

DEPARTMENT OF THE SENATE
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22 MAR 1994
Mary Evans

The Parliament of the Commonwealth of Australia
Parliamentary Standing Committee on Public Works



Report Relating

to the

HMAS *Cerberus* Technical Training and other facilities, Western Port, Vic.

(First Report of 1994)

Australian Government Publishing Service
Canberra



Parliamentary Standing Committee on Public Works

REPORT

relating to the

HMAS *CERBERUS* TECHNICAL TRAINING AND OTHER FACILITIES, WESTERN PORT, VIC.

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MEMBERS OF THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

(Thirty-First Committee)

Mr Colin Hollis MP (Chairman)
Senator Paul Henry Calvert (Vice-Chairman)

Senate	House of Representatives
Senator Bryant Robert Burns	Mr John Neil Andrew MP
Senator John Robert Devereux	Mr Raymond Allen Braithwaite MP
	Mr Russell Neville Gorman MP
	Mr Robert George Halverson OBE MP
	Hon. Benjamin Charles Humphreys MP

Committee Secretary: Peter Roberts

Inquiry Secretary: Denise Denahy

Secretarial Support: Sophia Konti

EXTRACT FROM THE VOTES AND PROCEEDINGS OF
THE HOUSE OF REPRESENTATIVES

No. 23 dated Tuesday, 5 October 1993

7 PUBLIC WORKS—PARLIAMENTARY STANDING
COMMITTEE—REFERENCE OF WORK—HMAS
CERBERUS TECHNICAL TRAINING AND OTHER
FACILITIES, WESTERN PORT, VIC.

Mrs Crosio (Parliamentary Secretary to the Minister for the Arts and Administrative Services), pursuant to notice, moved—That, in accordance with the provisions of the *Public Works Committee Act 1969*, the following proposed work be referred to the Parliamentary Standing Committee on Public Works for consideration and report: HMAS *Cerberus* technical training and other facilities at Western Port, Vic.

Mrs Crosio presented plans in connection with the proposed work.

Question - put and passed.

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

HMAS *CERBERUS* TECHNICAL TRAINING AND OTHER
FACILITIES AT WESTERN PORT, VIC.

By resolution on 5 October 1993 the House of Representatives referred to the Parliamentary Standing Committee on Public Works for consideration and report to Parliament the proposed HMAS *Cerberus* technical training and other facilities at Western Port, Vic.

THE REFERENCE

1. The proposed facilities are required to allow Navy technical training, which is presently divided between HMAS *Nirimba* in NSW and HMAS *Cerberus* in Vic to be consolidated at HMAS *Cerberus* and to enable some aged and inadequate support facilities at HMAS *Cerberus* to be replaced or upgraded.

2. The estimated cost of the work when referred to the Committee in October 1993 was \$51.5m at April 1992 prices. However, at the time of the public hearing in January 1994, the estimated cost due to a number of changes was reduced to \$45.4m at April 1993 prices. (Refer paragraphs 109-111).

THE COMMITTEE'S INVESTIGATION

3. The Committee received a written submission from the Department of Defence (Defence) and evidence was taken from representatives of Defence at a public hearing at HMAS *Cerberus* on Tuesday 25 January 1994. On Monday 24 January the Committee inspected the Army College of TAFE at Bonegilla at the invitation of the Hon L Lieberman, MP, Member for Indi. On Tuesday 25 January the Committee inspected existing facilities at HMAS *Cerberus*.

4. While at HMAS *Cerberus* the Committee also inspected sites for a future Defence Housing Authority development. This development does not form part of this proposal.

5. A list of witnesses who gave evidence at the public hearing is at Appendix A. The Committee's proceedings will be printed as Minutes of Evidence.

6. A number of written submissions were also received from other organisations and these are incorporated in the Minutes of Evidence.

BACKGROUND

7. HMAS *Cerberus* is the Royal Australian Navy's principal training establishment. It is located between Stony Point and Sandy Point on the Western Port Bay side of the Mornington Peninsula. Following the implementation of some of the recommendations by Admiral Sir Reginald Henderson to the Australian Government in 1911, an area of 1 500 hectares at Crib Point and Hanns Inlet was selected as a destroyer and submarine base. The establishment opened as the Flinders Naval Establishment in September 1920, but its role had been changed to training by the time it was commissioned as HMAS *Cerberus* in 1921.

8. During the 1920s and 1930s training schools were progressively added. Rapid expansion occurred during the Second World War and temporary buildings were erected. Some limited redevelopment commenced in 1957 and continued until the 1970s. During the 1980s a program of refurbishing and constructing accommodation and schools for sailors was undertaken. The following reports relating to developments at HMAS *Cerberus* were tabled by the Committee:

- . 11/1986 HMAS *CERBERUS*, CRIB POINT – Construction of a New Wharf and Seamanship School at HMAS *Cerberus*, Crib Point, Victoria
- . 2/1989 CRIB POINT – Construction of New Communications and Recruit Schools, HMAS *Cerberus*, Crib Point, Victoria
- . 8/1989 CRIB POINT – Upgrade of Navy Living-in Accommodation at HMAS *Cerberus*, Crib Point, Victoria

9. HMAS *Cerberus* currently has approximately 400 separate buildings, which at any time may accommodate up to 1 700 service and civilian personnel, most of whom are involved in training courses. The Base provides basic training for all recruits and technical, advanced and specialist training in subjects such as gunnery, communications, cookery and supply, mechanical and electrical engineering, dentistry, seamanship and nuclear biological chemical and damage control. Most RAN personnel pass through

HMAS *Cerberus* in their early careers for basic or specialist training at one of the nine training schools.

10. HMAS *Nirimba*, located to the west of Sydney, was originally established during the Second World War to provide maintenance facilities for Royal Navy carrier aircraft. Upon its transfer to the RAN in 1952 it continued to be utilised for aircraft maintenance purposes until the first intake of apprentices in 1956. With the aircraft transferred to other establishments, the hangars were converted for use as practical areas for apprentice training.

THE NEED

11. The 1991 Defence Force Structure Review (DFSR) endorsed by the Commonwealth Government, foreshadowed the closure of the technical training establishment at HMAS *Nirimba*. HMAS *Nirimba's* functions of induction and technical training are similar to those carried out at HMAS *Cerberus*. The DFSR identified savings in both instructional and support staff in the order of 240 personnel by consolidation at HMAS *Cerberus*.

12. The buildings at HMAS *Nirimba* are draughty in winter and extremely hot in summer. Their soundproofing is poor, their ventilation inadequate and they generally do not provide an environment consistent with the needs of modern training methods and equipment. Upgrading and continued use of the facilities at HMAS *Nirimba* was not considered cost-effective.

13. The effect of consolidation is to increase the population of HMAS *Cerberus* by some 312 personnel, which in turn generates a need for some additional facilities. These have been combined with a number of other facilities requiring replacement or expansion regardless of the technical training consolidation.

Options Considered

14. The Committee queried why HMAS *Cerberus* should take over training in preference to other locations eg the Army College of TAFE at Bonegilla. Bonegilla near Albury, has five trade wings: motor vehicle, metal trades, electrical trades, radio trades and building trades. The Committee inspected the College at Bonegilla and was impressed with the facilities and training provided. All trade wings are supervised by a senior civilian instructor and trade training is conducted by both military trade qualified and civilian (TAFE) teachers.

15. Defence advised the Committee that it had employed Kinhill Engineers Pty Ltd (Kinhill) to address the costs of relocating Marine Technician (MT) and Electrical Technician (ET) training from HMAS *Cerberus*. Alternative locations considered included RAAF Base Wagga (Wagga), the Army base at North Bandiana (Bandiana) and the Army College of Technical and Further Education at Bonegilla (Bonegilla). Kinhill also investigated possible cost savings from the use of TAFE Colleges.

16. Nine options were considered by Kinhill, namely:

- . all MT and ET training to be located at HMAS *Cerberus*
- . all MT and ET training to be located at Wagga
- . all MT and ET training to be located at Bandiana
- . all MT and ET training to be located at Bonegilla
- . MT training to be located at Bonegilla and ET training at HMAS *Cerberus*
- . MT training to be located at HMAS *Cerberus* and ET training at Wagga
- . MT training to be located at Bonegilla and ET training at Wagga
- . twenty-two weeks of MT training at Bonegilla, the remainder of MT training at HMAS *Cerberus* and all ET training at HMAS *Cerberus*
- . MT and ET training based at HMAS *Cerberus* with some modules conducted at the Frankston and Dandenong TAFEs.

17. Members of the project team visited HMAS *Nirimba*, Wagga, Bandiana, Bonegilla, Frankston College of TAFE and Dandenong College of TAFE to assess the capacity of available facilities and the requirements for new or modified facilities to suit the proposed relocation of Initial Technical Training (ITT).

18. Following consideration of the capital and personnel costs associated with a broad range of options for the conduct of ITT, Kinhill concluded that there is not a significant cost difference between the following options:

- . all MT and ET training located at HMAS *Cerberus*
- . twenty-two weeks of MT training at Bonegilla, the remainder of MT training at HMAS *Cerberus* and all ET training at HMAS *Cerberus*

19. Kinhill concluded that there are limited savings to be obtained from sharing either the Frankston or Dandenong TAFE campuses, unless the Navy utilises the TAFE downtimes, such as weekends.

20. Defence advised the Committee that there has been a progressive series of rationalisation exercises of Navy's training, the net effect of which has been progressive consolidation at HMAS *Cerberus*. The Base has emerged as the Navy's premier training establishment with the development of first class facilities such as the seamanship school, communications school and recruit school. Defence believes that the cost-benefit analysis favours HMAS *Cerberus*. Defence stressed that it believes HMAS *Cerberus* to be the most suitable location for the Navy's principal training area.

Junior Sailors' Accommodation

21. The junior sailor population is currently accommodated in the refurbished older style accommodation blocks and in the newer Pethebridge House which houses 120 junior sailors in relatively modern conditions. Additional accommodation will be required to provide for the extra junior sailors undergoing training at HMAS *Cerberus* as a result of the consolidation of technical training.

Officers' Accommodation

22. Officers are currently accommodated in the east and west wings of the wardroom and in the Mitchell Block. Accommodation is required to provide for additional officers and to remove the need to accommodate officers in junior sailors' accommodation as occurs at present.

Health Centre

23. Medical and dental services are presently provided from 18 separate buildings of ages varying from 50 to 73 years. The majority of these grossly inadequate buildings are being utilised for functions for which they were neither designed nor constructed. The dental surgeries are grossly inadequate in size and were originally designed for treatment by an operator and assistant in standing positions. Site limitations and internal design prevent alterations to the building to meet modern practices. The buildings do not conform to current safety regulations, being deficient in space, emergency exits and ventilation.

24. The Committee agrees with a comment made by Senator the Hon R Ray, Minister for Defence, at an Estimates Committee meeting on 11 September 1991. Senator Ray described the hospital and dental services as "the most disgraceful Defence facility I have seen in my visits around Australia".

25. The medical centre provides on-entry medical testing and vaccinations for all general entry recruits entering the RAN; specialist medical consultation and day surgery for local sick and injured Defence personnel; surgical, resuscitation and stabilisation procedures in cases of emergency; post-operative and convalescent in-patient care; outpatient services; radiological, pathology, pharmacy and physiotherapy services; on the job training and continuation training for medical staff; ambulance services; preventative public health measures, e.g. mosquito eradication, for the entire establishment and occupational health surveillance.

26. The dental department is located in a brick building which was constructed in 1943 and which has been extended twice. It provides on-entry dental examinations, identification charting and dental treatment for all general entry recruits; routine and specialist dental treatment for all HMAS *Cerberus* personnel; specialist dental treatment for staff and trainees posted to the School of Army Health, Portsea; and specialist dental laboratory services for other establishments.

27. The dental school is housed in two separate buildings – the dental clinic and the former B Ward of the hospital. The latter is a part-timber, part-brick building constructed as an open hospital ward in 1920 and converted for training purposes in 1968. The dental school conducts courses for dental mechanics and dental hygienists. These courses contain a high

level of on the job training and all trainees are involved with the treatment of patients attending the dental department.

28. The expanded population of HMAS *Cerberus*, and in particular the additional trainees, will place further demands on the medical and dental services of the existing facility.

Junior Sailors' Galley/Cafeteria

29. The existing junior sailors' galley was built in 1941 and the junior sailors' cafeteria in 1948. The proposed consolidation of technical training at HMAS *Cerberus* will require the catering capacity of the junior sailors' galley to be increased to 1 400 (4 200 meals per day) and the seating of the junior sailors' cafeteria to be similarly increased to allow for two sittings per meal.

