



**TACTICAL UNMANNED AERIAL
VEHICLE FACILITIES PROJECT**

GALLIPOLI BARRACKS, ENOGGERA QLD

**STATEMENT OF EVIDENCE
TO THE
PARLIAMENTARY STANDING COMMITTEE
ON PUBLIC WORKS**

**DEPARTMENT OF DEFENCE
CANBERRA, ACT
March 2006**

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TACTICAL UNMANNED AERIAL VEHICLE (TUAV) FACILITIES GALLIPOLI BARRACKS, ENOGGERA, QLD.

PART A - JUSTIFICATION

INTRODUCTION

Background

1. This evidence to the Parliamentary Standing Committee on Public Works presents a proposal for the refurbishment, re-use and construction of facilities to support the introduction of the Tactical Unmanned Aerial Vehicle (TUAV) capability and the establishment of the 20th Surveillance and Target Acquisition Regiment at Gallipoli Barracks, Enoggera, Queensland. A Location Plan is at Attachment 1 and a Base Site Plan at Attachment 2.
2. The Department of Defence is acquiring a TUAV system to enhance the reconnaissance and surveillance capabilities of deployed land forces, by overcoming the limitations of mobility, terrain and range experienced by current capabilities. The system will fill capability gaps identified in Army's current Intelligence, Surveillance, Target Acquisition and Reconnaissance capability.
3. A new Army regiment, 20th Surveillance and Target Acquisition Regiment will operate the TUAVs at Gallipoli Barracks, Enoggera, in Queensland. Under a new Regimental Headquarters element, the Regiment will combine the existing capabilities of the 131st Surveillance and Target Acquisition Battery, with a new Unmanned Aerial Vehicle Battery, to be known as the 132nd Unmanned Aerial Vehicle Battery, and a Combat Service Support Battery.
4. Gallipoli Barracks is the most significant Army barracks in South-East Queensland. The land on which the Gallipoli Barracks is situated was purchased in 1908 for the establishment and training of defence units and to provide for rifle range facilities. Development during the period 1910-1921 included the construction of a rifle range, ordnance facilities, a school of musketry, artillery facilities, a hospital, an ammunition depot, a depot for remount horses and camp facilities for citizen forces. During the 1950s, facilities were provided for an infantry battalion and a construction

squadron. An area transport company, supply depot, trade training centre and personnel depot were constructed in 1962. A regular Army task force was located at Enoggera in the 1960s. A major development program, the Enoggera Redevelopment Stage 1 project, was carried out in 1965-67 and a further major development program, Enoggera Redevelopment Stage 2 project, commenced in 1979 and was completed in 1981. The current role of Gallipoli Barracks is to provide a base for 7th Brigade, the Deployable Joint Force Headquarters, associated full time and Reserve land forces and training and logistic units. Gallipoli Barracks accommodates over 2,600 regular uniformed personnel, 3,000 Reservists and more than 200 civilian and contract personnel.

OBJECTIVES

5. The Australian Defence Force (ADF) will acquire TUAVs tailored for local area surveillance that will enhance the ADF aerial surveillance capabilities for land operations and selected maritime operations. The capability is planned for introduction into service from 2008
6. The system will consist of four air-vehicles fitted with sensor payloads, a ground segment to provide control and exploitation functions, and elements for maintenance and logistics support. The first TUAVs are expected to be in operational service in 2008.
7. 20th Surveillance and Target Acquisition Regiment will operate the TUAVs. The facilities required for the air-vehicles are to be located at Gallipoli Barracks and are the subject of this proposal.

Date for Completion

8. Subject to Parliamentary clearance of this project, construction will commence in late 2006, with completion by October 2007.

THE PROPOSAL

9. The TUAV project will involve:
 - a. the construction of three new purpose-built buildings and the refurbishment of one existing building to support the introduction and operation of the new Tactical Unmanned Aerial Vehicles;

- b. the refurbishment of eleven existing buildings and construction of one new building to support the establishment of 20th Surveillance and Target Acquisition Regiment, including the existing 131st Surveillance and Target Acquisition Battery; and
- c. the refurbishment and extension of ten existing facilities to support the 25th/49th Battalion Royal Queensland Regiment.

Location

10. The proposals outlined in this evidence are confined to Gallipoli Barracks, which is located in Enoggera approximately seven kilometres from Brisbane's Central Business District.

Benefits of Expected Improvements

11. The proposal provides facilities to meet the Army's requirement to support the introduction of the TUAV capability and the establishment of 20th Surveillance and Target Acquisition Regiment.

12. The re-allocation of facilities between the 25th/49th Battalion Royal Queensland Regiment and the 131st Surveillance and Target Acquisition Regiment will result in a more effective utilisation of the existing facilities at Gallipoli Barracks.

COSTS

Cost Estimate

13. The estimated outturn cost of the TUAV project is \$17.45 million excluding GST. The cost estimate includes construction costs with fit out, professional fees, furniture and fittings, information technology equipment and a contingency sum.

Expected Savings

14. While this proposal will result in better utilisation of the existing facilities at Gallipoli Barracks, there will be a small increase in operating costs. This increase is expected due to the energy, maintenance and garrison support costs for the new TUAV buildings. These increased costs will outweigh the savings expected from reduced maintenance and energy costs for the existing buildings identified for refurbishment in the project.

OPTIONS

15. The aim of this proposal is to provide facilities to support the introduction of the new TUAV capability and the establishment of 20th Surveillance and Target Acquisition Regiment. Collocation of the TUAV capability with 20th Surveillance and Target Acquisition Regiment at Gallipoli Barracks provides a range of operational benefits. Construction of all new facilities on a greenfield site was considered during planning. This proposal, by re-allocating facilities to 20th Surveillance and Target Acquisition Regiment and the 25th/49th Battalion Royal Queensland Regiment, supplemented with some refurbishment and the construction of a small number of purpose-built facilities offers significantly better value for money for the Commonwealth. In this proposal, new construction will be limited to providing purpose-built facilities for the TUAV maintenance and training requirement and the Regiment's radar storage requirements, as there are no existing Defence facilities suitable for re-use for these functions.

ECONOMIC, ENVIRONMENTAL, AND SOCIAL IMPACTS

Economic Impacts

16. This proposal will not produce revenue. Up to fifty personnel are expected to be directly employed on construction activities. The project will also generate some off-site job opportunities from the manufacture and distribution of materials over the anticipated construction period of some ten to twelve months. It is anticipated that local Brisbane building subcontractors would be employed on a large proportion of the construction works.

