Australian Government

Department of Defence

17th CONSTRUCTION SQUADRON RELOCATION INFRASTRUCTURE PROJECT

RAAF Base Amberley, Queensland

STATEMENT OF EVIDENCE
TO THE
PARLIAMENTARY STANDING COMMITTEE
ON PUBLIC WORKS

Canberra, Australian Capital Territory

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17th Construction Squadron Relocation Infrastructure Project

RAAF Base Amberley, Queensland

Identification of the Need

Enhanced Capability

1. The 6th Engineer Support Regiment (6 ESR) is a specialised engineer regiment of the Australian Army. Formed on 13 January 2003, it was created in order to serve as a unit level (regimental) headquarters for the command and control of a number of Royal Australian Engineer (RAE) sub units (squadrons), which had previously been independent.

2. 6 ESR's mission is to prepare and maintain combat ready individuals and formed bodies in order to successfully support land, joint and specified operations for the Defence of Australia and its National Interests.

3. With an establishment of more than 600 regular soldiers, 6 ESR is the largest of the RAE regiments and currently comprises the 17th Construction Squadron (17 Const Sqn), the 21st Construction Squadron (21 Const Sqn), the 20th Explosive Ordnance Disposal Squadron (20 EOD Sqn) and an Operational Support Squadron (OSS).

4. By virtue of 6 ESR’s function, the majority of its personnel are drawn from the RAE, although various other Australian Army Corps provide administrative clerks, drivers, mechanics and logisticians to support regimental and squadron level tasks. Personnel from 6 ESR have undertaken numerous deployments since its establishment in 2003, with 6 ESR also providing the headquarters element for Reconstruction Task Force 4 that deployed to Afghanistan in 2008 as part of Operation Slipper.

5. 6 ESR is currently geographically dispersed across the following three Defence sites:

a. Headquarters (HQ) 6 ESR, 21 Const Sqn and the main elements of OSS are located at RAAF Base Amberley, Queensland;

b. 20 EOD Sqn is located at Enoggera Barracks, Queensland; and

c. 17 Const Sqn and an OSS detachment are located at Holsworthy Barracks, New South Wales.

6. In June 2010 and following a review of the disposition of engineer units, the Chief of Army directed the collocation of 17 Const Sqn with its parent unit, HQ 6 ESR and its sister unit, 21 Const Sqn, and its relocation to RAAF Base Amberley into new purpose built facilities.

7. The collocation and relocation of 17 Const Sqn at RAAF Base Amberley will provide opportunities to enhance the command and control of engineer units in South East Queensland, to improve the overall operational and training effectiveness of 6 ESR, and to gain unit wide efficiencies through the implementation and provision of a mature operational support 'shared services' model.[1]

8. RAAF Base Amberley is one of the largest Defence sites in Australia and is also home to the Royal Australian Air Force's (RAAF's) C17 strategic airlift fleet, Army's 9th Force Support Battalion and the Joint Logistics Unit - South Queensland. As such, relocating 17 Const Sqn to RAAF Base Amberley will also enable wider Defence gains in operational effectiveness that involve domestic and regional air and land deployments, and operational efficiencies that involve the reliance on force and national level logistics support and sustainment.

Background

9. 17 Const Sqn currently consists of 107 personnel that are trained as plant operators, carpenters, plumbers, electricians and other construction based trades. The OSS detachment that is currently collocated with 17 Const Sqn at

[1] Such 'shared services include the management, repair, supply and sustainment of unit vehicles, plant, equipment and stores.

Holsworthy Barracks currently consists of 31 personnel that are trained as vehicle mechanics, fitter / armourers, storemen, cooks and supply chain specialists. The OSS detachment at Holsworthy Barracks also maintains and sustains the Sqn's fleet of 104 'B' class vehicles and 28 'C' class vehicles.[2]

10. 17 Const Sqn was originally formed in 1949 as an independent unit out of the then Eastern Command Maintenance Squadron and was based at Kingsford, New South Wales. The Sqn was subsequently disbanded in 1973 at which time it was part of the 2nd Field Engineer Regiment based at Enoggera Barracks. The Sqn was then re-raised at Holsworthy Barracks as part of the 1st Construction Regiment in 1977 and was accommodated in existing facilities that were first constructed in the 1960s.

11. In 2003, 17 Const Sqn, still at Holsworthy Barracks, came under the command of 6 ESR, along with 21 Const Sqn, which at that time were both based at Gallipoli Barracks. 21 Const Sqn subsequently relocated to RAAF Base Amberley in 2010 to new purpose built facilities, and was followed in 2012 by HQ 6 ESR, also to new purpose built facilities, under the Army's Enhanced Land Force (ELF) Initiative, Stages 1 and 2 respectively.

12. 17 Const Sqn remained in their 1960's facilities at Holsworthy Barracks until mid 2011 at which time elements of the Sqn were forced to relocate to other vacant and 'less old' facilities on Holsworthy Barracks, given the extremely poor state of repair of what were now almost 50 year old facilities. These aged facilities also no longer supported the functions, structure, manning and equipment holdings of the Sqn, which had an adverse impact on the Sqn's ability to meet directed preparedness requirements, which in turn impacted on 6 ESR's ability to provide a force level engineering capability in support of wider Defence operations.

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[2] 'B' class vehicles are 'wheeled' military vehicles that are used for the movement of personnel, plant, equipment and vehicles. 'C' vehicles are military plant vehicles that are either wheeled (such as graders) or tracked (such as bulldozers).

13. The need to relocate 17 Const Sqn to RAAF Base Amberley gained further impetus on 19 September 2012, when Parliament approved the Moorebank Units Relocation (MUR) project, which included the relocation of the School of Military Engineering (SME) from Steele Barracks, New South Wales to new purpose built facilities to be constructed at Holsworthy Barracks. Of the several locations on Holsworthy Barracks that were investigated for the relocation of the SME, the original 17 Const Sqn site was determined as the preferred site.

14. To enable the MUR project to progress, and in particular to allow demolition works to commence at Holsworthy Barracks, temporary facilities to accommodate those elements of 17 Const Sqn that were still located in the 1960's facilities were delivered in early 2013 under the MUR project.

15. Although 17 Const Sqn is now accommodated in 'less old' facilities on Holsworthy Barracks, the current facilities remain at best a temporary solution and have the following deficiencies:

    a. The current working accommodation is split over two former unit lines that were developed to support non engineer units. As such, neither of these lines caters for 17 Const Sqn's specific role or capability requirements.

    b. Storage for equipment is limited with most vehicles stored in the open and subjected to the weather. In addition, storage areas for weapons, tools and equipment do not provide adequate security measures and create difficulties in effectively managing certain workplace health and safety (WHS) risks.

    c. There is no carpentry workshop or plant training area. This means that 17 Const Sqn are unable to provide all services and tasks as directed and are unable to improve, let alone maintain the skills of sqn tradespersons.

16. Despite 17 Const Sqn's tumultuous history of geographical locations and the lack of ever having fully functional and fit for purpose facilities provided, the Sqn has a long and proud record of operational achievements inclusive of the Vietnam War, Operation Slipper in Afghanistan and peacekeeping operations in both

Namibia and East Timor. Today, 17 Const Sqn through 6 ESR continues to provide a robust and responsive military engineering capability to the Australian Defence Force, the Army (in particular the Army Aboriginal Community Assistance Program), and the wider Australian community following natural disasters.

Supporting Future 6 ESR Operations at RAAF Base Amberley

17. The 2010 direction by Chief of Army to relocate 17 Const Sqn to purpose built facilities at RAAF Base Amberley also allowed HQ 6 ESR to raise and commence the establishment of an OSS. Previously, the functions currently performed by the OSS were organic to (and duplicated in) both 17 and 21 Const Sqns.

18. The OSS was raised and initially established at RAAF Base Amberley in 2012 through the reorganisation of existing personnel and equipment, and the reallocation of existing facilities within 6 ESR. However, given 17 Const Sqn's current location at Holsworthy Barracks, OSS functions, personnel and equipment remain split between two interstate locations. In addition to being less efficient, this physical separation in distance also complicates and hinders the effective management of critical and regulated unit governance requirements such as WHS, personnel and equipment readiness, vehicle, plant and equipment control, and supply chain distribution.

19. Given the existing OSS facilities at RAAF Base Amberley were not purpose built, there are additional issues impacting the future effectiveness and efficiency of 6 ESR operations, which are as follows:

    a. HQ OSS is currently located in the existing HQ 6 ESR building, which is functionally dislocated from OSS personnel;

    b. the functional requirements of HQ OSS, the Technical Support Troop and the Operational Support Troop can not be fully met; and

c. once the proposed relocation of 17 Const Sqn is complete, the existing facilities will be too small to undertake the required maintenance on both 17 and 21 Const Sqn's vehicle, plant and equipment holdings.

20. Therefore, in addition to constructing new purpose built facilities for 17 Const Sqn at RAAF Base Amberley to meet the needs for the Sqn's collocation with HQ 6 ESR and 21 Const Sqn, the 17 Const Sqn Relocation Infrastructure Project (the Project) is also proposing to provide new purpose built and adaptively reused facilities at RAAF Base Amberley to accommodate the collocation of all OSS elements, thereby allowing the OSS to achieve its intended mature state for the provision of shared operational support services.