30. The existing junior sailors' galley is due for replacement or major refurbishment because of the age and condition of the building and equipment, the need to meet current hygiene standards and the need to provide satisfactory cooking and dining facilities. The facility design is not suitable for new equipment or the provision of a more efficient layout. Defence advised the Committee that the building is inefficient, dingy and potentially unsafe. The effort required to keep this building at a reasonable standard of hygiene is excessive. Fabric and internal finishes, particularly in the cafeteria are old and require continuing costly maintenance.

31. The internal layout of the cafeteria is inefficient with the single point of entry and exit located adjacent to the scullery. Congestion arises at each meal as sailors try to enter while others are trying to return cutlery and crockery and leave the building.

32. All food processed by the galleys is received and distributed by the victualling section, which has storage and office space. Provisions are currently transported by vehicle 100 metres to the junior sailors' galley, which uses 75 per cent of all provisions issued. On average over 2.5 tonnes of provisions are dispatched daily to the galleys, requiring four staff to undertake this task.

Technical Training Facility

33. Initial technical training is currently undertaken in the Weapons Electrical Engineering School, the Radio Building, White City, the Marine

Engineering Demonstration Building, the Powerhouse, the Shipwrights Maintenance Engineering Building, Block B, Block C and the new Bricklaying and Lagging building. The technical training facility is required to provide classrooms, laboratories, workshops, a library, resource storage and office spaces to meet the demand arising from the consolidation of technical training at HMAS *Cerberus* and the introduction of ITT courses.

Indoor Swimming Pool

34. The existing 33 metre indoor swimming pool was constructed in 1943 and is presently used by up to 1 700 service and civilian personnel. The facility provides for instructional and recreational swimming and for the conduct of recruit swimming tests. Activities include swimming training, survival at sea training, water polo competitions, diving training and competition, scuba diving training and canoe training. Consolidation of technical training at HMAS *Cerberus* will increase the demand on pool facilities.

35. The existing pool is of a non-standard length (33 metres) which reduces its suitability for both HMAS *Cerberus* and Defence Force Physical Training School (DFPTS) users. Other deficiencies include asbestos roofing of the complex, shallow depth of the pool, minimal concourse area, lack of spectator and competitor facilities, maintenance-intensive wooden changing rooms that are remote from the swimming pool entrance and exposed to the weather and insufficient storage space.

36. The present pool is located approximately 80 metres from the gymnasium, resulting in a duplication of supervisory and administrative staff. Rectification works are placing an increasing demand on the limited repair and maintenance funds available and sometimes make the pool unavailable for use for unacceptably long periods. This in turn results in additional expenditure being required to conduct initial recruit swimming tests and remedial swimming lessons at Frankston which is 30 kilometres away. Failure to provide a suitable facility will result in continued drain on manhours and funds while the existing pool undergoes further maintenance.

37. Defence advised the Committee that the pool is too small to accommodate the number of trainees required to use it. The filtration machinery, which has had a great deal of expenditure over the last few years is just about at the end of its life. The inside of the pool is becoming unhygienic with tiles peeling and cracking. Birds are nesting in the roof and droppings fall into the pool. The Committee queried the possibility of ear

infections from the pool, but was advised that this does not occur due to constant testing of the water.

Synthetic Recreational Field

38. Soccer and hockey are currently played on grassed fields and tennis is played on *en tous cas* tennis courts. Inclement weather often renders the existing outdoor recreation fields unserviceable, a situation that is exacerbated by poor drainage of most of the fields. As a result, the existing facilities are unable to support the demands placed upon them by the DFPTS, the sport and recreation requirements of HMAS *Cerberus* personnel, the physical training of recruits and the Physical Training Display Team. These demands result in the available recreational and instructional facilities for physical training having to operate beyond their capacity.

39. A facility is required to provide for the outdoor physical instruction and training requirements of the DFPTS, the Recruit School and HMAS *Cerberus* personnel. Major activities required to be served by the facility will be instruction, training and competition (both inter-service and civilian) in hockey, soccer, tennis, volleyball and touch football.

Gymnasium Extension

40. The existing gymnasium comprises four squash courts, a gymnasium floor, a weight training room and associated classrooms, offices and amenities. The existing gymnasium is not able to cope with the demands placed upon its facilities by the establishment personnel and the addition of the DFPTS has stretched the facilities beyond a practical limit. The existing facility does not meet the requirements of the DFPTS and severely limits its activities. Increased training numbers associated with technical training consolidation will further reduce the facilities available for physical training.

41. The gymnasium lacks adequate floor space and lighting for physical training activities, change rooms and amenities, storage space, and office space to cope with both the administration of the gymnasium and administration for the DFPTS.

42. An expanded facility is required to provide for the indoor physical instruction and training requirements of the DFPTS, the Recruit School and HMAS *Cerberus* personnel. Major activities to be carried out will be the training of physical training instructors from the three services and physical instruction and training of recruits and HMAS *Cerberus* personnel.

Transport Compound

43. Present temporary arrangements for the transport function are spartan and not conducive to longer term management. The existing facility comprises a wooden garage building, demountable accommodation units and associated hard stand parking. The majority of the wooden garage building was subsumed as a maintenance workshop following conversion of other buildings for interim ITT. Arrangements are deficient in respect to provision of adequate office accommodation; a duty ready/amenities room; staff changing facilities; overnight accommodation for duty drivers; stores space for motor vehicle spares; weather protection for vehicles and personnel during refuelling; garaging for vehicles requiring undercover parking and open parking for large vehicles.

44. The construction of a new facility will permit the transport function to relocate from the current inadequate demountable accommodation.

Committee's Conclusions

45. A need exists to provide facilities for staff and trainees who will be displaced due to the Government's decision to sell HMAS *Nirimba*.

46. The Committee notes that HMAS *Cerberus* is the Royal Australian Navy's principal training establishment, and agrees that HMAS *Cerberus* is the most suitable location for the consolidation of technical training for the Royal Australian Navy.

47. The Committee agrees that facilities at HMAS *Cerberus* need to be upgraded to allow for the training of apprentices which was formerly undertaken at HMAS *Nirimba*.

THE PROPOSAL

48. It is proposed to replace or upgrade some rundown and inadequate support facilities at HMAS *Cerberus* to allow Naval technical training which has been carried out at HMAS *Nirimba* to be relocated to HMAS *Cerberus*.

Junior Sailors' Accommodation

49. A three level building of 2 040 m² net providing 112 beds for junior sailors is proposed. This includes provision to increase the capacity to 180 beds should demand increase in the future.

50. The role of the facility will be to provide accommodation for personnel of the rank of Seaman, Able Seaman or Leading Seaman. These personnel are generally 19-26 years of age, whose activities outside working hours are not highly regulated. The major activities served by the facility will be sleeping and recreation.

51. The facility is modelled on the successful Pethebridge House where each junior sailor occupies a cabin for his or her sole use. Cabins will be grouped into four around a common room, toilet/shower and store. The four members of each unit will be responsible for cleaning and maintaining the common room and ablution areas.

Officers' Accommodation

52. The proposed facility will be a two level building of 670 m² net, providing 24 beds for officers, based on eight Lieutenant Commanders (or officers of higher rank) and 16 Lieutenants (or officers of lower rank), or beds for up to 32 personnel if only junior officers are accommodated. This flexibility will be achieved by locating a toilet/shower area between each pair of bedrooms and the second bedroom in each pair doubling as a sitting room for senior officers.

53. The role of the facility will be to provide accommodation for officers of the rank of Midshipman through to Commander. The majority will be of the rank of Lieutenant. The major activities served by the facility will be sleeping and recreation.

Health Centre

54. The proposed facility will be a single level building of 3 940 m² net, incorporating a 30 bed medical centre (2 700 m²), a nine surgery dental department and a dental school (1 240 m² for both).

55. The Committee queried the operational costs of the hospital and dental services. Defence advised that the medical centre currently has seven surgeons who perform on average 30 operations per month at a cost of approximately \$10 000. Equivalent costs in a civilian hospital would be approximately \$27 000 for the surgeon and anaesthetist, with extra cost for beds, wards and theatre fees.

56. Eight dentists are employed providing dental services to approximately 7 000 trainees. The dentists see on average at least 10 persons per day.

Defence advised that the operating costs for medical and dental services this year, excluding salaries, is \$1.2m.

Junior Sailors' Galley/Cafeteria

57. This facility will be a single level building of 1 700 m² net, designed to serve 1 400 personnel in two consecutive sittings. The role of the facility will be to provide a safe, hygienic galley and dining area for junior sailors. The major activities served by the facility will be the preparation and consumption of food.

58. Location of the cafeteria closer to the junior sailors' accommodation will reduce the distances to be covered for most of the personnel using the cafeteria.

59. The requirement for transportation of provisions will be substantially reduced by collocating the new galley with the existing victualling area.

Options Considered

60. Two options were considered:

- (a) construction of a new galley/cafeteria adjacent to the existing victualling building; and
- (b) refurbishment of the existing cafeteria to provide the same level of amenity and function as the new facility, and construction of a new galley.

61. Option (a) was adopted as the preferred option because it will avoid the significant disruption to current operations that would occur during a major refurbishment, overcome double handling of stores by collocating with the victualling building, and locate the cafeteria much closer to the junior sailors' accommodation.

62. It was initially planned to incorporate a recreation and trading area for the junior sailors, but this function has been deleted.

Technical Training Facility

63. This facility will be a single level building of 4 187 m² net, providing workshops, classrooms, instructor work areas, offices and store areas to

enable both MT and ET modules to be conducted. The collocation of both MT and ET training within the facility will reduce the facility area required and allow both staff and resources to be shared.

64. The role of this facility will be to provide space for the technical training of RAN personnel. This will be provided in the form of classrooms and practical training laboratories each capable of accommodating 15 trainees.

Indoor Swimming Pool

65. It is proposed to replace the existing 33 metre indoor pool with a 50 metre indoor pool with eight lanes. The bottom will be graded from 0.9 metres to 4.0 metres with 1 metre and 3 metre diving boards at the deep end. The net area of the facility will be 1 750 m².

66. The new swimming complex will be collocated with the existing gymnasium thereby reducing present duplication of supervisory and administrative staff.

Options considered:

67. Two options were considered.

- (a) construction of a new 50 metre indoor swimming pool adjacent to the existing Physical Training Centre and demolition of the existing 33 metre indoor swimming pool; and
- (b) refurbishment of the existing 33 metre indoor swimming pool to the same level of amenity as a new facility.

68. Option (a) was adopted as the preferred option because it will reduce the supervisory and administrative staff requirements due to being collocated with the existing gymnasium. It will allow increased and concurrent use by the many user groups and will meet the functional requirements of the various HMAS *Cerberus* schools, the most important of which are the swimming test requirements for both the recruit trainees and the DFPTS.

Synthetic Recreational Field

69. This facility will replace an existing grassed hockey field with an outdoor, all weather recreation surface. The dimensions of the facility will

be 60 x 100 metres (the size of a regulation hockey field) with a three metre perimeter clearance. The facility will be fully fenced with a tennis court height fence, fitted with post anchors for tennis court nets and floodlit to enable its use after dark.

70. The outdoor sports area will be capable of being used throughout the year. The synthetic recreational field will allow the continuation of training, which is currently curtailed because of unusable playing fields following periods of rain.

Gymnasium Extension

71. The facility will be a single level building extension of 1 480 m² net, providing additional gymnasium floor space, a weight training room, change rooms, classrooms, stores and offices. These will enable the DFPTS to move into the new facilities and HMAS *Cerberus* personnel to utilise the existing gymnasium.

Transport Compound

72. The facility will comprise several single level buildings and paved areas of 3 500 m² gross, providing areas for the storage, maintenance and repair of HMAS *Cerberus's* 28 medium/small vehicles and 14 large vehicles.

73. The facility will provide a range of services related to the garaging, maintenance and repair of motor transport, and essential facilities for associated staff. The major activities served by the facility will be vehicle maintenance, refuelling, cleaning, garaging and parking, spare parts storage, and vehicle and staff administration. Amenities and change rooms for staff will also be provided.

Child Care

74. The child care centre was incorporated in 1988 and registered by Community Services Victoria as a Class One children's services centre in April 1991. Since extensive renovation in early 1993 it has been registered to take 45 children, including 15 before and after school.

