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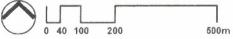
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B Precedent studies

#### SITE AND IMMEDIATE CONTEXT



Aerial showing the 115 ha Rifle Range site Source: Nearmap



## Executive summary

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This Urban Design and Landscape Report is to accompany the Former Rifle Range Poppelwell Road, Fern Bay Planning Proposal to Port Stephens Council.

This report has been prepared by Architectus for Defence Housing Australia, the owner of the Former Rifle Range site at Fern Bay. The purpose of this report is to test the preferred urban design concepts to accompany the planning proposal to demonstrate typical street layouts, dwelling mix and development impact on the highly sensitive coastal site.

The objective of this study is to highlight key relevant issues to be addressed as part of the future master plan for the site. Key issues concerning the sites are:

- coastal dune location
- bushfire
- ecology
- indigenous heritage
- heritage
- access

The Fern Bay Rifle Range site is one of two sites on the Stockton Peninsula owned by Defence Housing Australia seeking amendments to their respective Local Environmental Plans (LEP) through a Planning Proposal. The other site being the Fort Wallace site located 2 km south of the Rifle Range. The Rifle Range and Fort Wallace sites are located in separate local government areas, being Port Stephens and Newcastle City respectively. Accordingly, a separate Planning Proposal and accompanying master plan and Urban Design Report will be submitted to each Council in order to amend the different LFPs

#### The sites

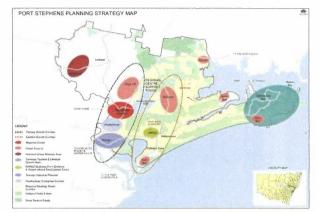
The Fort Wallace and Fern Bay Rifle Range sites are located on the Stockton peninsula approximately 5km and 7km north of Newcastle CBD respectively. Although, relatively close to Newcastle, they are separated by the Hunter River with road access to Newcastle via the Stockton Bridge and ferry access between Newcatle and Stockton at the southern tip of the peninsula. Both sites have great amenity being located between Stockton Beach and the Hunter River.

#### The vision

The vision is to create a new place for the public and future residents to enjoy without compromising the site's unique history and coastal landscape character. The following planning and design principles underpin any future development of the site;

- 1. Touch lightly on the land
- 2. Embrace the coastal ecology
- 3. Celebrate history and cultural heritage
- 4. Open the gates to the public
- 5. Utilise interesting architectural forms

An indicative master plan has been developed (and included within this report) that embodies these best practice planning and design principles.



PSPS 2011 - Port Stephens Planning Strategy Map



Artists perspective of the proposed master plan

Master Plan Vision -

"Stockton Rifle Range and Fort Wallace will be unique coastal communities with strong links to Newcastle CBD and a growing Hunter region.

The communities will be a place where the natural coastal landscape prevails over the built environment and a rich layer of cultural heritage is celebrated and made accessible to the public.

New buildings will be contemporary in design and character, with references to traditional coastal forms and materiality. Development will 'touch lightly' on the ground and minimise impacts on the site."



Character images

Fern Bay Rille Range | Urban Design and Landscape Report | Architectus + Spackman Mossop Michaels

