



Australian Government

Department of Defence

**LAND 200 TRANCHE 2 BATTLEFIELD
COMMUNICATIONS SYSTEMS FACILITIES
PROJECT**

Robertson Barracks, Northern Territory
Lavarack Barracks, Queensland
Albury Wodonga Military Area, Victoria
Simpson Barracks, Victoria
Puckapunyal Military Area, Victoria
Singleton Military Area, New South Wales
RAAF Base Edinburgh, South Australia

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

August 2018

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LAND 200 TRANCHE 2 BATTLEFIELD COMMUNICATIONS SYSTEMS FACILITIES PROJECT

Need for the Project

Aim of the Project

1. The aim of the Project is to provide facilities to support the training requirements for the Battlefield Management Systems capability being introduced under the LAND 200 Tranche 2 capability.

Location of the Project

2. As shown on the Location Plan in Attachment 1, the Project proposes to deliver works at the following sites:

- a. Robertson Barracks, Darwin (NT)
- b. Lavarack Barracks, Townsville (QLD)
- c. Albury Wodonga Military Area, Bandiana (VIC)
- d. Simpson Barracks, Watsonia (VIC)
- e. Puckapunyal Military Area, Puckapunyal (VIC)
- f. Singleton Military Area, Singleton (NSW)
- g. RAAF Base Edinburgh, Edinburgh (SA).

3. Robertson Barracks, located approximately 20 km east of Darwin's Central Business District, contains the majority of Army's 1st Brigade, one of Defence's six regular brigades.

4. Lavarack Barracks, located approximately 10 km south west of Townsville's Central Business District, contains Army's 3rd Brigade, one of Defence's six regular brigades.

5. Albury Wodonga Military Area, located approximately 5 km south east of the Albury-Wodonga Central Business District, contains the Army School of Electrical and Mechanical Engineering and the Army School of Ordnance which are split across Gaza Ridge Barracks North, Gaza Ridge Barracks South and Wadsworth Barracks.
6. Simpson Barracks, located approximately 20 km north east of Melbourne's Central Business District in the city fringe suburb of Watsonia, contains the Defence Force School of Signals.
7. Puckapunyal Military Area, located approximately 140 km north of Melbourne, contains the School of Armour, the School of Artillery, Army School of Transport and the Combined Arms Training Centre.
8. Singleton Military Area, located approximately 80 km north-west of Newcastle, contains the School of Infantry within the Lone Pine Barracks.
9. RAAF Base Edinburgh, located approximately 30 km north of Adelaide, contains the Simulation Centre .

Need for the Project

10. LAND 200 is the multi-tranche program that will modernise the command and control of the Joint Land Force. The project aims to deliver new and refurbished facilities to support the training requirements for the equipment being introduced under the capability. The capability will provide modern information technology to link sensors, weapon systems, commanders and their personnel in a networked environment. This will allow personnel to access and exchange Command, Control, Situational Awareness and Targeting information regardless of the operational scenario.

11. The Tranche 1 capability delivered the first capability package to the battlegroups within one of Army's brigades, and some enabling units and platforms, driving change from analogue to digital distribution of information at the lowest level, and moving information at the tactical edge quicker, and more efficiently. The Tranche 2 capability will build on the success and learning from Tranche 1 and will transform Army training and preparedness through the incorporation of the battle management system into training and simulation.

12. This will fundamentally change the way Army makes decisions and engages in land combat by presenting the same information to all platforms, at the same time, speeding up response and decision cycles to take action. This tranche of the program will also fit out the next generation of Protected Mobility Vehicles (the Hawkei) with modern communications and battle management capabilities to support land operations. Where Tranche 2 finishes, Tranche 3 will continue the transformation by digitising the remaining Army and Air Force assets, and updating the early equipment fleet bringing commonality across the Joint Land Force.

Proposed Facilities Solution

Scope of Project Works

13. Comprehensive master planning, site investigations, stakeholder consultation, whole-of-life cost analysis, and design development was undertaken to establish the works required under the Project to address each need.

14. Three works options were developed:

- a. **Option 1.** This option considered the feasibility of providing demountable buildings to deliver the works.
- b. **Option 2.** This option considered the use of existing facilities with or without modifications to deliver the works.
- c. **Option 3.** This option considered the feasibility of providing new facilities to deliver the works.

15. **Option 1** was assessed during the early development of the Project, noting the facilities provided to support LAND 200 Tranche 1 at Gallipoli Barracks (Enoggera, QLD) are in demountable buildings. An assessment of the financial viability of demountable buildings through a whole of life analysis considered initial capital, maintenance, utility and replacement costs, and residual value at the end of 25 years. The analysis indicated that whilst the lower initial costs make this option attractive, there would be a requirement to replace the demountable within 20 years. From a financial perspective, this option is unacceptable and poses a risk to the maintenance of Army's networking capability.

16. **Option 2** assessed the availability and viability of using existing facilities as is, modified or adaptively re-used. In assessing the feasibility of this option, a number of sub-options at each site were considered, with the selection of the preferred facility assessed through multi-criteria analysis. With two exceptions, training facilities and external areas were identified in the nominated locations as suitable with minor refurbishment or modifications to meet the requirements of the Project. One exception is at Lavarack Barracks (QLD) where a facility previously used for unit medical purposes was identified as suitable following adaptive changes to the existing building. The other exception is at Singleton

Military Area (NSW) where no suitable existing facilities were available for modification or adaptive re-use.

17. **Option 3** examined the feasibility and value for money of constructing new facilities and supporting engineering infrastructure to meet the requirements of the Project. This approach was only assessed if Option 2 was considered unworkable. It has been found that two sites required significant new works. At Lavarack Barracks (QLD), the facility identified for adaptive re-use required an extension to meet the entire requirement. At Singleton Military Area (NSW), an entirely new facility is proposed to satisfy the project's requirements.

18. Defence considers that Option 2 represents the best value for money solution to the Commonwealth to address the need from a whole of life perspective, except for at Lavarack Barracks and at Singleton Military Area. This option incorporates all the user requirements and by association addresses the risks relating to the Project. For Lavarack Barracks, Option 3 has been adopted in part through the expansion of an existing facility. For Singleton Military Area, a facility suitable for Option 2 was not available and Option 3 was adopted to deliver the facilities solution.

19. The Project comprises seven elements. The proposed scope of each element is outlined in the following paragraphs.

Project Element 1 – Robertson Barracks, Darwin

20. The proposed works at Robertson Barracks will require the refurbishment of an existing training facility. A plan showing the location of the proposed works within Robertson Barracks is provided at Attachment 2.

21. The facilities requirements for 1st Brigade at Robertson Barracks will be largely met by refurbishing Building 830. These refurbishment works will provide separate offices and open plan for Commonwealth and contracted staff, a storage/printer room and a meeting room, two classrooms, a kitchen area and communication services. The Quartermaster store and ablutions will be refurbished in the nearby Buildings 828 and 829 respectively. The vehicle training will be conducted in an existing compound with bollards installed in the vehicle shelter (Building 826). Plans for the proposed works are provided at Attachment 3.

22. Existing facilities will be used to address the requirements for the workshop, external training area and car parking.

Project Element 2 – Lavarack Barracks, Townsville

23. The proposed works at Lavarack Barracks will require the adaptive re-use and extension of an existing unit medical facility. A plan showing the location of the proposed works within Lavarack Barracks is provided at [Attachment 2](#).

24. The facilities requirements for 3rd Brigade at Lavarack Barracks will be partially met by refurbishing Building G2725. These refurbishment works will provide separate offices and open plan for Commonwealth and contracted staff, a meeting room, ablutions, kitchen area and communications services. An extension to Building G2725 will contain two new classrooms, the Quartermaster store, battery storage and workshop. The external training, vehicle training and carpark areas will be conducted in vacant areas adjacent to the nearby Building G0410. Plans for the proposed works are provided at [Attachment 4](#).

Project Element 3 – Albury Wodonga Military Area

25. The Albury Wodonga Military Area is made up of a number of geographically dispersed barracks locations around the Bandiana Township. The proposed works at Albury Wodonga Military Area will require the refurbishment of existing training facilities at Gaza Ridge Barracks. A plan showing the location of the proposed works within this area is provided at [Attachment 2](#).

26. **Army School of Electrical and Mechanical Engineering.** This requirement will be met by refurbishing Building 421 at Gaza Ridge Barracks. These refurbishment works will provide one classroom, a training workshop, battery storage, administrative areas, Quartermaster store, ablutions, kitchen area and associated communications. Bollards will be provided in the vehicle training area which will re-use an existing hard standing area adjacent to Building 421. Plans for the proposed works are provided at [Attachment 5](#).

27. **Army School of Ordnance.** The facilities requirements for the Army School of Ordnance at Bandiana will be partially met by refurbishing Building 588. These

refurbishment works will provide one office, four classrooms and battery storage. Plans for the proposed works are provided at [Attachment 5](#).

28. Existing facilities will be used to address the requirements for the Army School of Ordnance for some of the administrative functions, the Quartermaster store, workshop, ablutions, kitchen area and communications with an external training area, vehicle training area and car parking also existing nearby to Building 588.

Project Element 4 – Simpson Barracks, Watsonia

29. The proposed works at Simpson Barracks will require the refurbishment of an existing training facility. A plan showing the location of the proposed works within Simpson Barracks is provided in [Attachment 2](#).

30. The facilities requirements for the Defence Force School of Signals at Simpson Barracks will be partially met by refurbishing Buildings 290 and 342. These refurbishment works will provide two classrooms and battery storage in Buildings 290 and 342 respectively and a Quartermaster Store and workshop in Building 342. A vehicle training area will be established in an existing car park adjacent to Building 290. Bollards will be provided in the vehicle training area. Plans for the proposed works are provided at [Attachment 6](#).

31. Existing facilities will be used to accommodate the requirements for the administrative areas, ablutions, kitchen area and communications with the external training area and car parking also existing nearby to Buildings 290 and 342.

Project Element 5 – Puckapunyal Military Area

32. The proposed works at the Puckapunyal Military Area will require the refurbishment of existing training facilities at the Schools of Armour, Artillery and Transport as well as the Central Training Facility. A plan showing the location of the proposed works within the Puckapunyal Military Area is provided in [Attachment 2](#).

33. **School of Armour.** The facilities requirements for the School of Armour at the Puckapunyal Military Area will be partially met by refurbishing Building 21. These refurbishment works will provide two classrooms, an Exercise Control room, battery storage and ablutions. Plans of the proposed works in provided at [Attachment 7](#).

34. Existing areas within Building 21 and elsewhere at the School of Armour already satisfy the requirements for the administration areas, Quartermaster store, workshop, kitchen area and communications with external training area, vehicle training area and car parking also existing nearby to Building 21. Bollards will be provided in the vehicle training area.

35. **School of Artillery.** The facilities requirements for the School of Artillery at the Puckapunyal Military Area will be partially met by refurbishing Building 1692. These refurbishment works will provide two classrooms and battery storage. Plans for the proposed works are provided at Attachment 7.

36. Existing areas within Building 1692 and elsewhere at the School of Artillery already satisfy the requirements for the administration areas, Quartermaster store, workshop, ablutions, kitchen area and communications with external training area, vehicle training area and car parking also existing adjacent to Building 21. Bollards will be provided in the vehicle training area.

37. **Army School of Transport.** The facilities requirements for the Army School of Transport at the Puckapunyal Military Area will be partially met by refurbishing Building 845. These refurbishment works will provide two classrooms. Plans for the proposed works are provided at Attachment 7.

38. Existing areas within Building 845 and elsewhere at the Army School of Transport already satisfy some of the Project requirements. This applies to the administration areas, a Quartermaster store, battery storage, workshop, ablutions, kitchen area and communications with external training area. A vehicle training area and car parking also exists nearby to Building 845, however bollards will be provided in the vehicle training area.