Environmental Impacts

17. Defence's Environment Heritage and Risk Branch has determined that the works in this proposal are unlikely to have a significant impact on the environment and that the project does not require referral to the Department of the Environment and Heritage under the Environment Protection and Biodiversity Conservation Act 1999.

18. As a contractual obligation, the Head Contractor will be required to develop a Construction Environmental Management Plan covering all the proposed works. Based on this plan, a Defence Environmental Certificate of Compliance will be submitted for approval before the commencement of construction, in accordance with Defence's

Environmental Management Policy. The procedures contained in the Construction Environmental Management Plan will be regularly audited by Defence's Project Manager.

Heritage Impacts

19. Defence Heritage Management has advised that although there are areas of significant heritage value at Gallipoli Barracks, none are located at, or around, the proposed development sites for this project.

Social Impacts

20. This project will have minimal impact on the local community either during or post construction. During the construction phase, some employment opportunities may become available for local tradespeople. There would be little noticeable difference in day-to-day activities at Gallipoli Barracks. The TUAVs will not be flown from Gallipoli Barracks, but will use existing Defence training areas.

LONGER TERM PLANNING

21. The redevelopment of Gallipoli Barracks is included in Defence's unapproved Major Capital Facilities program for consideration later this decade. The redevelopment will address working accommodation, messing rationalisation and the engineering services infrastructure.

22. The Single Living Environment and Accommodation Precinct (Single LEAP) project is a separate initiative to improve living-in accommodation across Defence. Living-in accommodation at Gallipoli Barracks will be investigated as part of Phase 1 of this project, which is scheduled for presentation to the Committee this year.

CONSULTATION

23. Discussions have been held, or are planned to be held, with the Brisbane City Council and the Federal Member for Brisbane.

PART B – TECHNICAL INFORMATION

Scope of Works

24. This project proposes the re-allocation of existing facilities between the 131st Surveillance and Target Acquisition Battery and the 25th/49th Battalion Royal Queensland Regiment, supplemented with some new construction and extensive refurbishment. A detailed description of the proposal for each precinct is in the following sections.

20th Surveillance and Target Acquisition Regiment Precinct

25. **Overview.** The project proposes maximum re-use of existing facilities in the current 25th/49th Battalion Royal Queensland Regiment precinct, with limited work proposed to the existing facilities to accommodate the incoming 20th Surveillance and Target Acquisition Regiment. New facilities are proposed to accommodate the specialised TUAV working, training, maintenance and storage requirements. A new purpose-built facility is planned for the storage of the existing truck mounted radars. A site plan for the 20th Surveillance and Target Acquisition Regiment precinct is at Attachment 3. Floor plans and elevations of the new facilities are at Attachments 4-7.

26. Details of the scope of work proposed for each building in the precinct is as follows:

- a. **Buildings Q21, Q24, Q25, J50 and Q73.** Limited work is proposed in these five buildings. No significant changes to the floors plates are proposed. The Quartermaster stores in Buildings Q24 and Q25 will be converted to open plan office accommodation. Floor coverings, ventilation, windows and internal wall cladding will be provided to Building Q73 to accommodate the existing regimental gymnasium equipment. Minor security upgrades to the buildings are proposed. Limited electrical and communications work is planned for the refurbished open plan office areas.
- b. **Building Q72 – Regimental Headquarters.** Limited work is proposed in this building and no significant changes to the floors plates are proposed. Installation of additional communications infrastructure is planned to extend the data network in this building. A minor reconfiguration of the communications

room is planned to meet current Defence Security and Communications standards. The existing Quartermaster store will be converted to open plan office accommodation and air-conditioning will be installed to this room. Minor security and electrical upgrade work is planned.

- c. **Building Q69 – Vehicle Workshop.** A minor reconfiguration of existing office accommodation is proposed, including the installation of additional air-conditioning to the office spaces. Existing space will be converted for use as a generator workshop and a electronic workshop, to support the Regiment’s maintenance requirements.
- d. **Building Q26 – TUAV Contractor Warehouse.** A minor extension to the northern end of the existing building is proposed for a new battery store. The remainder of the building will be used for warehousing space for the Prime TUAV Equipment Contractor.
- e. **Building Q70 – Quartermaster Store.** The southern end of this building will be enclosed with weld-mesh walls to provide additional secure storage. Reconfiguration of existing wire caging is planned to improve the internal storage space.
- f. **Building Q27.** This building is proposed for demolition, to clear the site for the new TUAV Facility.
- g. **Building Q112 - New TUAV Facility.** A new purpose-built facility will be constructed to house:
 - i. the TUAV workshop and working accommodation for maintenance staff;
 - ii. TUAV storage, including storage of the air-vehicles and repair parts stores and breakdown spares;
 - iii. TUAV training, including technical training, simulation and syndicate rooms and working accommodation for training staff;
 - iv. the Systems Program Office working accommodation for contractor and Defence staff;

- v. working accommodation for 132nd Tactical Unmanned Aerial Vehicle Battery A-troop and B-troop personnel;
 - vi. the TUAV Systems Integration Lab; and
 - vii. the Deeper Maintenance workshops.
- h. **Building Q109 – Secure Vehicle Garages.** A new secure, enclosed, drive through garage to house the Ground Control Stations, Ground Data Terminals and TUAV Launchers will be constructed.
 - i. **Building Q110 - New Radar Store.** A new purpose-built four bay radar storage garage will be constructed. Each bay will be fire isolated
 - j. **Building Q111 – TUAV Engine Run-Up Area.** A new TUAV engine test area will be constructed. The area has been designed to minimise any noise impacts to the surrounding area.
 - k. **Site Infrastructure.** A new 500kVA pad mount transformer will be installed in close proximity to Building Q112, to service the new facilities. Extensive pavement works will be required around the new TUAV facilities. The existing stormwater, sewerage and water supply is adequate to meet the modest increase in loads on these services.

25th/49th Battalion Royal Queensland Regiment Precinct

27. **Overview.** The project proposes maximum re-use of existing facilities in the current 131st Surveillance and Target Acquisition Regiment lines to accommodate the 25th/49th Battalion Royal Queensland Regiment. The scope of work in this area generally consists of a refurbishment and minor extension of the existing office accommodation, training facilities and showers and amenities. New racking systems for Quartermaster stores and field store in Buildings O35, O65, O34 and O60 will be installed. Minor security improvements and asbestos removal will be undertaken across the precinct. The project proposes to construct a covered outdoor training area and install additional outdoor lighting. A site plan for the precinct is at Attachment 8. Floor plans for the most significant refurbishment works are provided at Attachments 9 and 10.