#### Executive summary

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Indicative Master plan

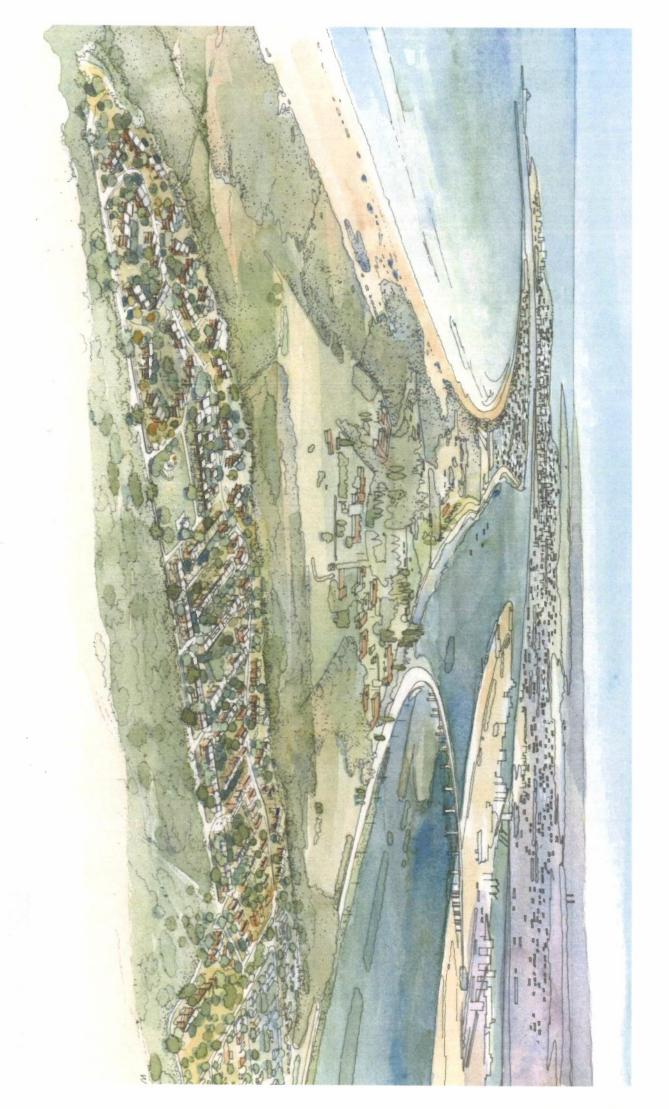


#### LEGEND

- Extended road network from existing neighbourhood
- 02/ Cluster Homes
- 03/ Single Eco Home
- 04/ Courtyard Homes
- 05/ Townhouses
- 06/ Shared path to dunes
- )7/ Vegetated detention basin
- 08/ Community park
- 09/ Potential play area
- 10/ Firetrail / bushwalk
- 11/ Dune boardwalk
- 12/ Access to dune lookout
- Worimi Conservation Lands



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#### Executive summary

#### Proposed LEP Mapping

The proposed LEP controls are intended to strike the right balance between development and conservation of the site's significant features. Sensitive ecological communities, heritage items and vulnerable coastal lands are proposed to be protected and enhanced, whilst the flatter, mostly featureless parts of the site are to be made available for housing and community amenities. Through new development, the historic site can be opened up to the public, new open space can be provided and degraded relics and vegetation communities can be restored.

An amended lot size map is also proposed to reflect the indicative master plan.

