

SL 17/9/09



Australian Government
Department of Defence

ENHANCED LAND FORCE STAGE 2 FACILITIES

GALLIPOLI BARRACKS, ENOGGERA, QUEENSLAND
AND
OTHER DEFENCE BASES AND TRAINING AREAS

STATEMENT OF EVIDENCE
TO THE
PARLIAMENTARY STANDING COMMITTEE
ON PUBLIC WORKS

DEPARTMENT OF DEFENCE
CANBERRA, ACT
SEPTEMBER 2009

INTENTIONALLY BLANK

TABLE OF CONTENTS

PART A – IDENTIFICATION OF THE NEED	1
INTRODUCTION	1
PROJECT OBJECTIVES	1
BACKGROUND	2
NEED FOR THE WORK	3
DESCRIPTION OF THE PROPOSAL	4
OPTIONS CONSIDERED	7
REASONS FOR ADOPTING PROPOSED OPTIONS	7
ENVIRONMENTAL AND HERITAGE CONSIDERATIONS	7
STAKEHOLDER CONSULTATION	8
PART B – TECHNICAL INFORMATION	9
PROJECT LOCATION	9
PROJECT SCOPE	9
SITE SELECTION	30
SITE DESCRIPTION	30
ZONING AND APPROVALS	30
LAND ACQUISITION	30
APPLICABLE CODES AND STANDARDS	31
PLANNING AND DESIGN CONCEPTS	31
BUILDING DESIGN PRINCIPLES	33
STRUCTURE	33
MATERIALS AND FINISHES	34
MECHANICAL SERVICES	34
HYDRAULIC SERVICES	34
ELECTRICAL SERVICES	34
CIVIL WORKS	34
ACOUSTICS	35
WATER AND ENERGY CONSERVATION MEASURES	36
MASTER PLANNING & FUTURE DEVELOPMENT	38
PROVISIONS FOR PEOPLE WITH DISABILITIES	38
HERITAGE ISSUES	39
CHILDCARE PROVISIONS	39
FIRE PROTECTION AND SECURITY MEASURES	39
OCCUPATIONAL HEALTH AND SAFETY MEASURES	40
LANDSCAPING	40
CONSULTATION WITH RELEVANT AUTHORITIES	40
IMPACT ON THE LOCAL COMMUNITY	40
PROJECT COSTS	41
PROJECT DELIVERY SYSTEM	41
PROJECT SCHEDULE	41
ATTACHMENTS	42

**ENHANCED LAND FORCE STAGE 2 FACILITIES
GALLIPOLI BARRACKS, ENOGGERA, QUEENSLAND
AND OTHER DEFENCE BASES AND TRAINING AREAS**

PART A – IDENTIFICATION OF THE NEED

INTRODUCTION

1. This evidence to the Parliamentary Standing Committee on Public Works presents a proposal to provide facilities and supporting infrastructure for the Enhanced Land Force Stage 2 Facilities Project at Gallipoli Barracks, Enoggera, Queensland and other Defence Bases and Training Areas.
2. This project proposes to construct new, extend or refurbish existing facilities in the following locations:
 - a. Queensland – Gallipoli Barracks, Enoggera; Lavarack Barracks, Mount Stuart Training Area and Townsville Field Training Area, Townsville; Wide Bay Training Area, Gympie; Royal Australian Air Force Base Amberley, Ipswich; Greenbank Training Area, Greenbank; and Kokoda Barracks, Canungra;
 - b. New South Wales - Lone Pine Barracks and Singleton Training Area, Singleton; and Garden Island and HMAS Penguin, Sydney;
 - c. Australian Capital Territory - Royal Military College and Majura Training Area, Canberra;
 - d. Victoria – Simpson Barracks, Watsonia, and Puckapunyal Military Area, Puckapunyal; and
 - e. South Australia – RAAF Base Edinburgh, Adelaide and Cultana Training Area, Cultana.

PROJECT OBJECTIVES

3. The objectives of this project are to provide permanent facilities and supporting infrastructure necessary to support:
 - a. 8th/9th Battalion, Royal Australian Regiment and other elements of 7th Brigade and 1st Division being enhanced under this project at Gallipoli Barracks; and
 - b. the development of enabling capabilities, in order to sustain increases in the delivery of collective training capability, career training and logistic support facilities at Defence Bases and Training Areas in South East Queensland and various locations throughout Australia.

BACKGROUND

4. In August 2006 the Government announced a decision to increase the capacity of the land force with an initiative referred to as the Enhanced Land Force. The expansion was to be based on two additional infantry battle groups and essential joint and Defence enablers, in order to satisfy strategic requirements. The increased capacity would be achieved by:
 - a. raising two infantry battalions along with enabling single service combat support, combat service support and essential joint and Defence enablers;
 - b. conducting a two stage process, with a battalion, combat support, combat service support and essential joint and Defence enablers being raised during each stage; and
 - c. commencing ELF Stage 2 once the core capabilities of the battalion raised in ELF Stage 1 were established.
5. 7th Battalion, Royal Australian Regiment is considered to be the 'first' battalion raised under Enhanced Land Force Program. It was raised in 2006, was substantially manned by 2008, is to be available for operational deployment in 2010 and be fully deployable by 2013. A separate capital works project called Hardened and Networked Army is providing permanent facilities for 7th Battalion, Royal Australian Regiment is under construction.
6. Currently 3rd Battalion, Royal Australian Regiment is to relocate as a light infantry battalion with parachute capabilities to new facilities in Townsville in 2012. These capital works are being provided as a part of the Enhanced Land Force Stage 1 project and are currently under construction.
7. 8th/9th Battalion is considered the 'second' battalion raised under Enhanced Land Force.
8. 8th/9th Battalion was initially formed on 31 October 1973 from the linking of the 8th Battalion, Royal Australian Regiment, and the 9th Battalion, Royal Australian Regiment, as a result of the downsizing of the Army following the Vietnam campaign. The Battalion remained in existence until 30 June 1997 when, due to a major restructuring of the Army, it was removed from the Order of Battle. The re-raising of 8th/9th Battalion and support for its supporting arms and services in South East Queensland as part of Enhanced Land Force Stage 2 was formally announced by Government on 2 October 2007. In addition, it was announced that the Battalion would be deployable by 2010 and initially accommodated at Gallipoli Barracks, Enoggera.

NEED FOR THE WORK

9. The need for facilities and infrastructure is driven by the requirement to support the Enhanced Land Force program that will substantially increase the size of the Army. The Army's Training Areas and establishments will need to be able to sustain the increase in individual career training requirements and increased collective training requirements. Facilities and supporting infrastructure are required to provide effective working and living facilities for 8th/9th Battalion and the other elements of 7th Brigade being enhanced under the Enhanced Land Force program. This is expanded in more detail as follows:

- a. **Gallipoli Barracks, Enoggera** is currently home to 1st Division, 7th Brigade and several Defence Support agencies such as Defence Support – Queensland and Defence Support – QLD elements, a childcare centre and a Defence Credit facility. The creation of 8th/9th Battalion and the associated increase in capacity of other 7th Brigade Units in order to be able to deploy two battle groups requires a significant overhaul of the Gallipoli Barracks facilities in terms of engineering services, unit accommodation and supporting Garrison infrastructure. This project is designed to create a suitable environment for servicemen and women and their families to work and live in Brisbane;
- b. **Collective Training** will be supported with upgrades to existing ranges and the provision of new ranges for the sustainability of the training areas with the increased collective training activities such as an Urban Operation Training Facility, Marksmanship Training Range, Method of Entry facility, Direct Fire Support Weapons Range, Special Weapons Range and Assault Grenade Range, Static Grenade Range and Camp Accommodation facilities. The collective training requirements are at Townsville Field Training Area, Wide Bay Training Area, Greenbank Training Area, Canungra Military Area, Singleton Training Area, Majura Training Area, and Cultana Training Area. Combat Training Centre facilities are renovated to accommodate their staffing increases;
- c. **Career Training** will be provided with upgrades and new facilities for the Warrant Officer Non Commissioned Officer –Academy Wings at North Queensland, South Australia and also the Officer Training Wing and Warrant Officer Non Commissioned Officer –Academy Wing at the Land Warfare Centre, Canungra. The School of Infantry, Defence Force School of Signals and the Royal Military College have facilities proposed to support and rationalise their increased training liabilities; and

- d. **Logistic Support** will be provided with Minor Retail Facilities for the Defence Explosive Ordnance Service at Wide Bay Training Area, Gympie; Singleton Training Area, Puckapunyal Military Area and Cultana Training Area. An additional Explosives Store House will be constructed at Mount Stuart Training Area, Townsville. 3rd Combat Services Support Battalion will be refurbished to accommodate their additional support services and storage requirements. The Navy's Primary Casualty Reception Facility will have facilities to support their capability at Garden Island and at HMAS Penguin.

DESCRIPTION OF THE PROPOSAL

10. This project proposes to provide new, extended or refurbished working and living accommodation and training facilities for Australian Defence Forces, as well as common use facilities and site infrastructure to support 8th/9th Battalion and increased growth of the Australian Defence Forces. The collective training, career training and logistic support will be provided at twelve Defence Bases and Training Areas across five States. A summary of this project is as follows:

QUEENSLAND

11. **Gallipoli Barracks, Enoggera:** The proposed works at Gallipoli Barracks will create an additional motorised infantry battalion (8th/9th Battalion) and its essential combat support, combat service support and Defence enablers at Gallipoli Barracks in the Enoggera suburb of Brisbane, Queensland. This project will construct permanent facilities for 8th/9th Battalion and the enhancement of facilities for other 7th Brigade, and 1st Division Units in Gallipoli Barracks. The scope of works involves 13 separate elements to enable 8th/9th Battalion and the growth in the supporting units to fit within a spatially constrained Barracks.

12. **Lavarack Barracks, Townsville:** The proposed works at Lavarack Barracks will enhance the mission preparation capability requirements at the Combat Training Centre; training capability requirements at the Land Warfare Centre Warrant Officer and Non-Commissioned Officer Academy, logistics support capability requirements for 3rd Combat Services Support Battalion, additional training ranges of a Direct Fire Support Weapons Range, Assault and Static Grenade Ranges, and an additional new Explosives Store House for the Defence Explosive Ordnance Service.

13. **Wide Bay Training Area, near Gympie:** The proposed works at Wide Bay Training Area provides a variety of training areas and ranges to support numerous Defence units with 7th Brigade the predominant user. It is approximately three and a half hours drive north of Brisbane and supports static and field firing ranges. The increased capability places additional demands on the existing training area and improvements are essential to provide sustainability of the training area. Additional training ranges proposed are a Special Weapons Range, Assault Grenade Ranges, Marksmanship Training Range, additional camp accommodation, upgrade of the vehicle refuelling point and vehicle wash point facilities, a 500 Explosive Pallet Space Minor Retail Facility for the Defence Explosive Ordnance Service plus upgrades to the engineering services infrastructure to sustain increased training requirements.

14. **RAAF Base Amberley, Ipswich:** The proposed works at RAAF Base Amberley is the construction of a new facility to support the relocation of Headquarters 6th Engineer Support Regiment from Gallipoli Barracks, Enoggera, Queensland.

15. **Greenbank Training Area, Greenbank:** The proposed works at Greenbank Training Area provides a variety of training areas and ranges to support Defence units with 7th Brigade the predominant user. Greenbank Training Area is located 24 kilometres from the centre of Brisbane City and 40 minutes drive from both Gallipoli Barracks and RAAF Base Amberley. The increased capability attributed to 7th Brigade under the Enhanced Land Force program places additional demands on the existing training area and improvements are essential to provide sustainability of the training area. The proposed works at Greenbank Training Area involve the complete reorganisation of the area with a new Main Range Entry Point at the southern end, a new range control complex, provision of an additional Marksmanship Training Range, an Urban Operation Training facility, a Method of Entry training facility, Engineer Mine Clearance Lanes, a Safe Driver Training area, permanent camp accommodation, a new vehicle wash facility and a depot for 25th/49th Battalion, Royal Queensland Regiment.