28. Details of the scope of work proposed for each building in the precinct is as follows:

- a. **Building O38 – Regimental Headquarters.** A general refurbishment of the interior and exterior of the building is proposed. Works will include replacing the floor coverings and external window louvers, removing asbestos, installing new air-conditioning, constructing a disabled access ramp and minor re-configuration of the internal layout.
- b. **Building O37 – Office and Training Accommodation, Regimental Aid Post.** A general refurbishment of the interior and exterior of the building is proposed. Works will include replacing the floor coverings and external window louvers, removing asbestos, installing new air-conditioning and constructing a disabled access ramp and amenities. The existing covered patio area to the east of the building will be enclosed and air-conditioned to provide a lecture space and two conference rooms.
- c. **Building O86 – Amenities Block.** The existing male toilet block will be extended by adding male showers, and female toilets and showers.
- d. **Building O33 – Quartermaster Store, Administration Company and Regimental Armoury.** The Quartermaster Store fit-out is generally in poor condition and not compliant with current standards. The existing mezzanine floor and shelving will be demolished, along with the existing gymnasium fit-out. The area will be reconfigured with a suitable racking/storage system sized for the Regiment's stores. The existing armoury will be enlarged significantly to cater for the Regiment's weapons holdings. New material handling equipment will be provided, which is suited for operation in the semi-confined storage space.
- e. **Building O34 – Vehicle Workshops and Offices, Field Stores.** One vehicle workshop bay is to be covered and field store cages will be installed. The building is generally in good condition and no other significant work is proposed.

- f. **Building 035 and O36.** The existing power conditioner will be decommissioned for possible re-use in the 20th Surveillance and Target Acquisition Regiment's precinct. No other significant work is proposed.
- g. **Building O60 - Q Store.** The building is generally in very good condition and the proposed work is limited to the removal of the existing internal cages, to clear the floor space for storage of bulk goods.
- h. **Building O61 - Gas Stores.** Structural repairs for the building will be completed.
- i. **Building O65 - Field Stores.** The proposed work includes removing the existing excess chain wire cages, shelving and desks and replacing the existing roller-doors, which are in poor condition.
- j. **Building O129 - Covered Training Area.** Construction of a covered training area is proposed for outdoor, night and wet weather training.

Site Planning, Selection and Description

- 29. All the proposed works are within Gallipoli Barracks. This property is Commonwealth owned and Defence controlled. This project does not require the acquisition of additional land.
- 30. This proposal aligns with the draft Master Plan for Gallipoli Barracks.

Zoning and Approvals

- 31. All the facilities proposed in this evidence are, or will be constructed, within the boundaries of Gallipoli Barracks, which is designated "Defence Special Purposes". No civilian authority design or construction approvals are required, although works will comply with the relevant Standards and Regulations.

Codes and Standards

- 32. Where appropriate, the design and construction of the proposed works and services will conform to the relevant sections of the following:
 - a. Building Code of Australia
 - b. Australian Standards and Codes;

- c. Commonwealth and State legislation;
- d. Defence Manual of Fire Protection Engineering;
- e. Defence Facilities Communications Cabling Standard; and
- f. Defence security publications.

33. A qualified and practising certifier will be required to certify that the design and the finished construction of the proposed facility meets the requirements of the Building Code of Australia, relevant Codes and Standards, the Defence Manual of Fire Protection Engineering, and any additional State, Local Government and Defence requirements.

34. The successful tenderer will be required to produce a Quality Plan. This plan will clearly show how building codes, Australian Standards, and any additional Defence requirements in relation to security, fire protection, and fire safety will be met and how the required standards will be maintained.

Provision for Disabled

35. Access and facilities for the disabled will be provided where necessary in accordance with the Building Code of Australia, Australian Standards, and the Defence's policy "Disabled Access and Other Facilities for Disabled Persons".

Occupational Health and Safety

36. The proposed facilities will comply with the requirements of the Occupational Health and Safety (CE) Act 1991, the Department of Defence Occupational Health and Safety Manual and relevant Queensland Government Occupational Health and Safety legislation, and operate in accordance with an approved Occupational Health and Safety Plan.

37. 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.

Energy Conservation Measures

38. The Commonwealth Government is committed to Ecologically Sustainable Development (ESD) 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 ESD. This project addresses this policy by adopting cost effective ESD as a key objective in the design, development, and delivery of new and refurbished facilities.

39. Preliminary design development for this project has included an analysis of energy consumption that could be anticipated from the implementation of the proposal. The energy efficiency of new buildings will be audited within twelve months of occupancy.

40. The preliminary design of the new facilities has considered and adopted the following measures to reduce energy consumption in a cost effective manner:

- a. siting buildings to make maximum use of prevailing winds and the sun for temperature control and lighting;
- b. using insulation and weatherproofing seals;
- c. using solar energy and solar hot water systems or energy efficient heat-pump technology;
- d. using energy efficient lighting and lighting control systems;
- e. using energy efficient plant and equipment;
- f. providing the capability to control energy use by zones within the facility;
- g. specification of waterless urinals and AAA water efficient fixtures; and
- h. using Building Management Systems as part of an area-wide energy management strategy.

Planning and Design

41. The designs for the new and refurbished facilities will provide a safe, efficient and pleasant workplace. 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.

42. The project's design team has 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 economies on a whole-of-life basis.

43. In selection of services and associated equipment, both the capital cost and operational and maintenance costs have been considered. Total ownership costs and comparisons have been undertaken and include a life cycle costing analysis in the product selection based on a simple payback period.

44. Maximum flexibility is required for most 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 the new facilities to allow future flexibility.

45. This project will:

- a. maximise the use of existing infrastructure to minimise capital facilities costs;
- b. adopt conventional construction techniques and materials, commonly used by the construction industry in regional Australia, with due regard given to climatic conditions; and
- c. utilise readily available and durable materials that combine long life with minimum maintenance and are sympathetic with the existing buildings, landscaping and precinct.

46. The building works and services will be fully fitted out, with all communications, light fittings, partitions, floor treatments and furniture. New facilities will incorporate building management systems, metering and other provisions to measure and monitor energy use and to allow regular energy audits.

Structural Design

47. The proposed new facilities will generally be steel portal frame structures over post-tensioned concrete floor slabs, clad external walls, and a metal roof appropriate to the environment. The structural design will provide control of cracking of concrete and incorporate structural tolerances for long term settlement. Internal walls will generally be non-load bearing frames lined with plasterboard to provide for maximum flexibility in future floor layout.