75. The centre is managed by a committee of service parents and interested personnel and staffed by fully qualified child care workers. The centre is available to children of service and civilian employees at HMAS *Cerberus* and operates from 7.00 am to 5.15 pm each working day. An

average of 30 children, ranging from six months to five years of age currently use the centre daily. In response to a submission from Childcare at Work, Defence advised that new child care facilities are not seen as necessary as the existing centre has recently been refurbished and has ample capacity to cope with the increase in demand that the development will generate.

Engineering Services

76. Existing services comprise roads and reticulated services such as water, sewerage, stormwater, electricity, natural gas, telephone and centrally monitored fire alarms. These services have been progressively provided and extended since the establishment of the Base. Water is provided by Melbourne Water, electricity by the State Electricity Commission of Victoria, telephone by Telecom and gas by the Gas and Fuel Corporation of Victoria. Sewage is treated at the establishment's own sewage treatment plant. Upgrading of these services is required to service the proposed facilities.

First class water

77. The existing water reticulation system has sufficient capacity to provide water for both the additional domestic and fire fighting requirements. Some mains relocation work will be required to suit the proposed building locations.

Sewerage system

78. Works will be required to both the sewerage reticulation network and the on-base treatment plant to cater for the proposed development. The discharge of any effluent to Hanns Inlet will meet the Victorian Environment Protection Authority requirements.

Stormwater system

79. The existing system has sufficient capacity to cater for the proposed development. Local upgrading of the system will be required at a number of the facilities.

Roads

80. No significant upgrading of the overall network is required to suit the proposal. Access roads will be extended and widened at several facilities.

Electricity

81. The existing high voltage supply and ring main system is sufficient to cater for the additional demand of the proposal. Some rework of the ring main system will be undertaken to balance the load evenly between the alternative outgoing feeders.

Telephones

82. The existing PABX and Telecom service line to the establishment has sufficient capacity to cater for the proposed demand. New cables will be provided within the establishment to cater for the accommodation, technical training and health centre.

Central monitoring

83. The existing security and fire alarm monitoring system has the capacity to cater for the proposal. A new line will be connected to the health and recreation centre.

Natural gas

84. The existing underground distribution network has sufficient capacity to cater for the proposal. Some rework, extension and relocation of gas mains will be required.

Information systems

85. A fibre optic backbone cable will be laid throughout limited areas of the establishment to provide local area networks in the administrative, teaching and health areas.

Design Considerations

Design

86. Recent major buildings such as the Seamanship School, Communications School, Recruit School and Pethebridge House reflect the architectural character, form and materials of the historically significant buildings at HMAS *Cerberus*. The proposed buildings will continue this approach. Accordingly, the proposed buildings are formal and axial in

composition, have hipped and gable roofs and repeat the limited range of materials used in the existing buildings.

Materials

87. The materials proposed for the new buildings have been selected for their economy, function, low maintenance and compatibility with existing facilities at HMAS *Cerberus*. These materials are face brick, concrete floors, corrugated metal roofs, plasterboard and acoustic tile ceilings and aluminium window frames.

Mechanical

88. Offices, classrooms, cafeteria and health centre areas will be airconditioned. Accommodation areas, pool and workshops will be heated. Natural ventilation will be utilised in accommodation areas and wherever consistent with thermal comfort and equipment requirements. Amenity areas will be mechanically ventilated. Airconditioning and ventilation will be provided in accordance with AS 1668.

Electrical

89. General and supplementary lighting will be provided in accordance with the requirements of AS 1680. Switching patterns will be arranged to utilise available daylight. External lighting will be provided at all entrances and exits. Natural light will be introduced from suitably installed and positioned windows and roof mounted skylights. The design will take account of State Electricity Commission of Victoria energy efficient systems.

90. Electric power will be provided from the established overhead distribution network. Standard 240 volt AC and 415 volt AC three phase 50 Hz socket outlets will be provided throughout the facilities to suit requirements. During periods of mains failure, adequate lighting will be provided from light fittings with an independent battery supply.

Energy conservation

91. The building design and mechanical and electrical equipment will be selected to minimise energy use and whole of life costs. To this end, a building management system will be installed to control and manage all services within the health centre and technical training facility. Minimisation of energy usage will be a major criterion for selecting systems and

equipment. A performance index will be established for each building, with energy targets assigned to each element in regard to fuel or energy type, location and usage.

92. Defence advised the Committee that the design of the buildings will use natural light to the maximum extent possible. Where artificial lighting is required, its control will be by switching pattern. As the design is yet to be finalised, Defence's overall requirement to conserve energy will be included in the brief to the architects.

93. The Committee queried whether an energy audit had been carried out on the Base. Defence advised that an energy audit had recently been carried out by SECV International and this is presently in draft form. The Committee commends the Department of Defence for the recent initiatives taken to improve energy efficiency at Defence establishments.

Committee's Conclusion and Recommendation

94. **The Committee believes that the Department of Defence should continue to carry out regular energy audits of its establishments. The Committee recommends that it be advised on the implementation of the recommendations of the energy audit conducted at HMAS *Cerberus*.**

Hydraulics

95. All designs will comply with the relevant codes and the specific requirements of Melbourne Water and any other relevant authority. Toilets will be provided with facilities for the disabled in accordance with the Building Code of Australia (BCA).

96. Sewage from the buildings will be discharged into the existing reticulated system and conveyed to the Base's treatment plant.

97. Stormwater will be collected from the building roofs and surrounding pavement areas and discharged to the existing drainage system.

98. Water will be supplied to each facility from the existing water reticulation system.

99. Hot and cold water will be reticulated throughout the facilities to showers, basins and sinks. Energy efficient shower roses will be installed in all shower cubicles.

100. The Committee queried whether consideration had been given to recycling waste water and using it on golf and recreation facilities. Defence advised that a number of studies have been carried out over the years. Studies to date have concluded that, based on the costs of water currently being used, it would not be cost effective. This will need to be reviewed over time, depending upon requirements for effluent discharge and the costs of operating and running the plant and costs of water. Defence stressed that although not part of this proposal, there is the possibility to reuse water and this is not precluded by any works that are planned to date.

Committee's Recommendations

101. **The Committee recommends that the Department of Defence undertake a review regarding the potential use of waste water at HMAS *Cerberus* with the aim of including it in the current project. The Committee recommends that it be advised of the results of this review and the cost implications for the project.**

Communications

102. Telephones will be provided to suit the requirements of each facility.

103. Local area computer networks will be provided within selected facilities to link office, instructor and specialist medical personnel areas.

Fire protection

104. Fire protection will be provided to all facilities in accordance with the relevant codes and the BCA.

105. Defence advised that it is conscious of the need to ensure that its staff are safe and its premises adequately protected. In response to a letter from the Commonwealth Fire Board, Defence advised that a requirement of the design finalisation process is for the plans to be certified to BCA standards, and conformance is confirmed and certified by a registered building surveyor during construction. A certificate of compliance with BCA standards is required before Defence will accept a facility from the builder. Normal procedure is for the local fire authority to be consulted during this design finalisation process, and this is the intention with the proposed facilities.

106. The Committee was advised that all of the proposed facilities will be linked to a detection/alarm panel in the Naval Police Coxswain's Office. The

office is manned 24 hours per day, seven days a week. Apart from the usual telephones, the office has a radio link with the Country Fire Authority to provide instant communications in the event of a fire. Additionally, HMAS *Cerberus* has its own firefighters and two fire engines. Manual call points in accordance with AS 1603 Part 5 will also be linked to the Naval Police Coxswain Building.

107. The Committee queried whether Defence had specific plans for dealing with bushfires. Defence advised that Navy trained firefighters at HMAS *Cerberus* provide a 24 hour service looking after the buildings and fire prevention in these buildings, while the Country Fire Authority handles any bushfire outbreaks. External hydrants will be provided in accordance with AS 2419. Small bore hose reels conforming to AS 1221 will be provided in accordance with AS2441. Portable fire extinguishers will be provided.

External works

108. The proposed sites are generally flat and, with the exception of the Officers' Accommodation, the need to clear existing trees and buildings is limited. Minor extensions to the existing road network will provide access to all proposed facilities. Sealed and drained car parking will be provided at each facility. To reduce the visual impact of car parking areas, such areas will generally be located at the rear of facilities. Limited formal parking will be provided at the main entrance to each facility. Landscaping will be in accordance with the approved Landscape Master Plan. The sites will be graded, grassed and planted with trees and shrubs. The Committee was advised that a mixture of native and exotic trees will be selected so that they do not become a security hazard around the buildings. Trees will be selected which are compatible with underground services with water-seeking trees being avoided.

STRATEGY FOR THE DELIVERY OF THE WORKS

109. The upgrading of the existing facilities and the construction of the new ITT facilities will be undertaken using the standard forms of Defence Contract. To facilitate an early start on the construction of the urgently required new health centre, the design and documentation of this facility, with the approval of the Committee, have been brought forward of the main project.

110. It is proposed to call tenders for the health centre in early 1994. The facilities will be started and completed progressively with the last facility being completed in June 1997.

FINANCIAL ASPECTS AND TIMING

111. The revised limit of cost estimate is \$45.5m at April 1993 prices. The elements of this estimate are set out as follow:

Item	Description	LOC estimate (\$ million)
1	Junior Sailors' Accommodation	4.5
2	Officers' Accommodation	2.0
3	Health Centre	9.3
4	Junior Sailors' Gallery/Cafeteria	3.6
5	Technical Training	8.6
6	Recreation Facilities	6.0
7	Transport Compound	0.7
8	Engineering Services	4.0
9	Furniture/fittings/equipment	6.1
10	Landscaping/demolition	0.7
TOTAL		45.5

Reasons for Change of Limit of Cost

112. The limit of cost when referred to the Committee was \$51.5m. However, this has been reduced to \$45.5m due to savings on the sewerage system and the technical training building.

113. Defence advised the Committee that it was originally believed that there would need to be a major overhaul of the whole sewerage system as

there was a strong possibility that the system would be inadequate to serve the revised development. Defence commissioned Kinhill to examine the adequacy of the sewerage system. Video cameras revealed that the state of the system was not as bad as had been anticipated. It is therefore possible to provide patch refurbishment rather than a total refurbishment. Defence has advised that some of the costs of that refurbishment should be funded by repair and maintenance. This has resulted in a 66 per cent reduction in the original sewerage estimate. A saving of \$2.3m has thus resulted.

114. A further saving was achieved with the technical training building. As the technical training building was not due for occupation until 1995-1996, and HMAS *Nirimba* was due to close at the end of 1993, interim facilities were needed. Consequently, \$3.5m was allocated from repair and maintenance funds for refurbishment. Since then it has become apparent that the interim facilities are adequate for the long term. This has resulted in a saving of \$3.5m.

115. The Committee queried the future of HMAS *Nirimba*, once training is transferred to HMAS *Cerberus*. Defence advised that negotiations are currently at an advanced stage with the NSW Government for the sale of the Base. It is possible that it will become a form of educational precinct with a mix of tertiary, secondary and TAFE training.

ENVIRONMENTAL CONSIDERATIONS

116. The proposal has been assessed by the Department of Defence in accordance with the Administrative Procedures of the *Environmental Protection (Impact of Proposals) Act 1974* and a Certificate of Environmental Compliance for the project has been issued by the Facilities Division. The Certificate conditions state that landscaped gardens should consist of native vegetation where possible and that any comments from the AHC should be taken into account. The Environmental Management Plan for HMAS *Cerberus*, due this financial year, will provide development guidelines for this and other future developments.

Heritage Considerations

117. A number of the existing facilities at HMAS *Cerberus* are listed on the Register of the National Estate (RNE). No modifications to these facilities are planned as part of this proposal, but there are potential adverse effects on the heritage listed buildings and precincts. The development of

the drawings will be undertaken and finalised in consultation with the AHC to ensure minimal effect on the heritage listed buildings and precincts. The proposed facilities will complement the existing architecture of the facilities on the RNE.

118. The AHC expressed concern over the demolition of certain buildings and the construction of ancillary works. Defence advised that it is acutely aware of the value of retaining the heritage character evident at HMAS *Cerberus*, and that this extends beyond the buildings and encompasses landscape issues as well. Although some demolition and landscaping will be involved in the proposal, Defence intends to comply with its obligations under the Heritage Act. All proposed development will conform to the Development Guidelines at section 8 of the Conservation Management Plan and with the philosophy of the Landscape Master Plan. A separate schedule was included in the health centre architectural contract to ensure that the design was sympathetic to the character of the remainder of the Base.

119. Defence advised that ancillary works such as car parking and roadworks will occur predominantly at the rear of new construction and will not be visible from the central heritage area. All engineering services are underground and, consequently, upgrading them will not have an impact on the heritage value of the establishment. Only two of the proposed buildings will be partially visible from the central conservation area and these will be screened by suitable plantings.