39. **Central Training Facility.** The facilities requirements for the Central Training Facility at the Puckapunyal Military Area will be partially met by refurbishing Building 855. These refurbishment works will provide two classrooms, Quartermaster store, battery storage, workshop and kitchen area. Plans for the proposed works are provided at Attachment 7.

40. Administrative areas are not required to be provided within Building 855 as the instructors will be provided these within their parent Schools. Existing areas within Building 855 already satisfy the requirements for the ablutions and communications with external

training area, vehicle training area and car parking also existing nearby to Building 855. Bollards will be provided in the vehicle training area.

Project Element 6 – Singleton Military Area

41. The proposed works within the Singleton Military Area will require the construction of a new training facility at Lone Pine Barracks, the home of the School of Infantry. A plan for the proposed location of works at Lone Pine Barracks is provided at [Attachment 2](#).

42. The facilities requirements for the School of Infantry will be met entirely by the new works. This includes two new classrooms, an external training area, a vehicle training area and car parking. Plans for the proposed works are provided at [Attachment 8](#).

Project Element 7 – RAAF Base Edinburgh

43. The proposed works at RAAF Base Edinburgh will require the refurbishment of the existing Building H1260 training facility. A plan showing the location of this building and the proposed works within RAAF Base Edinburgh is provided at [Attachment 2](#).

44. The Building H1260 refurbishment works will provide one classroom, a Quartermaster store and a battery store. Existing areas within Building H1260 already satisfy the requirements for the workshop, ablutions, kitchen area and communications requirements. Further administrative areas are not required at RAAF Base Edinburgh as instructors will fly in to conduct courses.

45. To the North-West of Building H1260, a vehicle training area and car parking will be constructed with bollards provided to enable vehicle training. Plans for the proposed works are provided at [Attachment 9](#).

Planning and Design Concepts

46. The philosophy for the design of the proposed works is based on:
- a. providing cost-effective, functional, low maintenance, energy efficient design options compatible with proposed functions and existing aesthetics.
 - b. where possible, adopting conventional construction techniques and materials commonly used by the construction industry and consistent with those already used.
 - c. applying appropriate durability measures to reduce ongoing maintenance and achieve the proposed design life.
 - d. providing flexible services and infrastructure to accommodate an appropriate level of growth.

Relevant Legislation, Codes and Standards

47. The following legislation, standards, codes and guidelines are applicable:
- a. *Environmental Protection and Biodiversity Conservation Act 1999 (Cth)*
 - b. *Fair Work (Building Industry) Act 2012 (Cth)*
 - c. *Work Health and Safety Act 2011 (Cth)*
 - d. *Disability Discrimination Act 1992 (Cth)*
 - e. *Fair Work Act 2009 (Cth)*
 - f. National Construction Code - Building Code of Australia
 - g. Defence Manual for Infrastructure Engineering Electrical
 - h. Defence Smart Infrastructure Manual
 - i. Defence Security Principles Framework (formerly Defence Security Manual)
 - j. Defence Estate Quality Management System
 - k. Defence Manual of Fire Protection Engineering.

48. Subject to Parliamentary expediency, an accredited Building Certifier will certify the compliance of the design and the compliance of the completed works.

Land and Zoning

49. The proposed works are consistent with uses prescribed in relevant Defence zoning instruments and the Defence Estate Principles of Development. All elements of the Project are located within the boundaries of Commonwealth-owned and Defence-controlled land. Accordingly, no civilian authority or design approvals are required, although the works will comply with the relevant standards and regulations where applicable.

Structure

50. The structural design of the proposed new buildings at Lavarack Barracks and the Singleton Military Area takes into account local geotechnical conditions, and are in accordance with all relevant Australian Standards and Codes. Detailed geotechnical investigations at each structure were undertaken to inform the building foundation designs.

Civil Design

51. The Project's civil works include hard stands and building pads at Lavarack Barracks, Singleton Military Area and Puckapunyal Military Area. The civil design covers works over an estimated total area of 3000m² across all sites. Detailed geotechnical investigations at each site were undertaken to inform civil designs.

Mechanical Services

52. The mechanical services have been designed where necessary according to the function and needs of the new buildings at Lavarack Barracks and the Singleton Military Area. Existing mechanical services have been checked and re-designed where necessary according to the function and needs of each refurbished building. The proposed mechanical services will meet specific user needs, relevant ventilation, thermal comfort and air quality requirements and the mandatory requirements of the Building Code of Australia, relevant Work Place Health and Safety requirements, and specifically AS/NZS 1668.2 the use of ventilation and air-conditioning in buildings – (Mechanical ventilation in buildings).

Hydraulic Services

53. Water and sewerage will be reticulated to and from new buildings at Lavarack Barracks and the Singleton Military Area through connections to the mains at the site. This service will comply with Commonwealth, State and Territory legislation, the Building Code of Australia, relevant Work Place Health and Safety requirements, AS/NZS 3666 (Air-Handling and Water Systems of Buildings Set) series and the AS/NZS 3500 (Plumbing and Drainage Set) series.

Electrical Services

54. Lighting, power and lightning protection will be provided in accordance with Australian Standards and Defence engineering requirements, namely the Manual of Infrastructure Electrical Engineering. Investigations have confirmed that there is adequate capacity on the network for the new and refurbished facilities at all sites. Electrical infrastructure and switchboards will have spare capacity to allow for future growth. Sub-metering will be included to each re-used and new building. The meters will be monitored through the Building Management System, which will support an active energy management program on the sites.

Fire Protection

55. Fire Protection has been addressed through compliance with the Manual of Fire Protection Engineering, and the Building Code of Australia. The Project has assessed the asset classification and criticality for the capability in order to determine the fire protection systems to be implemented in all facilities. General upgrades to the fire systems within existing facilities have been included.

Security Measures

56. The security design will ensure that any new facilities conform to the existing security system employed by the base. The facilities will be protected by electronic and physical security systems in accordance with the Defence Security Principles Framework (formerly Defence Security Manual).

Acoustics

57. The new facilities will comply with the National Construction Code and Australian Standards for noise and acoustics. Acoustic separation has been considered between rooms, and walls and are being designed to meet user requirements.

Work Health and Safety

58. The Project will comply with the *Work Health and Safety (WHS) Act 2011 (Cth)*, Work Health and Safety (Commonwealth Employment – National Standards) Regulations, and relevant Defence policies. In accordance with Section 35 (4) of the *Building and Construction Industry Improvement Act 2005 (Cth)*, contractors will also be required to hold full work health and safety accreditation from the Office of the Federal Safety Commissioner under the Australian Government Building and Construction Work Health and Safety Accreditation Scheme. Safety aspects of this Project have been addressed during the design development process and have been documented in a Safety in Design Report. A Work Health Safety Plan will be required to be developed for the construction phase prior to the commencement of any construction activities.

Materials and Furnishings

59. The material selection is based on suitability for purpose, durability, low maintenance and compliance with relevant codes and standards. The use of exposed structure requiring maintenance to protective coatings has been minimised.

Landscaping

60. The proposed new landscape works will complement and enhance the character of each site. The landscape design will focus on a functional, low maintenance, water sensitive approach with the use of indigenous plants. Precautions will be taken to avoid compromising environmental sensitivities by adopting landscaping practices in accordance with local environmental conditions and the Construction Environmental Management Plan.

Childcare Provisions

61. As there is no increase in personnel numbers on base, there is no requirement for additional childcare facilities as a result of this Project.

Provisions for People with Disabilities

62. Access for people with disabilities will be provided in consultation with the Defence Centre for Diversity Expertise and in accordance with the Building Code of Australia, Australia Standard 1428 *Design for access and mobility* and Defence policy “Disable Access and Other Facilities for Disabled Persons’. These standards lay out the design and construction requirements to comply with the *Disability and Discrimination Act 1992 (Cth)*.

Environmental Sustainability

63. Defence is committed to Ecologically Sustainable Development, and reducing greenhouse gas emissions. The Project has adopted cost effective ecologically sustainable development measures as a key objective in the design and development of the proposed works. These measures include:

- a. **Energy targets:** Energy targets will comply with measures as required under the National Australian Built Environment Rating System, Defence’s Smart Infrastructure Manual: Design and Construction and Defence’s Building Energy Performance Manual.
- b. **Measures to reduce energy and water use:** Measures to reduce energy and water use will comply with Defence’s Building Energy Performance Manual and Engineers Australia Australian Runoff Quality – A guide to Water Sensitive Design.
- c. **Re-use of existing structures:** Except for the new facility at the Singleton Military Area and the building extension at Lavarack Barracks, the facilities are re-using existing structures.
- d. **Demolition and disposal of existing structures:** Material which cannot be re-used in the construction will be removed from site in accordance with regulations.

Potential Impacts

64. Defence has conducted rigorous assessments to identify potential environmental and local community impacts, and propose suitable mitigation measures. These include:

- a. **Visual Impacts:** The assessments conducted did not identify any visual impacts arising from the Project.

- b. **Noise Impacts:** The assessments conducted did not identify any noise impacts arising from the Project.
- c. **Heritage Impacts:** The assessments conducted concluded that heritage risk associated with the Project are minor and manageable through the development of site specific Construction Environmental Management Plans.
- d. **Traffic, Transportation and Road Impacts:** The assessments conducted did not identify any traffic, transportation or road impacts arising from the Project. This project will not result in any net increases in permanent military or civilian personnel. There will, however, be an increase in contractor personnel accessing and working at each Project location during the construction phase. During construction, there will be an increase in the number of large vehicles delivering materials to site and undertaking construction activities. The development of Traffic Management Plans by the Head Contractor will mitigate the effects of this on the internal road networks. The Head Contractor will be required to conduct ongoing and regular coordination of all construction activities with local Defence authorities at each establishment.
- e. **Existing Local Facilities:** The assessments conducted did not identify any impacts on existing local facilities.

65. Defence has determined that the Project will not have a significant impact on existing environmental and heritage values, and is not required to be referred to the Minister of Environment and Energy under the *Environmental Protection and Biodiversity Conservation Act 1999 (Cth)*.

Consultation with Key Stakeholders

66. Defence has developed a community consultation and communications strategy that recognises the importance of providing local residents and other interested stakeholders an opportunity to provide input into, or raise concerns relating to the proposed works.

67. Defence has and will engage with a variety of internal and external stakeholders during project development and delivery. These include:

- a. Local Business Chambers

- b. Federal Members
- c. State Members
- d. Relevant Federal, State and Local Departments/Councils
- e. Community Groups.

Cost Effectiveness and Public Value

Project Costs

68. The estimated total capital out-turned cost of the Project is \$24.3 million (Budget 2018/19 Out-turned Cost with a P80 price confidence, excluding Goods and Services Tax). This includes management and design fees, construction costs, information and communications technology, furniture, fittings, equipment, contingencies and a provision for escalation.

69. An increase in operating costs is expected as a result of the proposed works. This is due to the addition of new facilities and infrastructure, which will increase the associated facilities maintenance, cleaning and utilities expenses.

Project Delivery System

70. Subject to Parliamentary approval, a Head Contractor form of contract is planned to deliver the works. A Head Contractor will be appointed to procure local trade contractors, and manage the construction of the works. A Project Manager and Contract Administrator will be appointed to manage the delivery phase of the works.

71. The Head Contractor form of delivery provides the Commonwealth with higher certainty on budget while promoting opportunities for small to medium enterprises through design and construction subcontractor packages.

Construction Program

72. Subject to Parliamentary approval, design activities are expected to be completed by late 2018, with construction expected to commence from early 2019 for completion in late 2019.