21. In March 2015, the Government approved the Project, inclusive of funding.

Description of Proposal

22. The Project proposes to provide purpose built and adaptively reused facilities that are fit for purpose, compliant and provide value for money. To provide such facilities, the Project also requires the conduct of demolition works, civil works, infrastructure / essential service works and landscaping.

23. The proposed 17 Const Sqn facilities are to be located on a 'Brownfield' site adjacent to HQ 6 ESR and 21 Const Sqn but outside of the existing 6 ESR compound. This will allow enhanced command and control through HQ 6 ESR and improved operational efficiencies between the two 'like' Sqns.

24. The proposed OSS facilities are also to be located on a Brownfield that is located within the existing 6 ESR compound. This will also allow enhanced command and control, and improved operational efficiencies whilst also allowing where possible, the adaptive reuse of existing facilities.

25. An area within the proposed Brownfield site for the new 17 Const Sqn facilities is currently used by the RAAF as a Fire Training Area (FTA) and will require demolition. The FTA is an operational requirement for RAAF Base Amberley to enable the continuation training and ongoing certification of RAAF Fire Crews.

As such, the Project also proposes to construct a new FTA on a Greenfield site within the confines of RAAF Base Amberley.

26. Components of these three major project scope elements are as follows:

a. Scope Element 1 - 17 Const Sqn:

(1) Sqn HQ offices;

(2) Resources, Const and Plant Troop offices and workshops;

(3) vehicle and equipment shelters; and

(4) car parking and deployment areas.

b. Scope Element 2 – OSS Facilities:

(1) Sqn HQ offices;

(2) Operational and Technical Support Troop offices, logistic areas and workshops; and

(3) vehicle and equipment shelters.

c. Scope Element 3 – New FTA:

(1) a concrete area with a mock aircraft fuselage;

(2) temporary building structures, hardstands and shipping containers to simulate building fires; and

(3) a vehicle recovery and fire fighting hardstand.

Project Location

27. RAAF Base Amberley is located 6km southwest of Ipswich and 35km southwest of Brisbane in South East Queensland. A State Locality Plan showing the location of RAAF Base Amberley is at Attachment 1 and a Regional Plan is shown at Attachment 2.

28. The proposed facilities are to be located adjacent to and within the 6 ESR compound along Vung Tau Road on the western side of RAAF Base Amberley. A Precinct Site Plan showing the location of the 6 ESR compound and the existing FTA is at Attachment 3. A Site Plan of the proposed 17 Const Sqn and OSS facilities is shown at Attachment 4.

29. The proposed site for the new FTA is to the north east of the existing site, on the northern side of John Ward Way. A Site Plan of the proposed new FTA is shown at Attachment 5.

Options Considered to Fulfil the Identified Need

30. To meet the identified need, Defence has considered a number of options that include the adaptive reuse of existing facilities and / or the construction of new facilities at both Holsworthy Barracks and RAAF Base Amberley.

31. The adaptive reuse of existing facilities and / or the construction of new facilities at Holsworthy Barracks was not considered to be feasible options as such options will not meet the Chief of Army's direction that 17 Const Sqn collocate with HQ 6 ESR and 21 Const Sqn at RAAF Base Amberley. Nor would such options provide the opportunities being sought to enhance the command and control of engineer units in South East Queensland, to improve the overall operational and training effectiveness of 6 ESR, and to gain unit wide efficiencies through the implementation and provision of a mature operational support 'shared services' model.

32. The adaptive reuse of existing facilities at RAAF Base Amberley (not inclusive of existing 6 ESR facilities) was also not considered to be a feasible option as there are no existing facilities that are in the vicinity of 6 ESR and that are also suitable to support the operations of a const sqn through adaptive reuse.

33. The preferred option is to construct new facilities in the immediate vicinity of 6 ESR and where possible, to adaptively reuse (and where required, extend) existing 6 ESR facilities that will both harness the opportunities offered through

collocation and realise the benefits from consolidating Army's construction capability in one location. These include:

a. improved command and control within 6 ESR;

b. reduced unit operating costs and risks;

c. the rationalisation of construction training and support facilities such as lecture rooms, plant training areas and maintenance facilities. In particular, OSS will see consolidated support facilities for both 17 and 21 Const Sqns; and

d. immediate access to strategic airlift through the RAAF's C17 fleet and road uplifts through Army's force level transport assets from 9 Force Support Battalion and national level logistics support and sustainment though Joint Logistics Command's Joint Logistic Unit – South Queensland.

Environment and Heritage Assessment

Overview of Assessment Process

34. An Initial Environmental Review (IER) was completed for the Project at the RAAF Base Amberley site in July 2012. The IER identified a number of minor risks such as interaction with fauna at the site and recommended appropriate mitigation measures for inclusion into the Environmental Assessment Report (EAR). The EAR then informs the Construction Environmental Management Plan (CEMP) and the Environmental Clearance Certificate (ECC) both of which will reduce environmental impacts during construction. Such mitigation measures include:

a. the provision of offset planting to mitigate vegetation clearing, occurring as a result of the proposed development;

b. strict adherence to Defence's existing Weed Management Control Program to prevent the spread of weeds through mishandling of removed vegetation;

c. the natural dispersal of local fauna and provision of a suitably qualified ‘wildlife spotter’ during any land clearing activities;

d. a testing regime for contaminated soil during any excavation activities;

e. the washing of construction vehicles, plant and equipment during construction to minimise the spread of fire ants;

f. the implementation of anti-bird nesting measures during construction; and

g. the completion of all required soil contamination assessments and if required, the removal or treatment of contaminated soil.

35. During the Planning Phase of the Project a series of site investigations were undertaken. These included:

a. a Contamination Assessment of the proposed site; and

b. a Tree Survey and Species Assessment.

36. Each of these site investigations assessed their relative risks in relation to the Project and made practical and cost effective recommendations for mitigating the risks and meeting all legislative and policy requirements.

37. The Contamination Assessment of the proposed site identified that soil contaminate concentrations were within acceptable limits. However, water contaminate concentrations did exceed some guidelines and the construction methodology employed for the Project will need to allow for the treatment and mitigation of these contaminants in any excavations made.

38. The Tree Survey and Species Assessment was undertaken to determine what level of compensatory planting and wildlife habitat will be required. The findings of this survey and assessment have resulted in an amount of compensatory planting and wildlife habitat being required. As such, the proposed project landscaping has been designed so that it incorporates approximately 3300 new trees and 200 nesting boxes being provided for wildlife.

39. Following the completion of the IER and supplementary assessments, Defence produced and approved an EAR for the Project that outlines a series of recommendations to ensure compliance with the *Environmental Protection Biodiversity Conservation (EPBC) Act* and Defence environmental policies and procedures.

40. To mitigate any potential environmental impacts as identified in the IER, EAR subsequent assessments and any future investigations, the Project will be managed in accordance with:

    a. the Defence Environmental Management Framework, including compliance with the Regional Environmental Management System;

    b. a Construction Environmental Management Plan (to be developed by the construction contractor and to include all environmental procedures for construction activities); and

    c. an ECC, which will be issued by Defence following submission of the CEMP and prior to any construction related activities being undertaken on site.

41. The EAR, prepared by Defence's Environment and Engineering Branch, determined that given the low impact of the proposed works, referral of the Project to the then Department of Sustainability, Environment, Water, Population and Communities under the *EPBC Act* was not required.

Indigenous and Non Indigenous Heritage

42. As part of the IER that was undertaken for the Project, heritage values of the proposed construction sites were investigated. This discovered that the Project was unlikely to impact on any matters of natural or European heritage.

43. Although it is unlikely that the Project will impact on any indigenous or non indigenous heritage values, there are areas on the eastern side of RAAF Base Amberley that have known indigenous heritage values. As such, RAAF Base Amberley has extant procedures in place for the chance discovery of any heritage

material, which will be followed on the discovery of any items of possible indigenous or non indigenous heritage value.

44. The existing FTA is the only structure that is proposed to be demolished under the Project. Under the IER review, this structure was determined to have no heritage value.

Key Legislation

45. The following key legislation is relevant to this project:

    a. *EPBC Act 1999 (Cth);*

    b. *Building and Construction Industry Improvement Amendment (Transition to Fair Work) Act 2012 (Cth);*

    c. *Work Health and Safety Act 2011 (Cth);*

    d. *Disability Discrimination Act 1992 (Cth);*

    e. *Fair Work Act 2009 (Cth); and*

    f. *Fair Work (Building Industry) Act 2012 (Cth).*

46. The design of all proposed Project facilities also complies with all relevant Australian Standards, Codes and Guidelines including National Construction Code, 2012 (inclusive of the Building Code of Australia).

Consultation with Key Stakeholders

47. Consultation has occurred with key Defence stakeholders as follows:

    a. Army Headquarters - Advice on project scope, operational / user requirements, relocation requirements and unit entitlement planning.

    b. Headquarters Forces Command - Advice on user requirements, transition arrangements and relocation/decanting issues.

c. Headquarters 6th Brigade - Advice on user requirements, transition arrangements and relocation / decanting issues.

d. HQ 6 ESR - Advice on user requirements, transition arrangements and relocation / decanting issues.

e. 23 Squadron, RAAF Base Amberley - Advice on base operations and FTA requirements.

f. Infrastructure Division – Advice on Zone and Precinct Planning requirements and site selection and environment, heritage and engineering policy / compliance.

g. Defence Support Queensland – Consideration of regional issues and concerns.

h. Defence Security Agency - Advice on physical security policy.

i. Chief Information Officer Group – Advice on Information Communications Technology policy and costing.