Materials and Finishes

48. 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

49. New and refurbished facilities, with the exception of vehicle garages and workshops, will generally be air-conditioned and the selection of building services and associated equipment will achieve an economic balance between capital cost and operation and maintenance costs. Selection of equipment has been based on a life cycle costing analysis. New facilities will incorporate building management systems, linked to the base regional utility management system, metering, and other provisions to measure and monitor energy use and to allow regular energy audits where practicable. Mechanical plant will have a level of spare capacity to ensure future flexibility.

Hydraulic Services

50. New facilities will be connected to the existing water and sewage infrastructure within Gallipoli Barracks.

Electrical Services

51. Lamps will be high efficiency fluorescent, compact fluorescent or discharge type and lighting would include sensor controlled lighting to intermittently occupied areas.

Fire Protection

52. The design of the fire protection systems will comply with the Defence Manual of Fire Protection Engineering.

Security

53. In accordance with Government initiatives to improve physical security arrangements in Government departments, advice from designated security authorities has been incorporated into the design solutions for the proposed facilities. The security threat assessment will be reviewed during the detailed design phase and the facilities will be secured as appropriate to the functional use. The highest security classification

for the facilities addressed in this proposal is expected to be 'Secret'. Security protection will be provided in accordance with the Defence Security Manual.

Civil Works

54. The proposed sites for new or extended facilities do not present any particular civil engineering problems, but each will be the subject of further survey and geotechnical investigation during the detailed design phase. Stormwater management will be incorporated into the existing system.

Landscaping

55. This proposal will not cause any substantial change in the essential character of existing facilities. Landscaping works would be directed towards 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.

Project Delivery System

56. A traditional Head Contract delivery system is proposed for this project. The Head Contractor form of delivery is particularly well-suited to projects where the scope is well-defined and can be constructed unhindered by operational constraints.

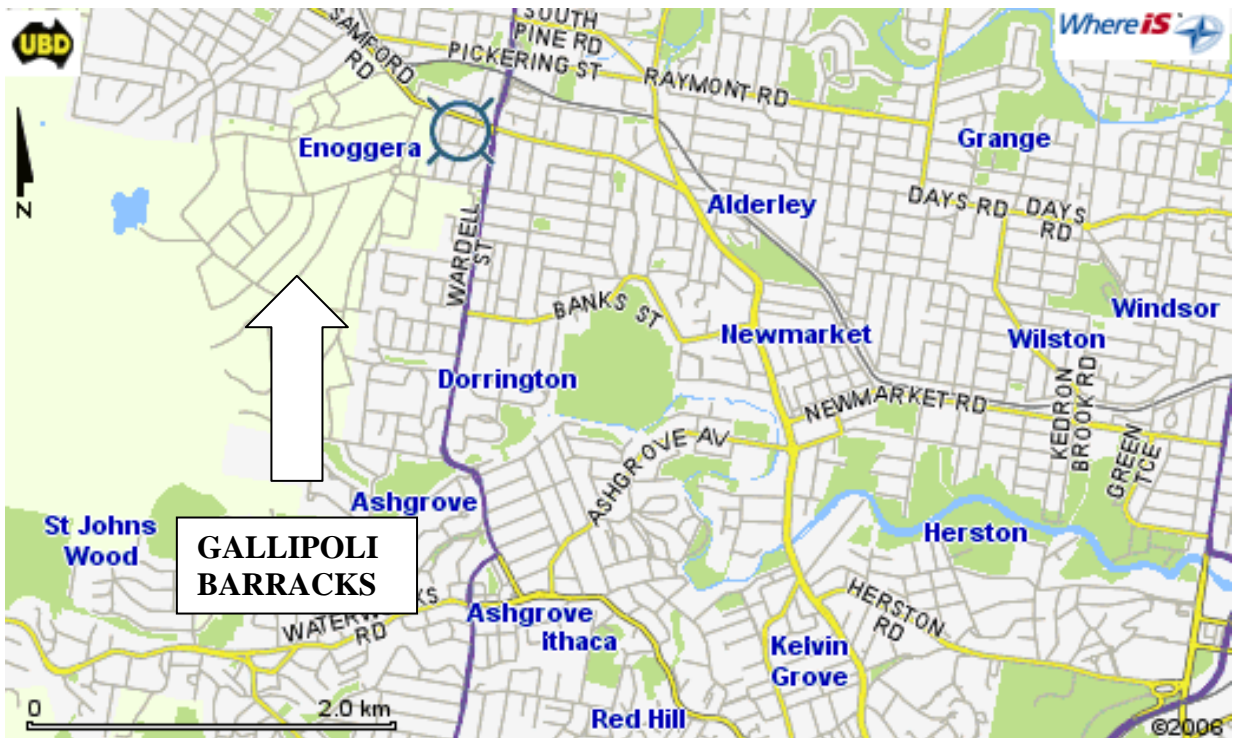
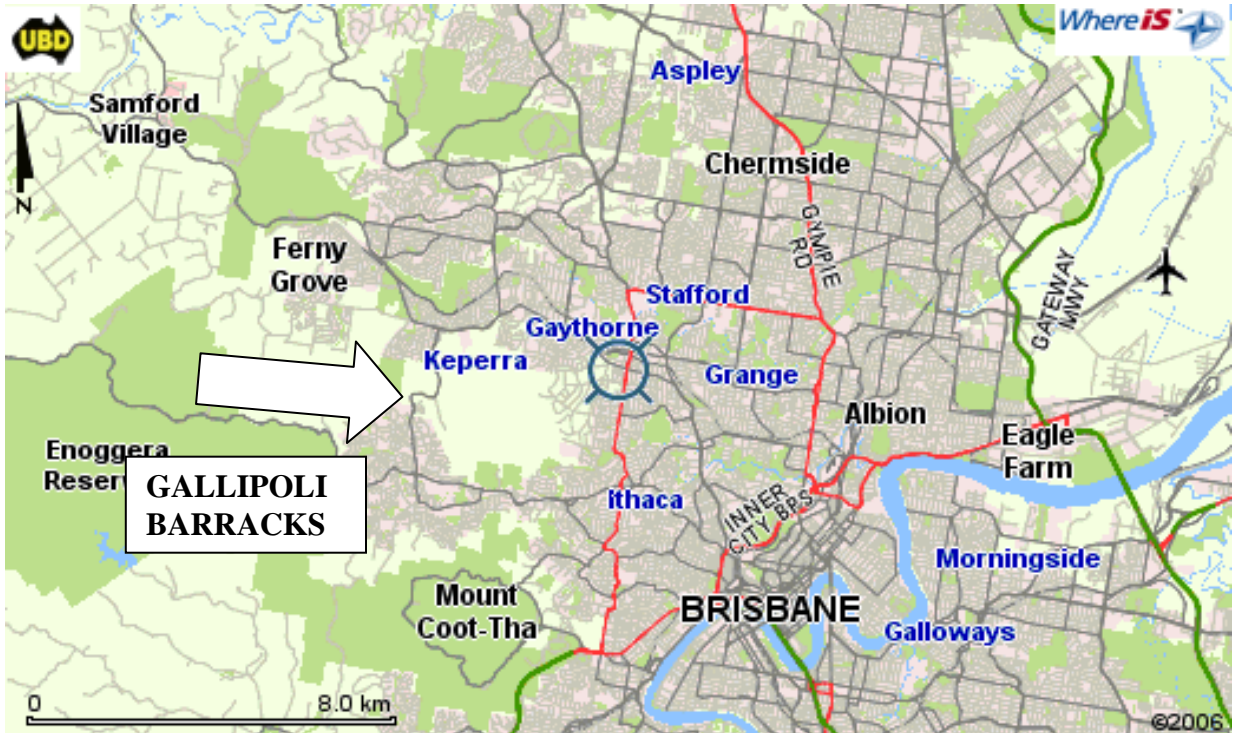
57. A Project Manager has been appointed to represent Defence and to act as Contract Administrator for the project.