16. **Kokoda Barracks and Canungra Training Area, Canungra:** The proposed works involve the provision of facilities to sustain the assets to cater for higher throughput of training. Kokoda Barracks has recently been upgraded and has relatively new training facilities. However there is a shortage of suitable training rooms required to conduct battle simulation training. The increased training requirement also generates a requirement to provide additional trainee standard living in accommodation, and upgrades to the gymnasium. The permanent camp accommodation will provide facilities for use by visiting units using the training area and ranges. The existing open range is proposed to be converted into a Marksmanship Training Range.

NEW SOUTH WALES

17. **Lone Pine Barracks, Singleton:** The proposed works involve provision of facilities to support the School of Infantry including upgrading of the Training Area. Works in the cantonment area include upgrades of the engineering services and construction of a Headquarters for the School of Infantry, Permanent Living in Accommodation, a Battle Simulation Centre, a Weapon Repair Facility, Museum and Pass Office. Range works include new, extended and refurbished weapons ranges, training and support facilities required to support increased use by the School of Infantry and existing users.

18. **Garden Island and HMAS Penguin, Sydney:** The proposed works for Primary Casualty Reception Facility will satisfy the need for dedicated working accommodation, training space and a Central Dispensing Point to support the mature capability. It is proposed to extend building 921 at Garden Island to provide the Central Dispensing Point facilities and adaptively reuse buildings 8 and 26 at HMAS Penguin, Balmoral to provide the required working accommodation and training facilities.

AUSTRALIAN CAPITAL TERRITORY

19. **Royal Military College, Canberra:** The proposed works involve provision of Living In Accommodation rooms to support the rehabilitation and transition of Officer Cadets and upgrades of facilities at the Majura Training Area to support training. 34 new Living in Accommodation for rehabilitation and 16 new LIA rooms for transition of officer cadets plus associated new working accommodation for their instructors are proposed to meet Royal Military College's rehabilitation and transition requirements. Redevelopment of Majura Training Area's Camp Blake facilities will provide new camp accommodation, a lecture theatre, Headquarter offices, a Regimental Aid Post and amenities and upgrade the existing Urban Operation Training Facility.

VICTORIA

20. **Simpson Barracks, Watsonia:** The proposed works involves the provision of a new Technical Training Wing building comprising staff working facilities, additional classrooms and associated external works and services and modifications to the covered training area to support career training.

21. **Puckapunyal Military Area, Puckapunyal:** The proposed work is to provide a Minor Retail facility for the Defence Explosive Ordnance Service in accordance with Defence standards.

SOUTH AUSTRALIA

22. **RAAF Base Edinburgh, Adelaide:** The proposed works provides facilities to support the career training capability requirements at the Land Warfare Centre's Warrant Officer and Non-Commissioned Officer Academy.

23. **Cultana Training Area, Cultana:** The proposed works at Cultana Training Area consists of improvements to the range facilities including providing a 500 Explosive Pallet Space Minor Retail facility for the Defence Explosive Ordnance Service, an Urban Operations Training facility, a Field Firing Training system Range, camp accommodation and environmental sustainability works to support collective training.

OPTIONS CONSIDERED

24. Defence has considered the viability of adaptively re-using or refurbishing facilities to reduce the need for new construction. In most cases, the option to re-use facilities is not cost effective because of the age, structural degradation, functional inadequacy or inappropriate location of the facilities. In these cases, the facilities proposed are to be new construction, located primarily on previously developed sites. In all other cases, the existing facilities have been upgraded to the extent required.

25. A number of siting options for proposed new construction were considered during the early planning of the project. These options were considered by Site Selection Boards. In all cases the proposed siting of new facilities is in accordance with the relevant Zone and Precinct Plans.

REASONS FOR ADOPTING PROPOSED OPTIONS

26. The proposal consists of an optimal mix of new construction and refurbishment to provide the most cost effective solutions to meet working, training and living needs arising from the Enhanced Land Force program.

ENVIRONMENTAL AND HERITAGE CONSIDERATIONS

27. Initial Environmental and Heritage Reviews have been prepared during the development of the Project, to determine the extent and nature of any environmental issues relating specifically to these project elements. These reviews address the design, construction, maintenance and operation of the project at all sites.

28. A review of the Initial Environmental and Heritage Assessment for the proposed Enhanced Land Force Stage Two works was undertaken at an early stage of development, enabling additional project options to be assessed with the aim of achieving improved environmental outcomes and increased sustainability. The Review has not identified any significant environmental concerns for the facilities in the Enhanced Land Force Stage 2 Facilities Project. This Initial Environmental and Heritage Assessment has provided preliminary mitigation, management and monitoring requirements to the design teams that have been taken into account in the design of the facilities. The design of the proposed works, where possible, have specifically addressed a number of the potential environmental impacts and incorporated features to mitigate or reduce any such impacts. Examples include the siting of buildings and ranges to minimise tree loss, choice of appropriate low water indigenous vegetation (where possible), stormwater reuse into gardens and grassed areas to reduce water consumption, and energy conservation measures such as insulation and energy efficient equipment. The Review has not identified any significant environmental concerns for the facilities in the Enhanced Land Force Stage 2 Facilities Project.

29. Defence aims to ensure the construction and ongoing use of all its facilities demonstrates a strong commitment to sustainability (whole of life considerations) and the protection of the environment. The implementation of the proposal outlined in this evidence will comply with the principles of Ecologically Sustainable Development

30. The proposed works do not impact on any of the heritage values associated with the Commonwealth Heritage List. However the project has the potential to uncover previously unknown aboriginal sites during construction.

31. To mitigate any environmental and heritage impacts, this project will be managed in accordance with the Defence Environmental Management framework, including compliance with the relevant provisions of the site specific Environmental Management System. Contractors will be required to produce a Construction Environmental Management Plan to articulate environmental control measures. The contractor's environmental procedures for construction activities will be adhered to as a contractual obligation and compliance with the approved plan will be periodically audited throughout the project. Environmental Clearance Certificates will be obtained prior to any construction activities on site.

STAKEHOLDER CONSULTATION

32. Stakeholders that have been and will be consulted, including local councils and authorities, are listed at Attachment 2. The State and Federal Members of Parliament in each major location have been or will also be consulted.

REVENUE

33. No revenue will be derived from this proposal.

PART B – TECHNICAL INFORMATION

PROJECT LOCATION

34. This project proposes to construct new, extended or refurbished facilities in the following locations as indicated in Attachment 1:

- a. Queensland – Gallipoli Barracks, Enoggera; Lavarack Barracks Townsville, Wide Bay Training Area, near Gympie; Royal Australian Air Force Base Amberley, Ipswich; Greenbank Training Area, Greenbank; and Kokoda Barracks and Canungra Training Area, Canungra;
- b. New South Wales - Lone Pine Barracks and Singleton Training Area, Singleton; and Garden Island and HMAS Penguin, Sydney;
- c. Australian Capital Territory - Royal Military College and Majura Training Area, Canberra;
- d. Victoria – Simpson Barracks, Watsonia, and Puckapunyal Military Area, Puckapunyal; and
- e. South Australia – RAAF Base Edinburgh, Adelaide and Cultana Training Area, Cultana.

PROJECT SCOPE

QUEENSLAND

Enoggera

35. The main works location is Gallipoli Barracks, Enoggera and a site plan of the proposed works is at Attachment 3. This component of the works comprises 13 separate project elements and each project element is summarised below and detailed further in the layouts, plans and perspectives at Attachments 4-23.

36. **8th/9th Battalion, Royal Australian Regiment Precinct.** The 8th/9th Battalion is currently located in refurbished facilities previously occupied by the 9th Battalion Royal Queensland Regiment. The existing accommodation is inadequate and does not have the capacity to cater for the complete Battalion when fully raised by 2012. For this element, Defence proposes to construct a new purpose built precinct to allow 8th/9th Battalion to fulfil its role of reaching operational capability as a deployable motorised infantry battalion. The following works are proposed:

- a. **Battalion Headquarters and Training Facilities.** A new multi-storey office building and single storey training building is proposed. The multistorey building will accommodate the Battalion headquarters, Regimental Guard House and Regimental Aid Post. This facility is at the entrance to the precinct and acts as a reception area for visitors to the battalion and as a permanently-manned base for the Battalion in the event of call-out or an event such as fire within the unit lines. The training facility will be sited to the north of the Battalion headquarters and provides a number of classrooms for lecture, and computer based training for the Battalion;
 - b. **Manoeuvre Company and Manoeuvre Support Company.** The three Manoeuvre Companies (A, B and C) and the Manoeuvre Support Company will be accommodated in the south east corner of the precinct. Company Q-stores, vehicle shelters and armouries will be located on the ground floor, with ablutions on the second floor and office accommodation for the Company headquarters on the third floor to make most effective use of this constrained site. An existing bench along the site allows for two storey vehicle parking to further minimise the Company footprint. Six small wet weather shelters are proposed along Sandy Creek at the south boundary of the precinct for outdoor training; and
 - c. **Administration Company.** The Administration Company comprises a headquarters, Technical Support Platoon, Transport Platoon and Logistics Platoon. The Administration Company Headquarters will be located within the Battalion transport compound in a compact two storey facility, collocated with the Transport Platoon. This compact facility contains the Company Q-Store, armoury and ablutions on the ground floor with office accommodation above on the first floor. The Logistics Platoon will work from the new Battalion Q-Store proposed for the south west corner of the compound. The Battalion Q-Store is an open plan warehouse type structure with a single storey annex for the Logistic Platoon working accommodation, armoury and ablutions.
37. **2nd Combat Engineer Regiment.** Currently, the 2nd Combat Engineer Regiment occupies a constrained site in the northeast corner of Gallipoli Barracks. The unit holds a wide variety of large military vehicles, engineering plant and commercial vehicles in addition to specialised military engineering equipment such as bridge-building and construction tools. The current facilities are unable to accommodate the increase to the unit, are unsuitable for reuse or extension and are at the end of their functional and economic life. Defence proposes to construct new facilities to allow 2nd Combat Engineer Regiment to fulfil its role of providing integral combat engineer support to 7th Brigade units. The following facilities are proposed:

- a. **Regimental Headquarters and Unit Training.** The Regimental Headquarters and Regimental Aid Post will be collocated in a new two storey facility, taking advantage of the fall of one full level at the south west corner of the precinct. A unit training facility will be constructed in close proximity to the Regimental Headquarters with a combination of indoor, and covered outdoor training areas for classroom, practical and computer base training;
- b. **2, 7 & 11 Combat Engineer Squadrons.** Each of the three Combat Engineer Squadrons will be located in separate structures on the eastern side of the Lavarack Parade spine. Each Squadron's accommodation, including headquarter offices, Q Store, Troop facilities and ablutions, is consolidated in a 2 storey building, with its vehicle shelters directly adjacent;
- c. **24 Support Squadron.** The facility for 24 Support Squadron is similar to the layout and organisation of a Combat Engineer Squadron with Q-store space, ablutions and workshops on the ground floor and office accommodation on the first floor. Squadron vehicle will be accommodated in adjacent shelters. 24 Support Squadron includes the Explosive Detection Dogs Section. The Explosive Detection Dogs Section will be accommodated in a single storey building with adjoining kennel facilities and exercise yard. The central building includes Section offices, ablutions and stores, as well as Food preparation, Veterinarian room and bath facilities for the dogs;
- d. **Operations Support Squadron.** The Operations Support Squadrons facilities include a new Regimental Q-Store, with associated office accommodation, armoury and ablutions. A new vehicle workshop is proposed for the Technical Support Troop and includes Repair and Maintenance bays, Recovery bay, Electrical bays, and General Engineering bays along with a repair parts store, battery store, petrol, oil and lubricants store, office accommodation for the Troop and ablutions;
- e. **Transport Compound.** The unit's expansion under the Enhanced Land Force program will see unit holdings of vehicles increase in size and asset value to in the order of 166 vehicles plus associated trailers and modules. This increase requires a large dedicated secure vehicle park; and
- f. **Training Facilities.** A central Unit Training Facility is required within the unit precinct to provide a facility from which a unit training program can be structured and managed. Squadron and Troop level training areas are required in a mixture of indoor and outdoor areas to allow sub-units to train their soldiers in the specialist skills required of them.