Public Value

73. Defence has comprehensively assessed public value, opportunities and benefit to the community as a result of the proposed works:

- a. **Meeting capability needs:** The Project will contribute significantly to a key Defence capability by directly supporting LAND 200. The proposed works will provide training facilities that are fit for purpose and will allow personnel to undertake the training in an environment that meets the specific tasks. The works are also expected to improve personnel morale and impact positively on recruitment and retention, which will have a flow on impact on capability support levels.
- b. **Employment opportunities:** The Project will employ a diverse range of skilled consultants, contractors and construction workers that could also include opportunities for up-skilling and job training to improve individual skills and employability on future projects.
- c. **Economic impacts:** Defence and the Head Contractor will actively promote opportunities for local small-to-medium enterprises through the construction subcontractor packages. The Head Contractor is required to deliver all works in accordance with, but not limited to, Building Code 2013 guidelines, National Construction Code – Building Code of Australia, relevant Australian Standards, relevant Defence Policy, and Workplace Health and Safety Legislation.
- d. **Local industry and Indigenous business involvement opportunities:** Defence and the Head Contractor will actively promote opportunities for local small-to-medium enterprises through the construction trade packages. There will be opportunities for indigenous business involvement in accordance with the Indigenous Procurement Policy.

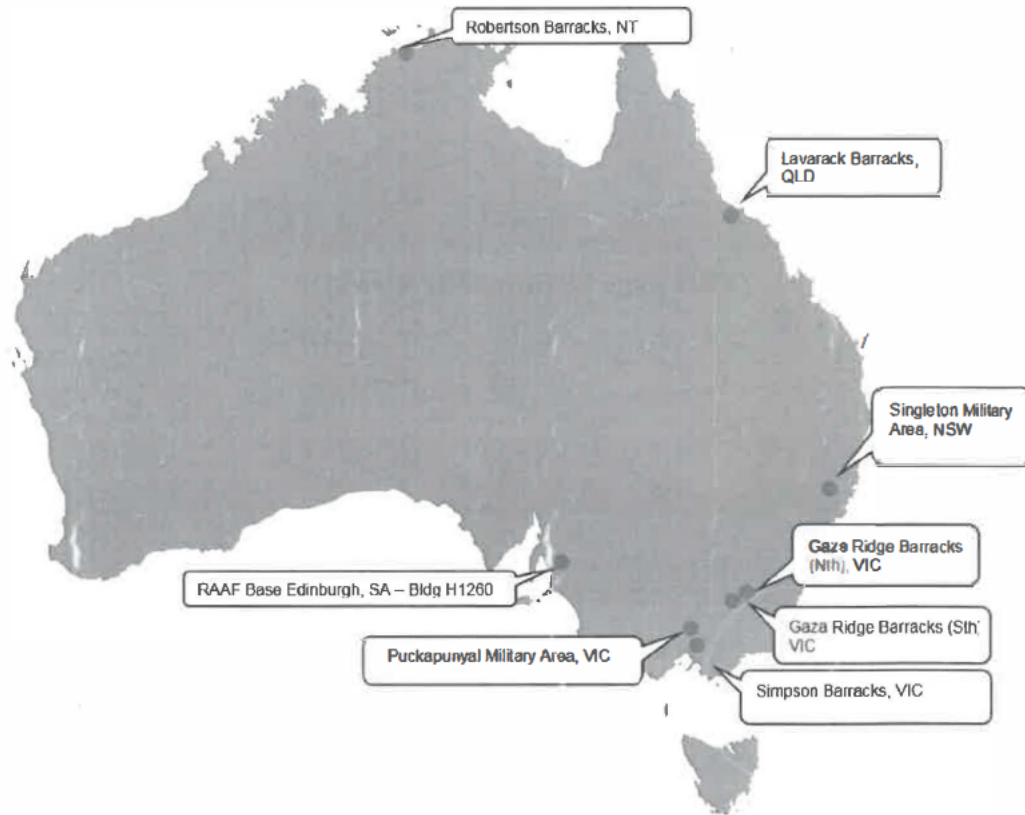
Revenue

74. No revenue is expected to be derived from the Project.

Attachments

1. National Locations for the Project
2. Project Element Location Plans
3. Concept Plans: Project Element 1 (Robertson Barracks)
4. Concept Plans: Project Element 2 (Lavarack Barracks)
5. Concept Plans: Project Element 3 (Albury Wodonga Military Area)
6. Concept Plans: Project Element 4 (Simpson Barracks)
7. Concept Plans: Project Element 5 (Puckapunyal Military Area)
8. Concept Plans: Project Element 6 (Singleton Military Area)
9. Concept Plans: Project Element 7 (RAAF Base Edinburgh)

Attachment 1 – National Locations for the Project



Attachment 2 – Project Element Location Plans

Project Element 1: Robertson Barracks (Darwin, NT)

1st Brigade North



Project Site Plan – Robertson Barracks (1st Brigade, Buildings 826, 828, 829, 830)



Project Element 2: Lavarack Barracks (Townsville, QLD)

3rd Brigade



Project Site Plan – Lavarack Barracks (3rd Brigade, Building G2725)



Project Element 3: Albury Wodonga Military Area (Bandiana, VIC)

Army Logistics Training Centre



Project Site Plan – Gaza Ridge Barracks (Army School of Ordnance, Building 588)



Project Site Plan – Gaza Ridge Barracks (Army School of Electrical and Mechanical Engineering, Building 421)



Project Element 4: Singleton Military Area (Singleton, NSW)

School of Infantry (Lone Pine Barracks)

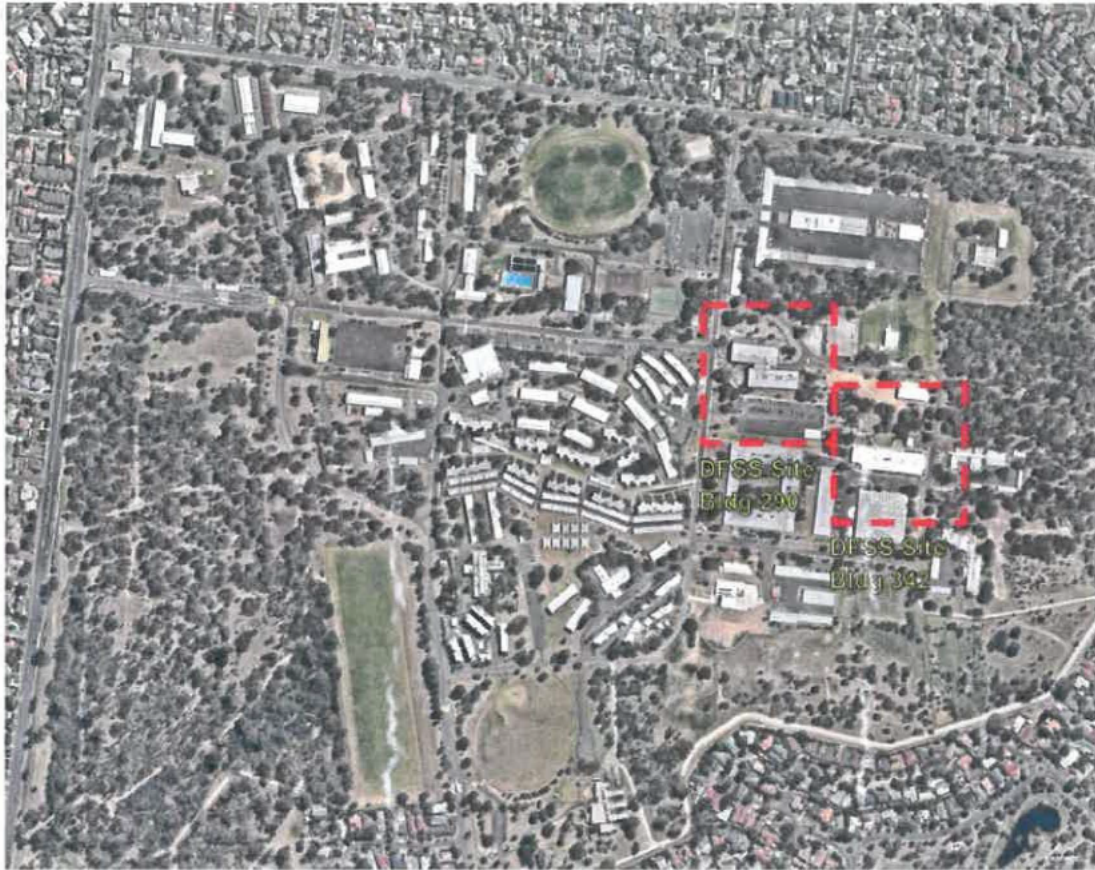


Project Site Plan – Lone Pine Barracks (New Build)



Project Element 5: Simpson Barracks (Watsonia, VIC)

Defence Force School of Signals



Project Site Plan – Simpson Barracks (Building 290)



Project Site Plan – Simpson Barracks (Building 342)



Project Element 6: Puckapunyal Military Area (Puckapunyal, VIC)

Combined Arms Training Centre



Project Site Plan – Puckapunyal Military Area (Central Training Facility, Building 855)



Project Site Plan – Puckapunyal Military Area (School of Armour, Building 21)



Project Site Plan – Puckapunyal Military Area (School of Artillery, Building 1692)



Project Site Plan – Puckapunyal Military Area (Army School of Transport, Building 845)



Project Element 7: RAAF Base Edinburgh (Adelaide, SA)

1st Brigade South



Project Site Plan – RAAF Base Edinburgh (Building H1260)

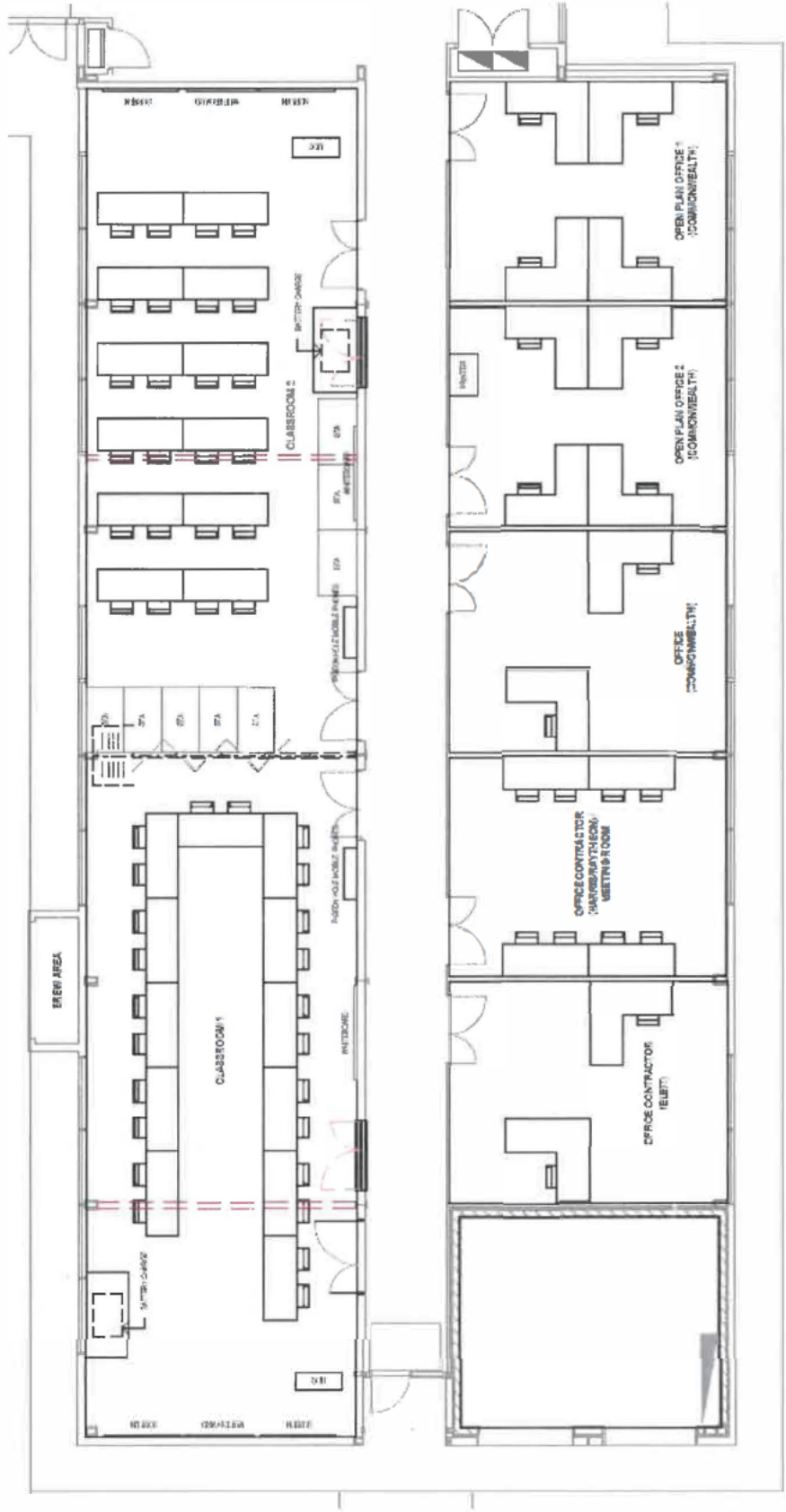


Attachment 3 – Concept Plans: Project Element 1 (Robertson Barracks)