Associated Drawings

58. Attachments 2-10 provides site plans and preliminary concepts for the major proposals outlined in this evidence.

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GALLIPOLI BARRACKS, ENOGGERA, QUEENSLAND

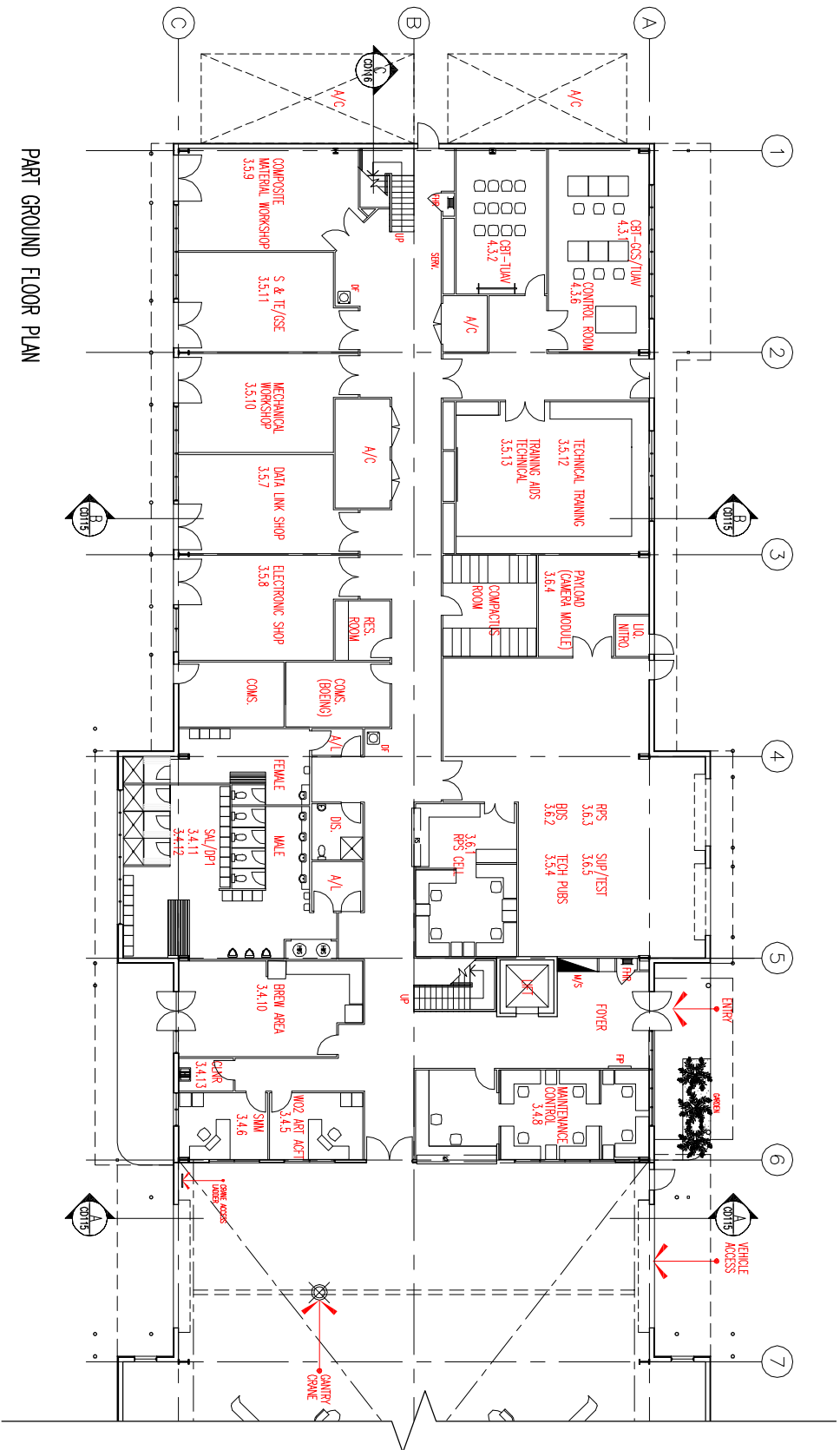
LOCATION PLAN

GALLIPOLI BARRACKS SITE PLAN



**Existing 131st
Surveillance & Target
Acquisition Battery
Facilities**

**Existing 25th / 49th
Battalion Royal
Queensland Regiment
Facilities**



PART GROUND FLOOR PLAN

TUAV FACILITIES - 20 STA
GALLIPOLI BARRACKS ENGGERA
 DEFENCE PROJECT NO A4389

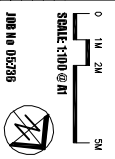
CLIENT
 PROJECT MANAGER
 DESIGN CONSULTANT