38. **7th Combat Signal Regiment Precinct.** Under the Enhanced Land Force program, the 139th Signals Squadron will be expanded to 7th Combat Signal Regiment. The role of the 7th Combat Signal Regiment is to provide direct communications, information systems, and administrative support to the 7th Brigade. 139th Signals Squadron currently occupies temporary facilities close to Headquarters 7th Brigade which are unable to support even the permanent requirements of the Squadron. The following new facilities are proposed to support the establishment of the 7th Combat Signal Regiment:

- a. **Regimental Headquarters and Unit Training Facility.** The Regimental Headquarters and Regimental Aid Post will be collocated in a compact two storey building to the north of the precinct. The Unit Training Facility will be constructed adjacent the Regimental Headquarters providing classrooms and teaching spaces for lecture and computer based training;
- b. **139th and 140th Signals Squadrons.** The 139th and 140th Signals Squadrons will be accommodated in separate, adjacent buildings, identical in layout. Each building contains office accommodation, briefing rooms and ablutions on the first floor, over the Squadron Q-store and vehicle shelters on the ground floor to maximise efficiency of land utilisation. The Squadron vehicle shelters are sized to accommodate the vehicle and trailer and are individually securable; and
- c. **Operational Support Squadron.** A consolidated structure is proposed incorporating the Squadron Headquarters, Q-store, Electronic Instrument Repair workshop, repair and maintenance bays, repair parts store, tyre store, Technical Support Troop and Logistics Troop office accommodation, Regimental armoury, vehicle inspection ramp and ablutions.

39. **7th Combat Services Support Battalion.** The 7th Combat Service Support Battalion provides mission ready Combat Service Support to support ADF operations. It also has a role to provide second line Combat Service Support to 7th Brigade and other designated units on operations, when training and in Barracks. The 7th Combat Service Support Battalion is located in existing facilities at Gallipoli Barracks which were primarily constructed during the 1990's. The existing accommodation does not have the capacity to cater for expansion under the Enhanced Land Force Program. To accommodate the growth across the Battalion, it is proposed to refurbish the existing Regimental Aid Post and Catering Company Headquarters and provide the following new facilities:

- a. **Combat Services Support Companies.** Elements of 6, 7 and 8 Combat Services Support Companies will be collocated in a new two storey shared facility adjacent the existing Battalion Headquarters;

- b. **Battalion Armoury and Armourers Workshop.** A new armoury and armourer's workshop will be constructed within the existing building for the storage and repair of additional Brigade weapons;
 - c. **Electronic Instrument Repair.** A new Electronic Instrument Repair workshop is required to cater for the increased throughput of Brigade equipment. The workshop will provide office accommodation, workshop space and testing areas along with the associated ablutions and storage spaces;
 - d. **Supply Company Warehouse.** The existing Supply Company Warehouse is not suitable for expansion and can not accommodate the additional Battalion stores. A new single level warehouse is proposed. The Logistics Platoon working accommodation and armoury will be collocated with the Q-store in an adjacent annex. The existing Q-store will be reused for the Combat Services Support Company stores, avoiding the need to construct new Company level Q-stores;
 - e. **Vehicle Workshop.** The existing vehicle workshop will be extended to provide an additional eight workshop bays to support the higher throughput of vehicles for repair. Associated office accommodation and support facilities are also required as part of the refurbishment of the existing workshop;
 - f. **Vehicle Storage.** A new vehicle compound, extending to the south of the current precinct is required to accommodate additional vehicles and trailers and replace the vehicle parking resumed by the new facilities; and
 - g. **Bulk Fuel Tanker Park.** The 7th Combat Service Support Battalion's Combat Supply Platoon operates the Bulk Fuel Tanker Park facility. The Bulk Fuel Tanker Park provides the capability to hold the 7 Brigade entitlements for Tanker Truck Fuel vehicles and Tanker Pump Assembly vehicle modules. A new purpose-built vehicle park for the secure storage and maintenance of bulk fuel tankers is required along with an administration building for staff.
40. **2nd / 14th Light Horse Regiment.** The establishment of a third cavalry squadron under the Enhanced Land Force program requires additional facilities for the 2nd / 14th Light Horse Regiment. It is proposed to construct new working accommodation for the additional squadron headquarters, additional storage space and ablutions.

41. **Headquarters 1st Division and 1st Intelligence Battalion Precinct.** Headquarters 1st Division provides the command and control functions for all 1st Division units. The establishment of a Defence Support precinct at the entrance of the Barracks requires the relocation of Headquarters 1st Division for their existing accommodation which is unsuitable for reuse or extension and is at the end of its functional and economic life. The 1st Intelligence Battalion is currently dislocated at various sites around Australia. The construction of a new facility will allow the consolidation of the major elements of the Battalion at Gallipoli Barracks. Whilst Headquarters 1st Division and 1st Intelligence Battalion will maintain their individual identities, it is proposed that they share a single office building to make most efficient use of the land available and to minimise construction and building maintenance costs. The new facility will comprise four levels and have a mix of offices and open planned areas segregated into functional areas.

42. In addition to the working accommodation, a new battalion Q-Store including office space and ablutions will be constructed to the south of the new office building. Various secure storage areas are required to hold signals equipment, classified documentation and other valuable items. A unit maintenance facility is proposed to support Level 1 maintenance of unit vehicles and equipment. Sheltered vehicle parking will be provided adjacent the office building.

43. **Explosive Hazards Centre.** The siting of the new 2nd Combat Engineer Squadron precinct requires the relocation of the Explosives Hazard Centre. The Explosive Hazards Centre currently shares a facility with its headquarters (Headquarters 6th Engineer Support Regiment) in a facility which is at the end of its economic and useful life, and which is not suitable for either retention or adaptive reuse. The project proposes to construct a new multi-storey facility for the Explosive Hazards Centre comprising Q-store and amenities on the ground floor and working accommodation and briefing spaces on the first floor. A small vehicle compound is located adjacent the building.

44. **1st Topographical Survey Squadron.** Under the Enhanced Land Force program, Army's geospatial capability will grow to support land, joint and specified operations. It is proposed to construct additional troop facilities including working accommodation, storage and vehicle shelters to accommodate the additional growth in the Squadron.

45. **Land Warfare Centre Warrant Officer and Non Commissioned Officer Academy.** The additional soldiers under the Enhanced Land Force Program will increase the need for training, the numbers of trainees and the types of courses delivered by the Warrant Officer and Non Commissioned Officer Academy. The Officer and Non Commissioned Officer Academy is

currently disparately sited around the southern end of Gallipoli Barracks. The instruction buildings are dated, do not have the capacity to absorb the additional students or courses and are unable to be efficiently extended or reused. This project proposes to construct new facilities for the Warrant Officer and Non Commissioned Officer Academy including lecture theatres, syndicate rooms and working accommodation for instructors. An existing Q-store will be refurbished for storage of goods. The new facilities will be constructed closer to the Lloyd Street entrance near other training facilities to generate more efficient land use. This enables their current site to be redeveloped for under purposes under a future redevelopment to further improve land utilisation at the barracks. In addition to the training facilities, an additional 162 rooms of trainee Living-In Accommodation is proposed to house the students while on course at Enoggera.

46. **Defence Support Precinct.** Defence Support Queensland requires new facilities as a result of the displacement from their existing locations caused by other project elements. It is proposed to construct a three-storey office accommodation building to provide for Defence Support Queensland, Defence Support Brisbane, 32 Security Section and the Comprehensive Maintenance Contractor. The working accommodation will comprise a mix of open plan and individual offices, with centralised amenities, meeting, training and ablution facilities. In addition, it is proposed to construct a garrison conference centre within the Defence Support precinct, to replace the existing facilities that are being displaced by other project elements. The conference centre will include a 400 person lecture theatre and a number of smaller syndicate rooms.

47. **Garrison Support Precinct.** In order to create efficiencies with customer focused service delivery, it is proposed to collocate customer support functions adjacent to the Defence Support precinct. Relocation of the Defence Publishing Service, Mail Centre and Furniture Store is required due to displacement by other project elements. It is proposed to collocate the Defence Publishing Service and Mail Centre in to a new combined facility, which comprises printing and reproduction equipment, mail receipt and distribution areas as well as provision of space for X-ray scanning equipment. The Furniture Store comprises a receipts and issue area, storage area, office accommodation and ablution facilities.

48. **Joint Logistics Unit – South Queensland Clothing Store.** The consolidation of combat clothing, combat equipment and non-combat clothing issue requires the construction of a new facility at Enoggera. The existing facility is inadequately sized to cater for the additional issue requirement and additional personnel at Enoggera. The facility will include a receipts and issue area, storage for equipment and clothing, office accommodation and a deliveries area.

49. **Car Parking Facilities.** In order to provide the significant number of vehicle parking for personnel both working and visiting Gallipoli Barracks in a manner which minimises land area, new multi-storey car parking is proposed in three areas under this project. The car parking facilities have been located in areas to optimise catchment of users and generally within 400m of facilities being serviced.

50. **Childcare Centre.** The existing Childcare facility currently operates at Gallipoli Barracks to the west of the Barracks perimeter. It is accessed independently to the Barracks from outside the wire. The increase in population at Gallipoli Barracks generates a requirement for additional Child care places. The existing building can not be expanded to cater for this requirement due to license restrictions, hence a new additional child care facility is proposed adjacent to the existing centre. The proposed facility will be operated by 'B4Kids' and the design is based upon a license to operate to 75 places, which is the maximum number of places allowable under the Queensland Development Code. The design of the Centre will fully comply with the Queensland Development Code for Childcare Centres. The design allows for a minimum of 10 staff, and provides an additional nine (for a total of 30) spaces in the existing car park, in accordance with Brisbane City Council requirements.

51. **DefCredit Facility.** The new facilities for the 8th/9th Battalion requires the demolition of the facility currently occupied by DefCredit. This project proposes to refurbish an existing space within the Frontline Commercial precinct at the Barracks to provide suitable alternate accommodate for DefCredit.

52. **Physical Training Centre.** Maintaining a high level of physical fitness is an essential requirement of all Defence uniformed personnel. Group physical fitness, team games and sport contribute to team building and morale. The existing physical training facilities comprise two outdated gyms and an outdoor pool. The current gym facilities are in poor condition and do not have the capacity to accommodate the additional personnel under the Enhanced Land Force program. The existing swimming pool has reached the end of its serviceable life and due to its exposed location is not optimally utilised throughout the year. The project proposes to construct a new Physical Training Centre comprising a 50m indoor pool, basketball courts, squash courts, multi-use rooms and office accommodation for the Physical Training Instructors. A satellite change facility will be constructed on Duncan Ovals to provide ablutions and change facilities for team player's utilising the ovals and storage of sporting equipment. The construction of the 2nd Combat

Engineer Regiment precinct requires realignment of Duncan Ovals including improvement of the playing surface, line marking and reinstatement of cricket nets and the running track.