120. Section 30 of the *Australian Heritage Commission Act 1975* imposes obligations on Commonwealth proponents, such that they are required not to take any action which adversely affects a place in the RNE, unless there is no feasible and prudent alternative. If there is no alternative then damage must be minimised. They are also required to inform the AHC of any proposed Commonwealth Government action which might significantly affect a place in the Register and give the AHC a reasonable opportunity to consider the proposal and comment on it. The Commonwealth actions referred to do not have to be actually at an RNE place (they could, for instance, be adjacent), as long as there might be a significant affect on an RNE place then it is required that the AHC be informed.

121. The Committee noted that although the project was referred through Parliament on 5 October 1993, a Section 30 referral was not forwarded by Defence to AHC until 21 December 1993.

Committee's Recommendation

122. The Committee recommends that the Department of Defence forward Section 30 referrals to the Australian Heritage Commission as soon as possible after referral of a project to the Committee.

CONSULTATIONS

123. The following organisations have been, and will continue to be consulted during the development of the project:

- . Australian Heritage Commission
- . Defence Housing Authority
- . Gas and Fuel Corporation of Victoria
- . Melbourne Water
- . Shire of Hastings
- . State Electricity Commission of Victoria
- . Telecom
- . Victorian Environment Protection Authority
- . Victorian Ministry of Planning and Environment

Committee's Recommendation

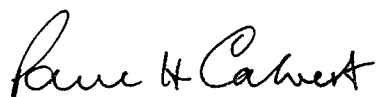
124. The Committee recommends HMAS *Cerberus* technical training and other facilities at Western Port, Victoria at an estimated cost of \$45.5m at April 1993 prices.

CONCLUSIONS AND RECOMMENDATIONS

125. The conclusions and recommendations of the Committee and the paragraph in the report to which each refers are set out below.

	Paragraph
1. A need exists to provide facilities for staff and trainees who will be displaced due to the Government's decision to sell HMAS <i>Nirimba</i> .	45
2. The Committee notes that HMAS <i>Cerberus</i> is the Royal Australian Navy's principal training establishment, and agrees that HMAS <i>Cerberus</i> is the most suitable location for the consolidation of technical training for the Royal Australian Navy.	46
3. The Committee agrees that facilities at HMAS <i>Cerberus</i> need to be upgraded to allow for the training of apprentices which was formerly undertaken at HMAS <i>Nirimba</i> .	47
4. The Committee believes that the Department of Defence should continue to carry out regular energy audits of its establishments. The Committee recommends that it be advised on the implementation of the recommendations of the energy audit conducted at HMAS <i>Cerberus</i> .	94
5. The Committee recommends that the Department of Defence undertake a review regarding the potential use of waste water at HMAS <i>Cerberus</i> with the aim of including it in the current project. The Committee recommends that it be advised of the results of this review and the cost implications for the project.	101

6. The Committee recommends that the Department of Defence forward Section 30 referrals to the Australian Heritage Commission as soon as possible after referral of a project to the Committee. 122
7. The Committee recommends HMAS *Cerberus* technical training and other facilities at Western Port, Victoria at an estimated cost of \$45.5m at April 1993 prices. 124



Paul Calvert
Acting Chairman
3 March 1994

WITNESSES

CRELLIN, Mr Christopher Derek, Technical Consultant, Kinhill Engineers, 437 St Kilda Road, Melbourne, Victoria 3004

DONALDSON, Captain Michael George, Commanding Officer HMAS *Cerberus*, Western Port, Victoria 3920

DUNNE, Commodore Michael Thomas, Director General Force Development (Sea), B-4-05A, Russell Offices, Canberra, Australian Capital Territory 2600

FLANAGAN, Lieutenant-Commander Gregory John, HMAS *Cerberus* Project Director, CP3-2-33, Campbell Park Offices, Canberra, Australian Capital Territory 2600

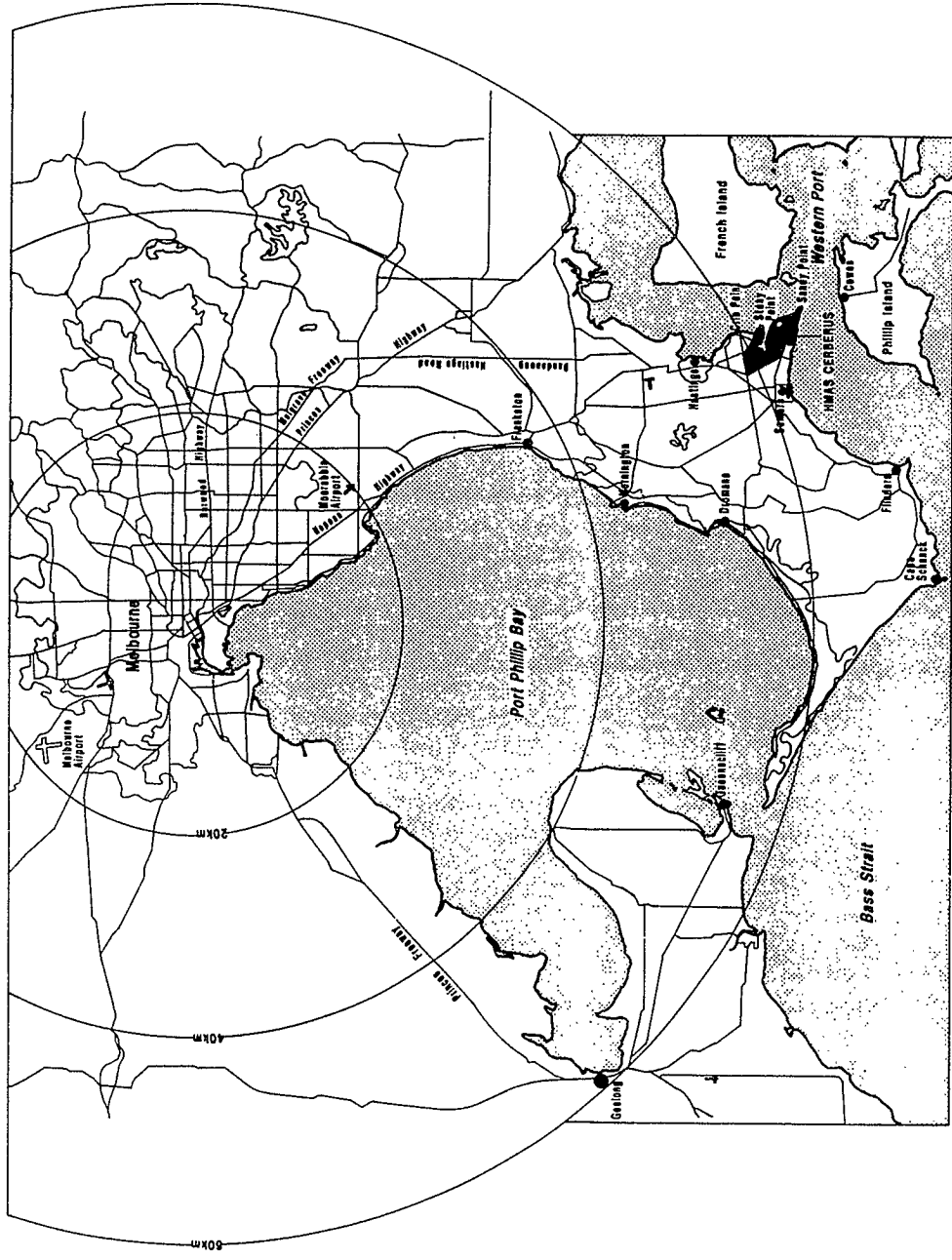
WARRINGTON, Captain Michael, Director General Facilities—Navy, CP3-2-14, Campbell Park Offices, Canberra, Australian Capital Territory 2600

APPENDIX B

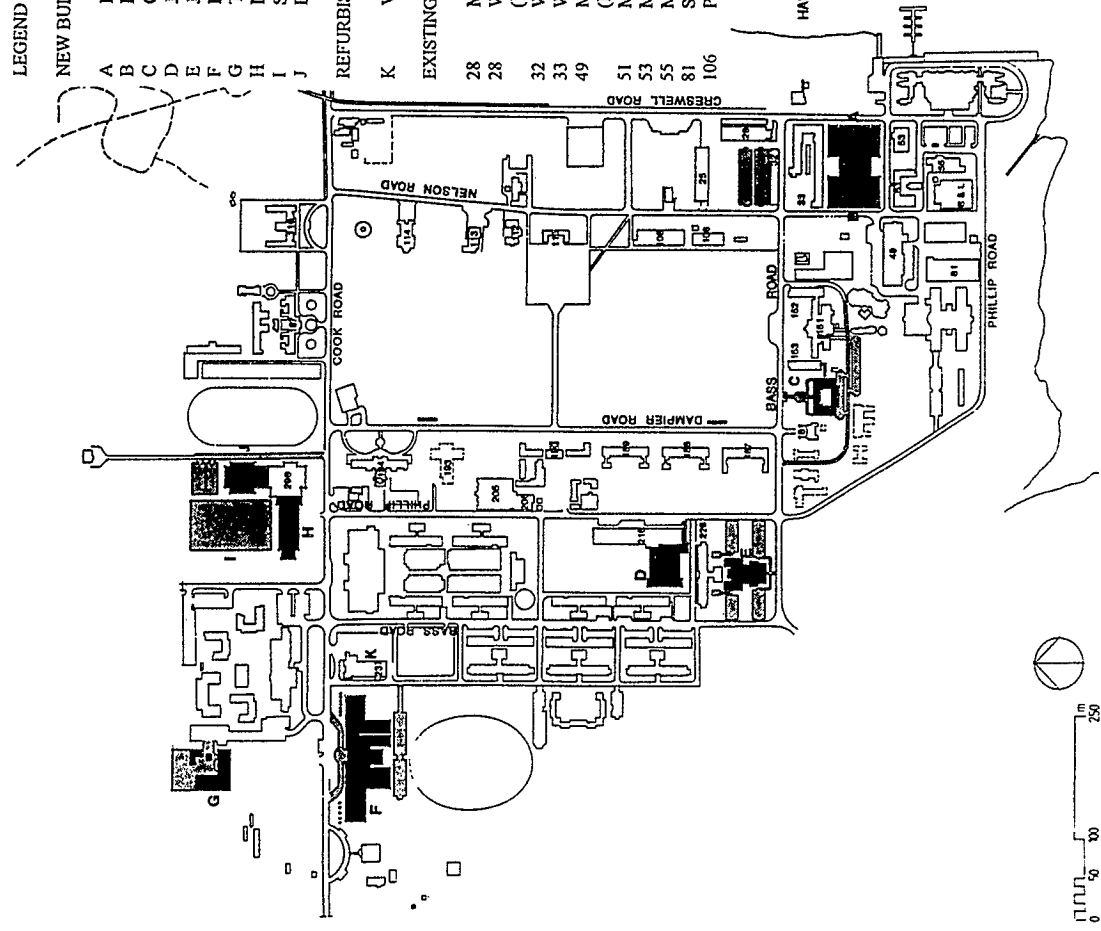
PROJECT DRAWINGS

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Motor Transport Compound Plan and Sections	B-21



