping

CONSTABLE'S COTTAGE

October 2016 – June 2017

Extension of Existing Building/Internal Renovations/Commercial Kitchen/External Dining Area/Landscaping

33 CLIFF STREET

October 2016 – June 2017

Internal Renovations/Driveway Excavations/External Deck/Landscaping

GREEN POINT COTTAGE

January 2016 – October 2016

Internal Renovations/External Deck/Landscaping

This type of construction will have several distinct phases that will require different material handling strategies to optimise the construction works and minimise impact to surrounding streets, other stakeholders and neighbours.

Our material handling strategies and Construction planning will require consultation with stakeholders and authorities before implementation.

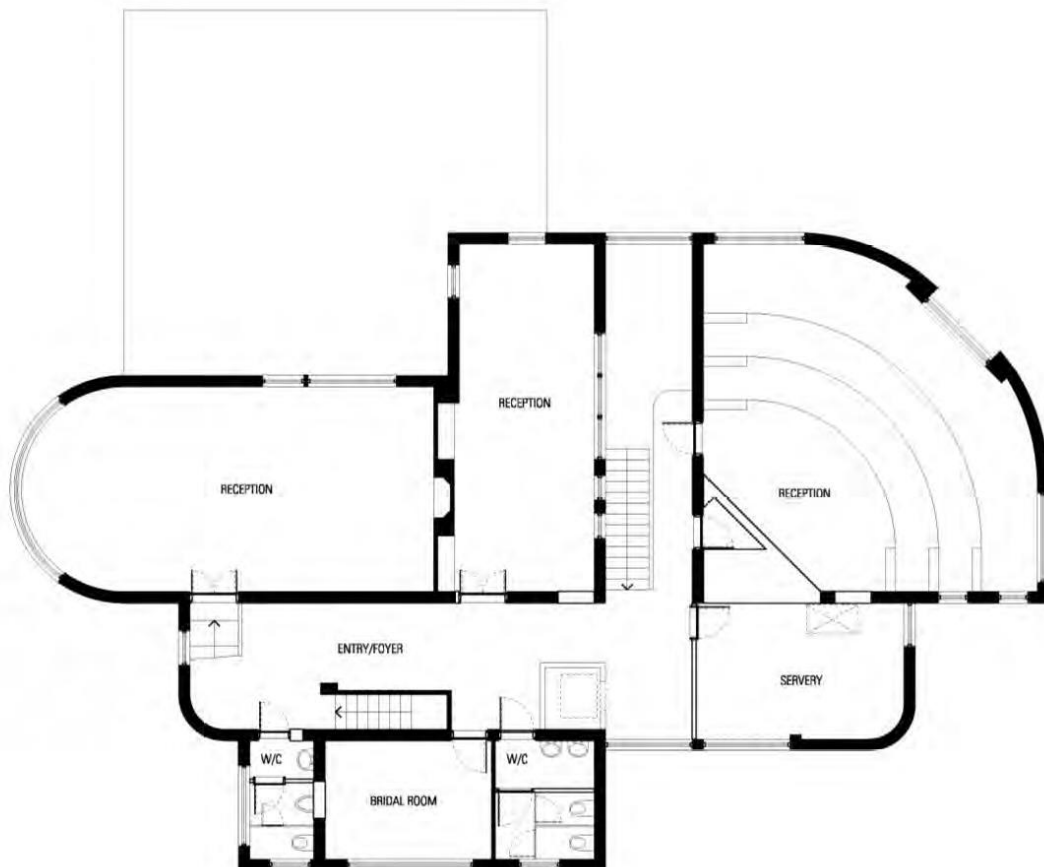
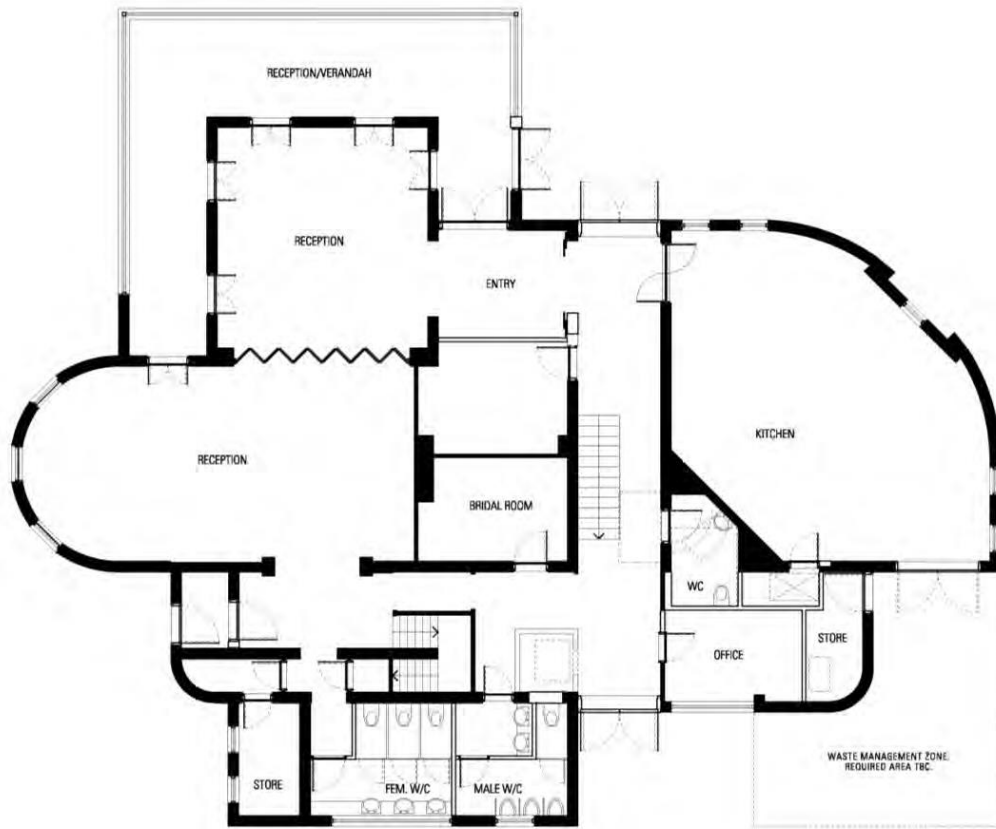
The proposed works in Detail:

Gap Bluff Precinct

Officers' Mess

The proposed adaptation of the Officers' Mess would involve the following works:

- Removal of the c1950s hipped roof and reconstruction of the original flat roofs with parapet.
- Installation of a lift along the eastern wall next to the 1989 addition.
- On the ground floor:
 - opening-up of the current foyer area to create a larger entry space;
 - conversions of the southern store (1989) into a bridal room;
 - conversion of the original ground-floor bathroom into a store, including removal of original terrazzo partitions;
 - conversion of the 1989 kitchen areas into WCs and a lift; and
 - retention of original fixtures and fittings throughout.
- On the first floor:
 - removal of 1989 partitions in the first floor and reinstatement of original billiard room;
 - removal of the first-floor male WC and expansion of the former sitting room over this space;
 - widening of the opening between the current foyer and reception area;
 - conversion of the enclosed balcony into a WC, including bricking-up one of the original doors and converting the original French door into a single door; and
 - retention of original fixtures and fittings throughout.
- Adaptation of the 1989 lecture theatres for a kitchen on the ground floor and a reception room on the first floor and major repairs to the lecture theatre roof.





Armoury

The proposed adaptation of the Armoury would involve the following works:

- total refurbishment and expansion of the existing building including removal of the hipped roof and construction of a second storey, and expansion of the building footprint to the east to include new WCs, bridal room, entry foyer and staircase to the second storey. This would require removal of the existing eastern wall and would require some excavation for footings;
- replacement of the ground-floor verandah with a new external lounge, which would support a trafficable terrace on the first floor above, and include new stairs at its western end;
- retention of the remaining original rear (northern) walls, including the remaining original timber double-hung sash windows;
- further opening-up of the interior by removal of 1989 partitions; and
- expansion of the service area to the northeast, behind the building.

The proposed new second storey would have a skillion roof and would be predominantly glazed. The proposed new roof would rise above the ridge level of the existing hipped roof.