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

49. Community consultations will occur as detailed in the table below:

Proposed Date	**Organisation/Group/Person**	**Type of Consultation**
April 2015	Federal Member for Blair Hon Shayne Neumann MP	Overview of proposed works. (Unclassified Material)
April 2015	State Member for Ipswich West Mr Jim Madden MP	Overview of proposed works. (Unclassified Material)
April 2015	Ipswich City Council Mayor Paul Pisasale	Overview of proposed works / ongoing meetings. (Unclassified Material)
April 2015	Queensland Department of Transport and Main Roads	Consultation regarding Traffic. (Unclassified Material)
April 2015	Local Environmental Groups ,	Consultation regarding proposed

	including the Australian Koala Foundation	works. (Unclassified Material)
April 2015	Community Information Forum	Overview presentation of proposed works. (Unclassified Material)

Purpose of the Works

Project Objectives

50. The purpose of this project is to provide purpose built and adaptively reused facilities that are fit for purpose, compliant and provide value for money in order to enable both the relocation of 17 Const Sqn from Holsworthy Barracks to RAAF Base Amberley (in accordance with the Chief of Army's direction) and the achievement of mature OSS functions within 6 ESR.

51. In meeting the purpose of the Project, significant operational, training and support opportunities offered through collocation will be harnessed, and long lasting benefits will be realised by consolidating Army's construction capability in a single location.

Details and Reasons for Site Selection

52. The proposed site within RAAF Base Amberley was selected due to its close proximity to the existing 6 ESR compound. This presents the highest and best use of land for operational effectiveness with respect to HQ 6 ESR, 17 Const Sqn, 21 Const Sqn and the OSS, and the Base as they relate to day to day operations of each facility and required operational separation distances between RAAF and Army units.

53. A formal Site Selection Board (SSB) was held on 18 April 2012, where appropriate Defence delegates agreed to the proposed site for the new 17 Const Sqn facilities. At the SSB, only one option was considered as this was the only site that achieved the required functionality for 6 ESR.

54. The SSB was subsequently approved by Assistant Secretary Estate Planning on 22 June 2012. The agreed site and associated delegate approval remains valid for a period of five years.

55. The proposed 17 Const Sqn site is predominately open forest and grassland, with a slight slope from northwest up to southeast. The site was originally cleared for farming, and during construction of the 21 Const Sqn facilities, much of the site was again cleared (with the exception of the existing FTA). Therefore, much of the vegetation on the site is recent regrowth.

56. The SSB for the proposed new FTA was also held on 18 April 2012 and was also approved by Assistant Secretary Estate Planning on 22 June 2012. During this SSB, again only one option was discussed.

57. The proposed new FTA site is predominantly open forest and grassland, with a slight slope from west to east. The site was originally cleared for farming and used as an excess fill area during previous construction projects, therefore much of the vegetation on site is recent natural regrowth.

Detailed Description of the Proposed Scope of Works

58. This project proposes three major scope elements. Details of each major scope element are as described below.

Scope Element 1 – 17 Const Sqn

59. This scope element includes the construction of new, purpose built facilities for 17 Const Sqn to meet their working accommodation requirements at RAAF Base Amberley. The construction of the proposed new facilities will incorporate Environmental Sustainable Design (ESD) features and include Green Building best practice principles.

60. This scope element consists of seven sub elements to achieve the working requirements of 17 Const Sqn. The following facilities are proposed:

    a. A Sqn HQ Building:

(1) A single storey building with two wings joined by an external covered breezeway. The floor plan is illustrated in Attachment 6.

(2) The building will be located to the north of the existing HQ 6 ESR on the west of Vung Tau Avenue.

(3) The working accommodation for HQ 17 Const Sqn personnel is to include offices and open plan workstations, orderly room, conference room, resource, archival and stationary rooms, space for soil test laboratory, plotter / printer room, reference library, stores and storage spaces, including Draft Priority 1 (DP1) personal military equipment, breakout spaces, ablutions and plant and communication rooms.

(4) The working accommodation areas are to be air conditioned, with the ablutions and store areas naturally ventilated. Additionally, in response to climatic design principles, the building wings are to have a narrow elongated plan form, at no part wider than two offices and a hallway.

(5) Attention to passive energy principles including providing opportunities to enhance cross ventilation is considered a necessity for the local climatic conditions. External walls are to be a mixture of lightweight steel cladding with operable glazed areas to the north and south long walls. Overhangs and full sun shading are also planned to all openings, allowing glare free natural light.

(6) Ablutions will be provided in accordance with the Building Code of Australia.

(7) Shower and change facilities will be required for personnel after physical training exercises and trade training exercises and maintenance.

(8) Disabled facilities and access will be provided to all buildings in the precinct.

b. A Const Troop Building:

(1) The building is to be single storey within the 17 Const Sqn compound and will serve as both working accommodation and a construction workshop facility. The floor plan is illustrated in Attachment 7.

(2) The buildings will be located to the north of the HQ 17 Const Sqn building west of Vung Tau Avenue.

(3) The building will provide working accommodation for Construction Troop personnel and will include offices and open plan workstations, briefing/conference facility, various stores and storage spaces (including DP1), workshop, breakout space, ablutions and, plant and communication rooms.

(4) Office elements are located at the eastern end of the buildings and are air-conditioned.

(5) The ablutions and DP1 storage areas are also accommodated in naturally ventilated sections of the ends of the buildings. The roof and external walls are to be clad with lightweight steel roofing and wall sheeting with durable masonry base walls provided for foot traffic impact resistance at lower levels.

(6) Fixed ventilation louvres and some panels of fibreglass roof sheeting provide additional natural lighting to all storage areas. The store design will be an open-plan layout using different storage media to suit the goods to be stored.

(7) The predominant storage volume will be housed on pallets or in racks suitable for the building materials stored. Wire mesh walls will provide lockable separation between the various storage elements, allowing goods to be placed in locations to suit their anticipated activity level.

c. A Plant Troop Building:

(1) A single storey building within the 17 Const Sqn compound. The floor plan is illustrated in Attachment 8.

(2) The buildings will be located to the north of the Resources Troop building, on the west of Vung Tau Avenue and to the south of John Ward Way.

(3) The buildings will provide working accommodation for Plant Troop personnel and will include offices and open plan workstations, briefing/conference facility, stores and storage spaces (including DP1), breakout space, ablutions, plant and communication rooms.

(4) The stores function will be within a braced steel framed building accommodating all functions at ground level. The cross section is to reflect the clearance requirements of the working, storage, racking, loading and dispatch areas.

(5) Office elements located to the east of the building are air-conditioned, whilst working and storage areas are naturally ventilated.

(6) The ablutions and DP1 storage areas are to be accommodated in naturally ventilated sections of the ends of the buildings. The roof and external walls are clad with lightweight steel roofing and wall sheeting with durable masonry base walls provided with foot traffic impact resistance at lower levels.

(7) Fixed ventilation louvres and some panels of fibreglass roof sheeting provide additional natural lighting to all storage areas. The store design is to be an open-plan layout using appropriate methods to suit the goods to be stored.

(8) The predominant storage volume is to be housed on pallets or in racks suitable for the building materials stored. Wire mesh walls

will provide lockable separation between the various storage elements, allowing goods to be placed in locations to suit their anticipated activity level. A large caged tyre store is to be located at the western end of the building.

d. A Resources Troop Building:

(1) A single storey building within the 17 Const Sqn compound. The building will be located to the north of 17 Const Sqn Const Troop, to the west of Vung Tau Avenue with the floor plans illustrated in Attachment 9.

(2) The buildings will provide working accommodation for Resources Troop personnel and will include offices, open plan workstations, briefing / conference facility, stores and storage spaces (including DP1), breakout space, ablutions and, plant and communication rooms.

(3) The store will be a braced steel framed building accommodating all functional requirements of the working, storage, racking, loading and dispatch areas.

(4) Office elements are located at the eastern end of the buildings and are air-conditioned, whilst storage and working areas are naturally ventilated.

(5) The ablutions and DP1 storage areas are also accommodated in naturally ventilated sections of the ends of the buildings. The roof and external walls are clad with lightweight steel roofing and wall sheeting with durable masonry base walls provided for impact resistance at lower levels.

(6) Fixed ventilation louvres and some panels of fibreglass roof sheeting provide additional natural lighting to all storage areas. The store design will be an open-plan layout using different storage media to suit the construction material to be stored.

(7) The predominant storage volume will be housed on pallets or in racks suitable for the building materials stored. Wire mesh walls will provide lockable separation between the various storage elements, allowing goods to be placed in locations to suit their anticipated activity level.

e. Vehicle and Equipment Shelters:

(1) Vehicle and equipment shelters provide accommodation and weather protection for the various 17 Const Sqn vehicle and equipment entitlements. The shelters will also provide cover for personnel attending to vehicles and equipment whilst parked. The floor plan of a vehicle shelter is illustrated at Attachment 10.