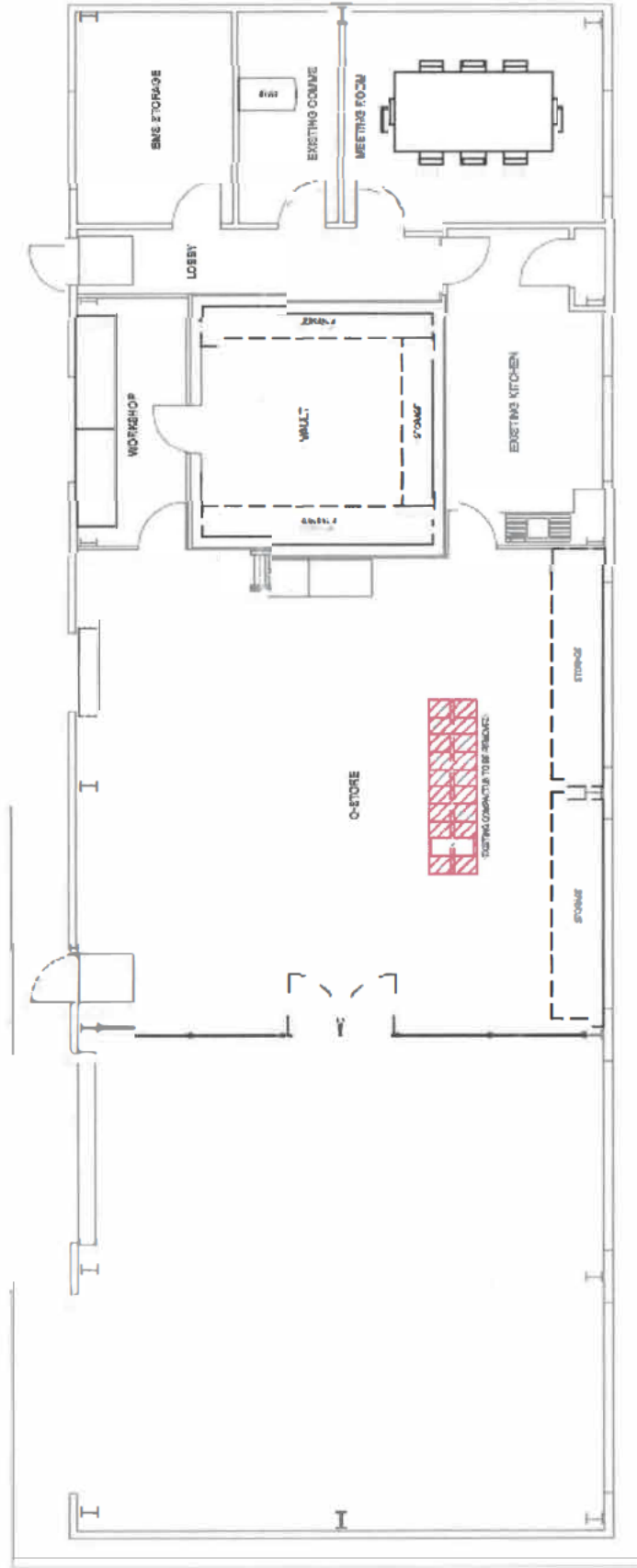
Building 880



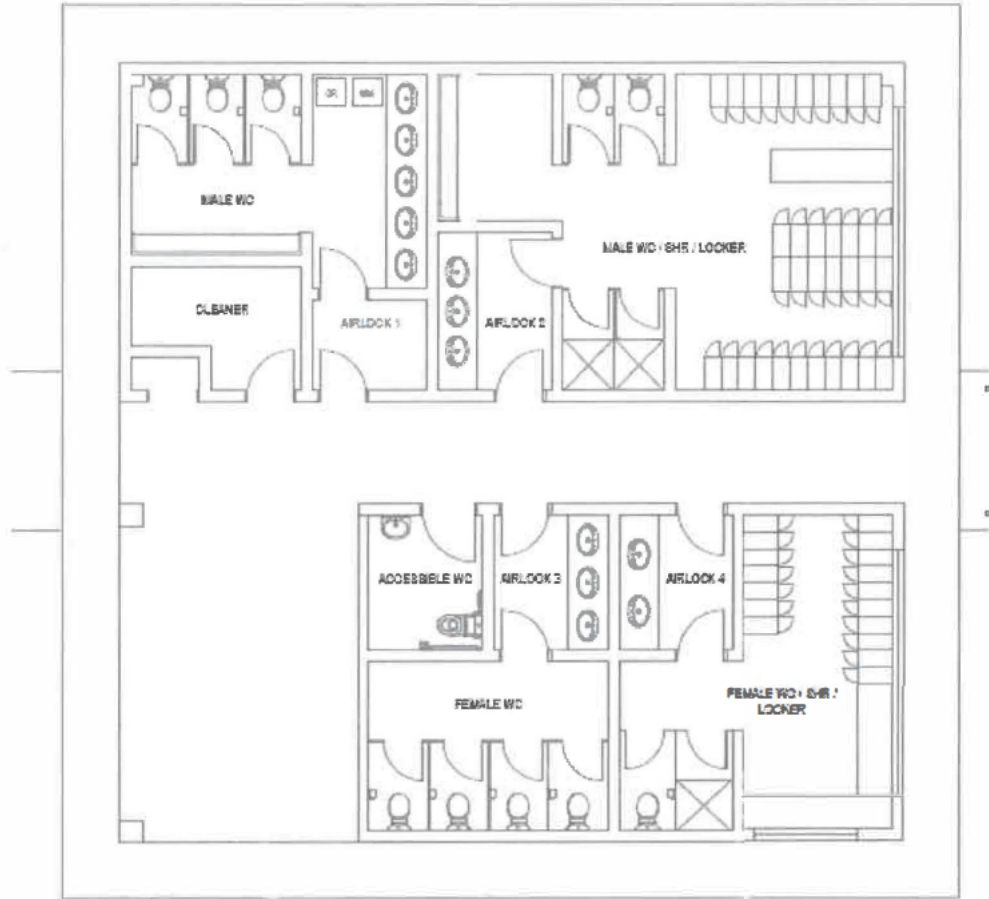
Building 880



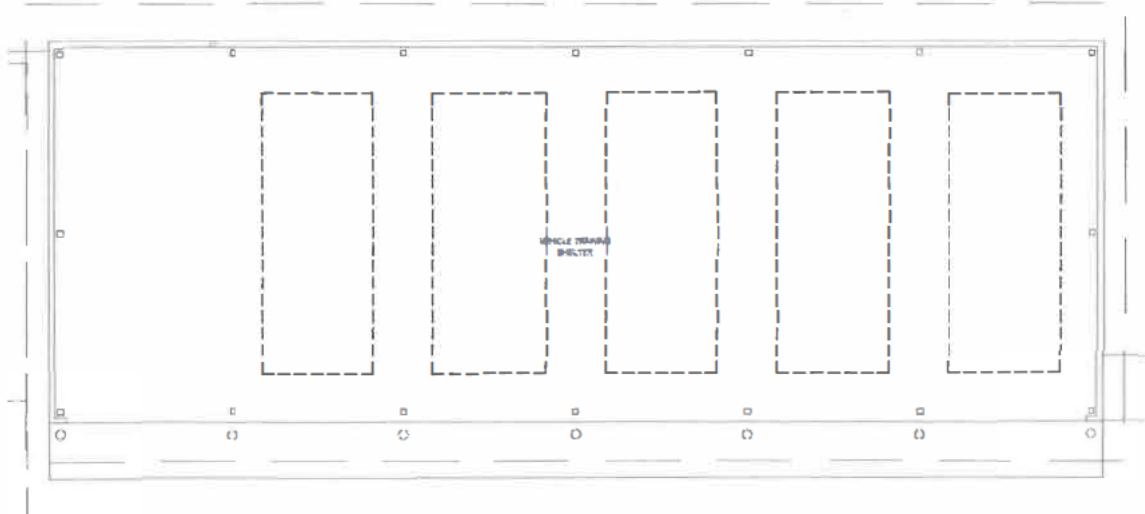
Building 828



Building 829

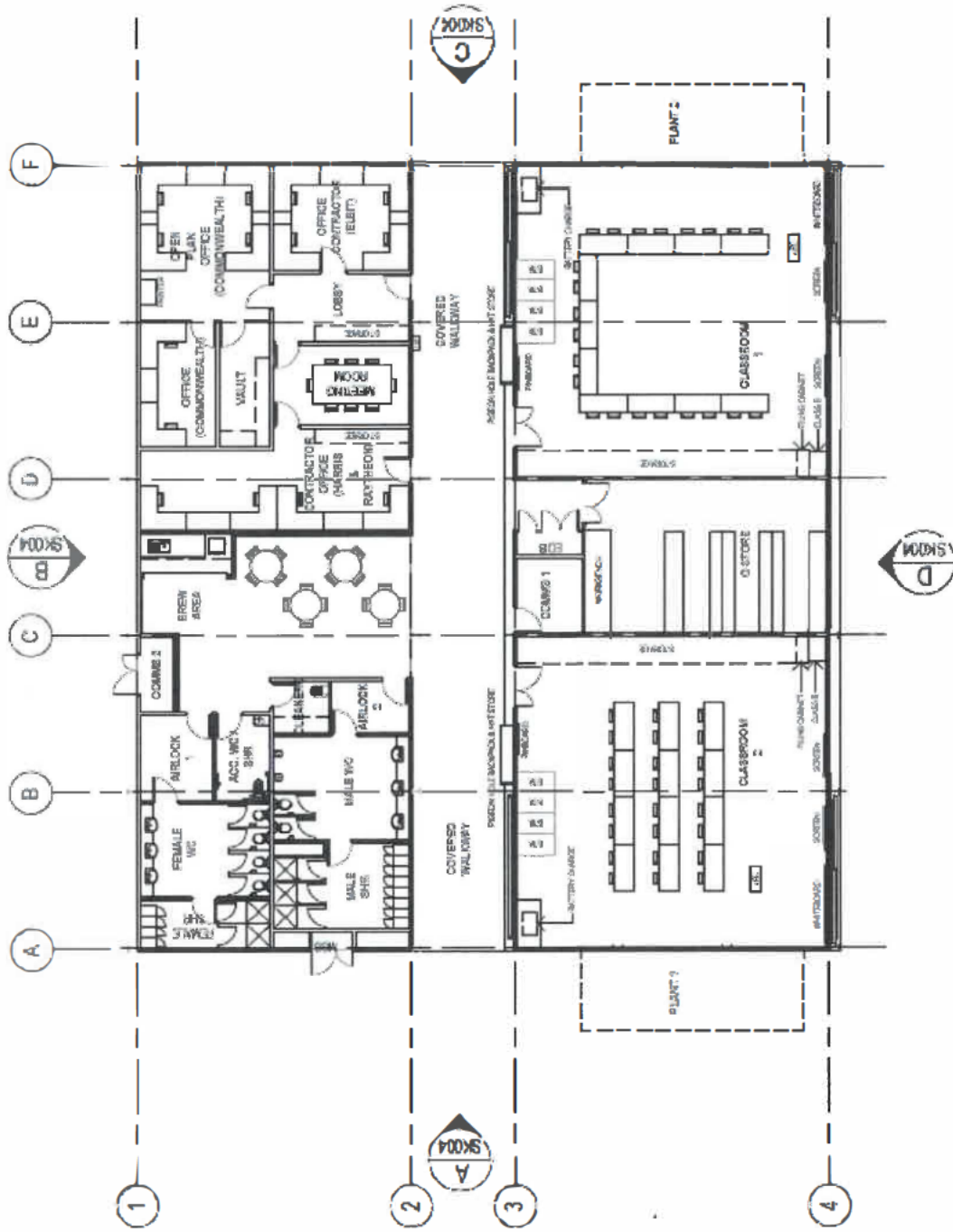


Building 826

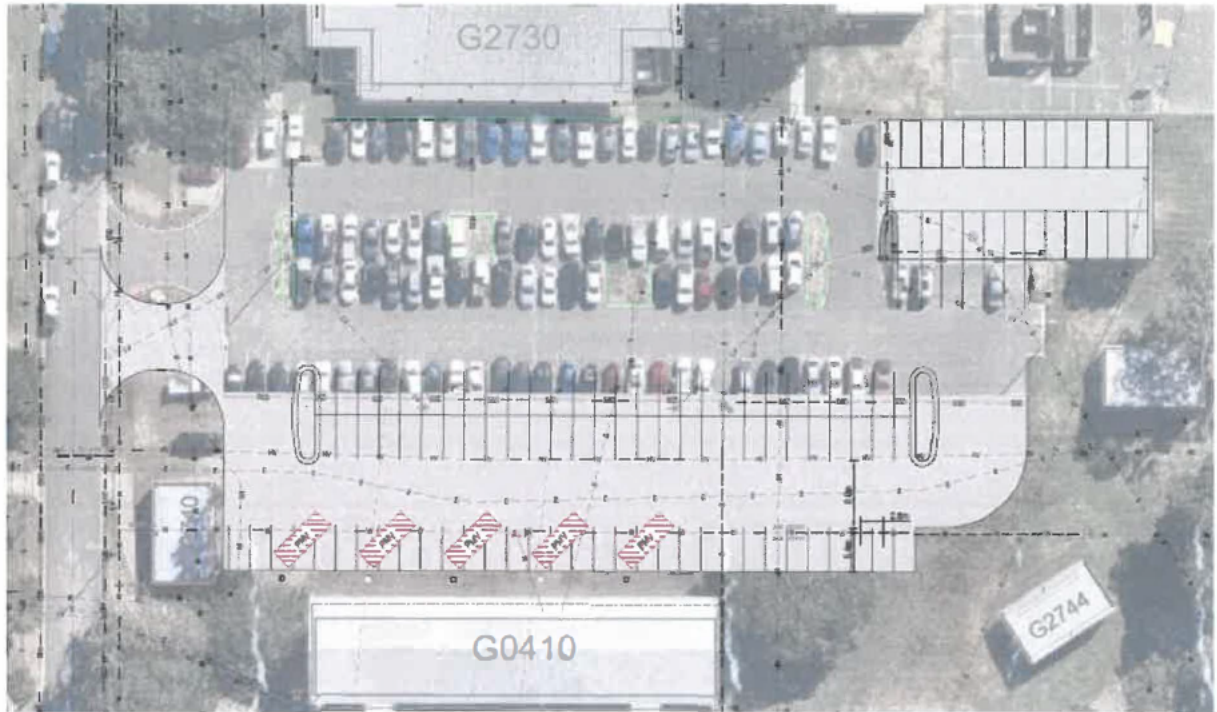