Australian Government
 Department of Defence

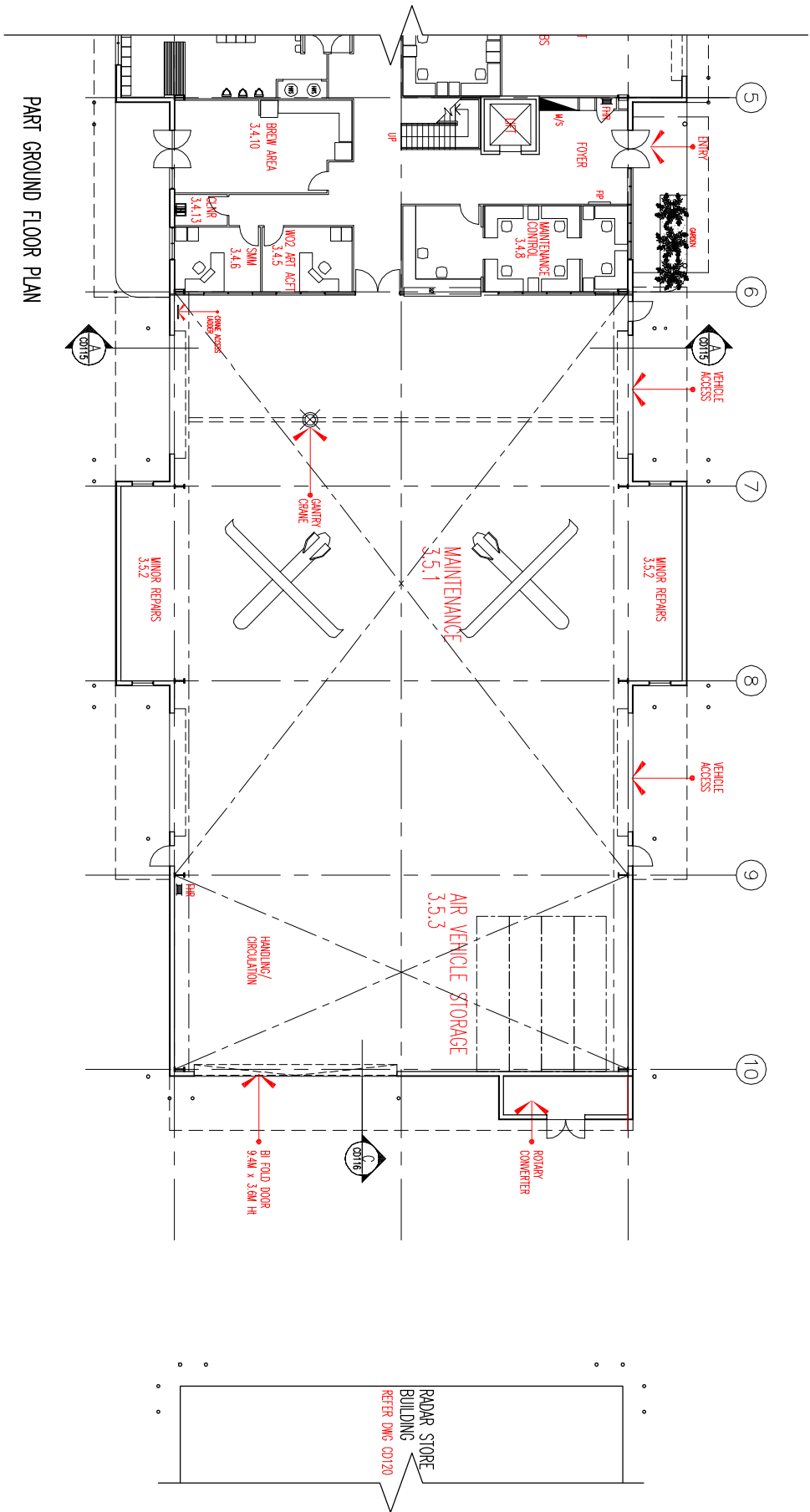
Mandrikos Wheelidon Architects
 NO. 20 ALANSON STREET, SOUTH BRISBANE, QLD, AUSTRALIA. PH: 61 7 550 98 000 FAX: 61 7 550 98 001

1	PER ISSUE	06/02/2016
2	ROOM LAYOUT REVISION	07/02/2016
3	GENERAL REVISION	26/11/2015
4	GENERAL REVISION	27/11/2015
5	GENERAL REVISION	28/11/2015



CONCEPT DESIGN
TUAV BUILDING 0112
FLOOR PLAN - PART GROUND

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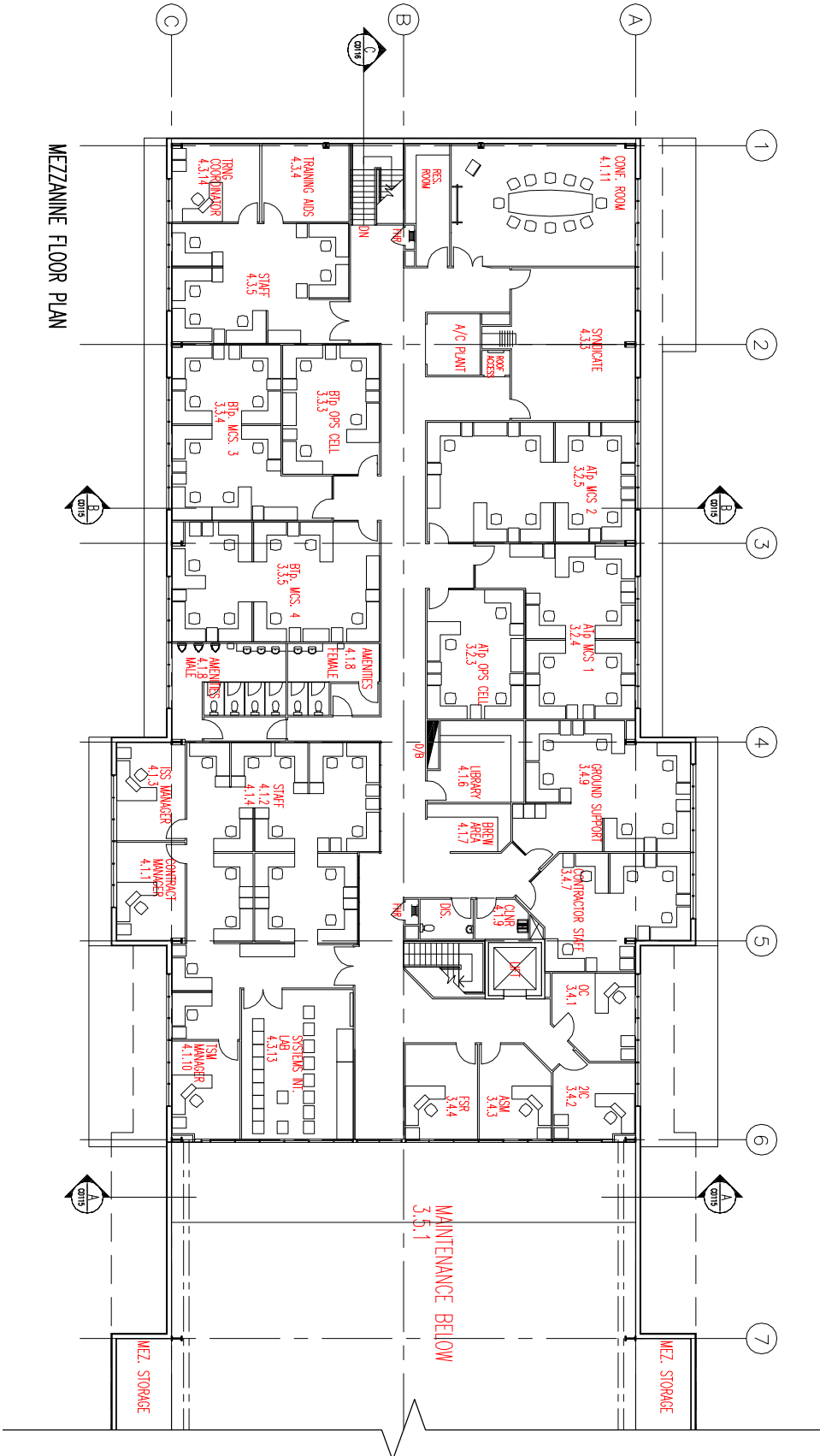