(2) The Project is proposing to construct seven new shelters for the 17 Const Sqn element comprising 106 ‘B’ vehicles, 48 ‘C’ vehicles and 22 pieces of general construction equipment, inclusive of trailers.

(3) The vehicle shelters are to be steel portal framed structures with bird ingress protection. Appropriate overhangs are provided for sun and weather protection. The east and west ends of the structures have solid walls to supplement the protection offered by overhangs where building orientation and exposure dictate a need for additional protection.

(4) Generally, the pavement below and adjacent to the shelters will be concrete due to the large tracked ‘C’ vehicles using the area.

f. A Regimental Car Parking and Deployment Area:

(1) A deployment area is to be provided at the northwest of the site and consists of a large open concrete section within the new facility footprint. This deployment area is a location for materiel and vehicles to be marshalled and organised prior to the entire Regiment, Squadron or Troop elements deploying on operations.

(2) The existing regimental deployment area is in the south-west corner of the precinct and is proposed to be relocated to the north-west corner of the precinct. This will allow collocation of vehicle workshop like functions and increase efficiency regarding vehicle maintenance movements. The deployment area will also cater for trailer and container storage.

(3) With some minor rearrangement of trailer parking areas, the large open deployment area will provide flexible use for the Regiment having regard for exercises, training, deployment, vehicle movements and container handling / storage.

g. Associated infrastructure / essential services to support the proposed facilities.

Scope Element 2 - OSS Facilities

61. This scope element requires new facilities and modifications / extensions to existing facilities to support working accommodation requirements within 6 ESR.

62. The construction of the proposed facilities will provide an opportunity to incorporate and provide further ESD features, including Green Building principles. The facilities, proposed to be located close to the HQ 6 ESR and other regimental units, will achieve more efficient internal functional requirements and increased communication between the HQ and the Sqns.

63. This scope element consists of four sub elements to achieve the working requirements of OSS. The following facilities are proposed:

a. OSS HQ Facilities:

(1) The OSS HQ function is proposed to be relocated from within the existing HQ 6 ESR facility and will accommodate the remaining personnel from Holsworthy Barracks to the proposed extension of the Operational Troop Facility. This facility will contain the

command and administration functions of the OSS. The OSS will be located within the proposed extension to the existing Operational Support Troop facility. The floor plan is illustrated at Attachment 11.

(2) Provision will be made for office areas, an administration area and a conference room to support the mature state of OSS.

b. Operational Support Troop Facilities:

(1) The existing Operational Support Troop facility at RAAF Base Amberley was designed and constructed with consideration for future expansion.

(2) This facility requires an extension and reconfiguration of the existing building, creating a larger logistics facility, with the capability to support the entire regiment and its sub-units, as opposed to a single sqn as originally built. The floor plan is illustrated at Attachment 11.

(3) The expansion of the existing building will provide an increase in the existing armoury holding capability, to a regiment sized capability, double the size of the existing logistics store, as well as provide office area, ablutions and DP1 storage areas.

(4) External masonry walls are clad with lightweight steel sheeting, with durable impact resistant sheeting at ground level. Fixed ventilation louvres and some panels of fibreglass roof sheeting provide additional natural lighting to all storage areas. The store design is to be an open-plan layout using differing storage solutions to suit the goods being stored.

(5) The predominant storage volume is to be housed on pallets or in racks suitable for the equipment stored. Where required, wire mesh walls will provide lockable separation between the various storage

elements. The design allows for goods to be placed in locations to suit their anticipated activity level.

(6) The Operation Support Troop will also be provided with a large reclaim yard to store equipment and materials for future works undertaken by the Regiment.

c. Technical Support Troop Facilities:

(1) The Technical Support Troop building at RAAF Base Amberley was originally constructed as the 21 Const Sqn ‘B’ and ‘C’ vehicle workshop. The building will be repurposed to service the entire Regiment’s ‘B’ class vehicles. The existing workshop areas are proposed to have minor changes to the ancillary functions within the building. The existing Repair Parts Store (RPS), RPS Office and DP1 store in this workshop will be converted to office space for command and administrative functions for the Sqn as shown at Attachment 12.

(2) In addition to the ‘B’ class vehicle workshop, a new workshop is proposed for construction to the south of the existing workshop, and will predominately provide a facility for maintenance of the Regiment’s ‘C’ class vehicle and equipment fleet as shown at Attachment 13.

(3) A new RPS, RPS Office and DP1 store will be incorporated into the new ‘C’ vehicle workshop facility for the OSS.

(4) The new building will include eight large service bays, which is based on the total service time requirements and personnel needed, with one bay to be dedicated to lubrication requirements (oil change, greasing), including a recessed service pit with hose reel dispensers for lubricants; lifting capability in the vehicle servicing bays is via a gantry crane, which can also access the RPS for safe distribution of heavy spare parts; a two bay RPS / Tools Office,

including a storage area sized to suit the requirements of large vehicles and equipment; welding and electrical bays, with no formal divisions to provide flexibility to amalgamate spaces to address particular tasks; and storage facilities for a variety of hazardous goods, including batteries, Petrol Oils and Lubricants (POL) reticulation and propane gas.

d. OSS Vehicle Shelters:

(1) The OSS vehicle and equipment shelters will form part of the OSS compound area to provide accommodation and weather protection for OSS vehicles and equipment, as well as other vehicles from the Regiment waiting maintenance in the workshops. The shelters will also provide cover for personnel conducting maintenance and inspection activities on vehicles and equipment outside the workshop.

(2) One new shelter for the OSS is proposed to be constructed, to accommodate 15 ‘B’ class vehicles and five general pieces of construction equipment, including trailers.

(3) Appropriate overhangs are to be provided for sun and weather protection. The east and west ends of the buildings are to have solid walls to supplement the protection offered by overhangs where building orientation and exposure dictate a need for additional protection.

(4) Vehicle shelter sizes have been designed to suit the accommodation of the largest size of vehicles within the Squadron’s vehicle entitlement for flexibility.

(5) The vehicle shelters are to be single storey steel portal framed structures with both single and double skillion roofs with bird ingress protection netting.

Scope Element 3 – New FTA

64. The proposed site for 17 Const Sqn is currently occupied by the existing FTA and is used to conduct on base operational training for aircraft incident response, vehicle recovery and building fire training. The Project will need to demolish the existing facility and construct a new facility prior to constructing the new 17 Const Sqn and OSS facilities.

65. The new FTA will be constructed prior to demolition of the existing FTA to ensure continuous operational training and accreditation capability for RAAF Fire Services are maintained throughout the construction period.

66. This element consists of three sub elements to achieve the working requirements of the FTA. The following facilities are proposed:

    a. a large concrete area with a mock aircraft fuselage (this project element includes associated plumbing, equipment and drainage to the existing Aqueous Film Forming Foam (AFFF) tank);

    b. temporary building structures, hardstands and shipping containers to simulate building fires for close quarter fire fighting training; and

    c. vehicle recovery hardstand for rescue training of persons trapped in vehicles and vehicle fire fighting training.

67. Surveys have been undertaken on the site of the existing FTA with regards to contaminants. These identified that soil contaminant concentrations were within acceptable limits. However, water contaminant concentrations did exceed some guidelines. The construction methodology will allow for appropriate treatment and disposal of soil in approved landfills should contaminant levels be found to exceed acceptable limits.

68. The size of the proposed new fire test pad will be much larger than the existing pad. This is due to the large spraying distance of the Panther Fire Truck and will also mitigate any AFFF spills off the pad area.

Public Transport, Local Road and Traffic Concerns

69. As a result of the Project, 17 Const Sqn will be relocating to RAAF Base Amberley, which will see a small increase to the local base and area population. With regards to the effect on the local road network, a traffic analysis has been completed which has shown no adverse effects on the road networks around the Base.

70. During construction there will be an inevitable increase to the number of large vehicles that enter the base to deliver material to site. Contractual arrangements within the construction contract will mitigate the effects of this on the local road network. This will involve the use of a dedicated construction access gate off Hansens Rd to prevent delays to the area around the main gate of RAAF Base Amberley.

Zoning and Local Approvals

71. The sites approved for all project scope elements are all located within an Operation Support Zone as defined within the RAAF Base Amberley Zone and Precinct Plan (2007). The intended function and use of all project elements are consistent with this zoning.

Childcare Provisions

72. Childcare facilities are currently available on RAAF Base Amberley. There are no requirements for additional childcare facilities as part of this project, with the existing facilities meeting the current and known future needs of the Base.

73. As part of the relocation preparations of 17 Const Sqn, arrangements will be made with the childcare facility to ensure that there are provisions within the childcare facility so that the anticipated numbers can be accommodated.

Impact on Local Community

74. Within RAAF Base Amberley, there is on-base accommodation available for military personnel. 6 ESR have provisions within this accommodation and this will be utilised for some of the 17 Const Sqn personnel relocating to RAAF Base

Amberley. Those personnel who do not obtain on-base accommodation will be required to find accommodation in the local area. RAAF Base Amberley has a long standing and good relationship with the local community. Therefore due to the number of personnel that this will involve, it is not expected to have any effect on the overall accommodation availability in the local area.