Attachment 4 – Concept Plans: Project Element 2 (Lavarack Barracks)

Building 2725 Extention

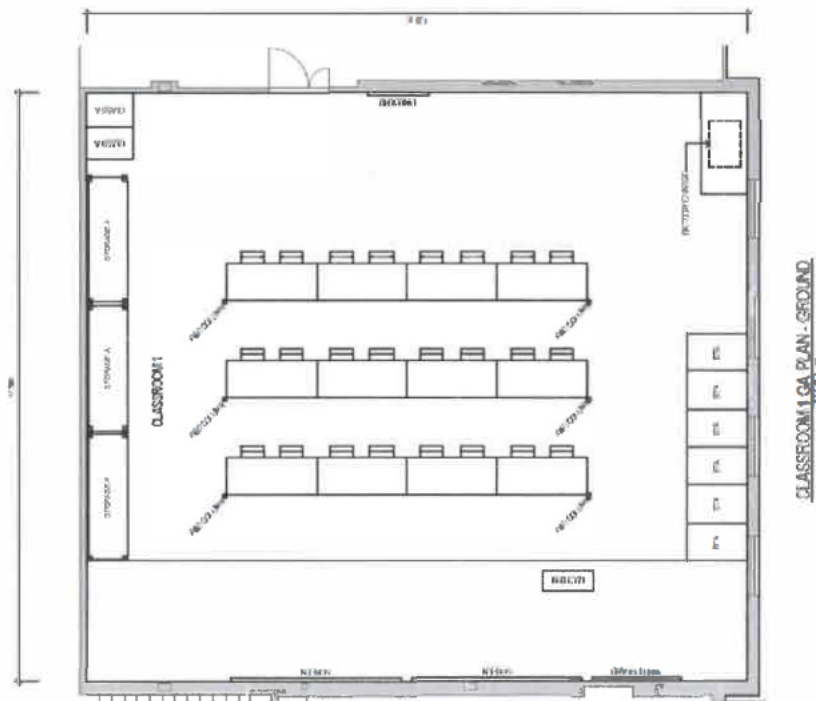


Combined Vehicle Training area and Car Park

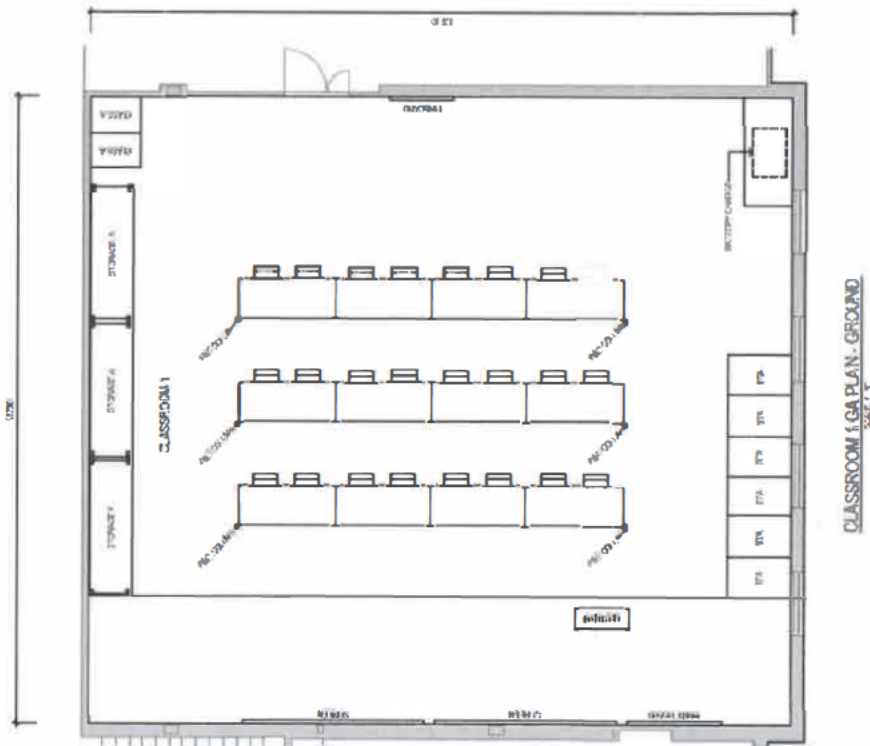


Attachment 5 – Concept Plans: Project Element 3 (Albury Wodonga Military Area)