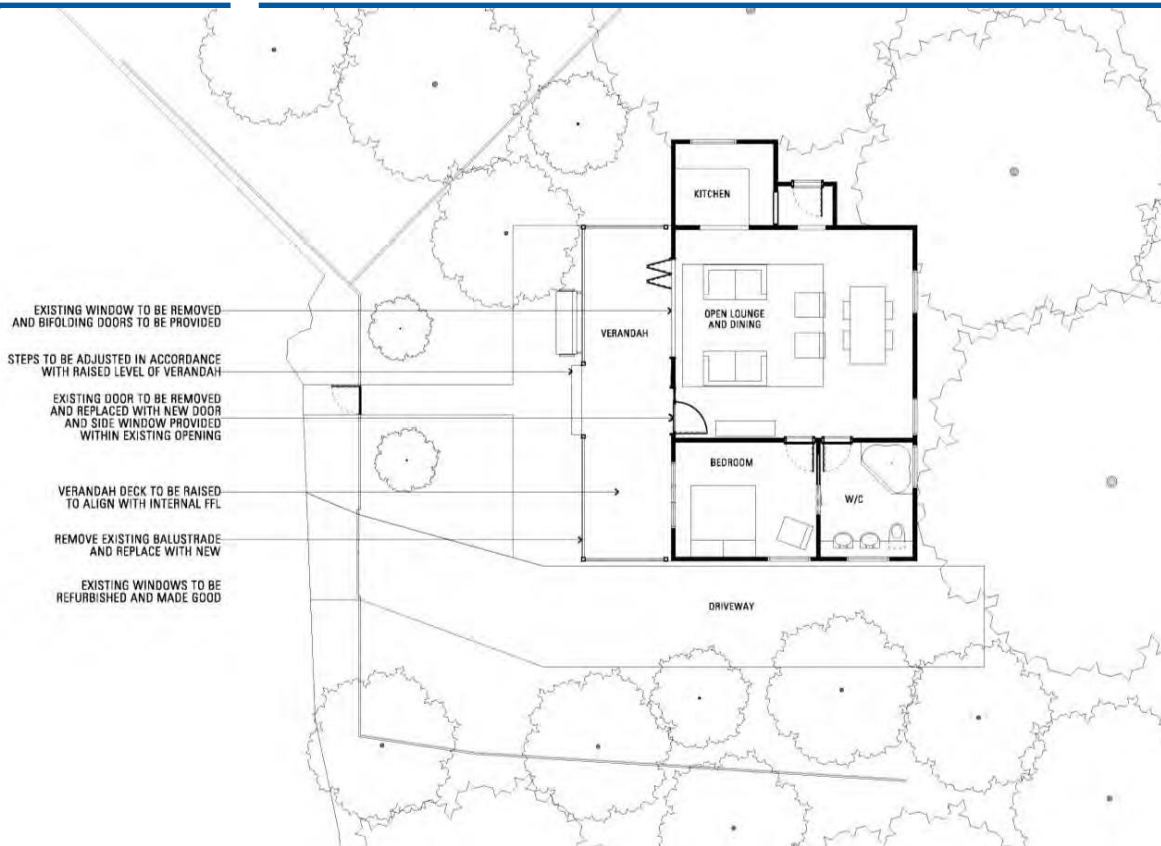
Proposed landscaping works would comprise establishment of new garden beds with low plantings along the proposed new terrace along the southern wall of the Armoury; a new stone-paved landing at the base of the new southwestern stairs to the terrace, and addition of further native plants to the existing beds to the west. The existing lawns in front of the Armoury would be retained, as would the Norfolk Island pines to the southeast.



Gap Bluff Cottage

The proposed adaptation of Gap Bluff Cottage would involve rearrangement of the interiors to provide one bedroom and a larger bathroom in the current second bedroom, a kitchen in the current store and a large, single living and dining area; and conservation works as required. The one remaining original window and the external form and appearance of the building would be retained.

The proposed landscaping would comprise retention of existing large shrubs and trees, planting of low hedges inside the western and southern fences, replacement of the concrete path with brick paving, and retention of the lawns in front of the cottage.



Camp Cove Precinct

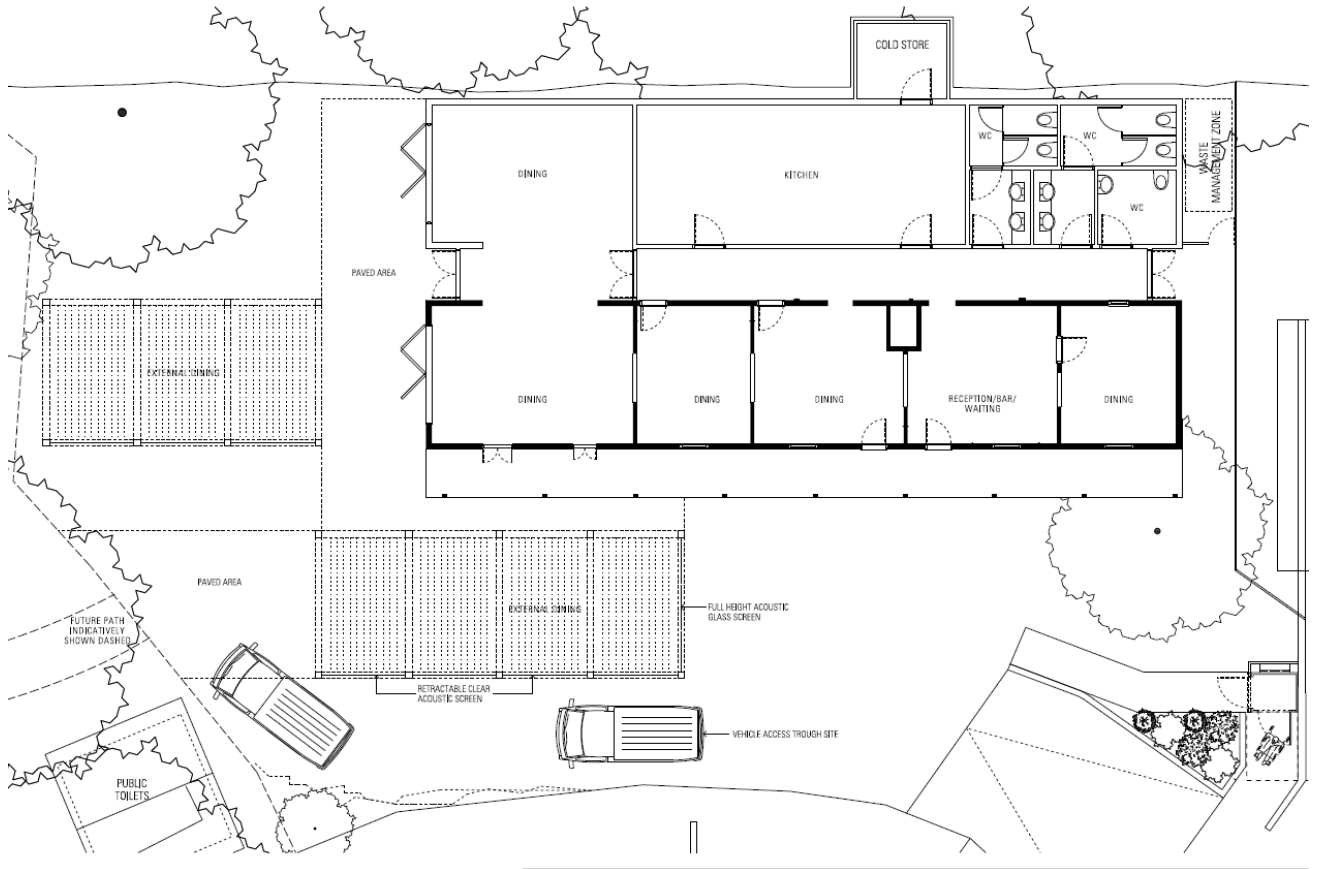
Constable's Cottage, 32 Cliff Street

The proposed adaptation of Constable's Cottage would involve the following works:

- Construction of a new single-storey addition to the north (rear) of the cottage. This addition would require removal of the existing rear wing and the c1952 enclosed verandah. Stubs of the original rear-wing walls would be retained within the corridor between the original cottage and the addition. The rear wing would be articulated as a separate pavilion, with the connecting corridor set back from the eastern and western walls of the existing cottage, and have a hipped roof and weatherboard cladding to match.
- Widening of the c1952 opening between the current dining and lounge rooms, and removal of the reconstructed architraves in this location.
- Creation of a new opening in the walls between the existing lounge room and eastern bedroom—the existing early/original doorway with early/original architraves would be retained in situ.
- Creation of a new opening in the northern wall of the existing lounge to the new corridor beyond.
- Creation of a new, wide opening in the western wall of the existing dining room to the current second bedroom, and a new, wide opening between the current second and main bedrooms.
- Replacement of the existing bay window to the western end of the c1952 addition with glazed bifold doors.
- Construction of an outdoor dining area with pergola along the western side of the building and along the southern facade of the c1952 addition—the dining area would require removal of the c1950s garage in the northwestern corner of the site.
- Adaptation of the existing store (former WC) cut into the sandstone rock face into a cool store.
- Construction of an accessible platform lift in the southeastern corner of the site.
- Retention of early/original doors and windows along the primary (southern) elevation of the building and retention of the existing hipped roof and the verandah.
- Retention of early/original interior joinery including architraves, fireplaces, doors and timber battens.

- Conservation works generally.

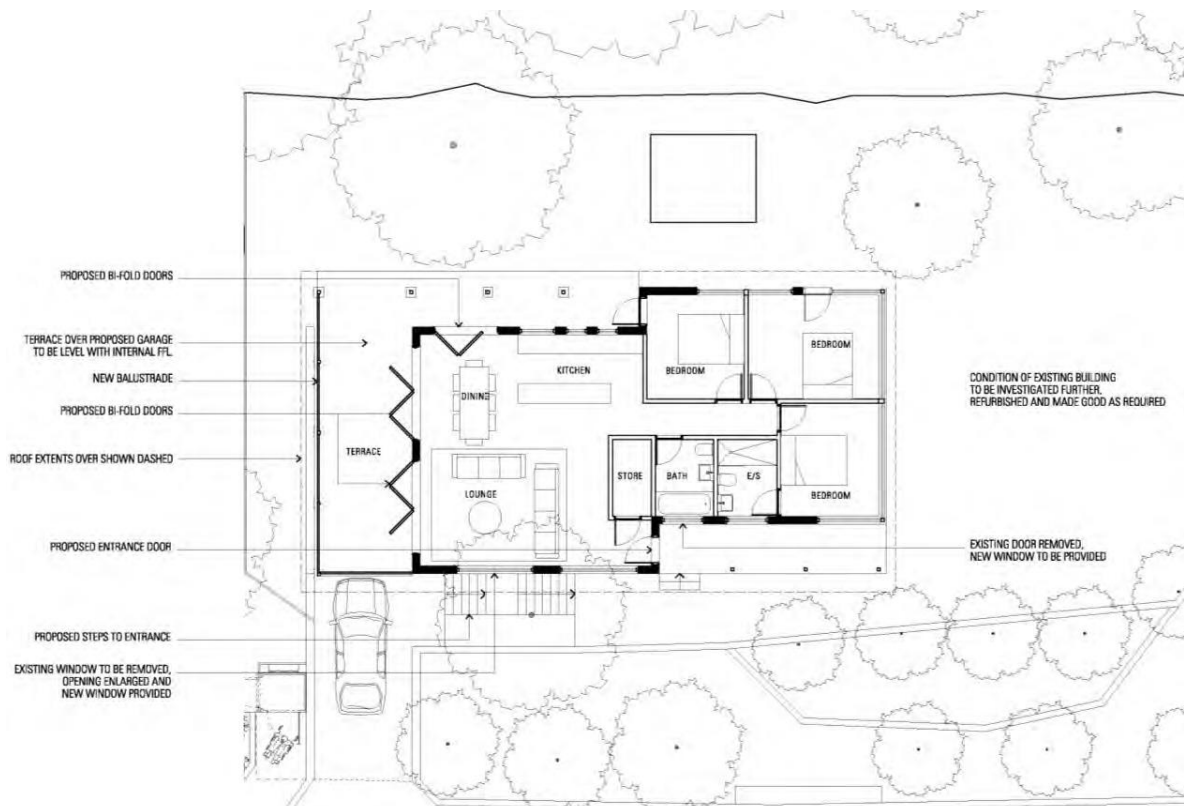
Proposed landscaping works would comprise replacement of the high metal fence and boundary fences with a weathered timber fence and gate, and planting of a mix of Australian native shrubs and cottage garden plants such as rosemary. Areas of lawn would be maintained to the south of the proposed new outdoor dining area. Existing mature trees would be retained.



33 Cliff Street

The proposed adaptation of the house at 33 Cliff Street would comprise rationalising the interiors to provide open-plan living spaces to the west and bedrooms and bathrooms to the east; replacing the western wall with glazed bi-fold doors; and excavation of the driveway for a road-level garage and a trafficable terrace above (Figure 6.8).

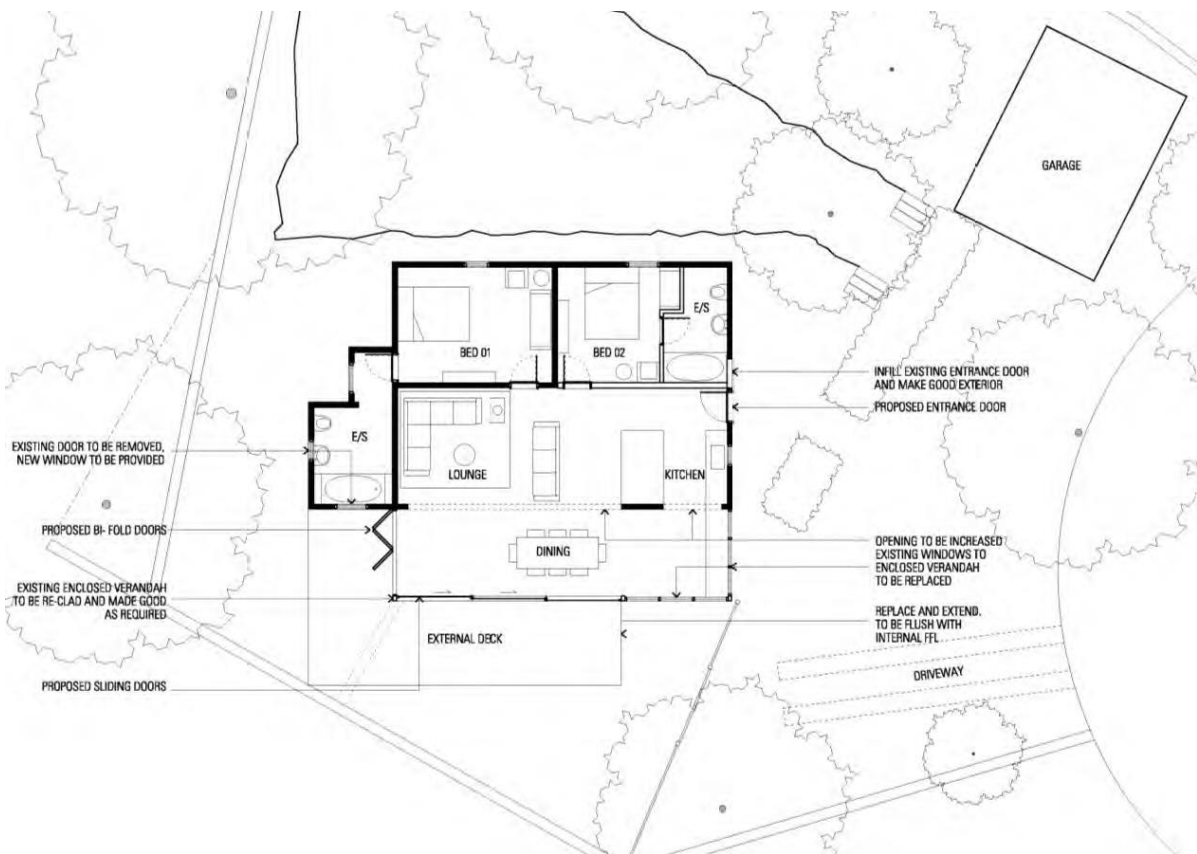
Proposed landscaping works would comprise replacement of existing plantings with native coastal species to the east of the house, and planting of a fast-growing screening hedge along the property's western boundary. The existing path and clothesline to the east of the house would be removed and a new lawn established.