53. **Barracks Training Facilities.** The increased training requirement resulting from the Enhanced Land Force program requires redevelopment of training Areas. For the Enoggera Close Training Area, it is proposed to provide new and refurbished facilities to support military skill training of 7th Brigade units and other users. To achieve this requirement, the following facilities are proposed:

- a. **Mission Rehearsal Exercise Facility.** The purpose of the new Mission Rehearsal Exercise Facility is to accommodate a 250 man combat team contingent for pre deployment preparations and certification. The Mission Rehearsal Exercise Facility will comprise tent lines and ablutions, flexible multipurpose rooms, an armoury, Q-store, undercover messing space and support functions such as a treatment room, orderly room and welfare room;
- b. **Weapons Training Simulation System Facility.** A new 24 lane Weapons Training Simulator System facility is proposed in addition to the existing 12 lane facility to support achievement of mandatory weapons skills training;
- c. **Night Vision Equipment Training Facility.** The project proposes to refurbish and extend the existing night vision equipment training facility to allow increased throughput of personnel undergoing night vision equipment training, generated by the increase in Army personnel at the Barracks;
- d. **100m Range Upgrade.** A refurbishment of the existing 100m range is proposed to allow its safe use under standard military Range Practices;
- e. **25m Ranges.** Two new 25m ranges are proposed to allow a greater throughput of weapons training for personnel at Gallipoli Barracks;
- f. **Upgrade of Obstacle and Bayonet Assault Courses.** Refurbishment of the two existing military obstacle courses and Bayonet Assault Course are proposed to enhance their training value and increase their time in service;
- g. **Muscle Toughening Course.** A new Muscle Toughening Course is proposed to increase the physical training opportunities for units at Gallipoli Barracks;

- h. **Method of Entry Facility.** A new Method of Entry facility is proposed to replace the individual and small team training aspects of the existing Military Operations in Urban Terrain Facility;
- i. **Urban Operations Training Facility.** A new Urban Operations Training Facility is proposed to replace the section and Platoon training aspects of the existing Military Operations in Urban Terrain Facility;
- j. **Mask Test Facility.** A new Mask Test Facility is proposed to allow units at Gallipoli Barracks to safely undertake Chemical, Biological, Radiological and Nuclear mask training within the local area; and
- k. **Wet Weather Shelters.** Four new wet weather shelters are proposed on the Enoggera Training Close Area to allow instruction to take place in adverse weather conditions.

54. **Living In Accommodation.** The increase in Army personnel at Gallipoli Barracks requires an additional 361 rooms of living in accommodation. Each of these new rooms will include an ensuite and kitchenette. Storage space and car parks for the 361 rooms will also be provided.

55. **Engineering Services.** A significant investment in the barracks inground infrastructure is required to support this development. The design of the upgrades proposed below has considered both this project, and the longer term requirements of the barracks to ensure effective infrastructure investment:

- a. **Fire and Potable Water Reticulation.** The existing trunk water reticulation mains serve a dual purpose for both water supply and fire fighting. The existing internal water mains have evolved on an “ad-hoc” basis as the Barracks have expanded and the demands have increased. There is no defined structure to the layout of the internal water mains and there are currently seven water connection points from the site to the municipal water mains. This project proposes to implement a design of an integrated “looped” or “ring main” system involving the construction of extensive water reticulation mains for potable water. All new pipework will be in accordance with the relevant Brisbane City Council standards and guidelines. In addition to the new reticulation mains, the project will rationalise the number of connection points from the Barracks to the municipal supply from seven to only two or three points. For fire fighting supply, the project proposes to construct a new, separate fire fighting ring main. The fire ring main will be supplied from the existing dam, incorporating a treatment facility and clean water reservoir with top up supply from domestic reticulation mains;

- b. **Stormwater.** Adequate stormwater drainage will be provided for all new development within the site. The stormwater design and construction will ensure that adequate downstream stormwater quality is achieved. All new elements will be constructed above the nominated flood levels;
- c. **Sewer.** The existing trunk sewer mains through the site discharge to the municipal system at three points and this project proposes to retain the existing connections. Some existing sewer mains which current traverse the site under the proposed development areas will be replace and realigned and new sewer mains will be constructed to service the 7th Combat Services Support Battalion expansion;
- d. **Natural Gas.** The project proposes to extend from the existing natural gas services on site to provide valved connections for the new facilities;
- e. **High Voltage Electrical Reticulation.** The electrical infrastructure within the 8th/9th Battalion and 2nd Combat Engineer Regiment precincts is required to be reconfigured to suit the planning of these precincts including replacement of substations and rerouting High Voltage cabling. Upgrading of individual substations and a new substation is required to supply the remaining project elements of the project. A new Energex feeder is proposed to meet the projected load of the Barracks. This will include the connection of a new Intake Switching Station to all the existing feeders and a direct interconnector to the existing Primary Switching Station. Augmentation of the existing Barracks feeders to provide 40% spare capacity on each of the feeders following the completion of the project elements works is proposed. The project will replace a number of substations across the barracks to ensure at least 15 years serviceable life at the end of the project;
- f. **Fire Protection Systems.** The Main Fire Indicator Panel requires replacement by a panel capable of supporting all buildings on site communicating via the Defence Engineering Services Network fibre optic network. To suit operational requirements, the new Fire Indicator Panel will be located in building F30. Buildings will be migrated to the new Fire Indicator Panel as they are constructed or refurbished;
- g. **Communications Networks.** The existing three communications pit and duct networks require replacement with a new single combined pit and duct system, constructed to the required Physical Security levels. The proposed communications infrastructure works will deliver additional capacity for future projects to have connectivity via the pit and duct

network to the major nodes within the Barracks. A blown fibre network is proposed to provide greater flexibility and service segregation;

- h. **Road Network.** New roads will be required to be constructed to service the proposed 2nd Combat Engineer Regiment precinct. The main access to the Barracks will continue to be through Lloyd St, with secondary access points at Wanimo Street and Fraser Road. A number of internal intersections will be upgraded along with security upgrades to the Lloyd Street and Frasers Road entrances; and
- i. **Car Parking.** The requirement is to provide new facilities to allow the car parking on Gallipoli Barracks to be adequate in supply for access to all locations on the site. To achieve this increase in car parking spaces as well as freeing current land for more effective development, three multi-level parks are proposed around the Barracks.

Townsville

56. The Townsville scope of work proposed to be delivered is summarised below and detailed further in the proposed facilities layouts, plans and perspectives at Attachments 24-28:

- a. **3 Combat Services Supply Battalion.** The existing facilities are not adequate to meet the operational requirements and refurbishment of their Supply Company Warehouse, Electrical Instruments and Weapon Repair Facility and Repair Parts Store are required. These enhancements involve changes to the racking configuration in the warehouse. Internal reorganisation of the workshop and some fit out plus modernising the repair parts storage and retrieval system;
- b. **Combat Training Centre.** The facilities required for Combat Training Centre involves the refurbishment of existing facilities and the provision of new facilities. The Headquarters Building is to be extended in its current location towards the east and west. It will form the primary address of the Combat Training Centre, being visible from Gallipoli Drive and will provide a modern, flexible working environment for all users. The Logistics Complex Q Store consists of a single building within a paved compound and will serve as the central storage facility of the Combat Training Centre and will accommodate administration and amenities, Draft Priority 1 and lockers as well as the main Q Store and Armoury. The Transport Compound will provide new sheltered accommodation for Combat Training Centre's vehicles;
- c. **Warrant Officer Non Commissioned Officer- Academy.** The facilities required for the Warrant Officer Non Commissioned Officer - Academy involves the refurbishment of

existing facilities and the provision of new facilities which include a new 100 seat lecture theatre and syndicate rooms and the existing syndicate room building is to be extended to provide a ninth syndicate room. New living-in accommodation to accommodate 80 trainees is proposed;

- d. **Explosives Store House.** An additional new Explosives Store House (ESH) is proposed to be constructed adjacent to the existing ESH at Mount Stuart Training Area in accordance with Defence standards to meet the increased capacity requirements resulting from the relocation of 3 RAR to Townsville in 2012; and
- e. **Townsville Field Training Area.** Three new ranges are proposed for Townsville Field Training Area. These consist of a Static Grenade Range, Assault Grenade Range, and Direct Fire Support Weapons Range. The Direct Fire Support Weapons Range will include an upgrade and modifications to the existing facility to bring the range to current Defence requirements. Facilities on the ranges will include a Range Control building, static firing points and shelter, a waiting shelter, an ammunition distribution shelter and ablutions.

RAAF Base Amberley

57. The RAAF Base Amberley scope of work proposed to be delivered is summarised below and detailed further in the proposed facilities layout and plan at Attachments 29 and 30. The scope of work involves the construction of a new facility comprising the working accommodation, ablution, storage and training facilities for the Headquarters staff.

Wide Bay Training Area

58. The Wide Bay Training Area scope of work proposed to be delivered is summarised below and detailed further in the proposed facilities layouts, plans and perspectives at Attachments 31-37:

- a. **Permanent Camp Accommodation.** The new camp accommodation will consist of 40 man blocks, which can also be used as training rooms, a fully fitted kitchen and dining facility two Q store buildings and two ablution blocks;
- b. **Marksmanship Training Range.** A new Marksmanship Training Range will be constructed to Defence standards and will be located adjacent to the existing Grouping and Zeroing Range, which is also to be upgraded a part of this project. Facilities on the new Marksmanship Training Range will include a Range Control Tower, static firing points and shelter, mechanical targets at every 100m out to 600m, a waiting shelter, an ammunition

distribution shelter and ablutions. Works for the Grouping and Zeroing Range will include refurbishment of the target systems at every 100m;

- c. **Special Weapons Range.** A new Special Weapons Range will be constructed to Defence standards to enable 7th Brigade units the fire a range of weapons currently within the unit allocations from fixed facilities. Facilities on the new Special Weapons Range will include a Range Control Tower, static firing points, suitable targets to meet specific weapons and ammunition requirements, a waiting shelter, an ammunition distribution shelter and ablutions;
- d. **Assault Grenade Range.** A new Assault Grenade Range will be constructed to Defence standards and will be located in the vicinity of the proposed Specialist Weapons Range. The facility will include a Range Control Tower, grenade throwing bays, waiting shelters and grenade distribution point. Ablutions will be able to be shared with the Special Weapons Range;
- e. **500 Explosive Pallet Space Minor Retail Facility.** A new 500 Explosive Pallet Space Minor Retail facility will be located in the south east corner of the training area and constructed in accordance with Defence standards. The works will also include a contractor's office located with Range Control and all engineering services to support the location;
- f. **Demolition Range.** The existing Demolitions Range will be refurbished to enhance its capacity to meet current Defence standards;
- g. **Refurbishment of Vehicle Refuelling Point and Vehicle Wash Point.** The existing vehicle refuelling point and vehicle wash point will both require major refurbishment to meet the increased usage of the Wide Bay Training Area, particularly by 7th Brigade units, as a result of the Enhanced Land Force program; and
- h. **Refurbishment of Training Area Infrastructure.** Training Area infrastructure, such as the electricity supply, water supply, sewerage treatment plant and internal roads, will require refurbishment to upgrade services to support the increased usage of the Training Area as a result of the Enhanced Land Force program.