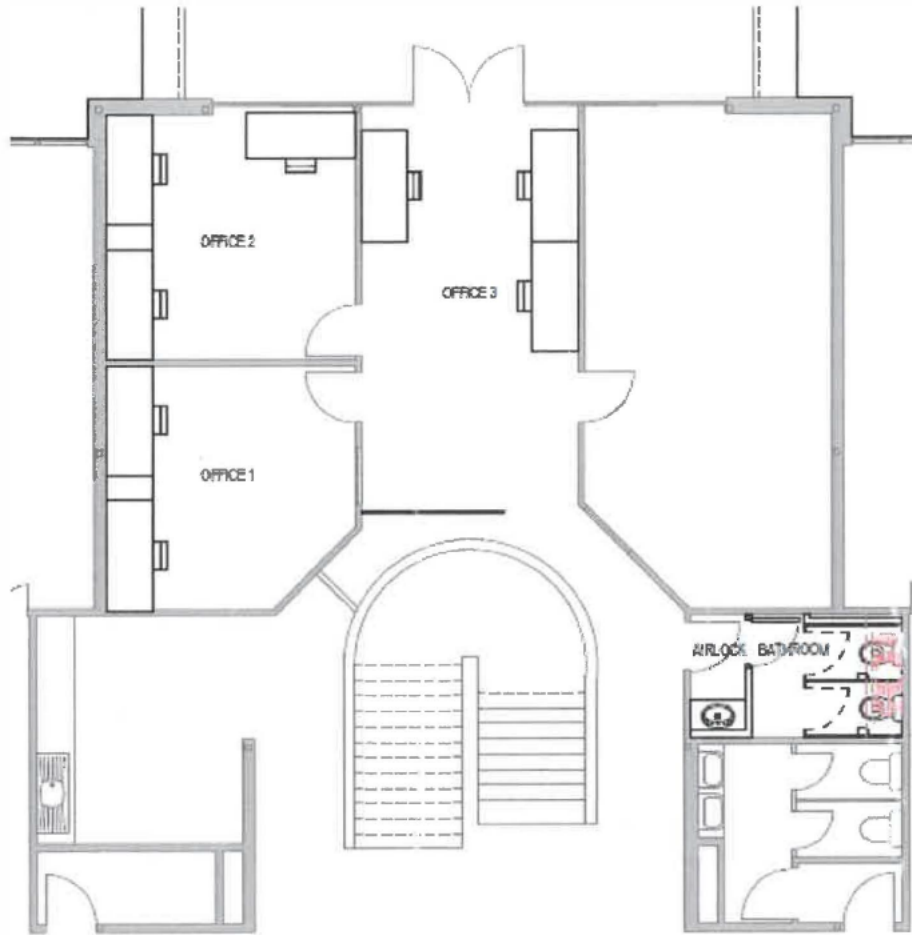
Building 588 – Ground Floor Classrooms



Building 588 – Ground Floor Classrooms

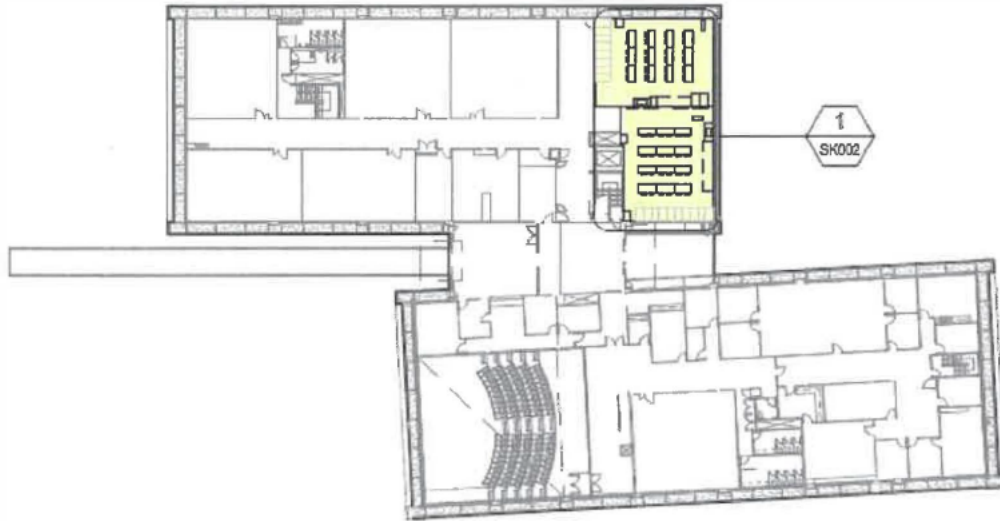


Building 588 – First Floor Offices



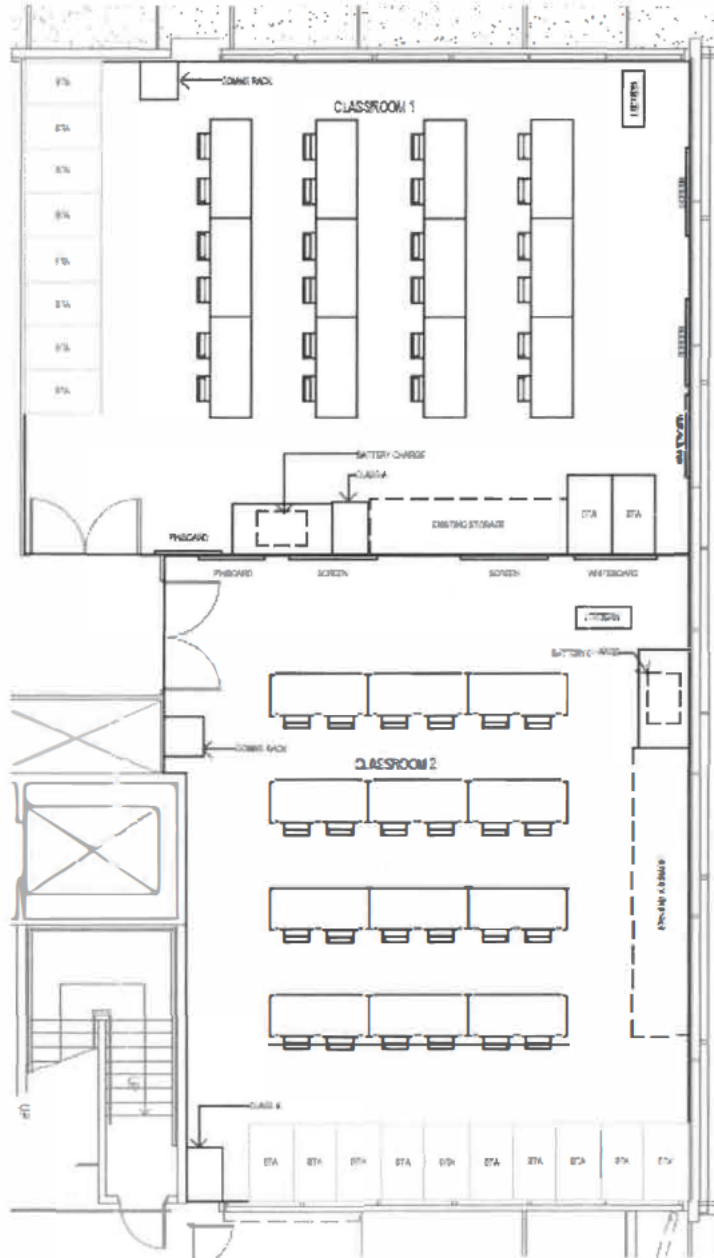
Attachment 6 – Concept Plans: Project Element 4 (Simpson Barracks)

Building 290



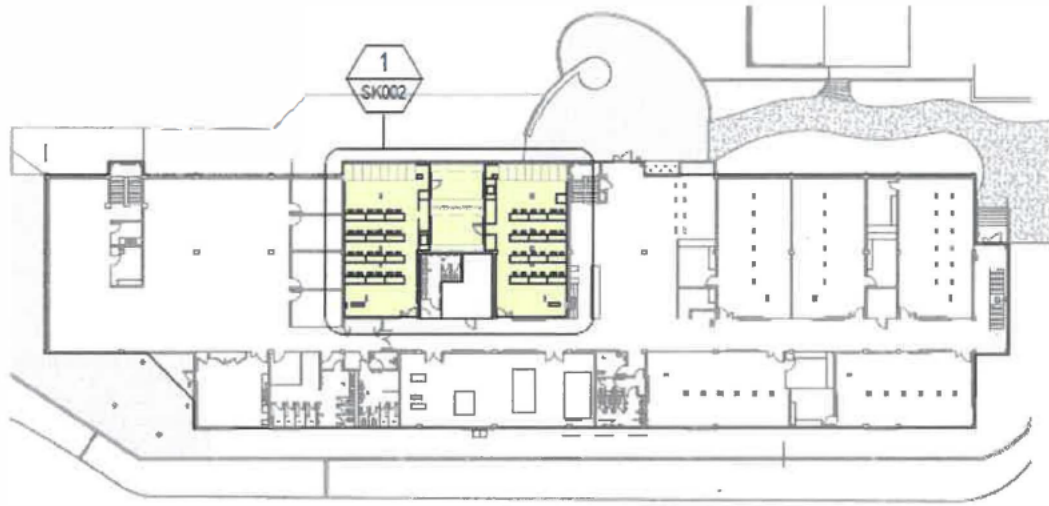
GAPLAN - GROUND
SCALE 1:50'

Building 290

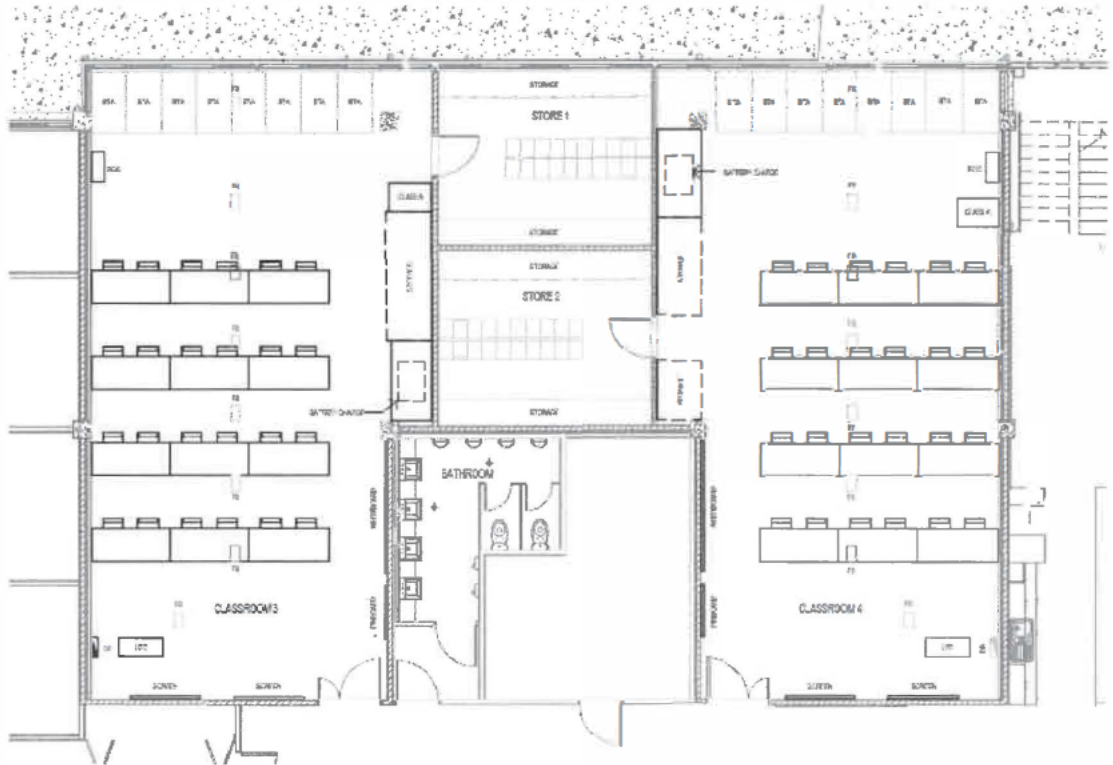


CLASSROOMS 1 & 2 GA PLAN - GROUND
SCALE 1:100

Building 342



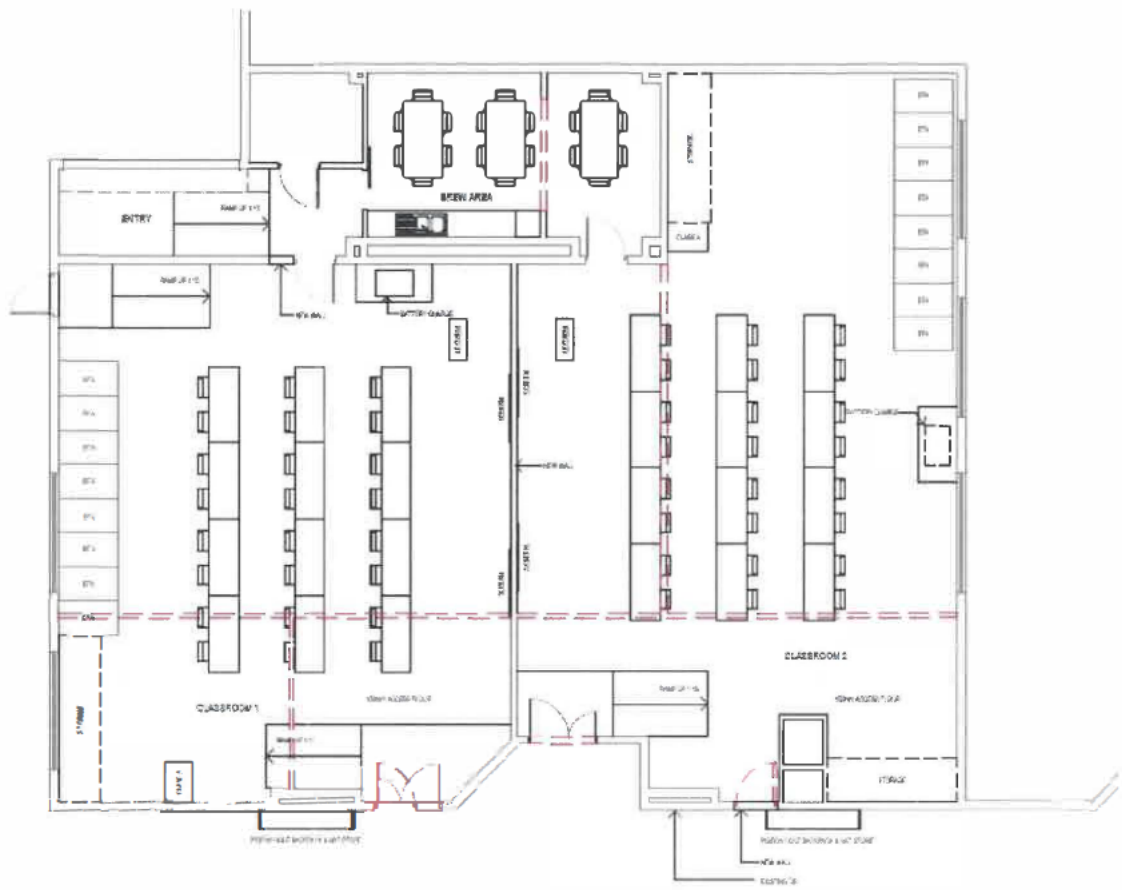
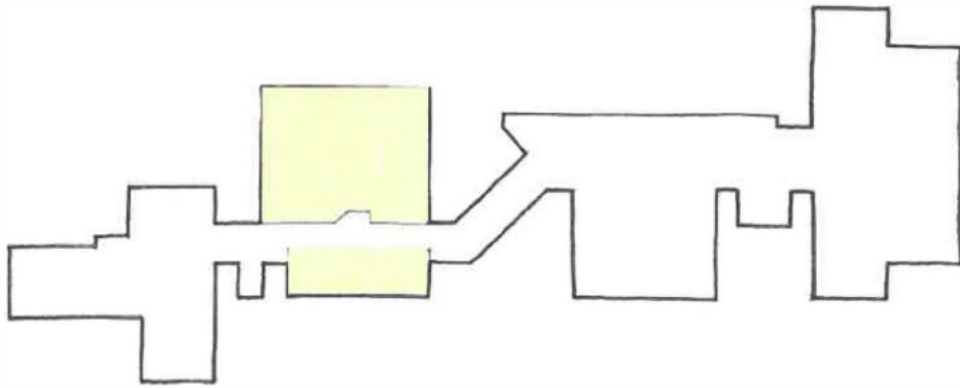
OVERALL GA PLAN - GROUND
SCALE 1:500