B-1 LOCAL AREA PLAN

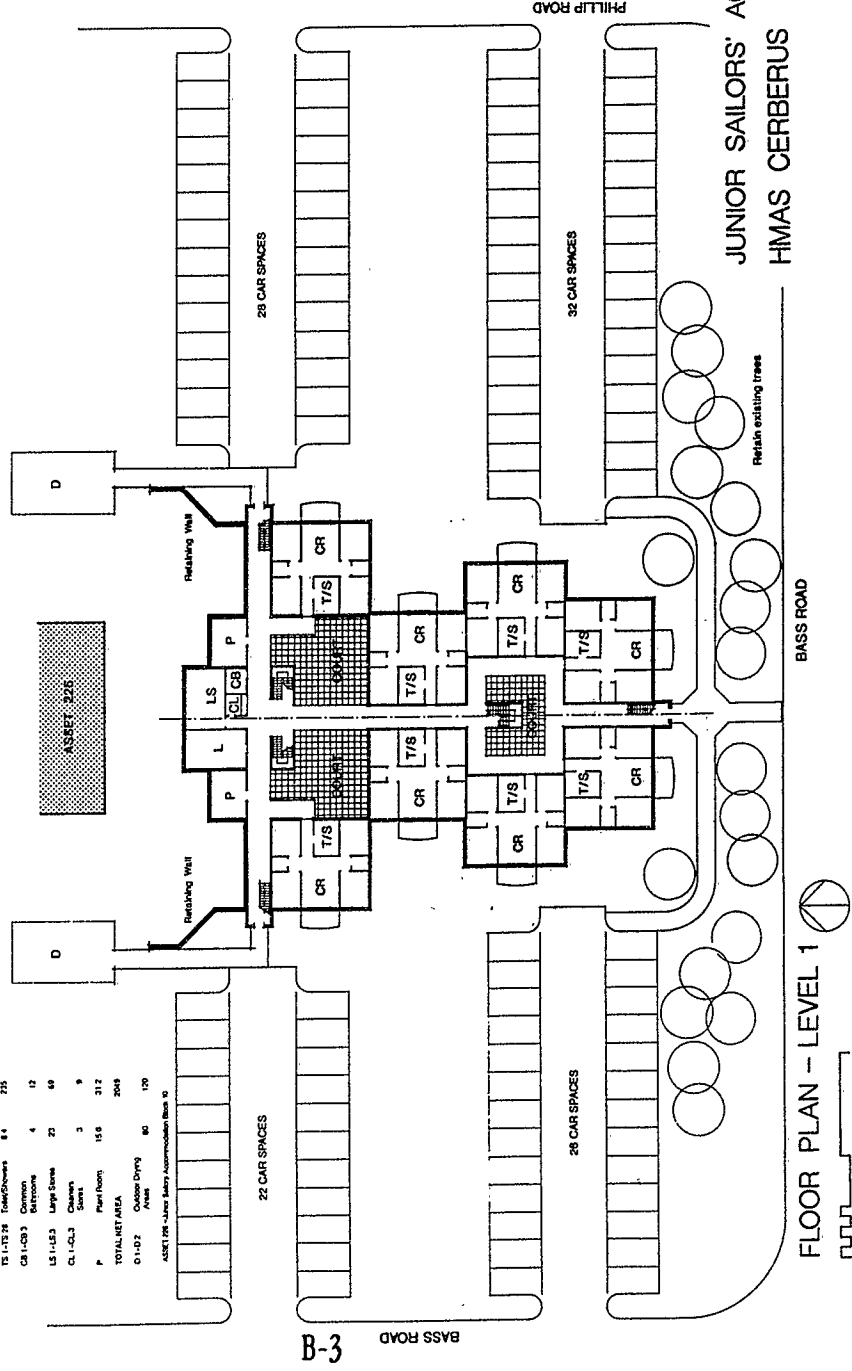


B-2

- LEGEND**
- NEW BUILDINGS**
- A Electrical Technicians Training
 - B Marine Technicians Training
 - C Officers Accommodation
 - D Junior Sailors Galley/Cafeteria
 - E Junior Sailors Accommodation
 - F Health Centre
 - G Transport Compound
 - H Indoor Pool
 - I Synthetic Recreation Field
 - J Defence Force Physical Training School
- REFURBISHED BUILDING**
- K Victoria Naval Band
- EXISTING ASSETS**
- 28 Motor transport Garage
 - 28 Weapons Electrical Engineering School (WEES) Administration Building
 - 32 WEES Radio Building
 - 33 WEES Central Block
 - 49 Marine Engineering School (MES) Demonstration Building
 - 51 MES Administration Building
 - 53 MES Classroom Building
 - 55 MES Training Workshop
 - 81 Shipwrights Workshop
 - 106 Photographic & Psychology Building
- 108 GUNNERY SCHOOL
 - 110 PARADE TRAINING SECTION
 - 112 MUSEUM
 - 113 ROMAN CATHOLIC CHAPEL
 - 114 PROTESTANT CHAPEL
 - 116 ADMINISTRATION BUILDING
 - 151 WARDROOM CENTRAL WING
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 - 161 HOSPITAL ADMINISTRATION BUILDING
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 - 190 JUNIOR SAILORS RECREATION COMPLEX
 - 193 JUNIOR SAILORS RECREATION
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 - 226 VICTUALLING STORE COMPLEX
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 - 237 ACCOMMODATION BLOCK 10
 - 296 SOUTHERN CROSS CINEMA
 - 296 GYMNASIUM
 - B&L BRICKLAYING AND LAGGING BUILDING

LOCATION PLAN
HMAS CERBERUS

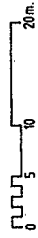
Room No.	Name	Area m ² (Approx)	Total Area m ²
CR 1-CR18	Common Room	15	450
CL 1-C12	Cabins	99	1108
S 1-S36	Stores	17	93.2
L 1-L3	Laundry/Dryng Room	23	68
TS 1-TS18	Toilet/Shower	64	235
CB 1-CB3	Common Bathrooms	4	12
LS 1-LS3	Large Stores	23	68
CL 1-CL3	Chains Stores	3	9
P	Pier Room	15.6	31.2
TOTAL NET AREA			2049
D 1-D2	Outdoor Dryng Area	60	120
ASSET PER JUNIOR SAILORS ACCOMMODATION Block 10			



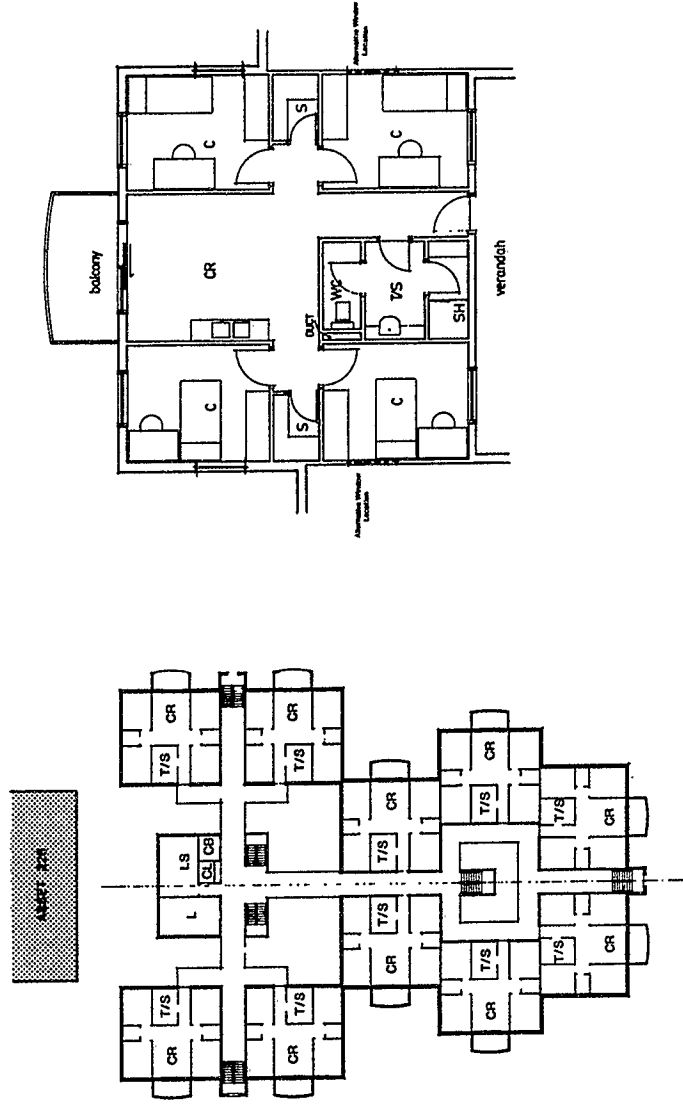
JUNIOR SAILORS' ACCOMMODATION
HMAS CERBERUS

KINHILL · HENDERSON & LODGE · RIDER HUNT
NOVEMBER 1992

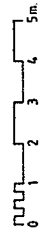
FLOOR PLAN - LEVEL 1



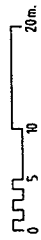
Room No.	Name	Area m ² (Approx)	Total Area m ²
CR 1-CR18	Common Room	15	450
CL 1-C12	Cabins	99	1108
S 1-S36	Stores	17	93.2
L 1-L3	Laundry/Dryng Room	23	68
TS 1-TS18	Toilet/Shower	64	235
CB 1-CB3	Common Bathrooms	4	12
LS 1-LS3	Large Stores	23	68
CL 1-CL3	Chains Stores	3	9
TOTAL NET AREA			2018
D 1-D2	Outdoor Dryng Area	60	120
ASSET PER JUNIOR SAILORS ACCOMMODATION Block 10			



TYPICAL UNIT LAYOUT



FLOOR PLAN - LEVEL 2

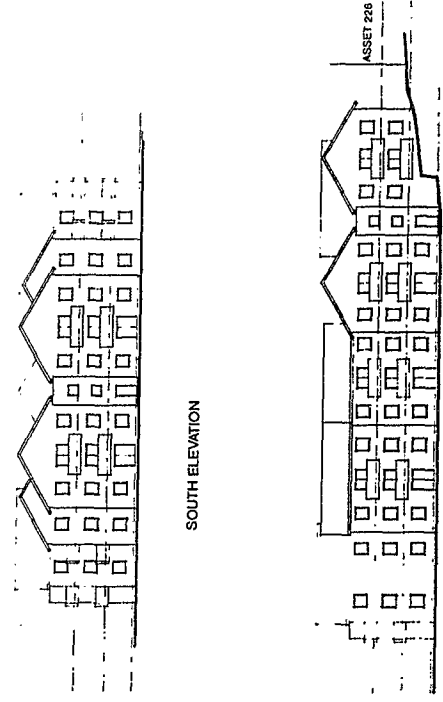
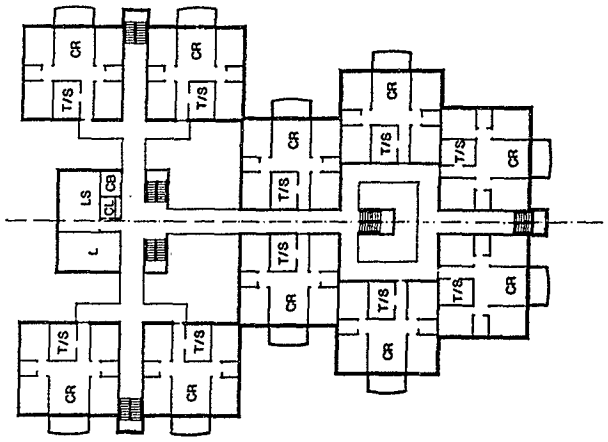


JUNIOR SAILOR'S ACCOMMODATION
HMAS CERBERUS

KINHILL · HENDERSON & LODGE · RIDER HUNT
NOVEMBER 1992

Room No	Name	Area m2 (Asphes)	TOTAL Area m2
CL 1-CL36	Common Room	15	420
C 1-1-112	Closets	99	1109
S 1-1-135	Stairs	17	95-2
L 1-1-13	Laundry/Drying Room	23	68
T 1-1-15/28	Toilet/Showers	8.4	235
CEL-CE3	Common Bathrooms	4	12
LS 1-1-15/3	Large Store	23	68
CL 1-CL3	Changes Store	3	9
TOTAL NET AREA			2018
D 1-1-2	Outdoor Driv'g Area	60	120

ASSET 218 - Junior Sailors Accommodation Block 10

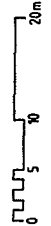


ELEVATIONS

JUNIOR SAILOR'S ACCOMMODATION
HMAS CERBERUS

KIMHILL • HENDERSON & LODGE • RIDER HUNT
NOVEMBER 1992

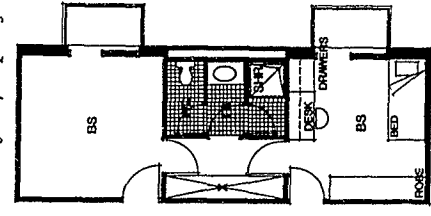
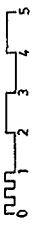
FLOOR PLAN - LEVEL 3



Room No.	Name	Area (Asphes)	Total Area m2
BS 1-1-10/20	Bedroom	17	384
X 1-1-1-18	Desk	4.5	72
T 1-1-1-18	Toilet/Showers	5	88
L 1-1-2	Landing	7.5	15
LS 1-1-3/5	Large Store	9	18
CL 1-CL2	Change Store	3	6
CL 1-CL4	Change Store	34	68
TOTAL NET AREA ACCOMMODATION			671
D 1	Outdoor Driv'g	30	30
TOTAL NET AREA OUTDOORS			30
TOTAL NET AREA OUTDOORS			30