Greenbank Training Area

59. The Greenbank Training Area scope of works proposed to be delivered is summarised below and detailed further in the layouts, plans and perspectives at Attachments 38-44. The proposed works will reorganise the training area, refurbish existing facilities and provide new training facilities to support increased throughput:

- a. **Range Entry.** The main entry for Greenbank Training Area will be relocated from the corner of Johnson Road and Woogaroo Street in the north west sector of the training area to the south east sector. This new entrance will be accessed by a new service road off Goodna Road approximately 300 meters to the west of the Greenbank State School. This service road will direct vehicles into the area of the new Range Control facilities. This will provide queuing of convoy vehicles, general vehicle parking and ready access to the proposed permanent Camp Accommodation, 25th/49th Battalion, Royal Queensland Regiment facilities and the vehicle wash point. The new service road will be located inside the training area to provide safe access from, and egress to, Goodna Road;
- b. **Range Control and Vehicle Wash Point.** New Range Control facilities, including a vehicle wash point, will be constructed on the new Range Entry service road. The new Range Control building will provide working space for personnel for range control, maintenance and security elements and a check-in point and briefing room for Range users and visitors. In addition, a new workshop will be constructed to replace the existing facility and the range communications network will be relocated;
- c. **25th/49th Battalion, Royal Queensland Regiment.** The scope of works includes new buildings for Battalion Headquarters, the two Rifle Companies and Administration Company. Also included will be a new Q Store and transport compound;
- d. **Permanent Camp Accommodation.** The new camp accommodation will consist of 40 man blocks, which can also be used as training rooms, a fully fitted kitchen and dining facility two new Q store buildings and two new ablution blocks;
- e. **Safe Driver Training Area.** The scope of works will provide a variety of new driving surfaces in varying environments, including replication of a suburban landscape. New facilities will include a Control Building, limited maintenance workshop, waiting areas for students and ablutions;
- f. **Urban Operations Training Facility.** A new Urban Operations Training facility will be designed to meet the operational training needs of 7th Brigade. It will consist of a mixture of

solid block and pre-fabricate facilities and will also include the probable use of 'sea containers'. The layout of the buildings will be complemented by a road network throughout the site. The new facility will be designed to replicate environments experienced by troops on operations;

- g. **Method of Entry Facility.** The new method of entry facility will be collocated with the Urban Operations Training Facility and will consist of a multi storey training facility of block construction and two half height training facilities, also of block construction;
- h. **Engineer Mine Clearance Lanes.** A new training area will provide three areas of approximately 30m by 30m of varying surfaces for the training of minefield clearance by hand for personnel from the 2nd Combat Engineer Regiment;
- i. **Marksmanship Training Range.** A new Marksmanship Training Range will be provided to Defence standards by refurbishing and extending the existing disused Pairs Battle Range. New facilities on the Marksmanship Training Range will include a Range Control Tower, firing mounds at every 100m out to 600m, mechanical targets, a waiting shelter, an ammunition distribution shelter and ablutions; and
- j. **Refurbishment of Training Area Infrastructure.** Training Area infrastructure, such as the electricity supply, water supply, sewerage treatment plant and internal roads, will require refurbishment to upgrade services to support the increased usage of the Training Area as a result of the Enhanced Land Force program.

60. **Kokoda Barracks and Canungra Training Area, Canungra.** The proposed scope of works in support of Land Warfare Centre at Canungra is summarised below and detailed further in the layouts, plans and perspectives at Attachments 45-47:

- a. **Electronic Open Range.** The existing Engineer Bridge open range is proposed to be converted into an electronic open range for weapon zeroing and marksmanship training. New facilities will include a Range Control Tower, firing mounds at every 100m out to 300m, mechanical targets, a waiting shelter, an ammunition distribution shelter and ablutions;
- b. **Permanent Camp Accommodation.** The new camp accommodation will consist of 40 man accommodation blocks which can also be used as training rooms, two new Q store buildings and two new shower and ablution blocks;

- c. **Battle Simulation Centre.** A new facility will provide simulation training capability with supporting training and staff facilities, consisting of two briefing and de-briefing theatres, twelve simulation training rooms, working accommodation for staff supporting the Centre, storage rooms for the Information and Communications Technology for the battle simulation training and ablutions. Two additional classrooms will be included in the facility to meet the increased training requirements of the Warrant Officer and Non-Commissioned Officer Training Wing of the Land Warfare Centre as a result of the Enhanced Land Force Program;
- d. **Living in Accommodation.** With the increased training liability to be conducted by the Land Warfare Centre at Kokoda Barracks, there will be insufficient living in accommodation rooms for students. 115 new trainee level Living In Accommodation rooms will be provided; and
- e. **Physical Training Centre.** The existing gymnasium is in poor condition and requires to be replaced. The scope will include provision of enhancement of the aerobics and weights training areas, a sheltered outdoor training area, change rooms with showers and ablutions. Also included is the provision of a sheltered outdoor training area and storage building in the Padang area of the Canungra Training Area for Battle Fitness training.

NEW SOUTH WALES

Singleton

61. The scope of works proposed for Army's School of Infantry is summarised below and detailed further in the layouts, plans and perspectives at Attachments 48-62:

- a. **School of Infantry Headquarters.** A new facility will replace the existing working accommodation spread across three existing outdated buildings which will be demolished. The new building will centralise all of the existing Command elements into one facility with their Defence Support elements;
- b. **Permanent living in accommodation.** New permanent living in accommodation will be provided to support the increased number of instructors. Thirty-four new rooms are proposed for the increased numbers of instructors;
- c. **Battle Simulation Centre.** A new Battle Simulation Centre will provide simulation training for officers and non-commissioned officers in battle command. The proposed new facility

comprises a central presentation area, seating for 80, two wings for red and blue force battle simulation and six syndicate rooms configured with individual workstations for online combat computer simulation training. The facility will also accommodate mock up simulators and external vehicle bays with connectivity to integrate a range of mobile command vehicles;

- d. **Weapons Repair.** A new weapons repair facility is to be constructed as an extension adjoining the existing multi user armoury. The extension will provide working accommodation for four staff and include a small weapon repair workshop. The facility will provide additional capacity and improve the efficiency of the armourers by co-locating them in a central armoury. An existing facility on North Ridge that has been adapted as a make shift weapons repair facility will returned to its original functional use as a vehicle repair facility;
- e. **Museum.** The existing museum is spread across several outdated buildings within the barracks command precinct. This has created security issues as the facility is utilised by the public. To improve base access and security, a new museum will be provided close to the front entry of the barracks and the existing buildings will be demolished. The new facility will include a main display area, office accommodation, a shop and café and educational facilities for training students in the history of the infantry corps. The educational facilities will also be used for presentations to the public, including school organisations;
- f. **Pass Office.** A new pass office is proposed to be constructed to replace the existing outdated facility at the entry to Lone Pine Barracks. The new pass office will be located on a realigned security fence line. This will improve access control and provide visual security of visitors approaching the new museum that will be located outside the barracks but within sight of the new pass office. The new facilities will comprise working accommodation for security staff, a reception and pass issuing area and a small guard house and boom gate adjacent to the pass office. The fire indicator panel for the barracks will be relocated to the pass office which will be continuously manned; and
- g. **Training Area and Ranges.** The existing facilities on Singleton's Training Area are insufficient to meet increased demand for weapons training by the School of Infantry, the Special Forces Training Centre and other Army units resulting from the Enhanced Land Force program. Several new, extended and refurbished facilities are proposed for the Training Area including; extension and refurbishment of Marksmanship Training Range Number 1, a new Marksmanship Training Range and Grouping and Zeroing Range, refurbishment of existing ranges to create two combined Assault Grenade and Static Grenade ranges, a new Direct Fire

Support Weapons Range, a new Urban Operations Training Facility, a new 200 Explosive Pallet Space Minor Retail facility for the Defence Explosive Ordnance Services, one new and two refurbished battle inoculation ranges, refurbished vehicle wash point and new and refurbished ablutions and storage facilities.

Sydney

62. **Primary Casualty Reception Facility.** The proposed scope of works for the Primary Casualty Reception Facility is summarised below and detailed further in the layouts, plans and perspectives at Attachments 63-65:

- a. **Central Dispensing Point.** It is proposed to extend the existing medical and dental facility at Garden Island to the south to provide a new Central Dispensing Point including working accommodation for two civilian pharmacists and storage space for pharmaceutical supplies; and
- b. **Working and Training Facilities.** The working and training requirements for increased numbers of personnel in the Primary Casualty Reception Facility other than the pharmacists are proposed to be located in two refurbished buildings at HMAS Penguin, Balmoral.

AUSTRALIAN CAPITAL TERRITORY

63. **Royal Military College.** The Royal Military College lacks purpose built facilities for officer cadets under going rehabilitation and/or transition from the Army. These functions are currently being accommodated within existing facilities required for cadets completing their officer training. The scope of works proposed for the Royal Military College is summarised below and detailed further in the layouts, plans and perspectives at Attachments 66-69:

- a. **Rehabilitation and Transition.** 34 new living in accommodation rooms are proposed for officer cadets in rehabilitation and 16 new rooms for those in transition with collocated new working accommodation for their instructors; and
- b. **Majura Training Area.** Training of officer cadets at the Royal Military College incorporates a broad curriculum and utilises a number of training methods ranging from classroom based instruction through field based training and associated activities. Whilst the majority of training is provided at the Royal Military College, there is a heavy reliance on facilities at Majura Training Area for field training. The existing camp facilities are outdated and insufficient to cope with the increased number of officer cadets conducting field training.

New and refurbished facilities are proposed including new camp accommodation, lecture theatre, Headquarter offices and amenities and refurbishment of the existing Urban Operations Training Facility.

VICTORIA

Watsonia

64. **Defence Force School of Signals.** The scope of work that is proposed for the Defence Force School of Signals is summarised below and detailed further in the layout and perspective at Attachments 70 and 71:

- a. **Technical Training Wing.** A new building is proposed to provide working accommodation for additional staff and students at Technical Training Wing of the school. The new facility will include 19 classrooms, integrated support facilities and amenities and be located immediately adjacent to the existing Covered Training Area;
- b. **Covered Training Area.** Refurbishment of the existing Covered Training Area is proposed to provide a large functional area for vehicle mounted communications training. The refurbishment will remove demountable classrooms and upgrade vehicle parking and training spaces including new raised vehicle platforms to assist with satellite terminal assembly training on vehicle mounted equipment. The refurbished facility will provide amenities and functional links to the new Technical Training Wing building; and
- c. **External Works.** Provision of external works and services to support the new Technical Training Wing will include removal of an existing communication training tower and replacement it with a new tower for “at height” training inside the Covered Training area; relocation of two existing weapon training shelters; and improvement of the functional space between the Covered Training Area and proposed new building for both pedestrian and vehicle access.

Puckapunyal

65. **Minor Retail Facility.** A new 500 Explosive Pallet Space Minor Retail facility is proposed to support the additional throughput of trainees in weapons training on the Training Areas. The new facility will be sited and constructed in accordance with Defence standards and include a contractors’ office at the existing Range Control and all engineering services to support the facility.

SOUTH AUSTRALIA

RAAF BASE Edinburgh

66. **Warrant Officer and Non Commissioned Officer Academy.** The scope of work that is proposed for the Warrant Officer and Non Commissioned Officer Academy is summarised below and detailed further in the layout at Attachment 72:

- a. **Lecture Theatre.** A new 100 seat lecture theatre will be provided in support of the career training courses and integrated into the training precinct being provided under the Hardened and Networked Army Facilities project;
- b. **Syndicate Rooms.** Ten new syndicate rooms will be provided in support of the career training courses and integrated with the lecture theatre;
- c. **Working Accommodation.** New working accommodation will be provided to include instructor space, logistics storage, resource rooms, and amenity for instructors and students;
- d. **Living In Accommodation.** New living-in accommodation rooms will be provided to accommodate 80 trainees; and
- e. **External Works.** External works and services will be provided to support the new academy including hardstands for training and parking, wet weather shelters, and infrastructure to integrate into the existing Hardened and Networked Army training precinct.