GA PLAN - GROUND
SCALE 1:100

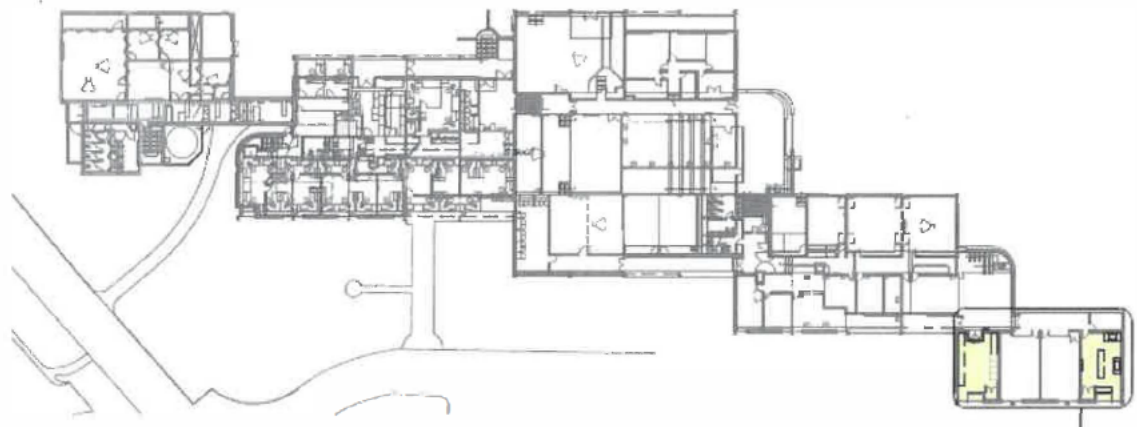
Attachment 7 – Concept Plans: Project Element 5 (Puckapunyal Military Area)

Central Training Facility – Building 855



CLASSROOM PLAN - LEVEL 1
SCALE 1:100

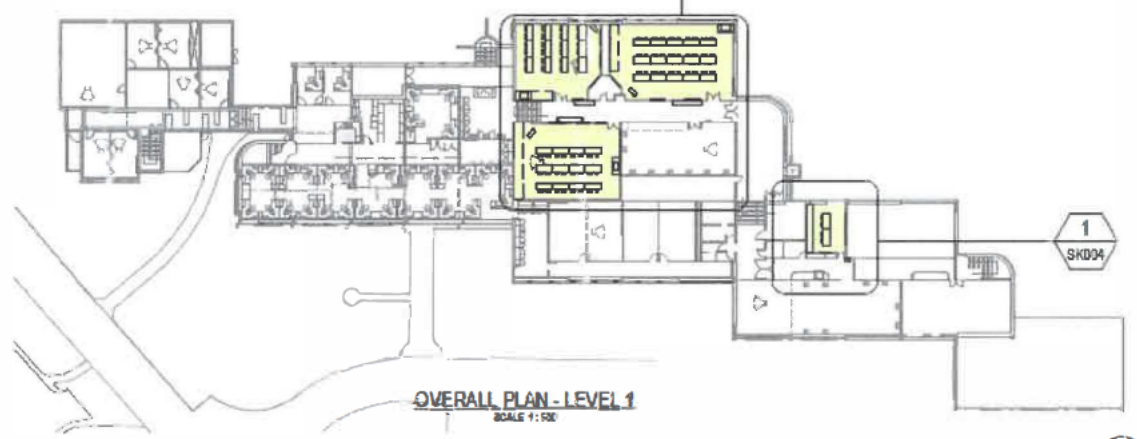
School of Armour – Building 21



OVERALL PLAN - GROUND
SCALE 1:50

1
SK002

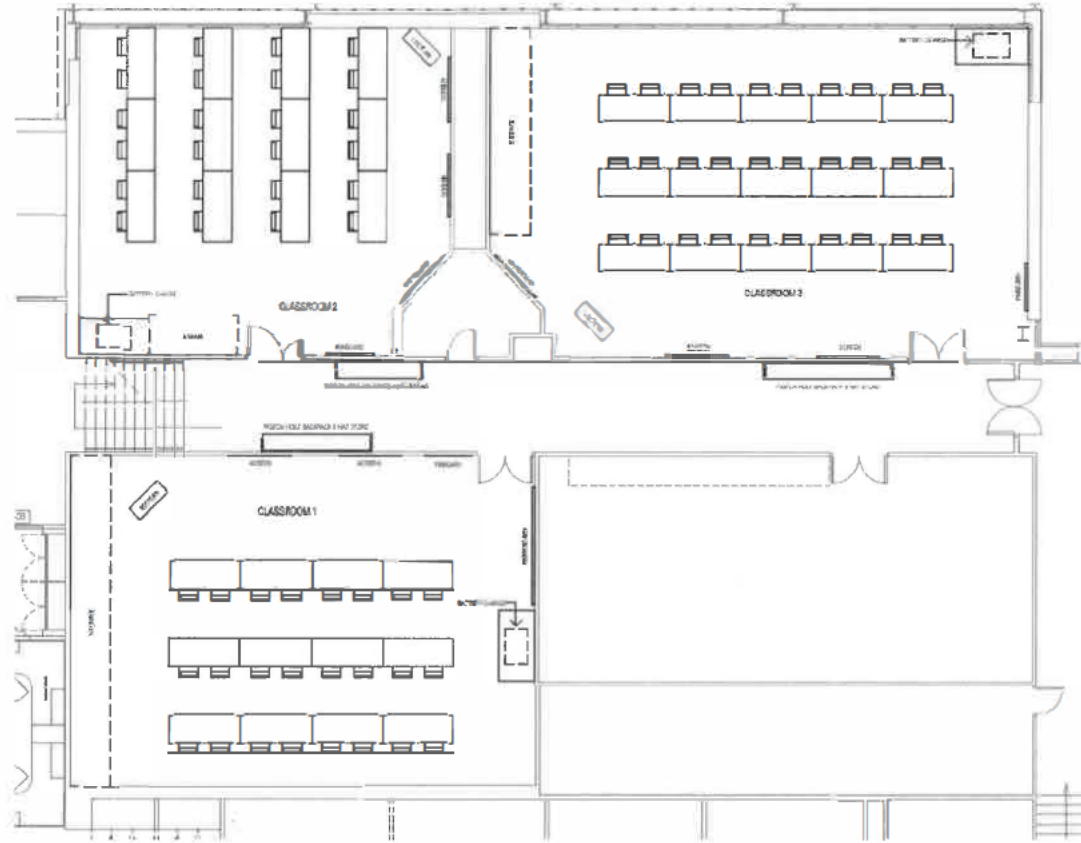
1
SK003



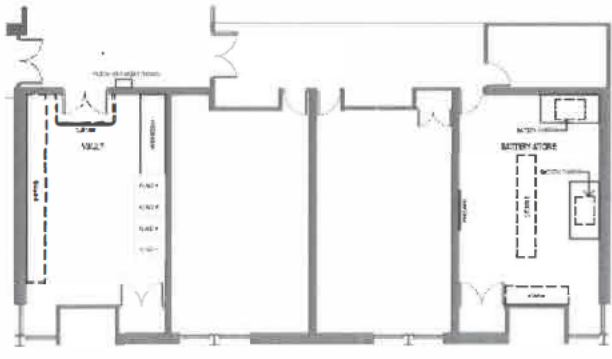
OVERALL PLAN - LEVEL 1
SCALE 1:50

1
SK004

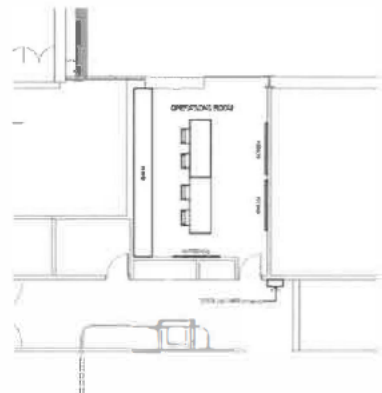
Building 21



CLASSROOM 1 & 2 GA PLAN - LEVEL 1
SCALE 1/16" = 1'-0"

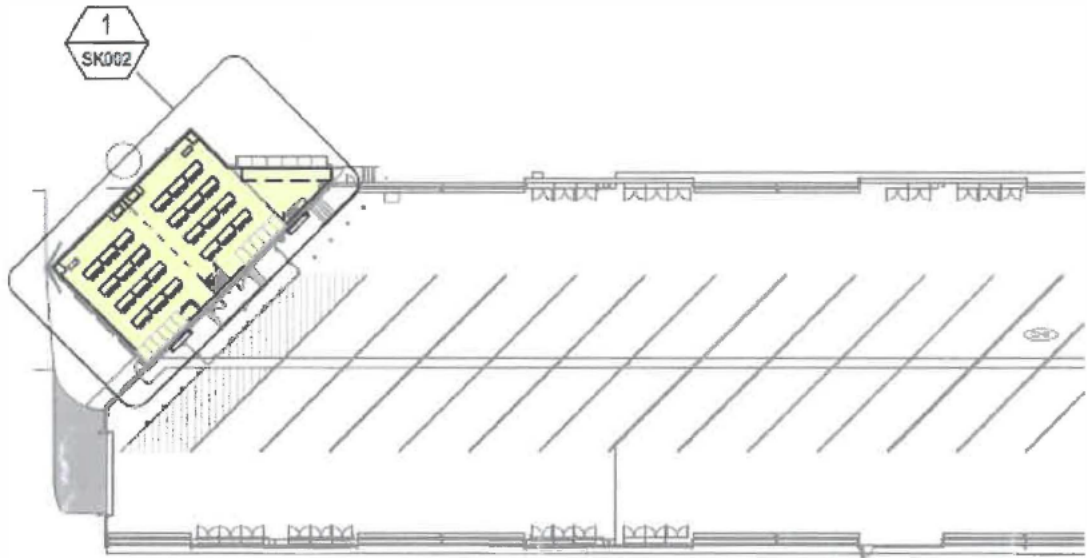


GA PLAN - GROUND
SCALE 1/16" = 1'-0"