PART GROUND FLOOR PLAN

TUAV FACILITIES - 20 STA
GALLIPOLI BARRACKS ENOGGERA
 DEFENCE PROJECT NO A4389

CLIENT	Australian Government Department of Defence																					
PROJECT MANAGER																						
DESIGN CONSULTANT																						
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CONCEPT DESIGN
TUAV BUILDING 0112
FLOOR PLAN - PART GROUND



MEZZANINE FLOOR PLAN

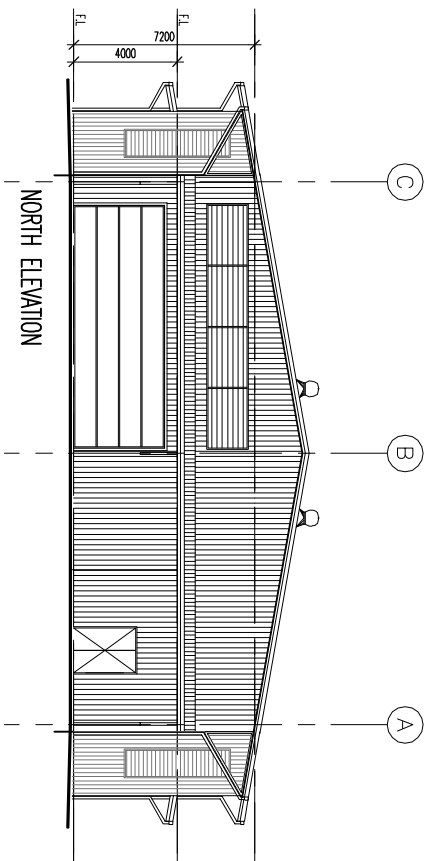
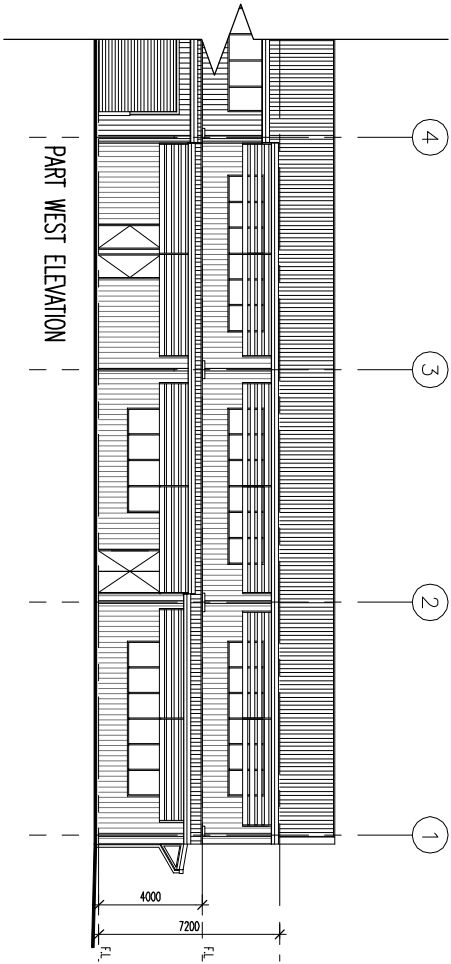
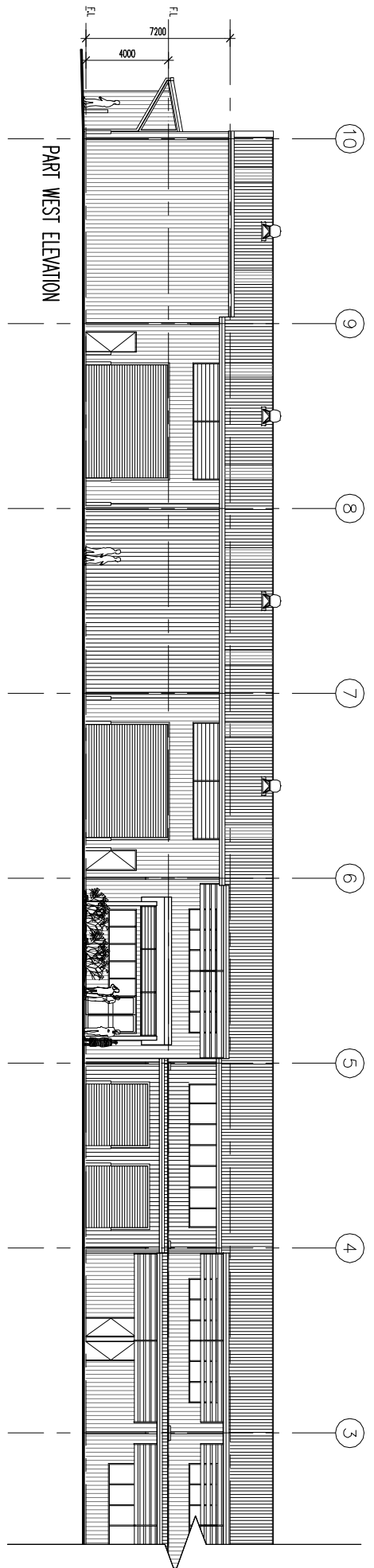
TUAV FACILITIES - 20 STA
GALLIPOLI BARRACKS ENOGGERA
 DEFENCE PROJECT NO A4389