Cultana

67. **Cultana Training Area.** The scope of work that is proposed for Cultana Training Area is summarised below and detailed further in the layout and plan at Attachments 73 and 74:

- a. **Minor Retail Facility.** A new 500 Explosive Pallet Space Minor Retail facility will be located on the existing training area and constructed in accordance with Defence standards. The works will include a contractor's office located with Range Control and all engineering services to support the new facility;
- b. **Permanent Camp Accommodation.** New camp accommodation will comprise accommodation blocks, kitchen and dining facilities, ablutions, administrative and logistic support areas. The facility will have an integrated stores area and hardstand;

- c. **Urban Operations Training Facility.** A new urban operations training facility will be provided that is capable of supporting up to a Battle Group sized element with both mounted and dismounted units. The proposed facility will have instrumented simulation capabilities;
- d. **Field Firing Training System Range.** A new Training Range will be constructed to allow for the armoured vehicles live firing training; and
- e. **Environmental Sustainability Works.** A range of works will be completed to improve fencing, road and water crossing structures for controlling storm water runoff, highway and railway passes, infrastructure services crossings and cattle grids.

SITE SELECTION

68. The selection of sites for each project location and element has been undertaken in accordance with Infrastructure Division Planning policy requirements. Site Selection Boards and Range Siting Boards were conducted and addressed Australian Defence Force policy, environment, heritage and operational considerations.

69. The selected siting locations for all project elements are consistent with the particular area Zone and Precinct Plan.

SITE DESCRIPTION

70. All project elements are located within the boundaries of Commonwealth owned and Defence controlled land. The locations for the project elements are on a mix of greenfield sites and previously developed land.

ZONING AND APPROVALS

71. All works referred to in this evidence are, or would be constructed within the designated boundaries of Commonwealth land. The Defence Bases are designated 'Defence Special Purposes'. No civilian authority design or construction approvals are required, although the project will seek to have the works comply with the relevant Standards and Regulations where possible.

LAND ACQUISITION

72. Whilst this proposal does not require the acquisition of additional land, a related project is the Cultana Training Area Expansion Project. The Cultana expansion project will provide additional opportunities to site the proposed camp accommodation and urban operations training facilities for good value for money outcomes.

APPLICABLE CODES AND STANDARDS

73. Where appropriate, the design and construction of the proposed works and services will conform to the relevant sections of the applicable Building Codes and Standards including the following:

- a. Building Code of Australia;
- b. Current Australian Standards and Codes;
- c. Commonwealth and State legislation;
- d. Defence Manual of Fire Protection Engineering;
- e. Defence Facilities Communications Cabling Standard;
- f. Relevant Defence Security Publications; and
- g. Occupational health, safety and welfare legislation and the Defence Occupational Health and Safety Manual.

74. A qualified and practicing building certifier will be required to certify that the design and finished construction of the proposed facilities meet the requirements of the Building Code of Australia, relevant Australian Standards and codes, the Defence Manual of Fire Protection Engineering and any additional State, Local Government and Defence requirements.

PLANNING AND DESIGN CONCEPTS

75. The general philosophy adopted for the design of the proposed facilities incorporates the following considerations:

- a. the provision of cost effective and utilitarian facilities of energy efficient design suitable for the climate of each site (including cyclonic conditions) and of a style compatible with the relevant base aesthetics;
- b. adoption where possible of conventional construction techniques and materials, in particular those commonly used by the construction industry in each location;
- c. the maximum use of existing infrastructure and facilities to minimise capital costs;
- d. utilisation of readily available and durable materials that combine long life while minimising maintenance;

- e. recognition of site constraints, security requirements, functional relationships to existing facilities and operational determinants; and
- f. planning, services and structure designed to accommodate flexibility.

76. For the ranges at Defence Training Areas, the general philosophy adopted for design of the proposed weapons ranges incorporates the following considerations:

- a. the provision of fit for purpose spaces that accord with Defence Range Manuals including the Manual of Land Warfare, Part 2, Infantry, Volume 6, Range Construction in a style compatible with the relevant Training Area aesthetics;
- b. the adoption of conventional earthwork techniques and materials used by the construction industry in each location;
- c. attention to standards and guidelines for earthworks including erosion management and other environmental requirements for outdoor spaces; and
- d. the maximum use of existing facilities and cleared spaces to minimise encroachment on natural vegetation.

77. The proposed designs provide a safe, efficient and pleasant workplace and also represent value for money. The designs offer good economy in relation to floor area, construction techniques, buildability and finishes, while achieving the necessary functional requirements, work flow patterns and work environment required to fulfil the function of the space.

78. The designers have considered, during the preliminary design stage, the implications and estimates of costs for designs, materials, construction techniques, finishes, equipment and energy systems which will deliver economy on a life cycle costing basis.

79. In selection of services and associated equipment, the capital costs have been balanced against forecast operational and maintenance costs. Operating costs comparisons have been undertaken during life cycle costing analysis in the design process prior to the selection of mechanical plant. Particular consideration has been given to energy efficient design solutions employing passive solar energy and water re-use initiatives.

80. The design, structure, servicing, and siting of buildings and other facilities have been determined to ensure that future expansion is possible. Each sub-element of the facility has the

capacity for future expansion. This is of particular importance in sizing and terminating in-ground services. New mechanical plants, where provided, are modular to ensure flexibility.

81. Maximum flexibility has been incorporated for the new internal office accommodation facilities. Except where the need for security or noise reduction dictates otherwise, minimum use has been made of structural internal walls or columns. In general terms, internal walls in open plan office areas are demountable partitions or workstation type to facilitate economic rearrangement. Building services are compatible with this requirement.

82. The building works and services will be fully fitted out, with all communications, light fittings, partitions, floor treatments and furniture. Facilities will incorporate building management systems, metering and other provisions to measure and monitor energy use and to allow regular energy audits. Each new facility will be connected to the Regional Utilities Management System where available for site wide utilities monitoring and management.

BUILDING DESIGN PRINCIPLES

Context and Objectives

83. There is an established character and typology of construction at each Defence Base. Buildings proposed in this project are designed to be effective in their functionality and sympathetic to the established principles of design in the locality.

Design for Climate

84. In all aspects of the design, consideration has been given to climatic issues with a view to providing climatically responsive solutions for the specific site. The following design principles have been applied during the design of all new construction and refurbishments:

- a. orientate according to avoid long façade facing east or west;
- b. protection to facades for sun shading and weatherproofing; and
- c. wall and roof materials selected to suit climate.

STRUCTURE

85. Structural design will take into account the soils and weather conditions encountered at the various locations. Proposed new facilities will generally be steel framed structures with concrete floor slabs, brick faces or equivalent external walls, and a metal roof appropriate to the

environment. Internal walls would generally be non-load bearing frames lined with plasterboard to provide for maximum flexibility in future floor layout.

MATERIALS AND FINISHES

86. Materials and finishes will be selected from those readily available locally for their functionality, durability, and low maintenance and for their ecologically sustainable design properties.

MECHANICAL SERVICES

87. The mechanical services works involve a number of systems. Air-conditioning will be provided to areas where climate and usage dictates a need. The selection of building services and associated equipment to new air-conditioned facilities will be required to achieve an economic balance between capital cost and operation and maintenance costs. Selection will be based on a life cycle costing analysis and particular consideration will be given to energy efficient design solutions employing passive solar and natural ventilation. New facilities will incorporate building management systems, metering and other provisions to measure and monitor energy use and to allow regular energy audits where practicable. Mechanical plant would incorporate a modular system to ensure flexibility.

HYDRAULIC SERVICES

88. Hydraulic services for water supply, sewerage and stormwater within each precinct or facility involve extension of infrastructure and building services to suit.

ELECTRICAL SERVICES

89. Lighting, power, lightning protection and fire detection will be provided in accordance with the relevant Australian Standards and any additional Defence requirements. Electrical infrastructure and switchboards will have modest spare capacity to allow for some future growth or demand. Fire detection systems, indication panels, emergency and exit lighting will be provided to suit the existing site systems.

CIVIL WORKS

90. None of the proposed sites for the new facilities present any particular civil engineering problems, but each will be the subject of further survey and geotechnical investigation during the design phase. The geotechnical surveys and inspections have been completed and foundation designs take into account local soil structures and weather conditions.

ACOUSTICS

91. Noise assessments have been, and will continue to be, conducted for the proposed facilities. Noise assessments completed to date have found that noise impacts could be managed within acceptable limits and should not adversely affect the surrounding environments. Externally located mechanical plant will be appropriately selected and treated to minimise noise impact on the environment within a suitable internal and external noise range.

92. Acoustic performance in new facilities will comply with the following:

- a. the Building Code of Australia;
- b. the Security Manual, Defence Occupational Health and Safety Manual and the Safety Manual;
- c. Defence policy 'Management of Fixed Plant and Equipment Requiring Special Licenses within Infrastructure Division';
- d. Worksafe National Standard for Occupational Noise (NOHSC:1007(2000));
- e. National Code of Practice for Noise Management and Protection of Hearing at Work (NOHSC:2009 (2000));
- f. Environment Protection Policy (Noise) 1997;
- g. Environmental Protection Authority; and
- h. Australian Standard AS2021; Australian Standard AS2107.

93. The steady noise level in an occupied room generated by all components of the air conditioning and ventilation plant shall not exceed the maximum levels recommended by Australian Standard 2107. Short term noise intrusion into occupied spaces from occasional but regular sources shall not exceed a noise level 5 dB below the maximum level recommended in Australian Standard 2107 for the particular area. Vibration isolation of mechanical plant and equipment will limit vibration levels in the building to comply with the recommended vibration levels as set out in Australian Standard 2670.2 and Australian Standard 2763 and any additional Defence requirements.

94. The external building fabric will restrict noise transmission ingress as per the relevant Australian Standards for road traffic noise and externally located building services plant.

WATER AND ENERGY CONSERVATION MEASURES

95. The Commonwealth is committed to Ecologically Sustainable Development and the reduction of greenhouse gas emissions. Defence reports annually to Parliament on its energy management performance and on its progress in meeting the energy efficiency targets established by the government as part of its commitment to improve Ecologically Sustainable Development. Defence also implements policies and strategies in energy, water and waste to improve natural resource efficiency and to support its commitment in the reduction of energy consumption, potable water consumption and waste diversion to landfill. This project has addressed this policy by adopting cost effective Ecologically Sustainable Development as a key objective in the design development and delivery of new facilities.

96. The ecologically sustainable development targets and measures for the project have been balanced with other requirements for Defence buildings (e.g. security, heritage considerations, Occupation Health and Safety) to ensure that, first and foremost, Defence's operational capability is not compromised.

97. All buildings included in this project will be designed, constructed, operated and maintained to ensure that they use energy efficiently. To achieve this, as a minimum, the buildings will comply with:

- a. Part I.2 and Section J of Volume One of the Building Code of Australia;
- b. Part 3.12 of Volume Two of the Building Code of Australia;
- c. The Energy Efficiency in Government Operations (EEGO) policy; and
- d. Defence Green Building Requirements Part 1

as applicable to the classification of each building.

98. All buildings will comply with the relevant energy efficiency provisions in the Building Code of Australia, except where there are energy efficiency requirements imposed by Defence that are of a higher standard. In this project, each building is subject to the higher standards of the Defence Green Building Requirements Part 1 which requires a 20% improvement on the Building Code of Australia minimum energy efficiency performance requirements.

99. Defence has adopted the principles of the Energy Efficiency in Government Operations policy in relation to office accommodation. For those office buildings that have a floor area of greater than 2000 m², and that comprise less than 100% of the total building area, the whole building will target 4.5 stars using the National Australian Built Environment Ratings System (NABERS) Energy for Offices as required by Defence Green Building policy.