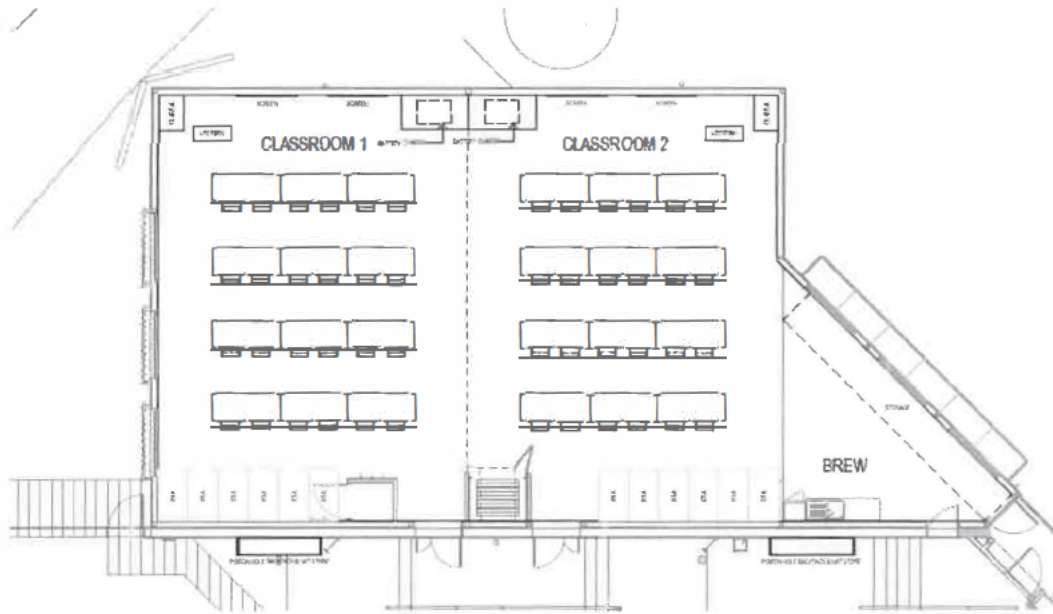


OPERATIONS ROOM GA PLAN - LEVEL 1
SCALE 1/16" = 1'-0"

School of Artillery – Building 1692

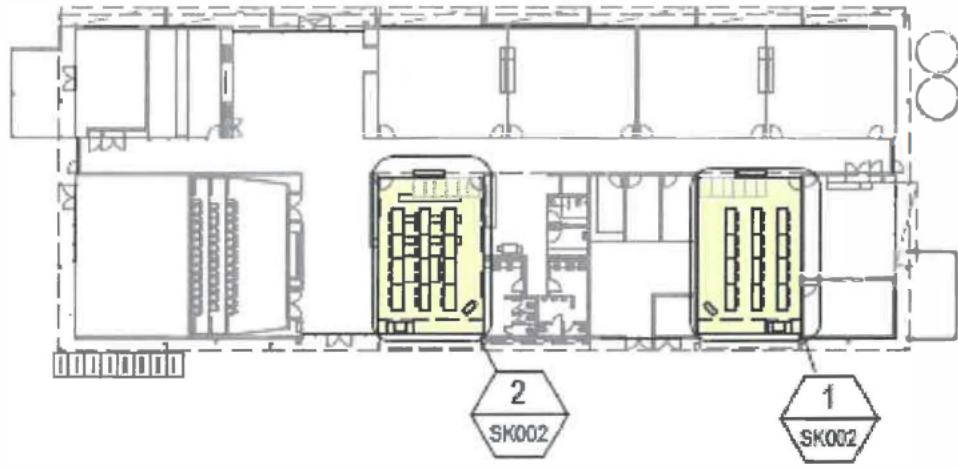


GA PLAN - GROUND
SCALE 1:500

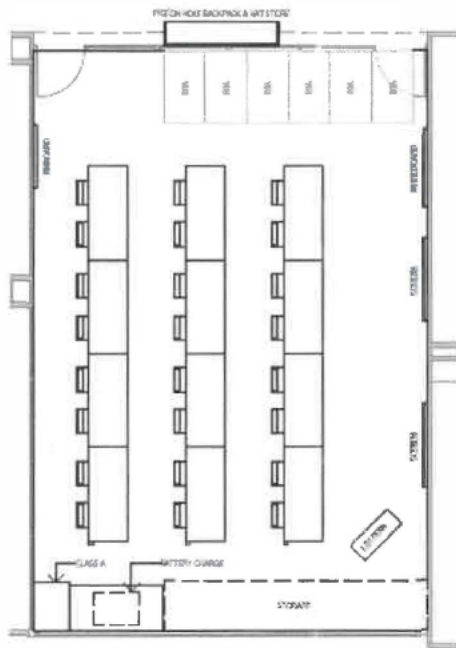


GA ROOM PLAN - GROUND
SCALE 1:100

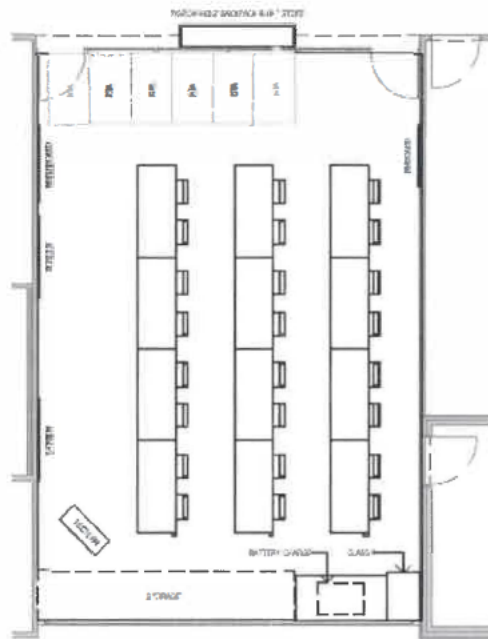
Army School of Transport – Building 845



OVERALL GA PLAN - GROUND
SCALE 1:600



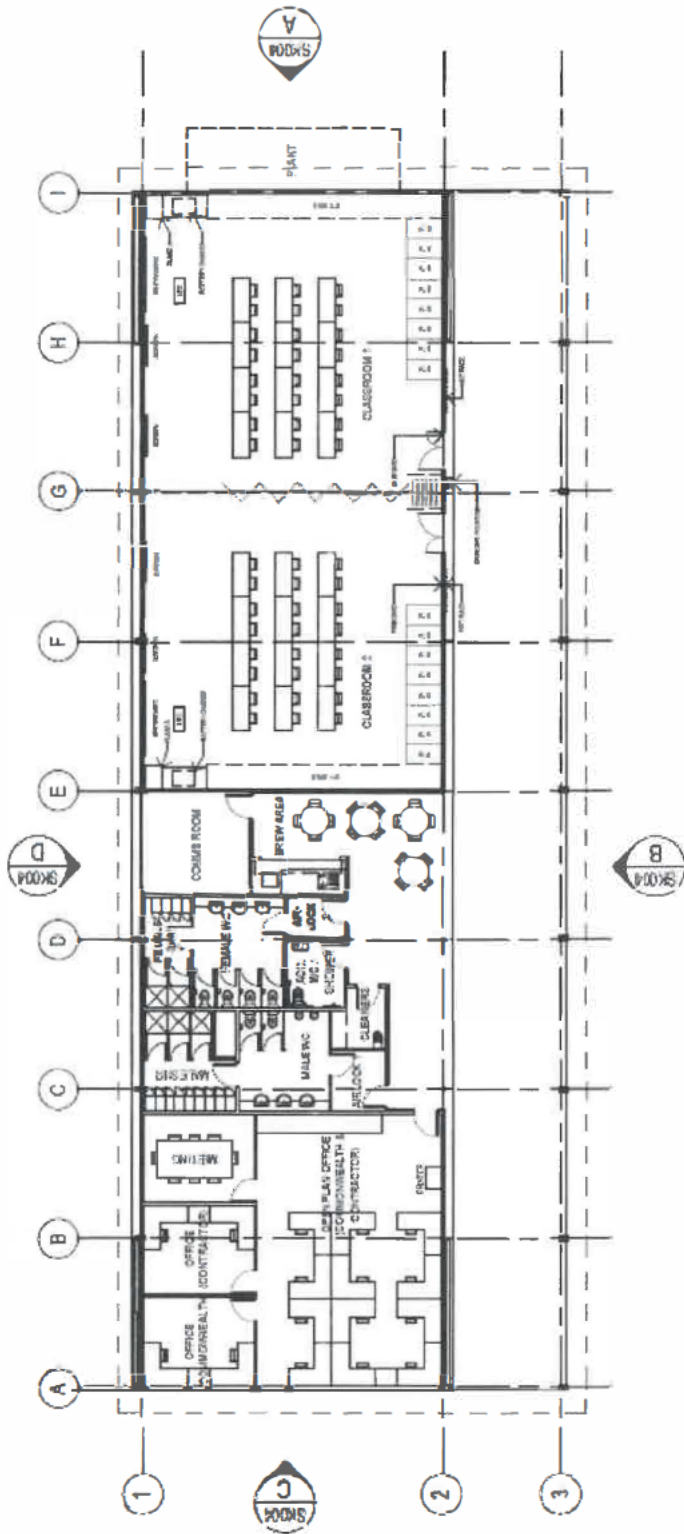
CLASSROOM 1 GA PLAN - GROUND
SCALE 1:100



CLASSROOM 2 GA PLAN - GROUND
SCALE 1:100

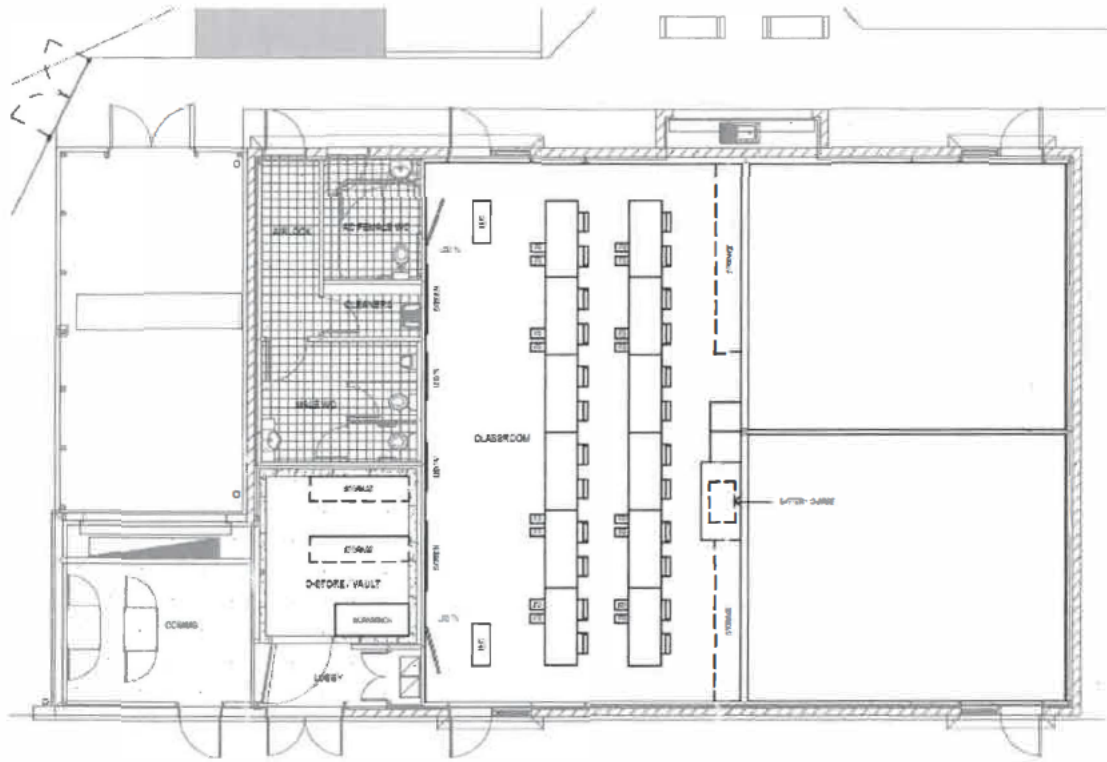
Attachment 8 – Concept Plans: Project Element 6 (Singleton Military Area)

New Build



Attachment 9 – Concept Plans: Project Element 7 (RAAF Base Edinburgh)

Building 1260



GA PLAN - GROUND
SCALE 1:100