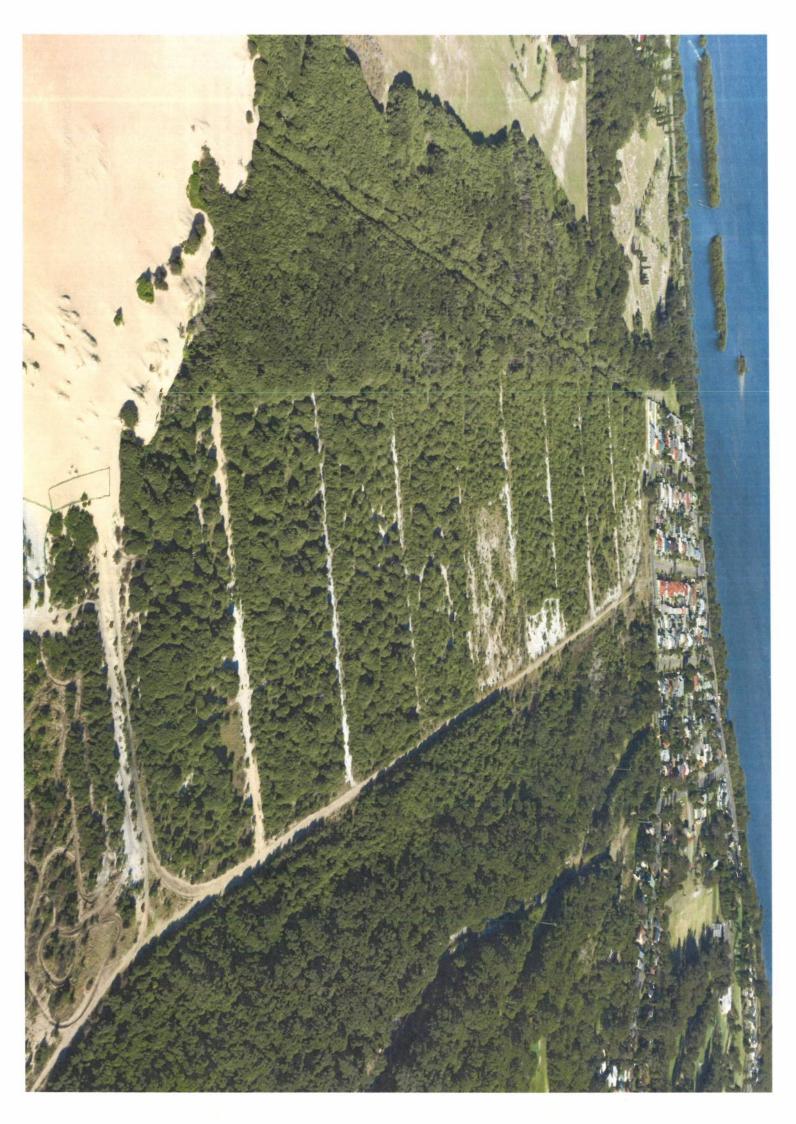
MAP 1 - Proposed Land Zoning Map



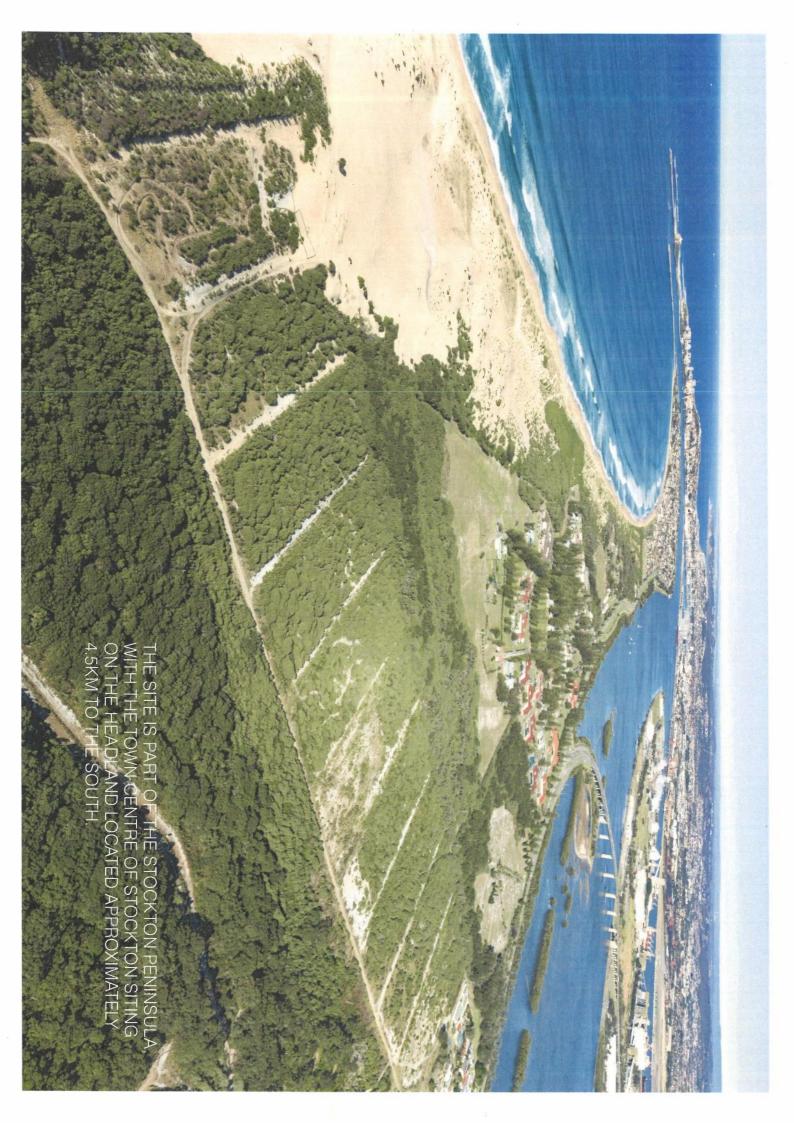
MAP 2 - Proposed Height of Buildings Map



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# Introduction



# Introduction

#### 1.1.1 The site

The Rifle Range site is approximately 115 hectares in area and is located on the Stockton Peninsula approximately 7km north of Newcastle CBD. Much of the eastern half of the site is taken up by the extensive dune system behind Stockton Beach, however, there are strong traces within the landscape of its former use as a rifle range.