75. The construction of the Project will provide opportunities for local enterprises to provide services as the head contractor, or as a sub contractor to the head contractor, providing this is in line with Commonwealth Procurement Rules and any relevant contractual obligations.

Planning and Design Concepts

76. The functional needs of 17 Const Sqn extensively dictate the planning and design criteria. These criteria and objectives, formulated as part of the design process, include the following:

    a. the layout of the Sqns should reflect improved functional efficiency;

    b. the hierarchy and chain of command should be reflected in the layout;

    c. the quantum and large size of the vehicles held by 17 Const Sqn requires significant allowances in areas for parking and manoeuvring both within and outside the compounds;

    d. large open paved areas are required on a regular basis for staging and deployment activities;

    e. deployment areas are preferably located so as not to be on direct view from Walloon Road; and

    f. security and safety requirements dictate spacing between buildings, roads and vehicle parking areas.

77. Based on these planning objectives, the following design principles were adopted:

a. orientate all buildings north-south with long axes east-west;

b. recognise that the operations of the Squadron are characterised by regular deployments of large numbers of heavy vehicles, and plant compounds to facilitate easy circulation and movement of heavy vehicles;

c. focus heavy vehicle movements to Vung Tau Avenue and John Ward Way, and then onto the public road system with minimum movement through the internal road networks;

d. the design, structure, servicing and siting of buildings should ensure that future expansion is possible;

e. Vung Tau Avenue is to be the primary entrance point to the Sqns, with a secondary access available off John Ward Way, allowing uninterrupted access for OSS and the deployment area. An alternative exit is available using Bougainville Road when necessary; and

f. develop functionally appropriate zones where possible, separating offices from compounds and industrial facilities, such as workshops, store areas, and pedestrian movements to large heavy vehicles.

78. Access and facilities for the disabled will be provided in accordance with the Building Code of Australia, Australian Standard AS1428 and the Defence policy ‘Disabled Access and Other Facilities for Disabled Persons’. The facilities will be fully compliant with legislation and will include accessible kitchens, toilets and shower facilities with disabled access to facilities considered in the development phase.

Structural Design

79. The structural design of the proposed hardstands, access roads and the building structures has taken into account local geotechnical conditions and are in accordance with all relevant Australian Standards and Codes. Appropriately qualified and experienced geotechnical and structural engineers have been engaged in the design of the proposed facility.

Hydraulic Services

80. Water will be supplied to the proposed facilities from an adjacent water main that services the 6 ESR precinct. 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 series and the AS/NZS 3500 series.

Electrical Services

81. The electrical supply to the proposed facilities will be from the existing electrical network on the Base. Investigations have confirmed that there is adequate capacity on the network for the new facilities. The electrical design has been undertaken in accordance with all relevant Australian Standards, all applicable Legislation, Regulations, Codes of Practice and Guidance Publications relevant in Queensland and stated Defence requirements.

Fire Protection

82. The RAAF Base Amberley Fire Services have been consulted in developing this proposal to ensure fire fighting capabilities are not adversely impacted in an emergency and that their training and accreditation are not affected.

83. Where required, the new facilities will be connected to the existing base wide fire alarm network. The fire engineering design has been undertaken in accordance with all relevant Australian Standards, all applicable Legislation, Regulations, Codes of Practice and Guidance Publications relevant in Queensland and stated Defence requirements.

Acoustics

84. Within the proposed buildings, acoustic privacy of partitioning is provided in accordance with AS/NZS ISO 717.1. This has been determined based on the function within each of the spaces and the level of privacy required.

85. Acoustic isolation from external sources has been incorporated into the office and storage facilities. Within the workshop facilities, this has been unable to be

achieved. This is because during hours of operation, the building occupiers leave the roller doors open to facilitate the throughput of vehicles for repair and servicing. However, any offices within the workshop buildings have been designed to meet the required sound levels.

Security

86. There is no public access to the proposed facilities and entry to the proposed facilities will be through the controlled access points at RAAF Base Amberley. The individual buildings on site been designed for the appropriate security classification as stipulated by Defence requirements.

Environmental Sustainability of the Project

87. The Commonwealth is committed to 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. Defence also implements policies and strategies in energy, water and waste to improve natural resource efficiency and to support its commitment to the reduction of energy consumption, potable water consumption and waste diversion to landfill.

88. This project has addressed Commonwealth policy by adopting cost-effective and ESD practices as a key objective in the design of the new facilities.

89. The ecologically sustainable measures for the Project are balanced with other requirements for Defence buildings, including security and WHS considerations to ensure that Defence's operational capability is not compromised. All buildings are designed and will be constructed, operated and maintained to ensure that they use energy efficiently considering their required use.

90. To achieve this, buildings will comply with:

    a. Section J of Volume One of the Building Code of Australia, National Construction Code 2014;

b. Part 3.12 of Volume Two of the Building Code of Australia, National Construction Code 2014;

c. The Energy Efficiency in Government Operations Policy; and

d. Defence Green Building Requirements Policy.

91. The proposed facilities will be a mix of new construction, on a largely undeveloped site (not withstanding the existing FTA) and modified / expanded facilities on a developed site. The sites, in terms of footprint, orientation and aspect, provide the greatest opportunity to implement environmental sustainability in precinct and building design.

92. All energy sources supplying the buildings will be individually metered and linked to a control and monitoring system allowing Defence to better manage and monitor environmental performance. Sub-metering will be provided in accordance with the Defence Energy Management Strategy, and the requirements of the Commonwealth Energy Policy.

93. Other ESD initiatives to be implemented within the scope of the Project include:

a. rainwater collection for use in building toilets;

b. implementation of pedestrian and bicycle routes across the precinct;

c. connecting into the existing Base Management System network, which allows for centralised monitoring and control of building systems;

d. soil cut and fill volumes will be balanced;

e. solar hot water systems will be installed for use throughout the buildings to supply hot water for showers and brew areas;

f. photovoltaic cells (solar panels) will be installed to the HQ buildings to supplement the electrical supply;

g. building orientation will be designed to maximise solar efficiencies;

h. mixed mode climate control is proposed for all occupied office areas; and

i. all facilities will include energy and water efficient plant and fixtures.

94. The intention is to design to the Green Star '5 star' rating.

Landscaping

95. Landscaping design has been included in all new building elements, where appropriate and functional. Landscaping works will also be completed to restore areas disturbed during construction and provide general improvement to the built environment.

96. Landscaping design will focus on a functional, low maintenance and water sensitive approach using plants that are indigenous to the area. A contractual establishment period will be included in the landscaping contract to ensure the landscaping elements are maintained and to ensure effective and efficient propagation.

97. Landscaping practices will be adopted to be sympathetic with local environmental conditions. Clear contractual constraints will also be placed upon the Contractor to address issues, adopt appropriate practices and to deliver promised services under the CEMP.

98. Planting will be undertaken to compensate for trees removed as part of the construction activities. Appropriate plantings will be undertaken in consultation with Defence's Regional Environmental Officer who has assisted in identifying appropriate species and locations. Furthermore, it is envisaged that the compensatory planting will enhance the green corridor to Hansen's Farm and for wildlife transiting through the Base.

Energy Targets

99. There are no applicable energy targets for this proposal.

Work Health and Safety Measures

100. The proposed facilities to be provided under this project will comply with Department of Defence's WHS Policy, the *Work Health and Safety Act (WHS) 2011 (Cth)*, Work Health and Safety (Commonwealth Employment - National Standards) Regulations and the Defence WHS Manual.

101. 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.

102. Safety aspects of this proposal have been addressed during the design process and have been documented in a Safety in Design Report completed by the Design Consultant. No special or unusual public safety risks have been identified in this process. The successful construction contractor will also be required to submit a Safety Plan for the construction phase and prior to the start of any construction activities.

Cost Effectiveness and Public Value

Outline of Project Costs

103. The estimated out-turn cost of the Project is $71.8 million, excluding Goods and Services Tax. This estimate includes the construction costs including escalation allowances, professional service fees, design, construction and Defence contingencies and information technology equipment.

104. The Project will contribute significantly to 6 ESR's efficiency, as the collocation of the Const Sqns will significantly reduce the costs associated with interstate travel, training, management and operation of the Regiment.

105. Existing facilities have been re-used where possible, minimising the total capital expenditure, while achieving the required functional capability.

106. ESD principles have been incorporated into the design of the proposed facilities, resulting in greater efficiencies and reduced costs over the design life.

107. Under this project, the Net Personnel Operating Costs (NPOC) have been estimated for the new facilities. NPOC analysis provides an estimate (of given accuracy level) to the regional Defence Support representatives of the mature annual cost of operating new or refurbished facilities. The cost estimate becomes the basis of an ongoing, indexed budget transfer for the operation of said facilities.

Details of Project Delivery System

108. A Project Manager / Contract Administrator has been appointed by the Commonwealth to manage the project works and associated administration of the contracts during the Planning Phase. Subject to Parliamentary approval, value for money assessments and satisfactory performance of the Project Manager / Contract Administrator, the Commonwealth will extend the Project Manager / Contract Administrator Contract to service the Delivery Phase of the Project.

109. A Design Services Consultant has been appointed to undertake the design of the facilities, which have been completed to 100%. Subject to Parliamentary approval of the Project, value for money assessments and satisfactory performance, the Commonwealth will extend the Design Services Consultants Contract to service the Delivery Phase of the Project.