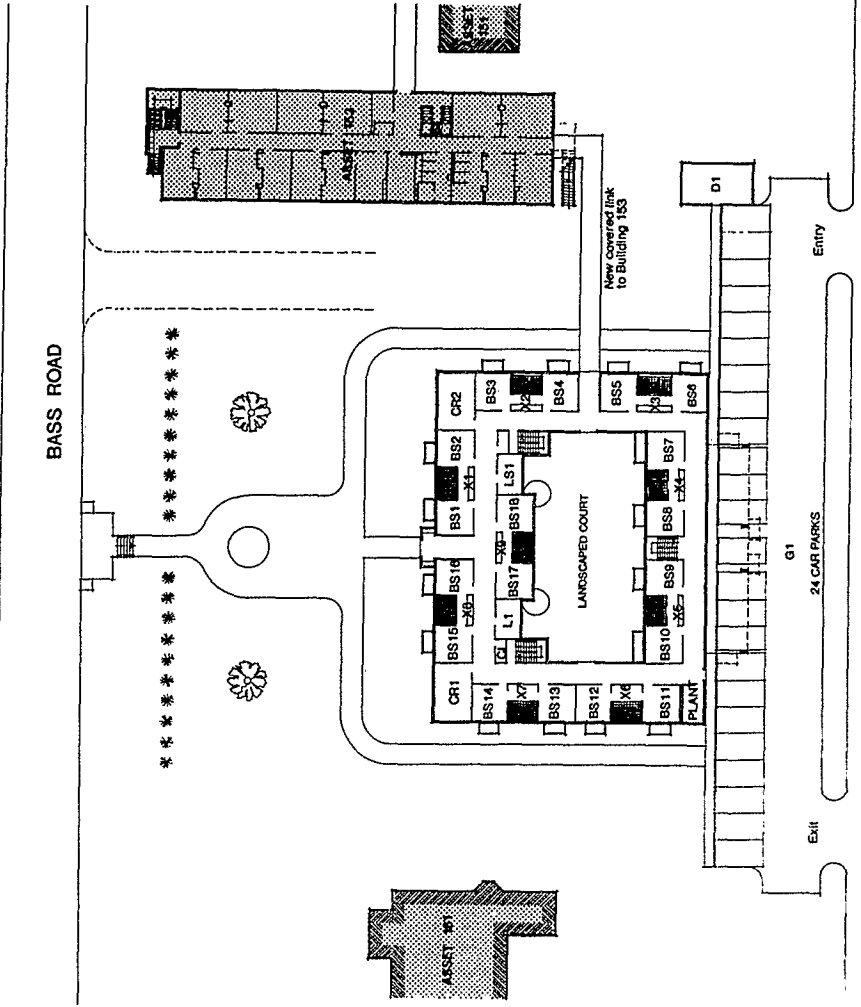
ASSET 211 - Officers' Accommodation Block 10
ASSET 212 - Henderson & Lodge
ASSET 213 - Henderson & Lodge
ASSET 214 - Henderson & Lodge

TYPICAL UNIT LAYOUT

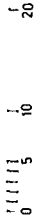


OFFICER'S ACCOMMODATION
HMAS CERBERUS

KIMHILL • HENDERSON & LODGE • RIDER HUNT
NOVEMBER 1992

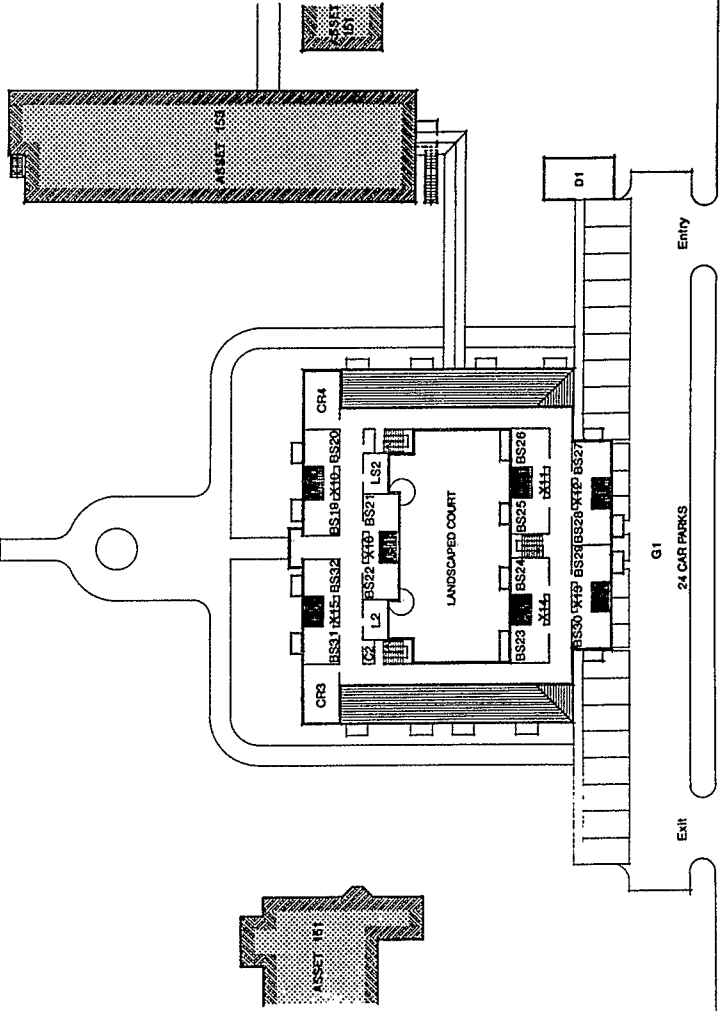


FLOOR PLAN - LEVEL 1



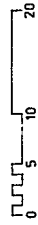
Room No.	Name	Area (sq ft)	Total Area (sq ft)
06-1-08-22	Staircase	12	34
K1-K16	Kitchen	48	77
TB 1-TB 16	Tank/Storage	8	80
L1-L1	Laundry	7.5	11
L3-L3B	Living Room	8	11
C1-C2	Change Room	5	8
CR1-CR4	Closet	24	88
TOTAL NET AREA ACCOMMODATION			871
D1	Outdoor Storage Area	30	30
TOTAL NET AREA OUTDOORS			30
ASSET 81 - Warehouse/Carport Area			
ASSET 82 - Warehouse/Carport Area			
ASSET 83 - Warehouse/Carport Area			
ASSET 84 - Warehouse/Carport Area			
ASSET 85 - Warehouse/Carport Area			
ASSET 86 - Warehouse/Carport Area			
ASSET 87 - Warehouse/Carport Area			
ASSET 88 - Warehouse/Carport Area			
ASSET 89 - Warehouse/Carport Area			
ASSET 90 - Warehouse/Carport Area			
ASSET 91 - Warehouse/Carport Area			

BASS ROAD



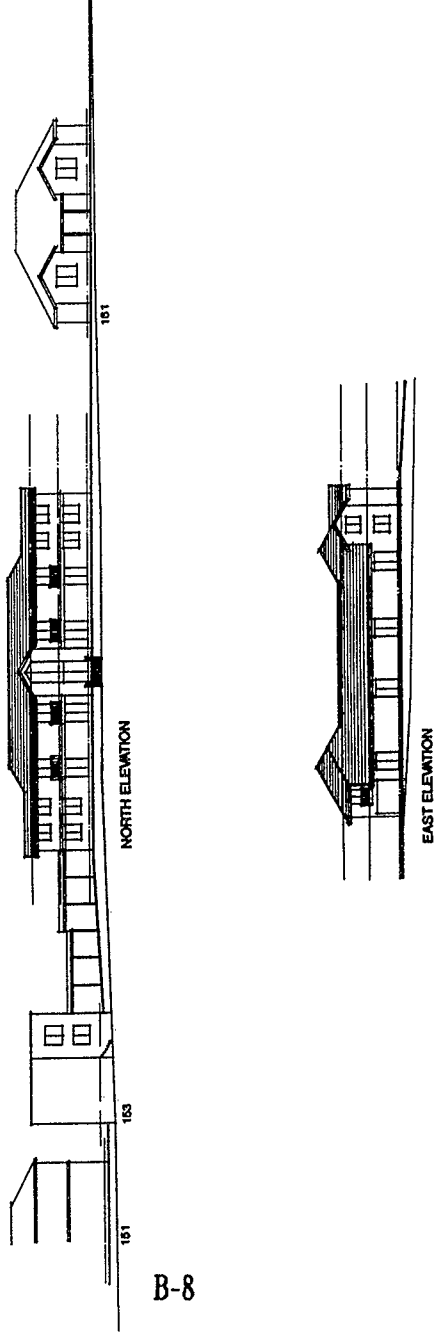
B-7

FLOOR PLAN - LEVEL 2



OFFICER'S ACCOMMODATION
HMAS CERBERUS

- KINHILL - HENDERSON & LOOGE - RIDER HUNT
NOVEMBER 1992



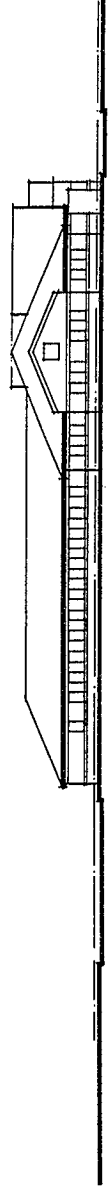
B-8



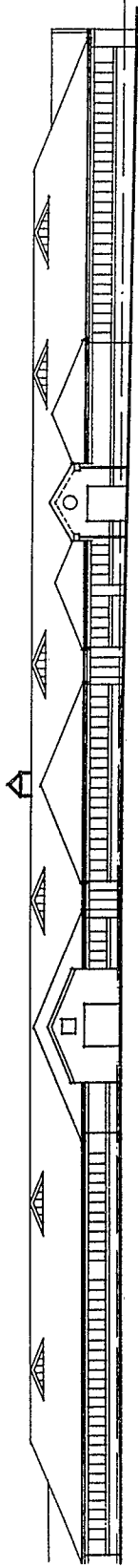
ELEVATIONS

OFFICER'S ACCOMMODATION
HMAS CERBERUS

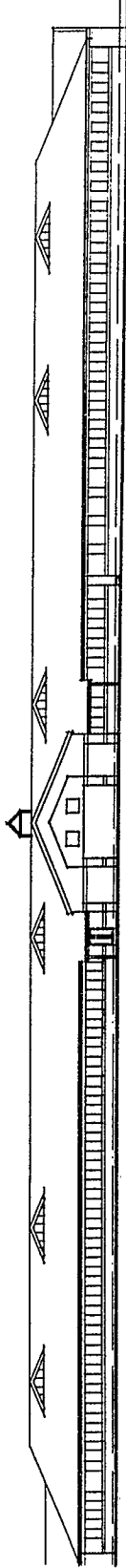
- KINHILL - HENDERSON & LOOGE - RIDER HUNT
NOVEMBER 1992



EAST ELEVATION



SOUTH ELEVATION



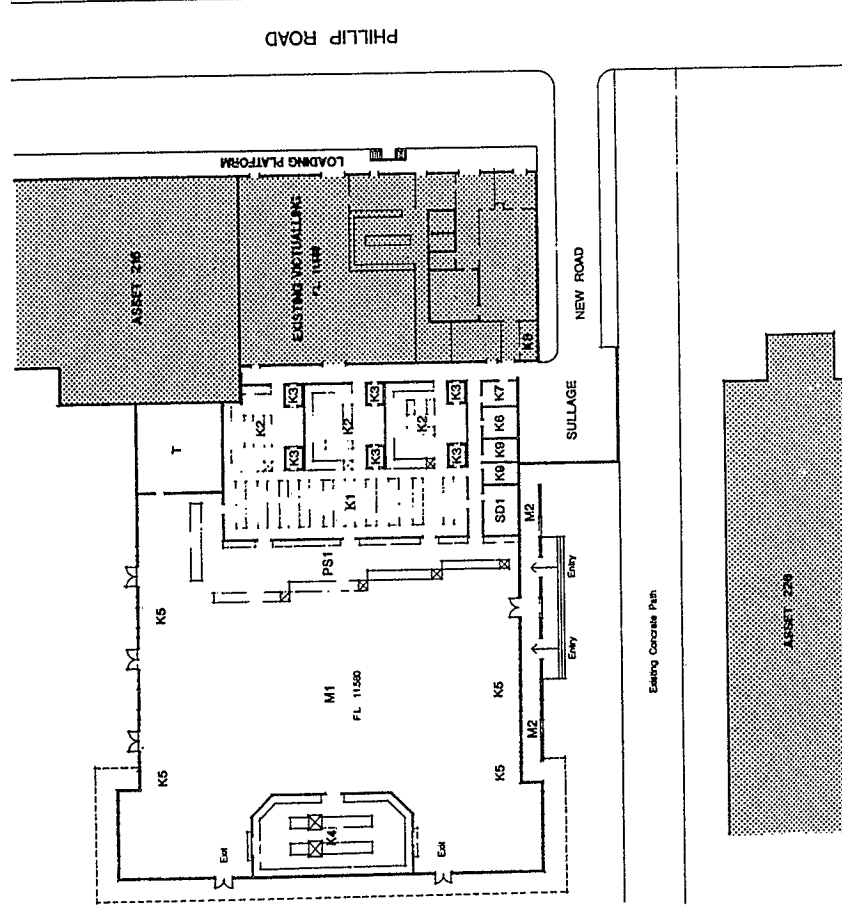
NORTH ELEVATION

HEALTH CENTRE
HMAS CERBERUS

• KINILL • HENDERSON & LODGE • RIDER HUNT
NOVEMBER 1992



ELEVATIONS



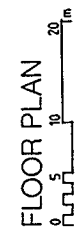
Room No.	Name	Area (sq m)	Vol (cu m)
K1	Consulting Area	20	
K2	Waiting Area	20	
K3	Reception	20	
K4	Reception	20	
K5	Waiting Area	20	
K6	Waiting Area	20	
K7	Waiting Area	20	
K8	Waiting Area	20	
K9	Waiting Area	20	
M1	Medical Suite	11500	
M2	Medical Suite	11500	
SD1	Storage	20	
T	Tram	20	
PS1	Plant Room	20	
PS2	Plant Room	20	
Col	Column	20	
Beam	Beam	20	
Roof	Roof	20	
Wall	Wall	20	
Window	Window	20	
Door	Door	20	
Stair	Stair	20	
Corridor	Corridor	20	
Room	Room	20	
Other	Other	20	
Total	Total	11500	