Green Point Cottage

The proposed adaptation of Green Point Cottage comprises rearrangement of the interiors, including removal of most of the wall between the verandah and the living areas to create a large, open-plan space, and conversion of the existing laundry into a bathroom. The current entrance in the eastern wall would be relocated to the south and the current entrance infilled and made good. The existing enclosed verandah windows would be replaced and the external deck would be extended and raised to be flush with the internal floor level. The overall form of the cottage would remain unchanged.

Proposed landscaping works comprise establishment of garden beds with low plantings along the southern and western boundaries of the property. The existing fence along these boundaries would be retained. Mature trees would generally be retained. The existing garage, driveway and chain-wire fence would be retained.



1.5 Precedence

Where ambiguity is detected between the procedures and requirements in this plan and the Office of Environment & Heritage Construction Assessment Procedures (CAP) then the procedures nominated in CAP will take precedence.

1.6 Interface with other Project Plans and Procedures

The Construction Management Plan forms part of an integrated set of the REF (Review of Environmental Factors) and should be read in conjunction with these other plans.

1.7 Document Control

Amendments to this Management Plan are approved by the Project Manager and authorised for distribution to all holders of controlled copies.

Date	Name of Recipient	Organisation
	Steve Bridge	Expertise Building Pty Ltd

Uncontrolled hard copies of this plan may be distributed to Expertise Building Pty Ltd personnel. These copies are not subject to automatic amendment and the receiver should verify currency of the document.

Revisions to this Management Plan will be made as required to reflect the current system requirements.

Rev	Date	Description	Page	Reviewed By	Approved By
0		Initial Issue	All		
1		Changes to			

2.0 Construction Management

2.1 Approach

The major external constraints on the project are:

- Maintaining smooth traffic and pedestrians flow with minimal disruptions to the surrounding streets;
- Maintaining thoroughfare for pedestrian traffic to Gap Bluff through the National Park lands.
- Undertaking works with minimal impact on neighbours ;and
- Ensuring no interference with HMAS Watson.

Upon commencement, our project team's immediate tasks will be to:

- Locate a project office, site accommodation and facilities;
- Undertake a survey of the site and complete a dilapidation report of surrounding properties and assets;
- Confirm the locations of existing services and obtain all necessary permits and licences and approvals; and
- Arrange for the installation of temporary services – power, water and sewer to service the site works and the amenities, where necessary.

2.2 Approvals

Approval is required for the works covering the minor excavation and foundation works for The Armoury, Constable's Cottage and 33 Cliff Street.

We foresee that the Approval will contain conditions that certain reports will need to be completed, submitted and approved before works can commence. Some of these reports needing approval will most likely be:

- Construction Management Plan;
- Erosion and Sediment Control; and
- Earthworks Plan for excavation.

It is not anticipated that sustained disruption to vehicle or pedestrian movement will occur, however prior to commencing temporary modification of traffic arrangements if required, further approvals will be required from National Parks, OEH and Woollahra Council including but not limited to:

- Application / Notification to Work on Council Property
- After Hours Application
- Civil Operational Works
- Landscape Operational Works

It is proposed that staged Building Approvals (BA) will be obtained from a qualified Private Certifying Authority (PCA). It is proposed that the BA will be approved in the following sequence:

- Demolition and Excavation works
- Structural works
- Services and Internal Fit Out

We do envisage that Staged occupation will occur in line with the Gap Bluff Development Build Program.

The staging of the BA's will allow works to commence, whilst affording time for those works requiring intense design time such as structural and finishes works. The net effect is an overall reduction in total development construction time.

2.3 Site Security

The site will be secured using appropriate fences and/or hoardings, with access gates manned with qualified security guards/traffic control officers, when required. EBCPL will control site entry of inducted personnel and machinery through a visitor log book. The site will be secured out of hours and patrolled by qualified security guards, if considered necessary.

All visitors to the site will be required to report to the site office, and will be appropriately inducted and registered in a visitors log book.

2.4 Public / Worker Safety

All site staff and subcontractors will be required to complete a site specific induction before commencing work on site. The induction will cover aspects relating to safety and amenity; including access, emergency evacuation procedures, location of first aid facilities, location of amenities, site hours, material handling, noise and dust policies and environmental management.

Prior to commencing works on site, all subcontractors will be required to submit a project specific Safety Management Plan.

2.2.1 Hoarding

The hoarding construction will consist of temporary metal fence with mesh. Where works are required at the boundary, temporary fence panels will be used.



Gates will be used on all access points onto the site.



3.0 Construction Methodology

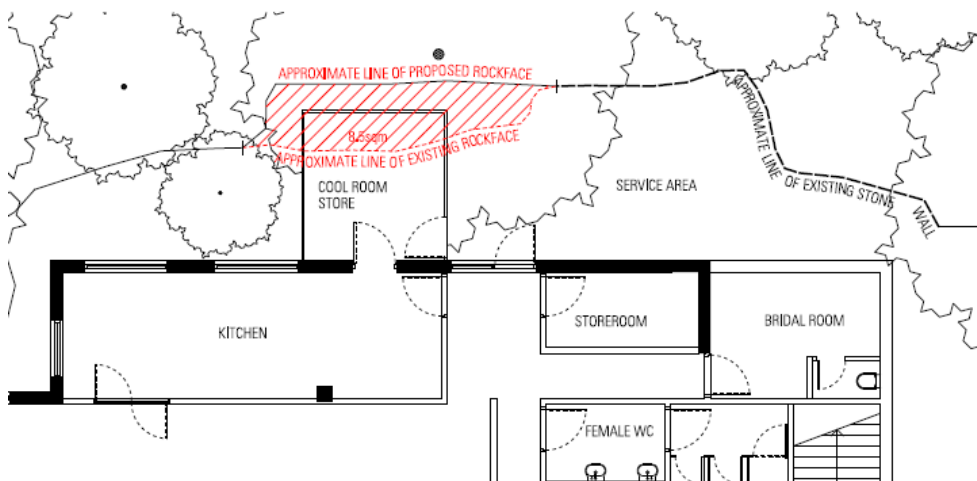
3.1 Demolition and Excavation

The site is part of Sydney Harbour National Park, divided into two precincts –

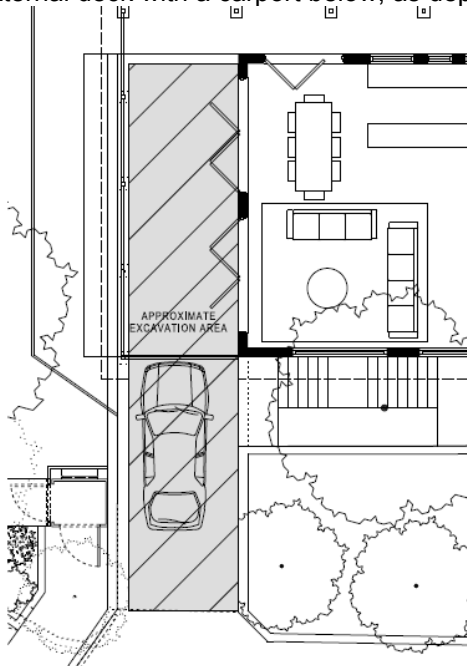
- Gap Bluff Precinct
- Camp Cove Precinct

Existing services within the site will be located and either capped if redundant or modified if they are to be used as temporary services for the works.

Excavation is presently anticipated in two locations. The first is situated at the rear of The Armoury to allow for the new coolroom to service the service kitchen. An approximate 8.5sqm of bedrock will be removed in the area adjacent to but not impacting the existing stone wall as depicted in the following plan -



The second area of excavation is the levelling of the driveway at 33 Cliff Street to allow for the construction of an external deck with a carport below, as depicted in the following plan -



3.2 Substructure Works

The proposed Substructure works will consist of structural concrete footings excavated in the natural or filled ground as detailed by the Structural Engineer, as required.