100. For all other mixed-use buildings that have office floor area of less than 2000m², separate digital on market status metering will be installed and office lighting will not exceed 10 W/m². Where available, fit for purpose and cost-effective appliances will be United States Environmental Protection Agency 'Energy Star' compliant with power management features enabled at the time of supply.

101. Each new building will be modelled to determine the predicted energy consumption and design targets will be determined for each building, depending on the building classification. Energy management is a key aspect in the design of the new facilities and the initiatives which will be included are:

- a. orientating the buildings to minimise east and west solar gain;
- b. installing a Building Management System in each building, linked to the site wide Regional Utilities Management System where available;
- c. in-building load control devices such as motion sensors where practical;
- d. natural ventilation and mixed mode systems wherever feasible and cost effective;
- e. installation of ceiling fans in selected areas to enhance comfort without the use of air conditioning;
- f. separate digital energy metering for tenanted areas, central services and computer (data) centres;
- g. energy efficient lighting (T5 fluorescent light fittings in office areas) supplemented by energy efficiency techniques such as occupancy sensing and after-hours automatic shut-off controls; and
- h. energy efficient appliances.

102. Efficient water use is a key aspect of the design. Key water saving measures will include where practical:

- a. all tap ware and fittings compliant with the Water Efficiency Labelling Standards scheme to provide a minimum of a 3 Star water conservation rating;
- b. pressure limiting valves to limit pressure at all appliances;
- c. provision for separate internal and external reticulation of cold water to all toilets and urinal flushing for future connection to non-potable water supply infrastructure;
- d. sub-metering of all major water supplies to each new building; and
- e. rainwater harvesting from roof areas complete with storage tanks and pressure pumping to supply localised landscaping, wash down areas and toilet flushing.

103. The Australian Greenhouse Office, in the Department of the Environment and Water Resources, will be consulted with respect to these energy efficiency requirements.

MASTER PLANNING & FUTURE DEVELOPMENT

104. Each of the project elements will be constructed on sites consistent with the relevant Barracks Zone and Precinct Plans for each site location.

PROVISIONS FOR PEOPLE WITH DISABILITIES

105. Access and facilities for the disabled will be provided where necessary in accordance with the Building Code of Australia, Australian Standard AS1428 and Defence's policy 'Disabled Access and Other Facilities for Disabled Persons'. Where possible, the use of existing facilities and access has been identified and incorporated in the design.

106. Dispensations will only be sought where operational requirements are inconsistent with Building Code of Australia requirements. In particular, access for people with disabilities will be limited to a small number of buildings on the basis that the majority of facilities will be occupied by military personnel, the nature of whose occupation often precludes any disabilities.

HERITAGE ISSUES

107. Defence commissioned heritage assessments on the various sites during the initial planning of the redevelopment project as part of an Initial Environmental and Heritage Review. There are a number of Defence base where works are proposed that are on the Commonwealth Heritage list. The Bases are RAAF Base Amberley and Gallipoli Barracks, Enoggera for heritage values and Wide Bay Training Area, Greenbank Training area and Canungra for natural values.

108. The proposed works do not impact on any of the heritage values associated with the works proposed at RAAF Base Amberley or Gallipoli Barracks, Enoggera. However the project has the potential to uncover previously unknown aboriginal sites during construction especially at Greenfield sites.

109. There are Heritage Management Plans for all Commonwealth heritage listed bases and the proposed works will conform to the advice contained within the relevant base Heritage Management Plans. Appropriate management measures will be incorporated into the Construction Environmental Management Plan for each work site.

CHILDCARE PROVISIONS

110. Additional childcare facilities are being provided under this project in Enoggera. Contractual arrangements with Childcare providers will be adhered to.

FIRE PROTECTION AND SECURITY MEASURES

111. All construction and fire protection requirements will, as a minimum, be in accordance with the provisions of the Building Code of Australia, the Defence Manual of Fire Protection Engineering and all other applicable Codes and Standards. The Manual of Fire Protection Engineering details Defence fire protection policy for asset protection and building function protection.

112. In accordance with Government initiatives to improve physical security arrangements across Government Departments, advice from designated security authorities has and will continue to be incorporated in the design solutions for the proposed facilities as appropriate. A Security Threat Assessment and a Security Risk Assessment have been completed, and appropriate security protection will be provided in accordance with the Defence Security Manual and specific project requirements. The security threat assessment will be reviewed during the detailed design phase and

the facilities would be secured as appropriate to the classification level required for activities conducted.

OCCUPATIONAL HEALTH AND SAFETY MEASURES

113. The proposed facilities will comply with the requirements of the *Occupational Health and Safety Act 1991*, the Department of Defence Occupational Health and Safety Manual and relevant State Government Occupational Health and Safety legislation and operate in accordance with an approved Occupational Health and Safety Plan.

114. The Australian Government is committed to improving occupational health and safety outcomes in the building and construction industry. In accordance with Section 35(4) of the *Building and Construction Industry Improvement Act 2005 (Commonwealth)*, contractors will hold full occupational health and safety accreditation from the Office of the Federal Safety Commissioner under the Australian Government Building and Construction Occupational Health and Safety Accreditation Scheme.

115. All construction sites will be appropriately secured to prevent public access during the construction period. No special or unusual public safety risks have been identified.

LANDSCAPING

116. Landscaping works will be directed toward the restoration of areas disturbed during construction and general improvement of the built environment. Precautions will be taken to avoid compromising existing environmental sensitivities by adopting landscaping practices in keeping with local environmental conditions. Landscaping design will have regard to minimising potable water usage.

CONSULTATION WITH RELEVANT AUTHORITIES

117. A wide range of authorities have been engaged at each location, including local Councils, relevant water and energy companies. Authorities that have been, or will be, consulted are listed at Attachment 2.

IMPACT ON THE LOCAL COMMUNITY

118. The proposal will have a positive economic impact on local communities. The project will generate a significant amount of short-term employment during the construction phase through on-

site labour and construction materials fabrication and supply. Works will be delivered by a number of Head Contracts. Defence anticipates that local building sub-contractors would be employed on a large proportion of the construction works. Significant numbers of personnel are expected to be directly employed on construction activities that would also generate some off-site job opportunities from the manufacture and distribution of materials over the construction period. Another positive economic impact is expected from additional local staff hired to provide increased garrison support and comprehensive maintenance services during the facilities' operation. There will be minimal disruption of local community activities either during or post construction.

119. Construction traffic routes will be managed to minimise any disruption to the local communities during the construction period. Each of the sites is located within the base boundaries and construction activities will be managed to not cause any disruption to residents adjacent to the bases.

PROJECT COSTS

120. The estimated out-turned cost of this project is \$1,457.836 million (excluding GST). This cost estimate includes the construction costs, management and design fees, furniture, fittings and equipment, contingencies and an escalation allowance.

121. An increase in net operating costs is expected due to the construction of the new facilities and the associated increases in facilities maintenance, cleaning and utilities expenses.

PROJECT DELIVERY SYSTEM

122. The proposed delivery system is by a Managing Contractor for the works in Enoggera and by Head Contract in all the other locations. The delivery system was selected on the basis of the scope, the risk of disruption of operational activities at the Barracks and Training Areas, the value of the works and any interdependencies with other concurrent projects. A single Project Manager has been engaged to represent Defence at Enoggera to co-ordinate the works and act as Contract Administrator. Two other companies have been engaged to provide the Project Management and Contract administration on the other sites.

PROJECT SCHEDULE

123. Subject to Parliamentary clearance of the project, construction of the first elements is expected to commence in mid 2010. All major works are expected to be complete by late 2014.

ATTACHMENTS

Attachment 1	Enhanced Land Force Stage 2 Location Map
Attachment 2	Enhanced Land Force Stage 2 Facilities Project - Key Stakeholder Consultation

QUEENSLAND

Enoggera (Gallipoli Barracks)

Attachment 3	Gallipoli Barracks Site Plan
Attachment 4	8 th /9 th Battalion, Royal Australian Regiment - Precinct Site Plan
Attachment 5	8 th /9 th Battalion, Royal Australian Regiment - Site Perspective
Attachment 6	2 nd Combat Engineer Regiment - Precinct Site Plan
Attachment 7	2 nd Combat Engineer Regiment - Site Perspective
Attachment 8	7 th Combat Signal Regiment - Precinct Site Plan
Attachment 9	7 th Combat Signal Regiment - Site perspective
Attachment 10	7 th Combat Services Support Battalion - Precinct Site Plan
Attachment 11	7 th Combat Services Support Battalion - Site Perspective
Attachment 12	Headquarters 1 st Division and 1 st Intelligence Battalion - Precinct Site Plan
Attachment 13	Headquarters 1 st Division and 1 st Intelligence Battalion -Site Perspective
Attachment 14	Close Training Area, Mission Rehearsal Exercise, Battle Simulator Centre and Explosive Hazards Centre - Precinct Site Plan
Attachment 15	Close Training Area, Mission Rehearsal Exercise, Battle Simulator Centre and Explosive Hazards Centre - Site perspective
Attachment 16	Warrant Officer and Non Commissioned Officer Academy - Precinct Site Plan
Attachment 17	Warrant Officer and Non Commissioned Officer Academy - Site Perspective
Attachment 18	Defence Support - Precinct Site Plan
Attachment 19	Defence Support - Site Perspective
Attachment 20	Physical Training Centre – Precinct Site Plan
Attachment 21	Physical Training Centre – Site Perspective
Attachment 22	Childcare Centre Facility – Precinct Site Plan
Attachment 23	Northern Carpark Facility - Plan

Townsville

Attachment 24	Lavarack Barracks – 3 rd Combat Services Support Battalion Warehouse - Plan
Attachment 25	Lavarack Barracks – Combat Training Centre Logistics - Plan
Attachment 26	Lavarack Barracks – Combat Training Centre Headquarters - Plan
Attachment 27	Lavarack Barracks – Warrant Officer and Non-Commissioned Officer Academy - Plan
Attachment 28	Lavarack Barracks – Warrant Officer and Non-Commissioned Officer Academy Trainee Living-in Accommodation - Plan

Amberley

- Attachment 29 RAAF Base Amberley - Headquarters 6th Engineer Support Regiment – Precinct Site Plan
- Attachment 30 RAAF Base Amberley - Headquarters 6th Engineer Support Regiment – Plan

Wide Bay Training Area

- Attachment 31 Location Plan
- Attachment 32 Special Weapons Range – Site Perspective
- Attachment 33 Assault Grenade Range - Site Perspective
- Attachment 34 Marksmanship Training Range (Type A) - Site Perspective
- Attachment 35 Permanent Camp Accommodation – Precinct Site Plan
- Attachment 36 Permanent Camp Accommodation – Site Perspective
- Attachment 37 Camp Accommodation Block – Plan and Building Perspective

Greenbank Training Area

- Attachment 38 Location Plan
- Attachment 39 Safe Driver Training Area - Precinct Site Plan
- Attachment 40 Urban Operations Training Facility – Site Perspective
- Attachment 41 Range Entrance, Range Control and Vehicle Wash Point - Precinct Site Plan
- Attachment 42 Range Control Facility – Site Perspective
- Attachment 43 25th/49th Battalion, Royal Queensland Regiment – Precinct Site Plan
- Attachment 44 25th/49th Battalion, Royal Queensland Regiment and Permanent Camp Accommodation – Site Perspectives

Canungra

- Attachment 45 Location Plan
- Attachment 46 Permanent Camp Accommodation and Battle Simulation Centre– Site Perspective
- Attachment 47 Trainee Living-In Accommodation and Physical Training Centre – Precinct Site Plan