CLIENT	Australian Government Department of Defence
PROJECT MANAGER	S&P
DESIGN CONSULTANT	Mandelikos Wheelidon Architects NO. 20 ALEXANDER STREET, SOUTH BRISBANE, QLD 4008 AUSTRALIA PH: 61 7 3860 8444
NO. 1	PRELIMINARY
NO. 2	SCHEMATIC DESIGN
NO. 3	CONCEPT DESIGN
NO. 4	DEVELOPMENT
NO. 5	CONSTRUCTION

SCALE: 1:100 @ A1
 JOB NO 05236

CONCEPT DESIGN
TUAV BUILDING 0112
FLOOR PLAN - MEZZANINE

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TUAV FACILITIES - 20 STA
GALLIPOLI BARRACKS ENOGGERA
 DEFENCE PROJECT NO A4389

CLIENT
 PROJECT MANAGER
 DESIGN CONSULTANT

Australian Government
 Department of Defence

Mandrikos Wheelodon Architects

NO 2 MANANDRIKOS STREET, 2047 THE BARRACKS, GARDIERS ARCADE, 41 SHANNON WAY, 41 SHANNON

1	PRELIMINARY DESIGN	06/02/20
2	CONCEPT DESIGN	17/07/20
3	CONCEPT DESIGN	02/12/20
4	CONCEPT DESIGN	02/12/20

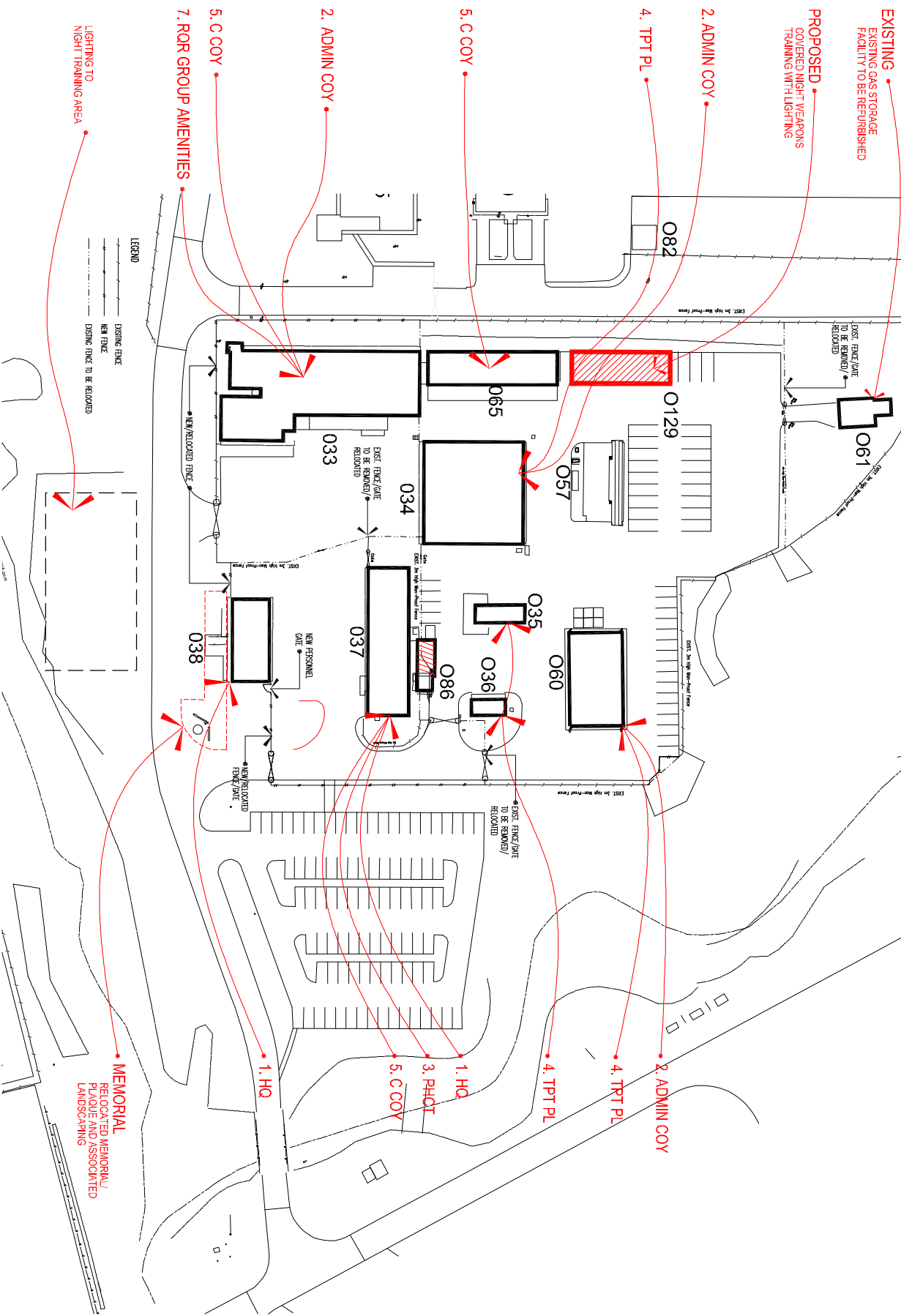
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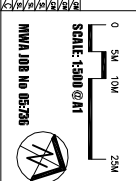
TUAV FACILITIES - 25/49 ROR
GALLIPOLI BARRACKS ENGGERA
 DEFENCE PROJECT NO A4389

CLIENT
 Australian Government
 Department of Defence

PROJECT MANAGER
 GHD

DESIGN CONSULTANT
 Mandikos Wheelton Architects

NO.	REVISION/AMENDMENT	DATE
0	GENERAL REVISION	06/03/20
1	GENERAL REVISION	06/03/20
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CONCEPT DESIGN
MASTER PLAN
25/49 PRECINCT

DRW:	GD 001	ISSUE:	G
DRWN:	DA	CHKD:	SL
DATE:	NOV/05	AUTH:	GW

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