3.3 Structure

The structural trades will be supported by Mobile Cranes as required for the purpose of materials handling. Mobile cranes will be set up inside the site boundaries. Concrete Placement will be via a mobile line pump operated within the site boundaries.

Scaffold requirements have been considered and will be implemented as required.

3.4 Façade

The facade will be repaired and or installed as soon as practical to commence waterproofing floors so that finishes and fit out can commence.

3.5 Services and Finishes

Services and Finishes will be installed progressively as the Structural building works permit.

3.6 External Works

The works will also include making good any areas that have been affected by the construction of the project.

3.7 Construction Sequence and Planning

The locations and types of plant may vary depending on the results of more detailed planning as the design solidifies and the availability of plant is firmed up.

There will be 3 distinct phases requiring different material handling logic to construct the buildings efficiently and minimise impact on surrounding streets and neighbours. The phases are:

- Phase 1. Site establishment; Demolition; Excavation
- Phase 2. Structure
- Phase 3. Finishes and external works

Each Phase will not happen in isolation. Phase 2 and 3 will happen simultaneously once the structure is sufficiently complete to allow the finishes trades to commence on lower levels.

3.8 Material Handling

3.8.1 Mobile Cranes

Mobile cranes will be used for general lifting, materials handling and erection works as required

3.8.2 Hoists

Not required.

3.8.3 Concrete Handling

Concrete Placement will be via mobile concrete line pumps set up within the site boundaries.

3.8.4 Rubbish Removal

Rubbish will be removed from site by a licenced waste contractor and taken to a transfer facility for separation.

4.0 Environmental

4.1 General

The objective of this section is to identify the proposed methods that will be employed to minimise the impact of noise, vibration and air quality in the vicinity of the development.

4.2 Noise and Vibration Management

The normal hours of work will typically be 7.00am to 5.00pm, Monday to Saturday excluding public holidays. All plant will be regularly maintained and log books kept ensuring that there are no excess noise emissions. Where it is practical, electric machinery will be used in lieu of mechanical devices.

All subcontractors will be responsible for managing noise and vibration in accordance with their project specific Management Plans.

It is proposed to undertake some after hour's works for specific tasks to minimise impacts to pedestrians, vehicular traffic or in the interest of safety. The works that are proposed to be undertaken outside of normal working hours include the following, if and where required:

- Removal of tree's;
- Hoarding works;
- Crane erection and dismantling; and
- Footpath works.

We do not envisage vibration generated by the Works affecting adjoining properties.

4.3 Dust Management

Dust control measures will be implemented as required, and will be in accordance with NSW Workplace health and safety regulations and Environmental Protection Act.

Dust Management will be most critical during the demolition phase of the project, with the subcontractors for these trades specifically dealing with dust management within their project specific management plans.

Measures that may be employed include:

- Site Perimeter – A 1.8m sheeted hoarding will be provided in all areas where external works are occurring
- Demolition – All trucks removing materials from site will be loaded whilst inside the site perimeter, with loads covered before exiting
- Excavation – water down working surfaces as required. Minimise stock piling of material. Maintaining stabilised access roads and driveway
- Construction – Maintain a high level of housekeeping to minimise likelihood of windblown dust

4.4 Stormwater and Sediment Control

A stormwater and sediment control plan will be developed and will be implemented prior to works commencing. This will ensure that stormwater from the development does not enter adjoining properties, and that all water that enters the council stormwater system does not contain silt or other contaminants.

The following are possible solutions during each phase of construction. These options will be developed further and consolidated into the overall management plan.

Demolition / Excavation – At the commencement of these works, screens and bunding at the perimeter of the site where stormwater may run off will be installed. Bunding will also be implemented around stormwater drains. Diligent housekeeping will be implemented to minimise risk of dust/debris being washed into pits.

Construction – The building slab drainage will be progressively installed and connected to council drains. Drainage pits will be bunded or have filter cloth applied to ensure debris and silt does not enter the council's drains.

4.5 Asbestos Management

EBTL will develop an Asbestos Management Plan as required, through an accredited Consultant in accordance with Safe Work Australia guidelines -



An Asbestos Management Plan that sets out how asbestos or ACM is identified at the workplace and will be managed, for example what, when and how it is going to be done.

Our Asbestos Management Plan will include:

- the identification of asbestos and ACM, for example a reference or link to the asbestos register for the workplace, and the locations of signs and labels
- decisions, and reasons for the decisions, about the management of asbestos at the workplace, for example safe work procedures and control measures
- procedures for detailing accidents, incidents or emergencies of asbestos at the workplace
- workers carrying out work involving asbestos, for example consultation, information and training responsibilities.

Other information that may be included in the asbestos management plan is:

- an outline of how asbestos risks will be controlled, including consideration of appropriate control measures
- a timetable for managing risks of exposure, for example priorities and dates for any reviews, circumstances and activities that could affect the timing of action
- identification of each person with responsibilities under the asbestos management plan and the person's responsibilities
- procedures, including a timetable for reviewing and, if necessary, revising the asbestos management plan and asbestos register
- air monitoring procedures at the workplace, if required.

5.0 Appendices

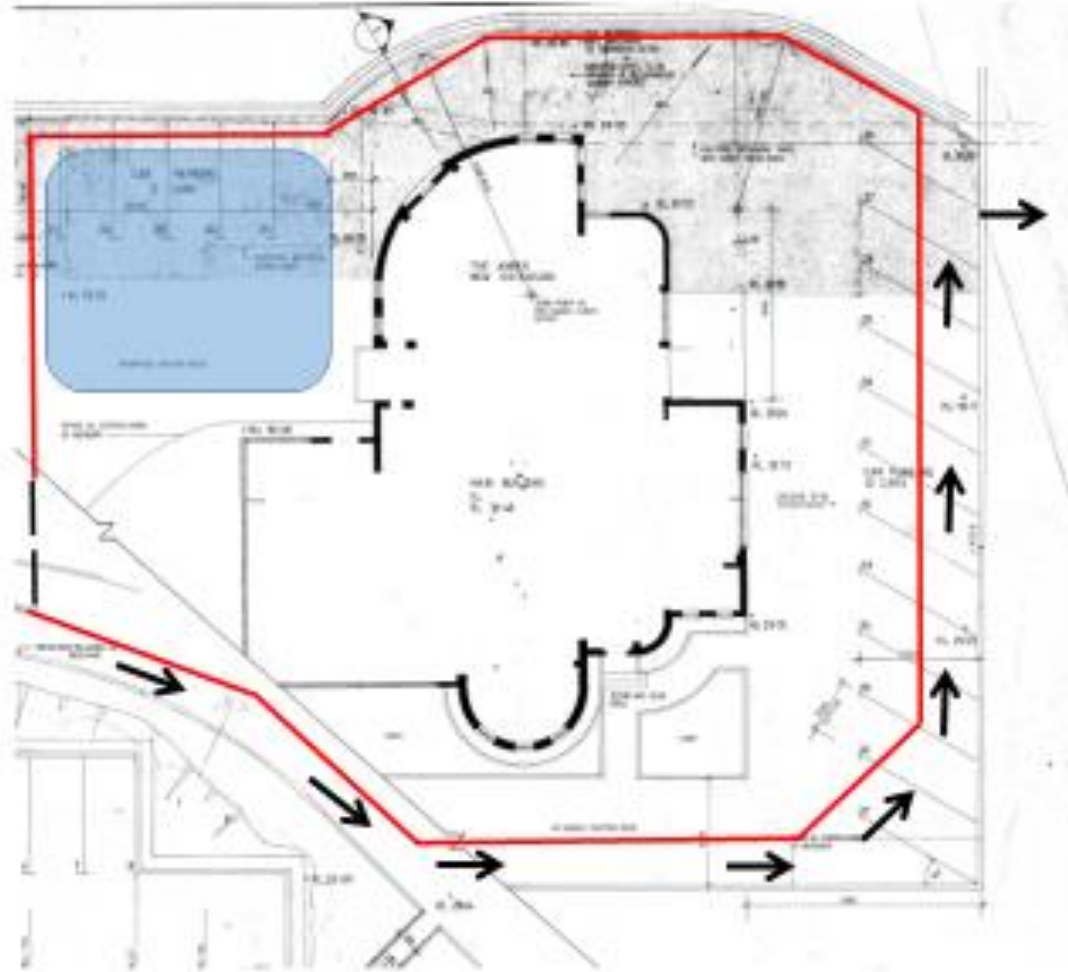
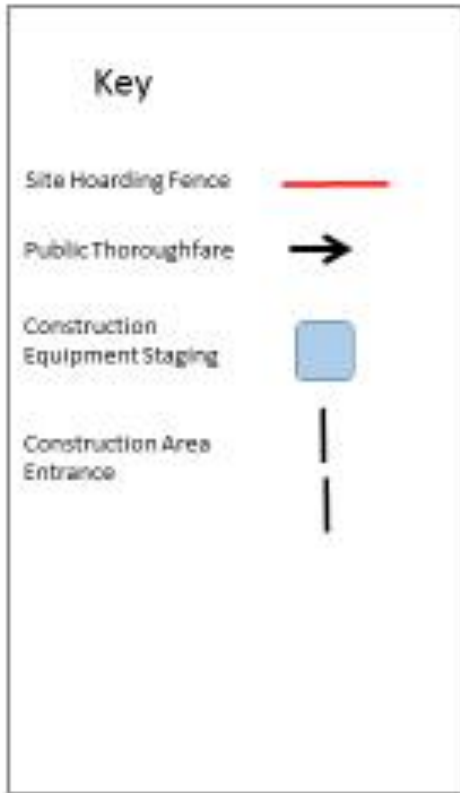
5.1 Appendix – Site Layout