110. Subject to Parliamentary approval of the project, Defence intends to engage one Head Contractor, using the Defence Head Contract (HC-1 2003) to construct all proposed scope elements of the Project. The Head Contractor will deliver the project works in accordance with, but not limited to all current National Construction Code – Building Code of Australia guidelines, Commonwealth Procurement Rules, Australian Standards, Defence Standards, Guidelines, Policy and Procedures and Workplace Health and Safety Legislation.

Construction Program

111. Subject to Parliamentary approval of the Project, construction is expected to commence in mid 2015 with construction completed by late 2016 to align with the January 2017 posting cycle for Army. This ensures that the requirement of relocating 17 Const Sqn and OSS equipment and personnel from Holsworthy Barracks to RAAF Base Amberley does not interfere with the regular functioning of the Regiment.

Public Value

112. The proposed facility will meet an important Defence capability need for 6 ESR.

113. The Project will also 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.

Revenue

114. No revenue will be derived from this Project.

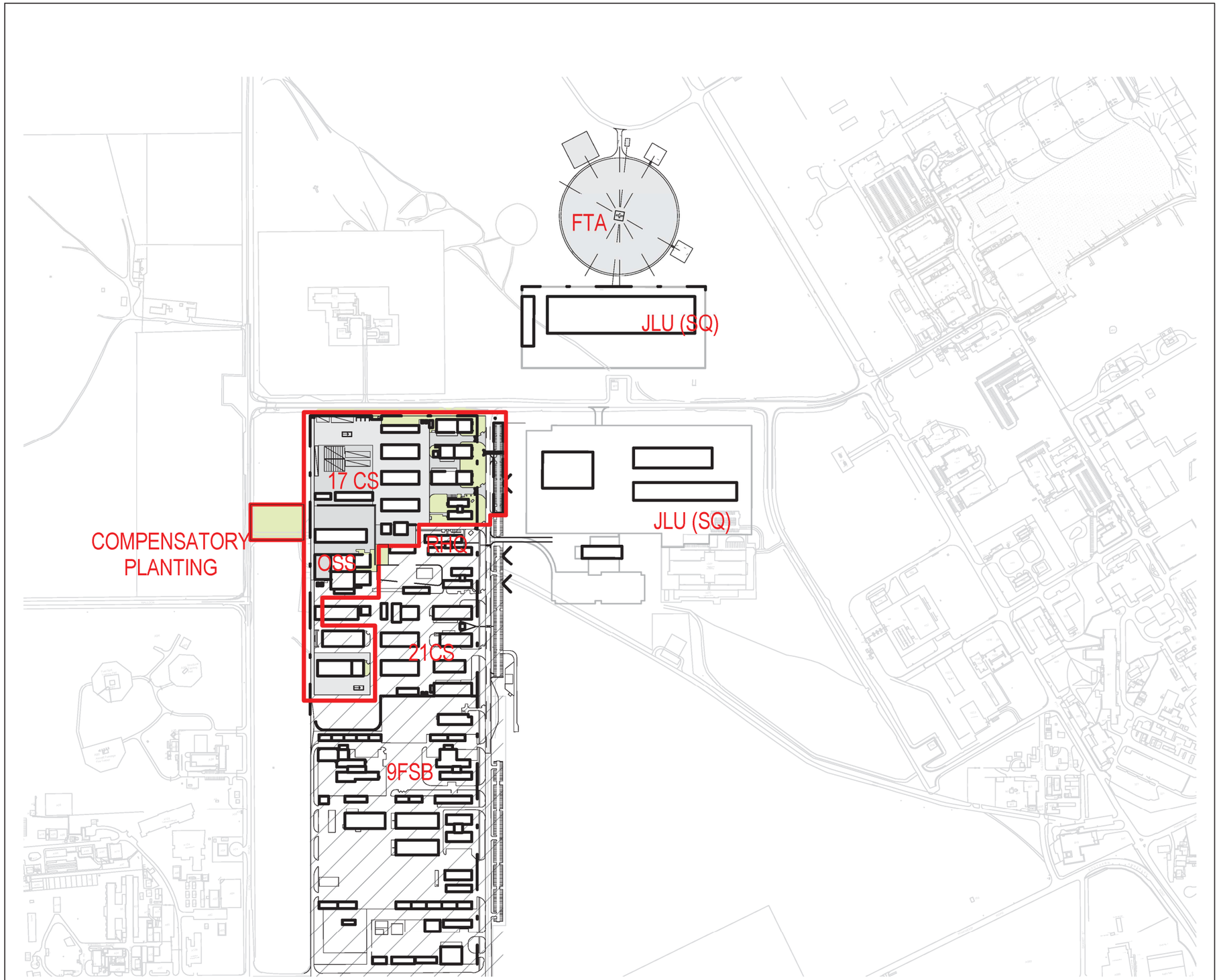
Attachments

1. Locality Plan
2. Regional Plan
3. Precinct Plan
4. Site Plan - 17th Construction Squadron/ Operational Support Squadron
5. Floor Plan - Fire Training Area
6. Floor Plan - 17th Construction Squadron - Headquarters
7. Floor Plan - 17th Construction Squadron - Construction Troop
8. Floor Plan - 17th Construction Squadron - Plant Troop
9. Floor Plan - 17th Construction Squadron - Resources Troop
10. Floor Plan - 17th Construction Squadron - Vehicle Shelter
11. Floor Plan - Operational Support Squadron - Q Store
12. Floor Plan - Operational Support Squadron - B Vehicle Workshop
13. Floor Plan - Operational Support Squadron - C Vehicle Workshop

ATTACHMENT 01 | LOCALITY PLAN - RAAF BASE AMBERLEY

ATTACHMENT 02 | REGIONAL PLAN - RAAF BASE AMBERLEY

SCALE
0



ATTACHMENT 03 | PRECINCT PLAN - RAAF BASE AMBERLEY

SCALE
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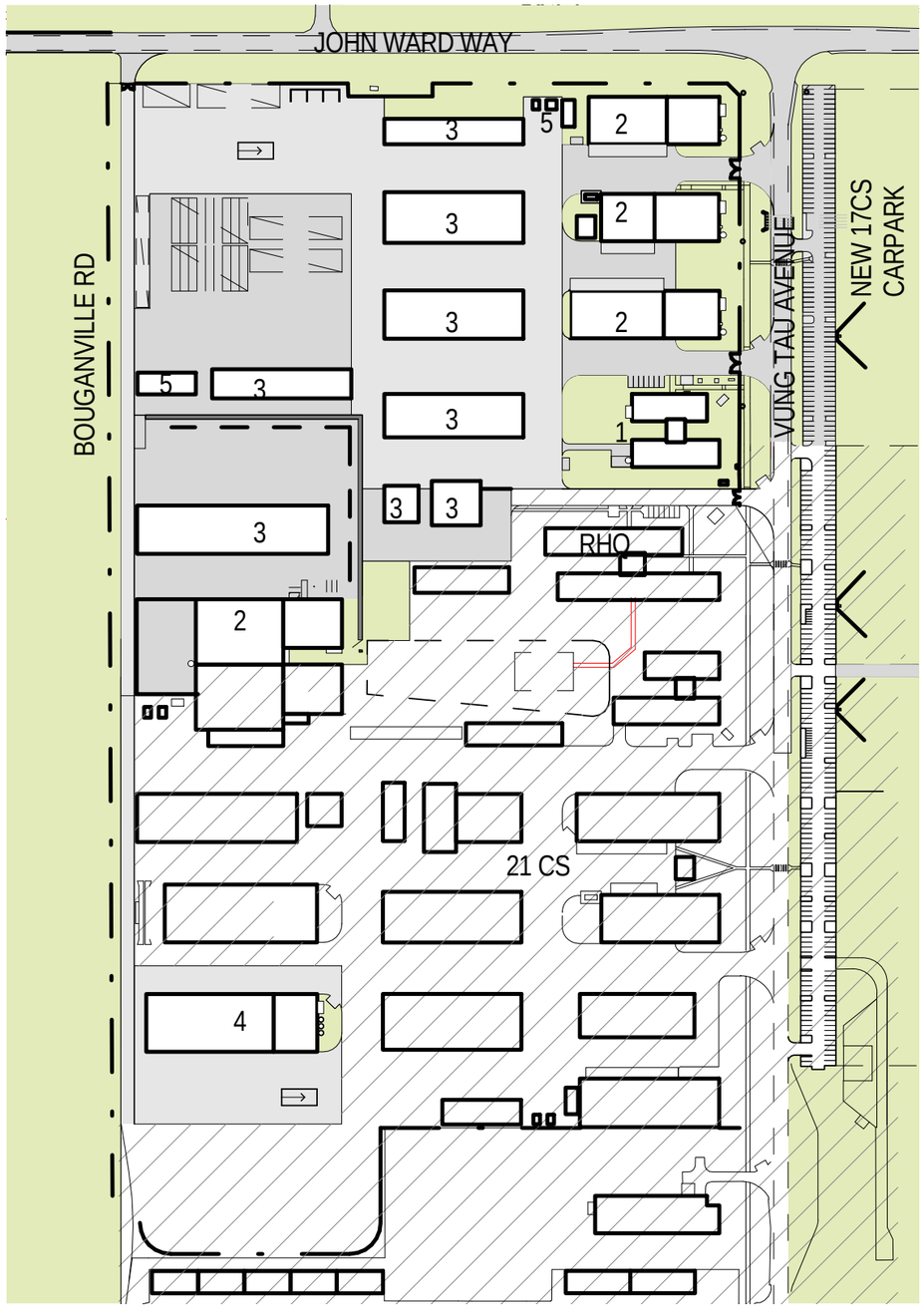