Fern Bay Rifle Range is within Port Stephens LGA.

The site is accessible from its west via Popplewell Road which links back to Newcastle via Nelson Bay Road across the Hunter River.

The site is bound by the Worimi Conservation Lands to the north, the Stockton Centre and Stockton Cemetery to the south, existing residential subdivision to the west and Stockton Beach and dune system to its east.

#### Key site features include:

- Historically used as a rifle range with the operational layout of the firing mounds still evident.
- The site topography is characterised by a large flat areas previously used as the range with steep dunes that block views to the east and low lying areas of regrowth to the north.
- Larger areas of remnant vegetation regrowth to the north of the site bordering the Worimi Conservation Lands and to the south bordering the Stockton Centre.

#### 1.1.2 Purpose of this report

This report has been prepared by Architectus on behalf of Defence Housing Australia (DHA) for land at 14 Popplewell Road, Fern Bay, known as the Rifle Range site.

The site was formerly owned and utilised by Defence for training and has, at some points in its history, been open for public uses. The site is no longer required for Defence purposes and was purchased by DHA. The purpose of this report is to prepare concept options for the site that test the site's development potential in line with its changing uses and vision for the future of the site.

The concept options developed are intended to inform a planning proposal to Port Stephens Council by demonstrating the capacity of the site to accommodate development while responding to the site constraints.

#### 1.1.3 Objectives of the master plan

Objectives of the master plan are:

- facilitate housing for defence personnel;
- provide a scheme that is supported by stakeholders;
- protect and improve the ecological condition of the site;
- create a master plan that provides public benefit eg. public parks, beach access, cycleways;
- provide a mix of dwelling types that will meet a variety of housing needs;
- locate density on already scarred landscape (minimise building in bush);

- provide housing types that sit lightly within the landscape;
- connect to the great open space network from the mountains to the sea;
- connect with and extend the great coastal walks of NewcasIte eg. Merewether Baths/Anzac Memorial Walk/ Fort Scratchley;
- manage bushfire and APZs.

#### 1.1.4 The team

This report was prepared in consultation with a team of technical specialist consultants in order to understand the site opportunities and constraints in detail.

The team included:

- Spackman Mossop Michaels, landscape architecture;
- Umwelt, ecological advice and indigenous heritage;
- Klienfelder, bushfire advice;
- Urbis, european heritage;
- BMT WBM, coast engineering advice;
- ADW Johnson, civil engineering;
- Better Transport Futures, traffic and transport; and
- Elton Consulting, community consultation.

Architectus worked collaboratively with specialists to ensure that the concept master plan was informed and feasible. Detailed reports from these consultants are provided as part of the Planning Proposal to Council.

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### Site context

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#### 2.1 Site analysis

A comprehensive analysis of the site, its context, constraints and opportunities has been undertaken to inform development potential and a framework from which the master plan was developed. The following analysis underpins the structure of the master plan and identifies more broadly the developable and undevelopable areas on this highly ecologically sensitive site. The extensive analysis ranges from broad contextual analysis to detailed site analyses.

Contextual analysis includes:

- Environmental context
- Coastal processes
- Local context and destinations
- Transport
- Open space network

Detailed site analysis looks at:

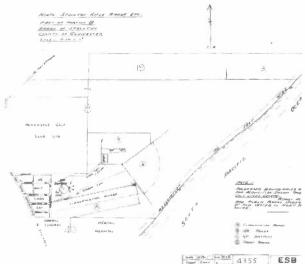
- Topography
- Ecology
- Landscape
- Coastal erosion
- Heritage
- Access and circulation
- Views
- Built form

The key site analysis findings are condensed into a combined constraints and opportunities diagram. Further detail regarding site analysis is provided in seperate consultant reports undertaken specifically for this planning and urban design process.

#### 2.2 Existing built form

There is little existing built form on the site from the historical use of the site by Defence. Items include part of the Anti-Aircraft Battery; Links Battery and firing markers. The operational layout of the firing mounds is still evident.

The location of each item has been surveyed as part of the Urbis site heritage study.



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