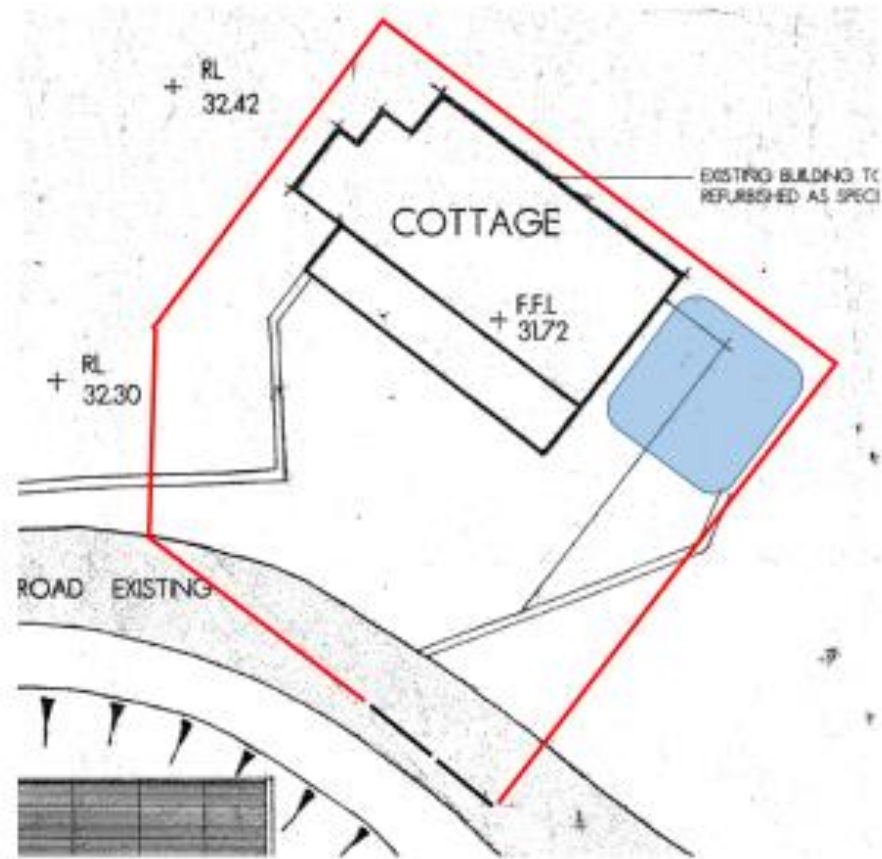
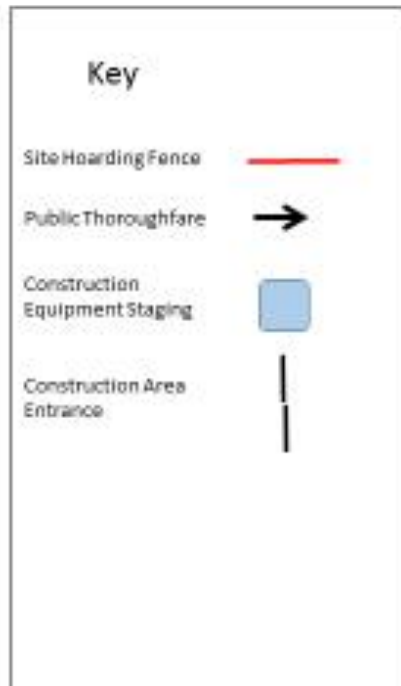
5.1 Appendix 1 –	Site Layout	Officers Mess
5.1 Appendix 2 –	Site Layout	Gap Bluff Cottage
5.1 Appendix 3 –	Site Layout	The Armoury
5.1 Appendix 4 –	Site Layout	33 Cliff Street
5.1 Appendix 5 –	Site Layout	Constable’s Cottage
5.1 Appendix 6 –	Site Layout	Green Point Cottage

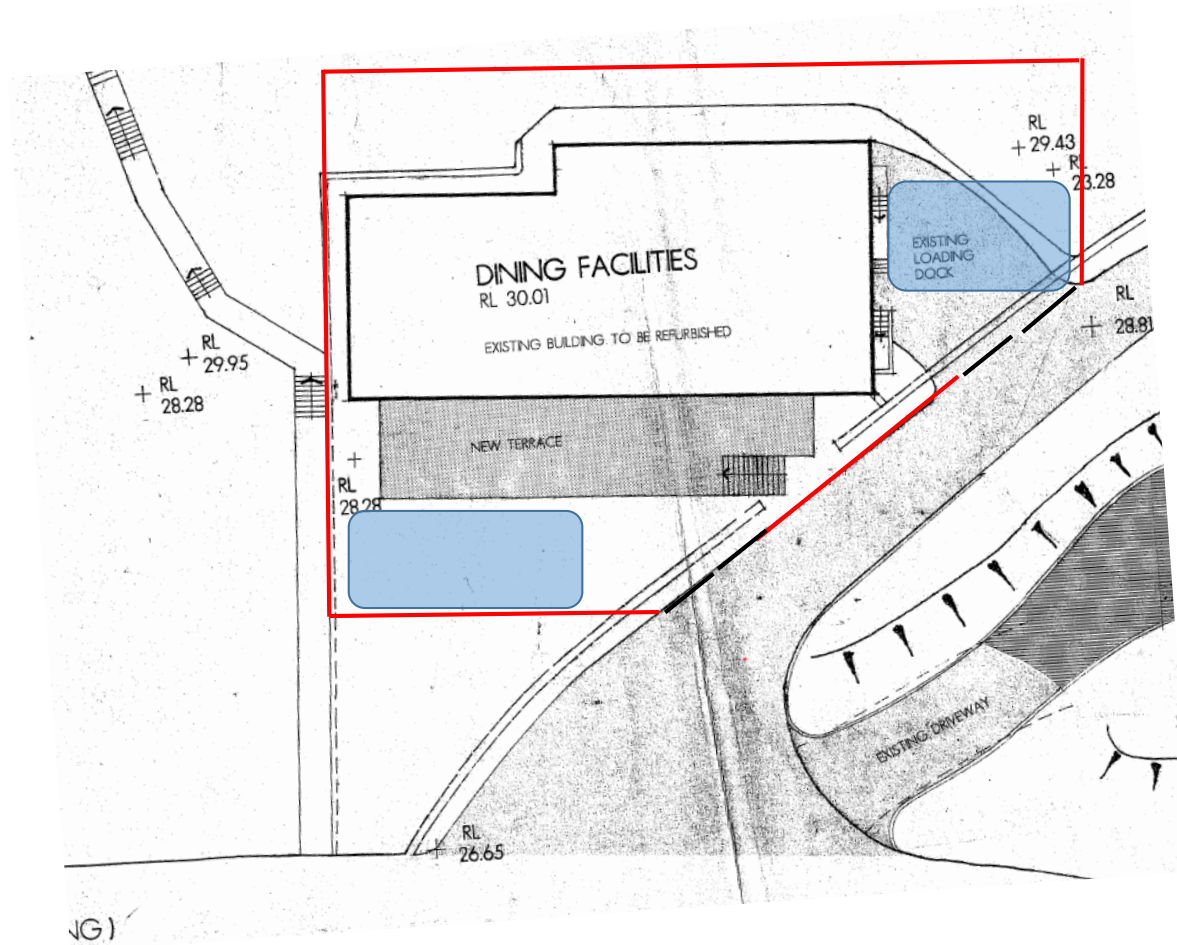
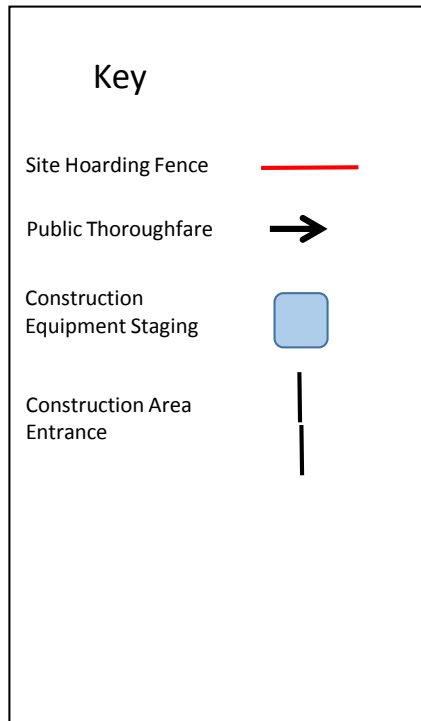
Site Fence Hoarding
Public Thoroughfare
Construction Equipment Staging
Construction Area Entrance