PHILLIP ROAD

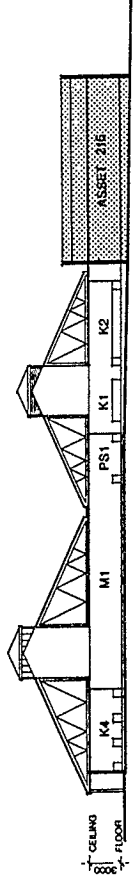
B-12

JUNIOR SAILORS GALLEY &
CAFETERIA
HMAS CERBERUS

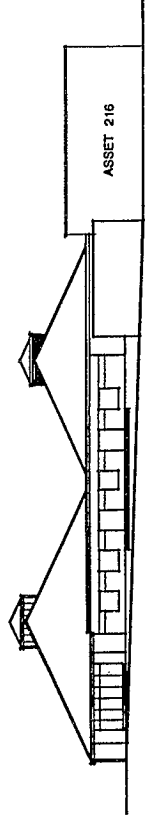
• KINILL • HENDERSON & LODGE • RIDER HUNT
NOVEMBER 1992



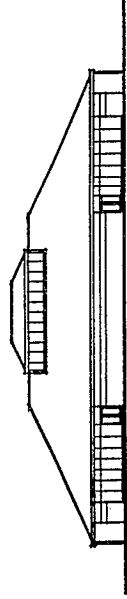
FLOOR PLAN



LONGITUDINAL SECTION



SOUTH ELEVATION



WEST ELEVATION

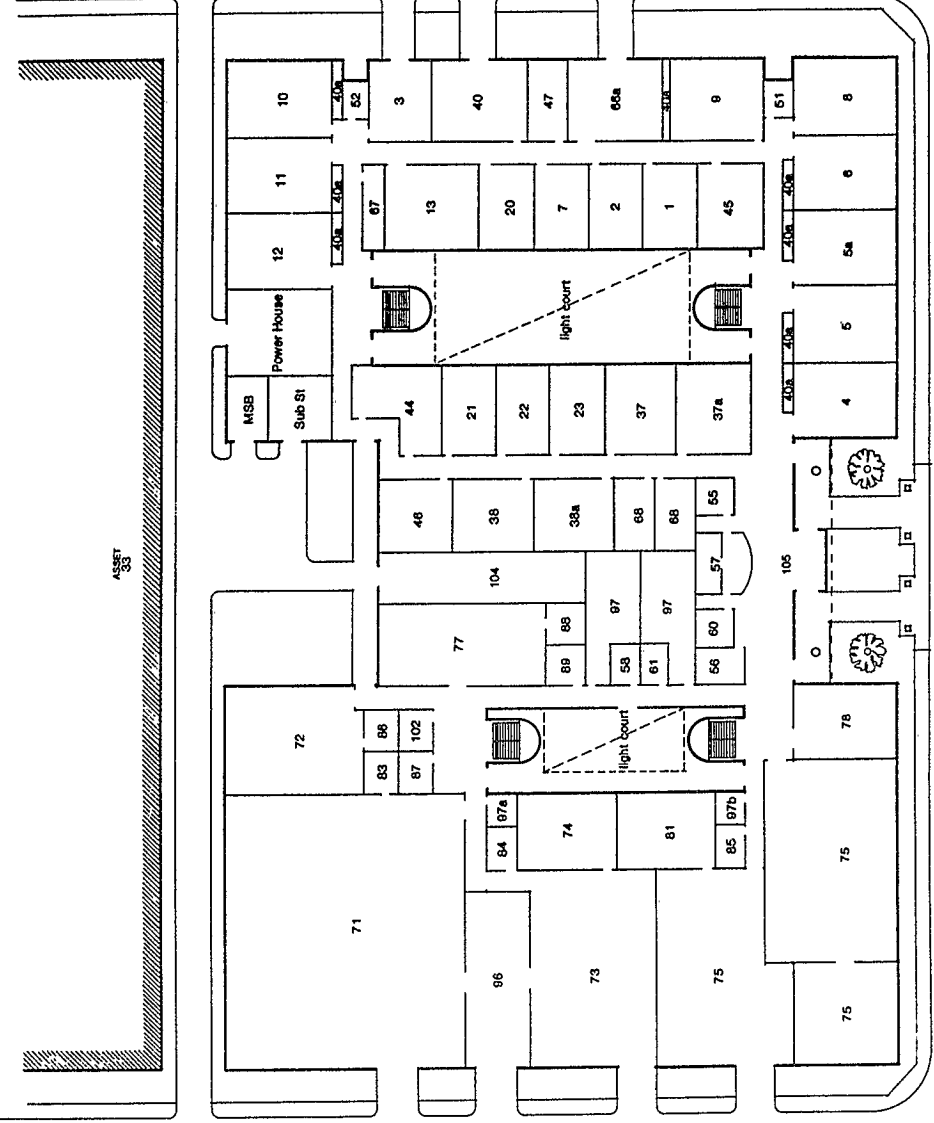
JUNIOR SAILOR'S GALLEY &
CAFETERIA
HMAS CERBERUS

- KINSELL - HENDERSON & LODGE - RIDER HUNT
NOVEMBER 1992

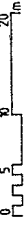
ELEVATIONS



Room No.	Name	Area (sq ft)
1	Entry	10
2	Locker Room	10
3	Locker Room	10
4	Locker Room	10
5	Locker Room	10
6	Locker Room	10
7	Locker Room	10
8	Locker Room	10
9	Locker Room	10
10	Locker Room	10
11	Locker Room	10
12	Locker Room	10
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45	Locker Room	10
46	Locker Room	10
47	Locker Room	10
48	Locker Room	10
49	Locker Room	10
50	Locker Room	10
51	Locker Room	10
52	Locker Room	10
53	Locker Room	10
54	Locker Room	10
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150	Locker Room	10
151	Locker Room	10
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164	Locker Room	10
165	Locker Room	10
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185	Locker Room	10
186	Locker Room	10
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188	Locker Room	10
189	Locker Room	10
190	Locker Room	10
191	Locker Room	10
192	Locker Room	10
193	Locker Room	10
194	Locker Room	10
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196	Locker Room	10
197	Locker Room	10
198	Locker Room	10
199	Locker Room	10
200	Locker Room	10

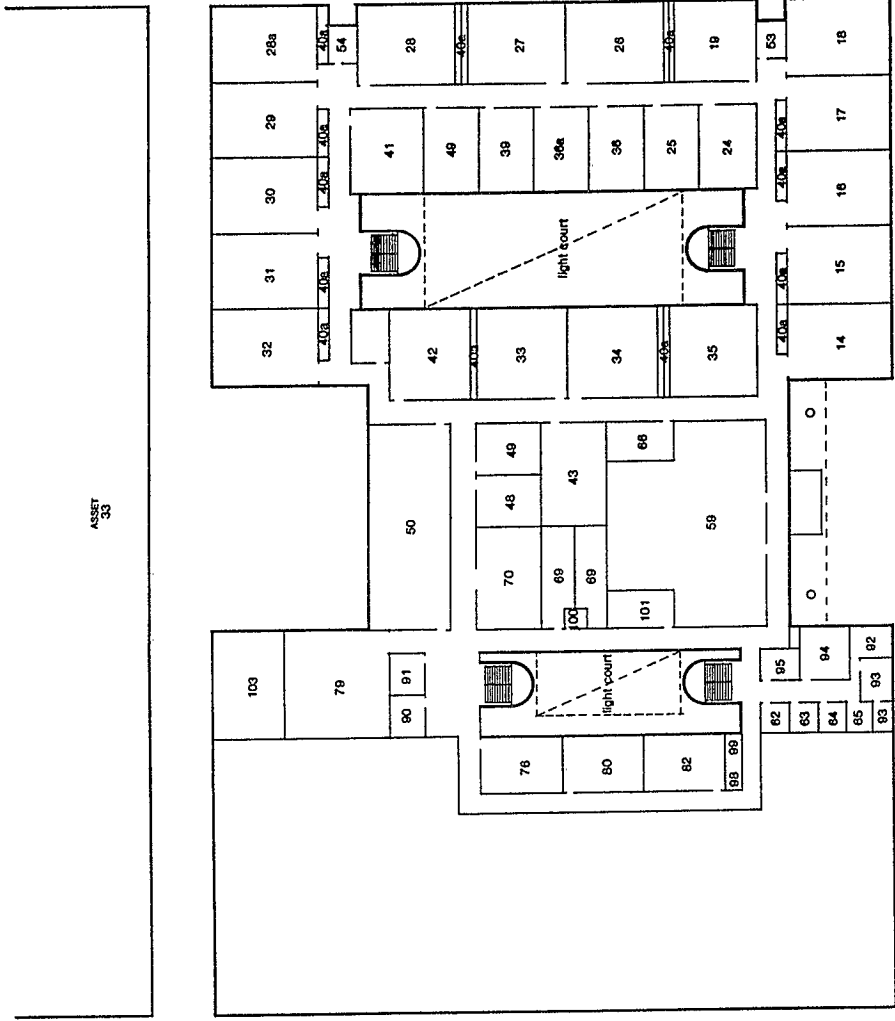


FLOOR PLAN - LEVEL 1



TECHNICAL TRAINING FACILITY
HMAS CERBERUS

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NOVEMBER 1992

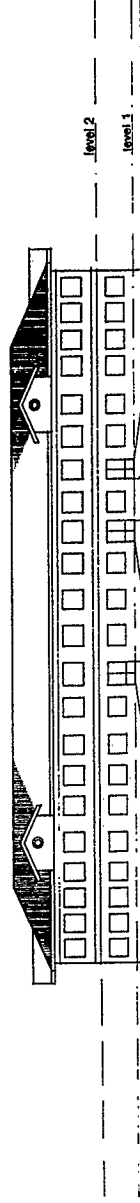
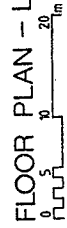