NEW SOUTH WALES**Singleton**

- Attachment 48 School of Infantry – Location Plan
- Attachment 49 School of Infantry - Headquarters - Precinct Site Plan
- Attachment 50 School of Infantry - Headquarters – Site Perspective
- Attachment 51 School of Infantry – Permanent Living In Accommodation - Plan
- Attachment 52 School of Infantry – Permanent Living In Accommodation – Site Perspective
- Attachment 53 School of Infantry - Battle Simulation Centre – Precinct Site Plan
- Attachment 54 School of Infantry - Battle Simulation Centre – Site Perspective
- Attachment 55 School of Infantry - Weapon Repair Facility –Plan
- Attachment 56 School of Infantry – Museum and Pass Office - Precinct Site Plan
- Attachment 57 School of Infantry - Museum – Plan
- Attachment 58 School of Infantry - Museum – Site Perspective

Attachment 59	School of Infantry - Pass Office – Site Perspective
Attachment 60	Singleton Training Area - Range Works – Site Plan
Attachment 61	Singleton Training Area - Urban Operations Training Facilities – Precinct Plan
Attachment 62	Singleton Training Area - Urban Operations Training Facilities Works – Site Perspective

Garden Island

Attachment 63	Primary Casualty Reception Facility –Extension to Building 921 - Site Plan
---------------	--

Balmoral

Attachment 64	HMAS Penguin - Primary Casualty Reception Facility – Refurbished Building 26 - Floor Plan
Attachment 65	HMAS Penguin - Primary Casualty Reception Facility – Refurbished Building 8 - Floor Plan

AUTRALIAN CAPITAL TERRITORY

Attachment 66	Royal Military College, Duntroon - Cadet Accommodation - Precinct Site Plan
Attachment 67	Royal Military College, Duntroon - Cadet Accommodation - Site Perspective
Attachment 68	Majura Training Area – Permanent Camp Accommodation - Precinct Site Plan
Attachment 69	Majura Training Area – Permanent Camp Accommodation - Site Perspective

VICTORIA

Watsonia

Attachment 70	Simpson Barracks – Defence Force School of Signals – Technical Training Wing – Precinct Site Plan
Attachment 71	Simpson Barracks – Defence Force School of Signals – Technical Training Wing – Indicative Floor Plan

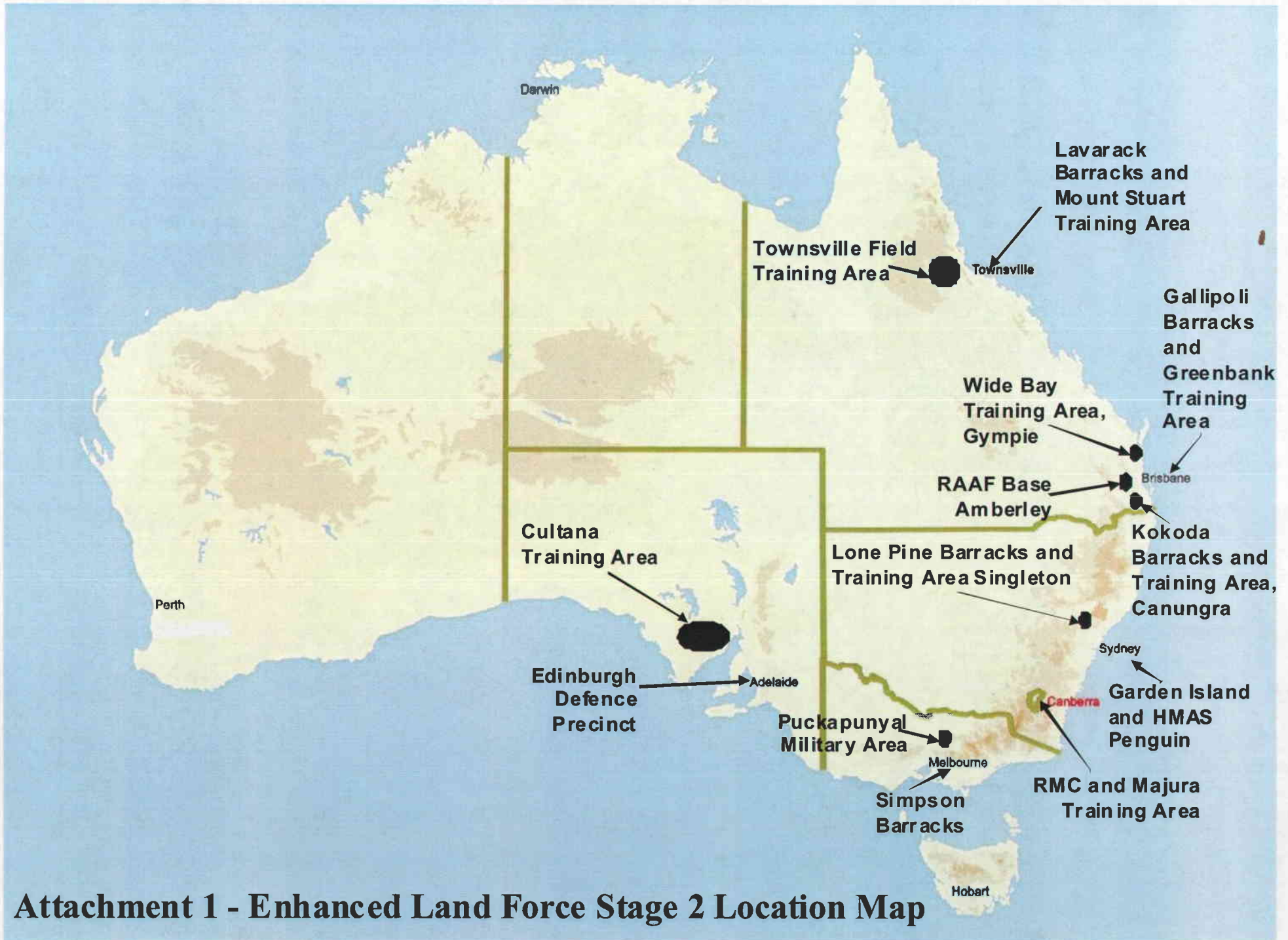
SOUTH AUSTRALIA

RAAF Base Edinburgh

Attachment 72	Warrant Officer and Non-Commissioned Officer Academy - Site Plan
---------------	--

Cultana

Attachment 73	Cultana Training Area – Permanent Camp Accommodation – Location Plan
Attachment 74	Cultana Training Area – Permanent Camp Accommodation – Precinct Site Plan



Attachment 1 - Enhanced Land Force Stage 2 Location Map

Enhanced Land Force Stage 2 Facilities Project - Key Stakeholder Consultations

Base/Location	Position/Role	Organisation
Lavarack Barracks, Townsville	Federal Member for Herbert	Parliament House of Australia
	State Member for Mundingburra	Parliament House of Queensland
	State Member for Thuringowa	Parliament House of Queensland
	State Speaker of the House	Parliament House of Queensland
	State Member for Burdekin	Parliament House of Queensland
	Mayor of Townsville	Independent
	Regional Executive Director	Queensland Education Department
	Regional Director	Defence Housing Authority
	President	Townsville Chamber of Commerce
	CEO	Townsville Enterprise Limited
	CEO	Townsville City Council
	Principal Engineer, Corridor Planning and Development	Queensland Department of Main Roads
	Manager, Infrastructure Planning, Water and Wastewater Business Unit	Townsville City Council
	Senior Technical Officer, Infrastructure Planning, Water and Wastewater Business Unit	Townsville City Council
	Manager, Network Connection	Ergon Energy
RAAF Base Amberley, Ipswich	Federal Member for Blair	Parliament House of Australia
	State member for Ipswich West	Parliament House of Queensland
	Deputy Mayor	Ipswich City Council
	A/District Director (Ipswich)	Dept of Main Roads Queensland
	Project Manager	Energex
	Manager Project Services	Ipswich Water
	Director	Australian Koala Foundation
Gallipoli Barracks, Enoggera	Federal Member for Brisbane	Parliament House of Australia
	State Member for Ashgrove	Parliament House of Queensland
	Divisional Manager City Planning & Sustainability	Brisbane City Council
	Local Member for Enoggera	Brisbane City Council
	Principal Engineer (Transport Planning) Network Planning and Corridor Management	Department of Transport and Main Roads
	Asset Manager Metro South	Energex
Wide Bay Training Area	Federal Member for Wide Bay	Parliament House of Australia
	State Member for Gympie	Parliament House of Queensland
	CEO	Gympie Regional Council
	Project Manager	Energex
	Traffic Engineer	Queensland Department of Transport and Main Roads
Greenbank Training Area	Federal Member for Rankin	Parliament House of Australia

Base/Location	Position/Role	Organisation
	State Member for Algester	Parliament House of Queensland
	Traffic Engineer	Queensland Department of Transport and Main Roads
	Principal Advisor (Corridor Studies)	Queensland Rail Queensland Department of Transport and Main Roads
	CEO	Logan City Council
	Project Manager	Energex
	Traffic Engineer	QLD Dept of Main Roads
Canungra	Federal Member for Forde	Parliament House of Australia
	State Member for Beaudesert	Parliament House of Queensland
Lone Pine Barracks, Singleton	Federal Member for Hunter	Parliament House of Australia
	State Member for Upper Hunter	Parliament House of NSW
Hon. George Souris	Member for Upper Hunter	The Nationals
Ms Belinda Charlton	General Manager (Acting)	Singleton Council
Mrs Karen Howard	President	Hunter Business Chamber
Mr Boris Novak	Defence Industry Committee (Chair)	Hunter Business Chamber
Mr Jeff Burgmann	Utilities Coordinator (water & sewer services)	Singleton Council
Mr Gary Perrin	Senior Site Inspector / Supervisor	Singleton Council
Mr Ian Hall	Manager for Planning and Negotiation – Upper Hunter	Energy Australia
Mr Steve Jarman	Network Designer, Access Network Design Network & Construction Design – TN&S	Telstra Corporation Limited
Mr Tim Fox	Zone Commander, Western Zone	NSW Fire Brigade
Mrs Jane Healey	Acting HMC Manager	Defence Housing Australia
	Mayor	Singleton Shire Council
	General Manager (Acting)	Singleton Shire Council
	President	Hunter Business Chamber
	Chairman Defence Industry Committee	Hunter Business Chamber
	Utilities Coordinator (Water and Sewer Services)	Singleton Shire Council
	Senior Site Inspector/Surveyor	Singleton Shire Council
	Manager for Planning and Negotiation – Upper Hunter	Energy Australia
	Network Designer	Telstra Corporation Limited
	Zone Commander, Western Zone	NSW Fire Brigade
	Regional Manager	Defence Housing Authority
Royal Military College, Canberra	National Capital Authority	National Capital Authority
Watsonia		

Base/Location	Position/Role	Organisation
Puckapunyal	Federal Member for McEwan	Parliament House of Australia
	State Member for Seymour	Parliament House of Victoria
	Mayor	City of Seymour
	Planning and Development Manager	Mitchell Shire Council
	Regional Fire Chief	The Country Fire Authority, Victoria
	Manager	SP Ausnet Limited (Powercor)
	Regional Manager	Defence Housing Authority
RAAF Base Edinburgh, Adelaide	Federal Member for Wakefield	Parliament House of Australia
	State Member for Taylor	Parliament House of South Australia
	Mayor	City of Salisbury
	Mayor	City of Playford
	Director Strategic Planning	City of Salisbury
	Business Development Manager	Network Group, ETSA Utilities
	Head of Planning and Infrastructure	SA Water
Cultana	Federal Member for Grey	Parliament House of Australia
	State Member for Stuart	Parliament House of South Australia
	CEO	Port Augusta Shire Council
	Project Manager	Electricity trust of South Australia