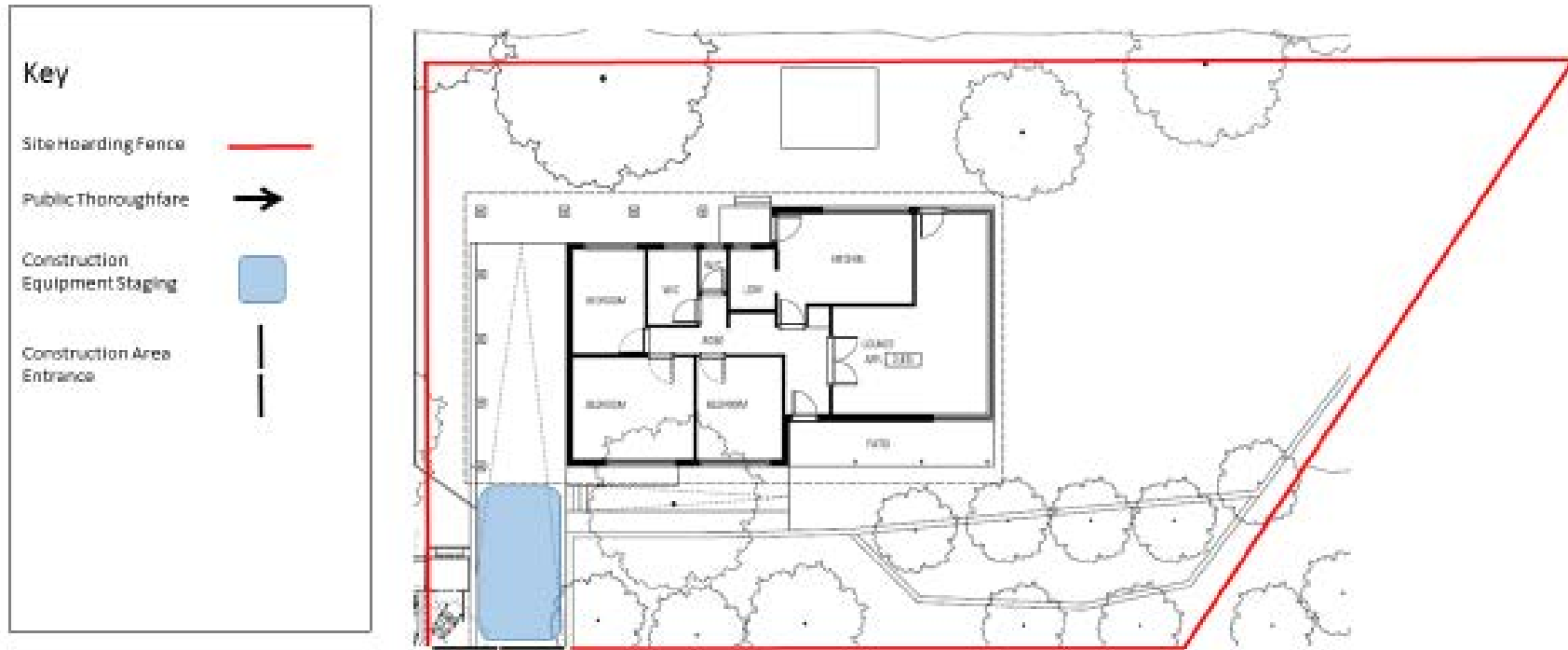
5.2 Appendix 1 – Proposed Traffic Routes