BUILDING LEGEND

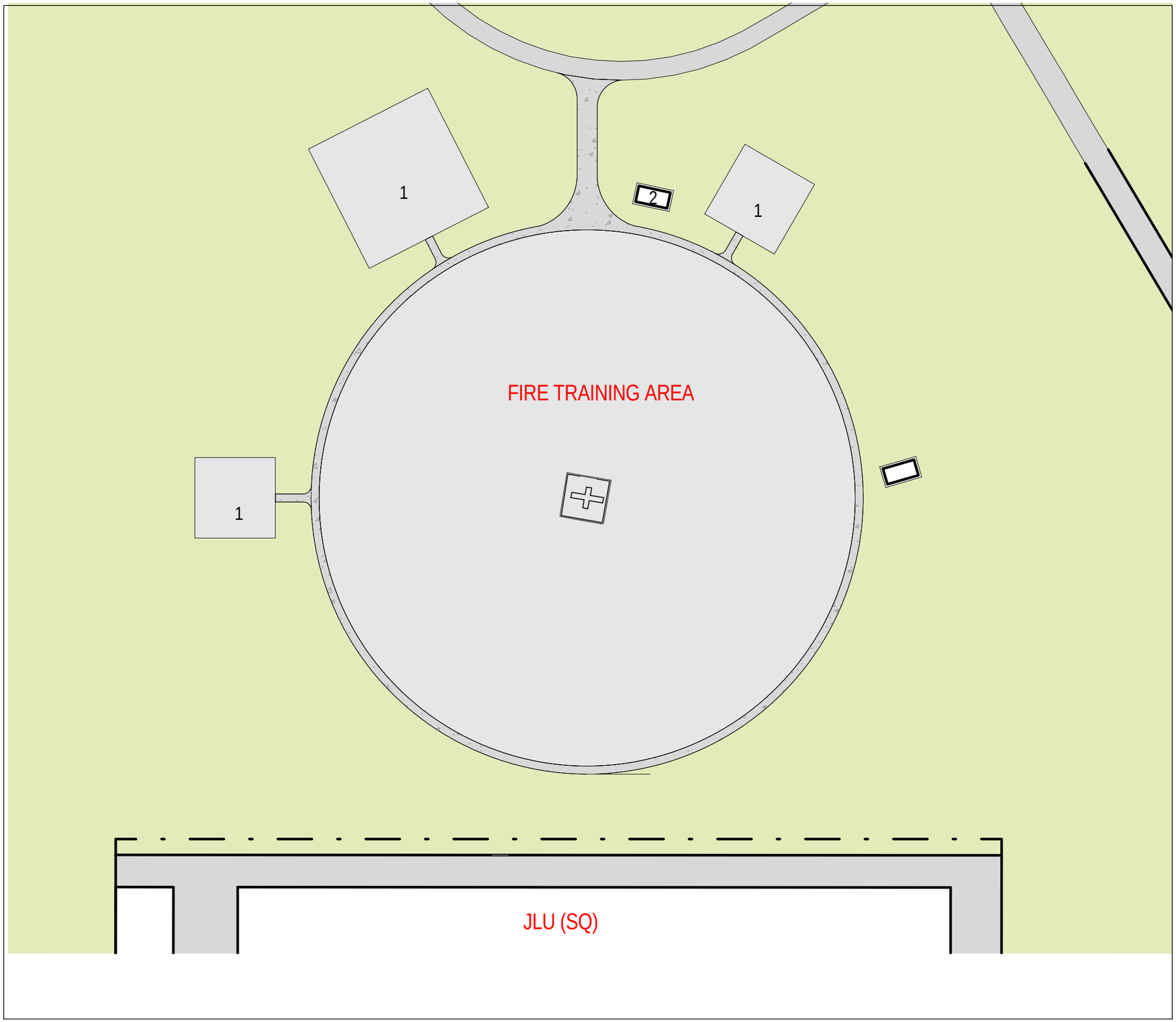
1	17CS HQ
2	TROOP BUILDINGS
3	SHELTER
4	WORKSHOP
5	HAZARDOUS STORE

KEY:

- NEW STRUCTURE
- SOFT LANDSCAPE
- ASPHALT SURFACE
- CONCRETE SURFACE
- EXISTING BUILDINGS & SURFACE

ATTACHMENT 04 | SITE PLAN - 17th CONSTRUCTION SQUADRON / OPERATION SUPPORT SQUADRON

SCALE
0



BUILDING LEGEND

1	ANCILLARY TRAINING AREA
2	SHELTER

KEY:

- NEW STRUCTURE
- SOFT LANDSCAPE
- ASPHALT SURFACE
- CONCRETE SURFACE
- EXISTING BUILDINGS & SURFACE

SCALE
0

ATTACHMENT 05 | SITE PLAN - RAAF AMBERLEY FIRE TRAINING AREA

ROOM LEGEND:

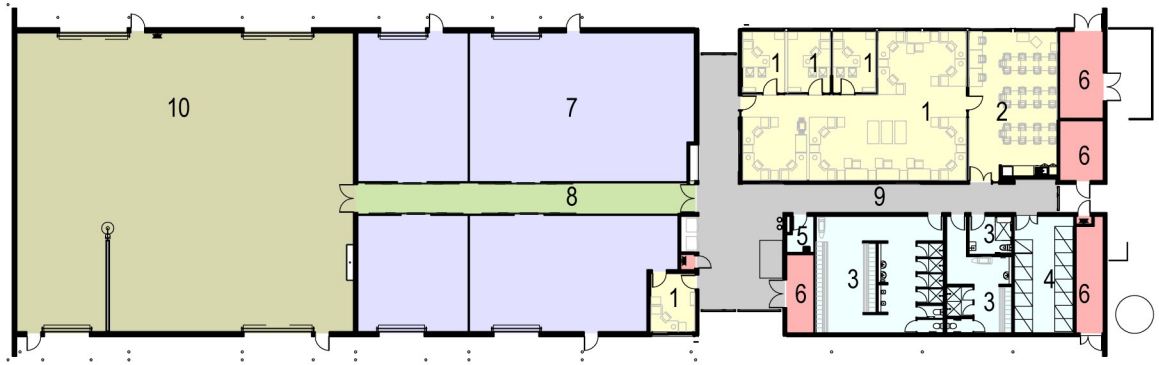
1	OFFICE
2	BRIEFING/ LUNCH
3	TOILETS SHOWERS
4	DP1
5	CLEANER
6	PLANT
7	LABORATORY

COLOR LEGEND

- BREEZEWAY
- CIRCULATION
- OFFICE
- PLANT
- SALS & DP1
- STORE
- WORKSHOP

SCALE
0

ATTACHMENT 06 | HEADQUARTERS 17TH CONSTRUCTION SQUADRON BUILDING - FLOOR PLAN



ROOM LEGEND:

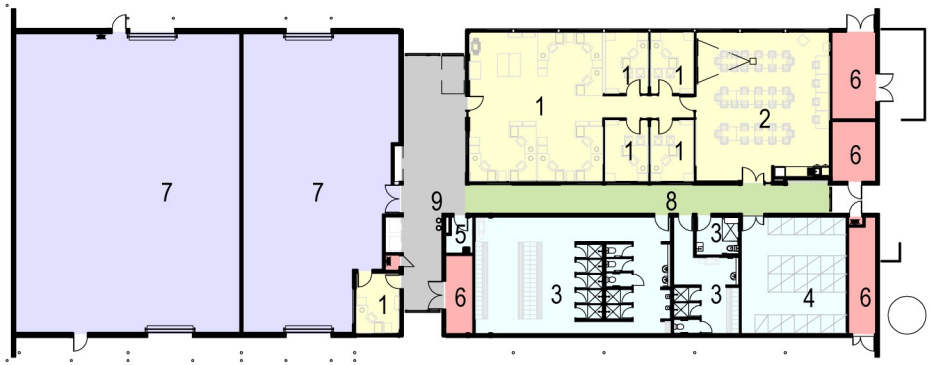
1	OFFICE
2	BRIEFING/ LUNCH
3	TOILETS SHOWERS
4	DP1
5	CLEANER
6	PLANT
7	STORE
8	CIRCULATION
9	BREEZEWAY
10	WORKSHOP

COLOR LEGEND

- BREEZEWAY
- CIRCULATION
- OFFICE
- PLANT
- SALS & DP1
- STORE
- WORKSHOP

SCALE
0

ATTACHMENT 07 | CONSTRUCTION TROOP 17TH CONSTRUCTION SQUADRON BUILDING - FLOOR PLAN



ROOM LEGEND:

1	OFFICE
2	BRIEFING/ LUNCH
3	TOILETS SHOWERS
4	DP1
5	CLEANER
6	PLANT
7	STORE
8	CIRCULATION
9	BREEZEWAY

COLOR LEGEND

- BREEZEWAY
- CIRCULATION
- OFFICE
- PLANT
- SALS & DP1
- STORE
- WORKSHOP

SCALE
0

ATTACHMENT 08 | PLANT TROOP 17TH CONSTRUCTION SQUADRON BUILDING - FLOOR PLAN

ROOM LEGEND:

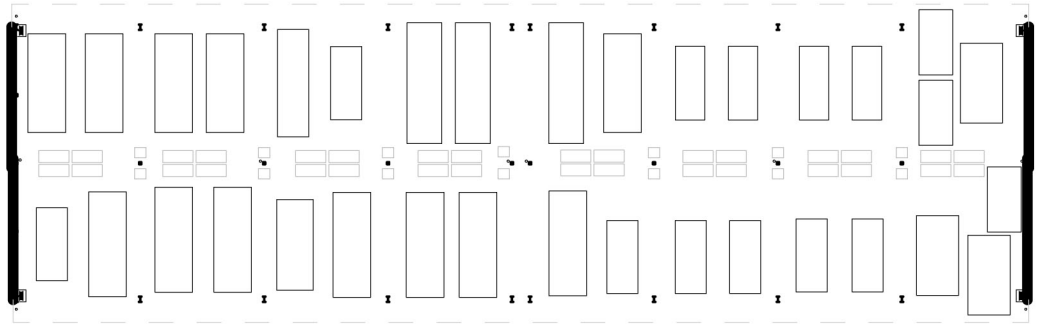
1	OFFICE
2	BRIEFING/ LUNCH
3	TOILETS SHOWERS
4	DP1
5	CLEANER
6	PLANT
7	STORE
8	CIRCULATION
9	BREEZEWAY

COLOR LEGEND

- BREEZEWAY
- CIRCULATION
- OFFICE
- PLANT
- SALS & DP1
- STORE
- WORKSHOP

SCALE 1 : 500@A4
0 550 13750

ATTACHMENT 09 | RESOURCES TROOP 17TH CONSTRUCTION SQUADRON BUILDING - FLOOR PLAN



COLOR LEGEND

- BREEZEWAY
- CIRCULATION
- OFFICE
- PLANT
- SALS & DP1
- STORE
- WORKSHOP

SCALE
0

ATTACHMENT 10 | TYPICAL 17TH CONSTRUCTION TROOP VEHICLE SHELTER - FLOOR PLAN

17th Construction Squadron Relocation Infrastructure Project
Submission 1

ROOM LEGEND:

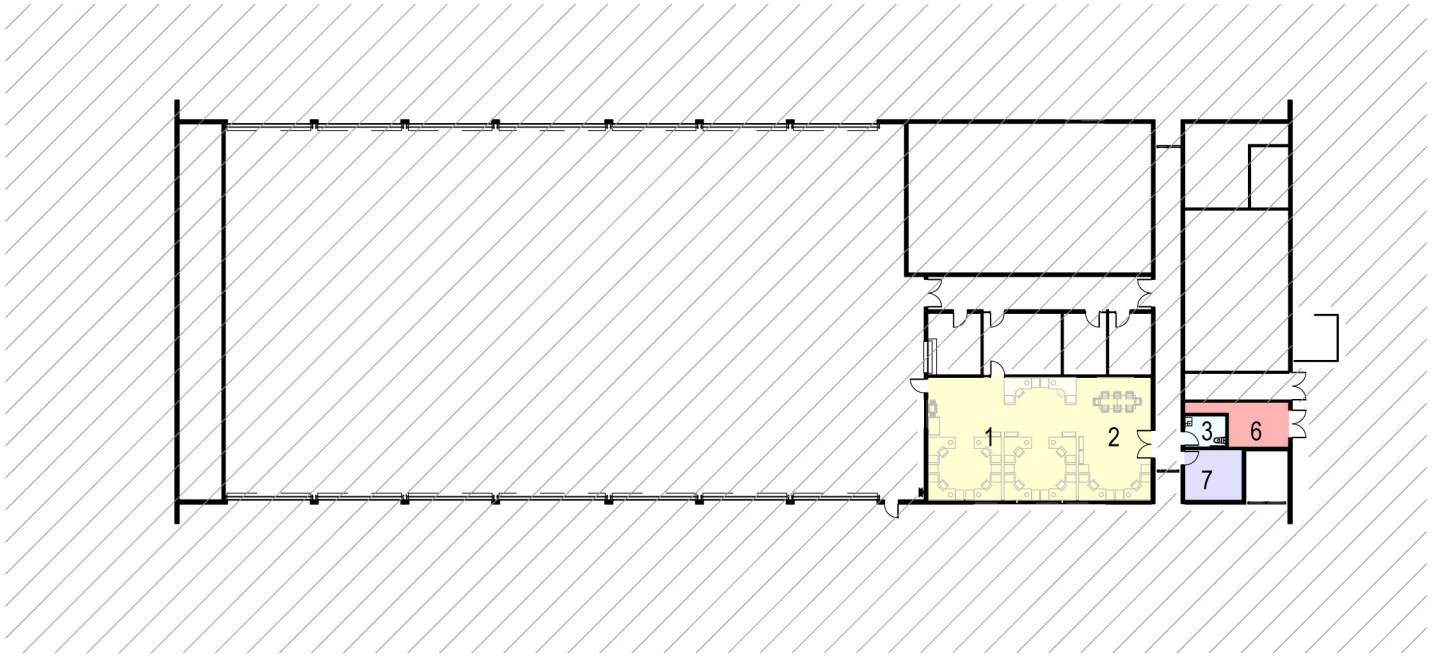
1	OFFICE
2	BRIEFING/ LUNCH
3	TOILETS SHOWERS
4	DP1
5	CLEANER
6	PLANT
7	STORE
8	CIRCULATION
9	BREEZEWAY
10	WORKSHOP

COLOR LEGEND

- BREEZEWAY
- CIRCULATION
- EXISTING
- OFFICE
- PLANT
- SALS & DP1
- STORE
- WORKSHOP

SCALE
0

ATTACHMENT 11 | QSTORE OPERATION SUPPORT SQUADRON - FLOOR PLAN



ROOM LEGEND:

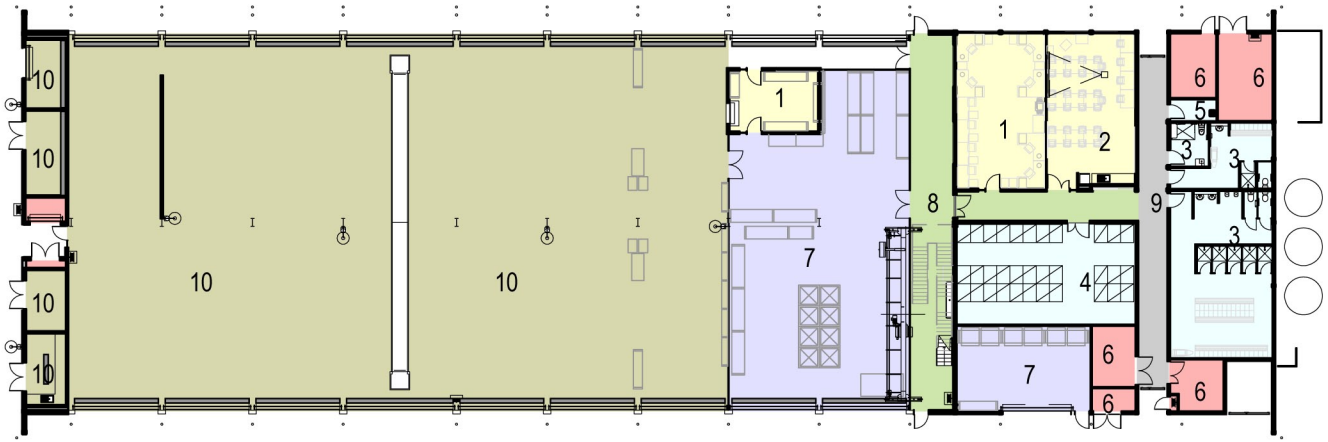
1	OFFICE
2	BRIEFING/ LUNCH
3	TOILETS SHOWERS
4	DP1
5	CLEANER
6	PLANT
7	STORE
8	CIRCULATION
9	BREEZEWAY
10	WORKSHOP

COLOR LEGEND

- BREEZEWAY
- CIRCULATION
- OFFICE
- PLANT
- SALS & DP1
- STORE
- WORKSHOP

SCALE
0

ATTACHMENT 12 B VEHICLE WORKSHOP OPERATION SUPPORT SQUADRON - FLOOR PLAN



ROOM LEGEND:

1	OFFICE
2	BRIEFING/ LUNCH
3	TOILETS SHOWERS
4	DP1
5	CLEANER
6	PLANT
7	STORE
8	CIRCULATION
9	BREEZEWAY
10	WORKSHOP

COLOR LEGEND

- BREEZEWAY
- CIRCULATION
- OFFICE
- PLANT
- SALS & DP1
- STORE
- WORKSHOP

SCALE
0

ATTACHMENT 13 | C VEHICLE WORKSHOP OPERATION SUPPORT SQUADRON - FLOOR PLAN