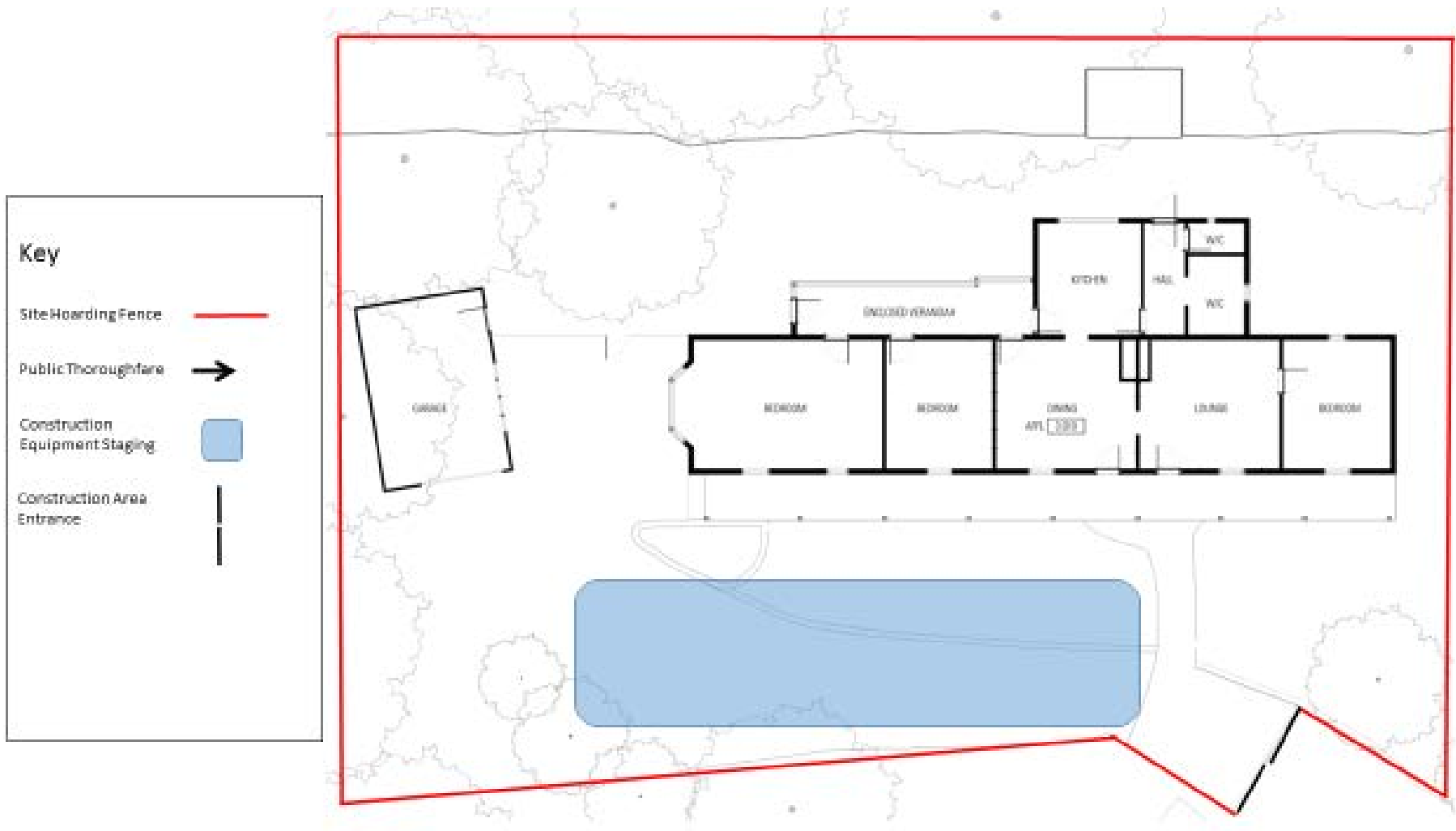
5.3 Appendix 1 – Construction Program

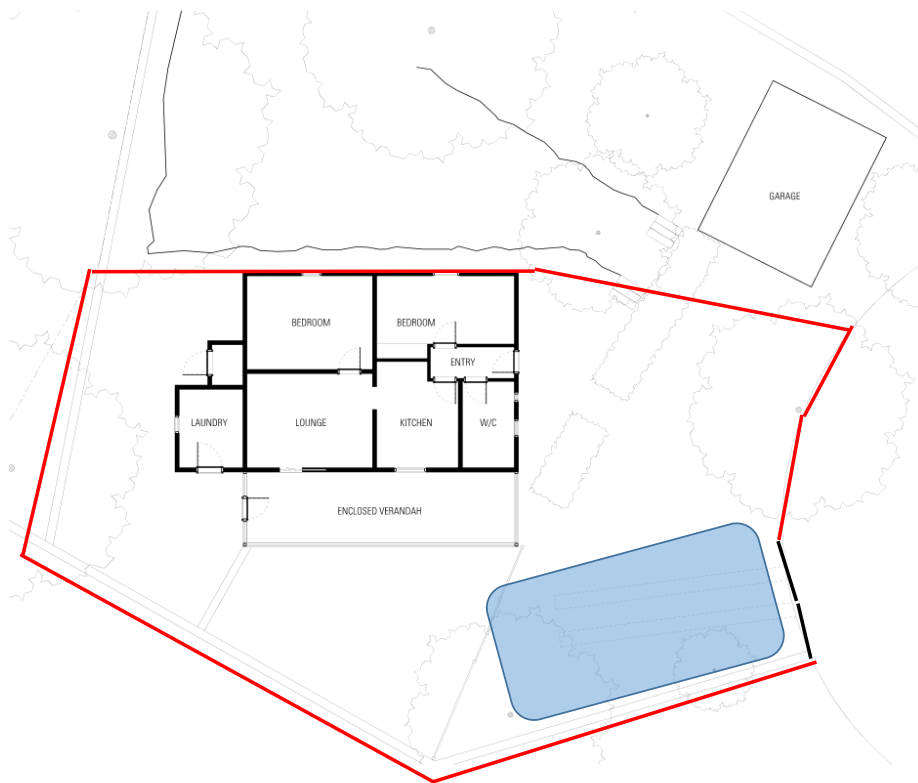
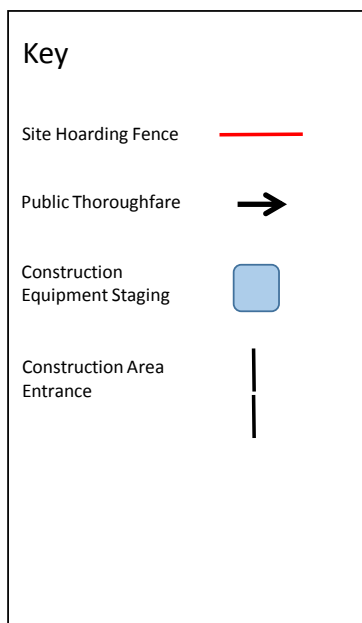




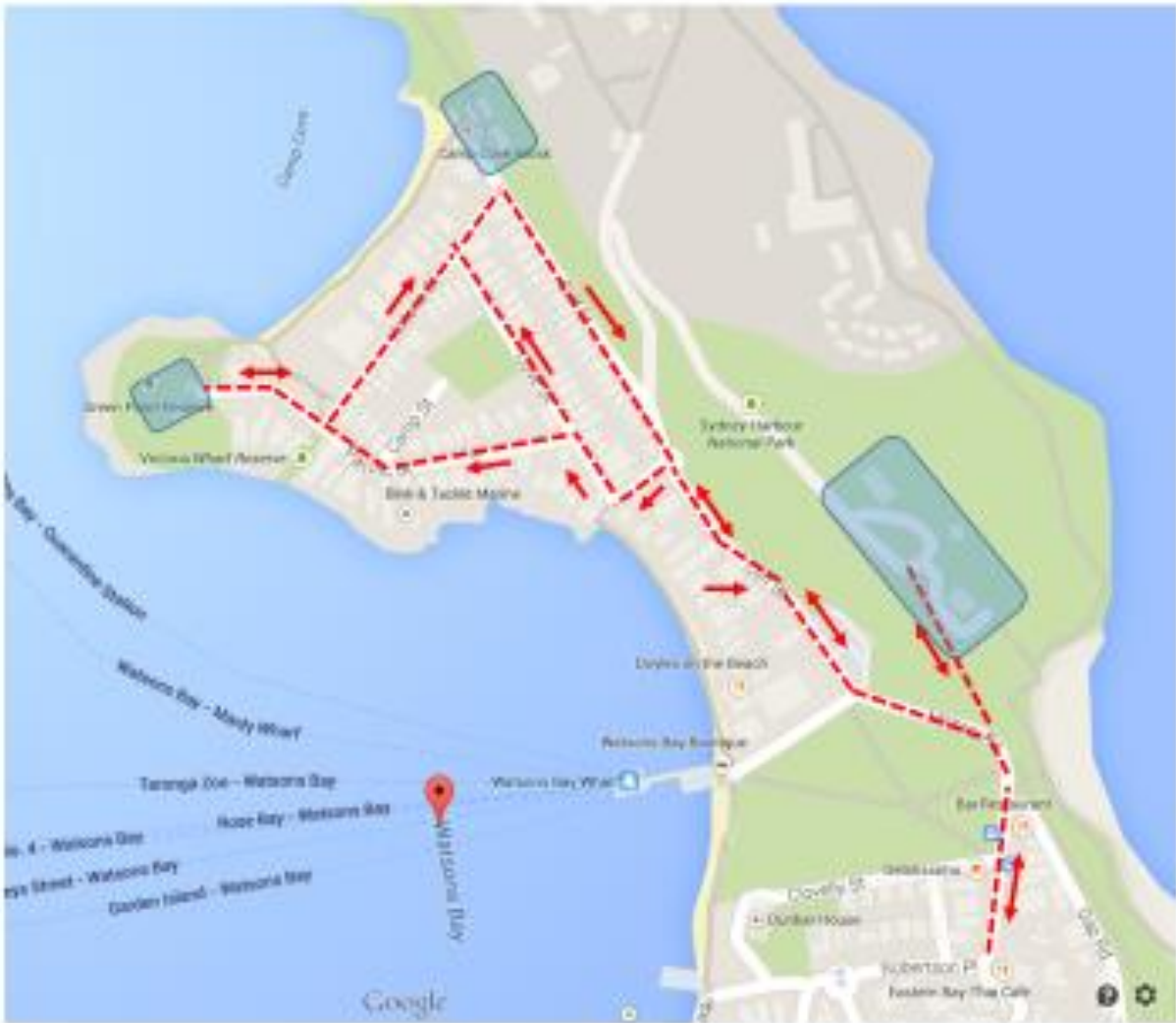








5.2 Appendix 1 – Proposed Traffic Routes



Key	
Construction Traffic Route	---
Construction Traffic Route Direction - two way	↔
Construction Traffic Route Direction - one way	→
Construction Site	□

5.3 Appendix 1 – Construction Program