FLOOR PLAN - LEVEL 2

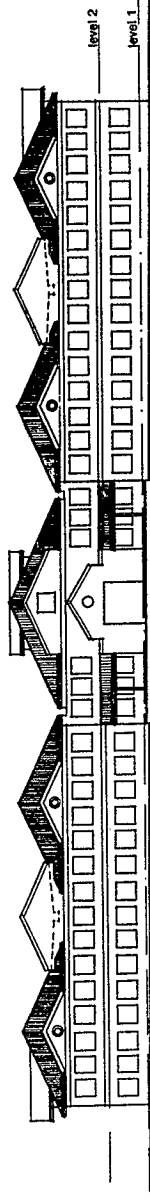
TECHNICAL TRAINING FACILITY

HMAS CERBERUS

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NOVEMBER 1992



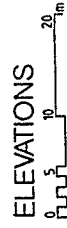
EAST ELEVATION



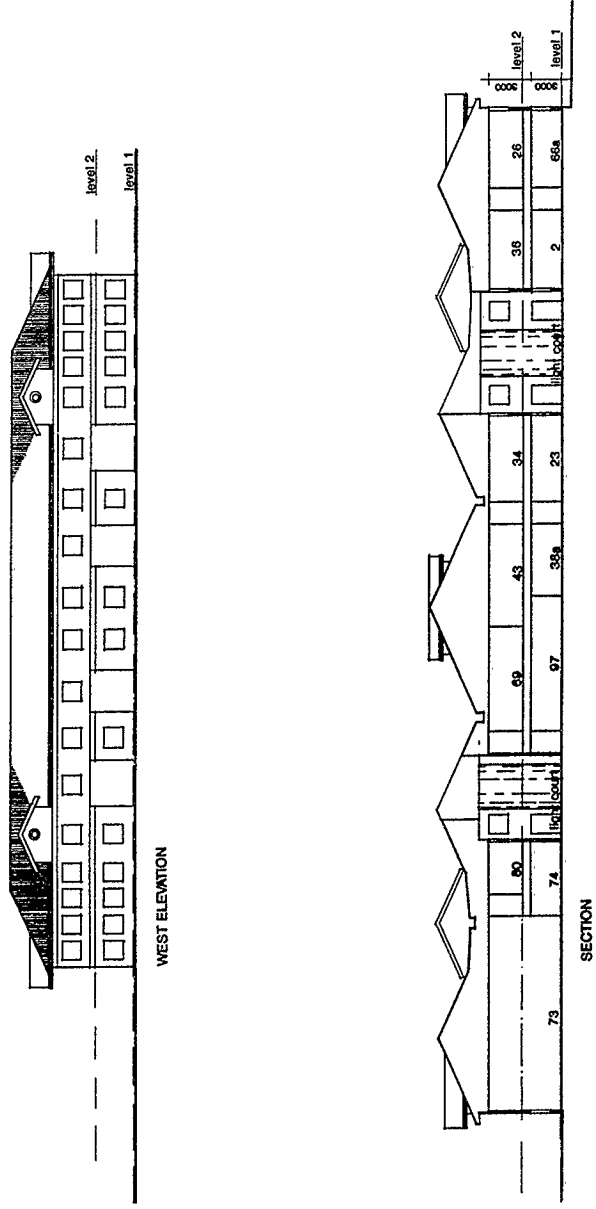
SOUTH ELEVATION

TECHNICAL TRAINING FACILITY
HMAS CERBERUS

KIMMILL • HENDERSON & LODGE • RIDGER HUNT
NOVEMBER 1992



Room No.	Name	Area (sq ft)
1, 2	Entry	45
3, 4	Entry	45
5	Entry	45
6	Entry	45
7, 8	Entry	45
9, 10	Entry	45
11, 12	Entry	45
13, 14	Entry	45
15, 16	Entry	45
17, 18	Entry	45
19, 20	Entry	45
21, 22	Entry	45
23, 24	Entry	45
25, 26	Entry	45
27, 28	Entry	45
29, 30	Entry	45
31, 32	Entry	45
33, 34	Entry	45
35, 36	Entry	45
37, 38	Entry	45
39, 40	Entry	45
41, 42	Entry	45
43, 44	Entry	45
45, 46	Entry	45
47, 48	Entry	45
49, 50	Entry	45
51, 52	Entry	45
53, 54	Entry	45
55, 56	Entry	45
57, 58	Entry	45
59, 60	Entry	45
61, 62	Entry	45
63, 64	Entry	45
65, 66	Entry	45
67, 68	Entry	45
69, 70	Entry	45
71, 72	Entry	45
73, 74	Entry	45
75, 76	Entry	45
77, 78	Entry	45
79, 80	Entry	45
81, 82	Entry	45
83, 84	Entry	45
85, 86	Entry	45
87, 88	Entry	45
89, 90	Entry	45
91, 92	Entry	45
93, 94	Entry	45
95, 96	Entry	45
97, 98	Entry	45
99, 100	Entry	45
101, 102	Entry	45
103	Entry	45
TOTAL NET AREA ELECTRICAL & MECHANICAL		
7298		

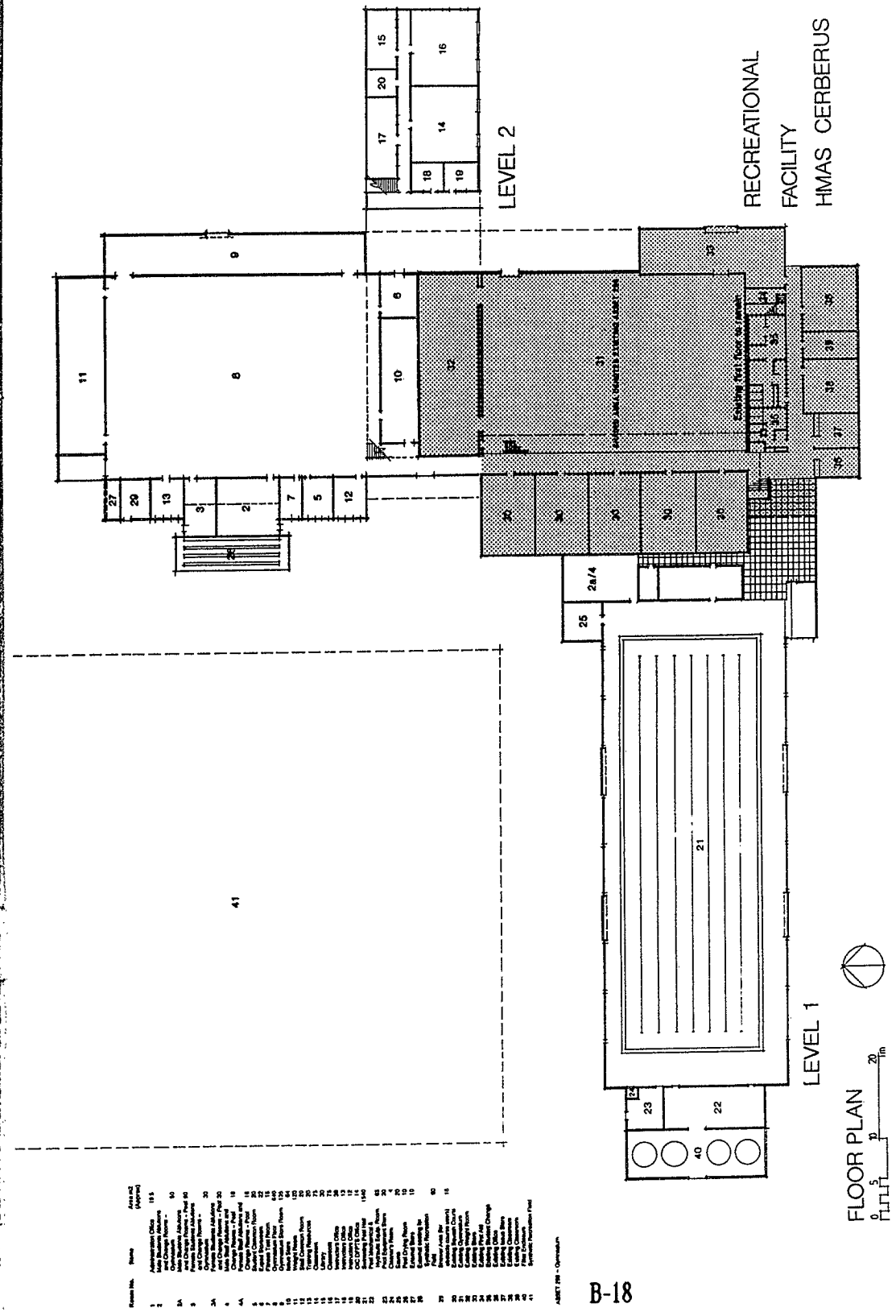


TECHNICAL TRAINING FACILITY
HMAS CERBERUS

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NOVEMBER 1992

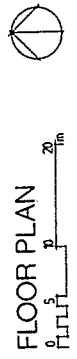


ELEVATIONS



RECREATIONAL FACILITY
HMAS CERBERUS

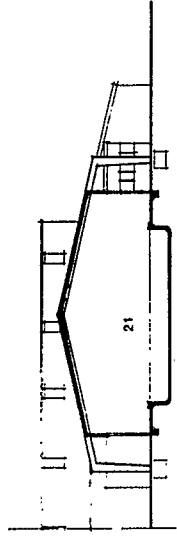
- KINILL - HENDERSON & LODGE - RIDGER HUNT
NOVEMBER 1992



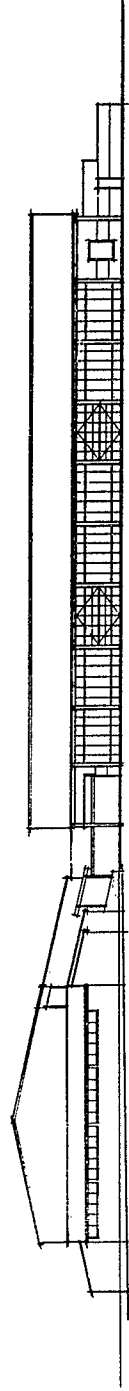
FLOOR PLAN

Room No.	Name	Area (sqm)
1	Administration Office	18.5
2	Director's Office	10.0
3	Director's Office	10.0
4	Director's Office	10.0
5	Director's Office	10.0
6	Director's Office	10.0
7	Director's Office	10.0
8	Director's Office	10.0
9	Director's Office	10.0
10	Director's Office	10.0
11	Director's Office	10.0
12	Director's Office	10.0
13	Director's Office	10.0
14	Director's Office	10.0
15	Director's Office	10.0
16	Director's Office	10.0
17	Director's Office	10.0
18	Director's Office	10.0
19	Director's Office	10.0
20	Director's Office	10.0
21	Director's Office	10.0
22	Director's Office	10.0
23	Director's Office	10.0
24	Director's Office	10.0
25	Director's Office	10.0
26	Director's Office	10.0
27	Director's Office	10.0
28	Director's Office	10.0
29	Director's Office	10.0
30	Director's Office	10.0
31	Director's Office	10.0
32	Director's Office	10.0
33	Director's Office	10.0
34	Director's Office	10.0
35	Director's Office	10.0
36	Director's Office	10.0
37	Director's Office	10.0
38	Director's Office	10.0
39	Director's Office	10.0
40	Director's Office	10.0
41	Director's Office	10.0
42	Director's Office	10.0

ASSET PER - Consultant

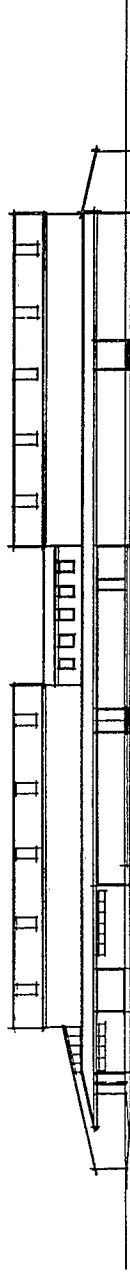


SECTION



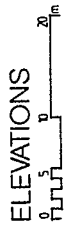
NORTH ELEVATION

B-19



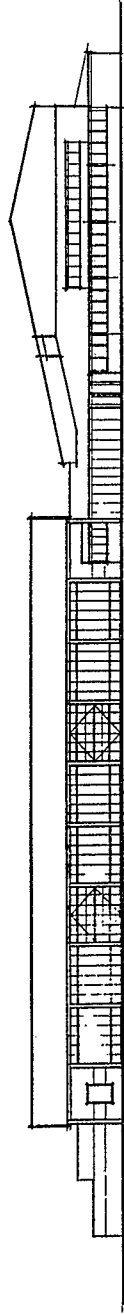
EAST ELEVATION

RECREATIONAL FACILITY
HMAS CERBERUS



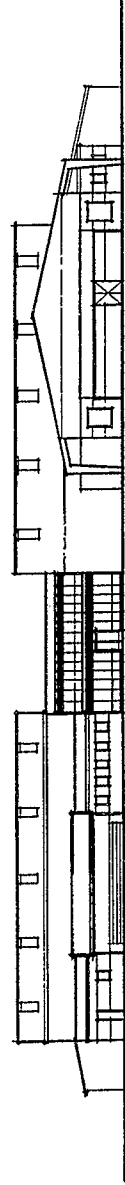
ELEVATIONS

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NOVEMBER 1982



SOUTH ELEVATION

B-20



WEST ELEVATION

RECREATIONAL FACILITY
HMAS CERBERUS

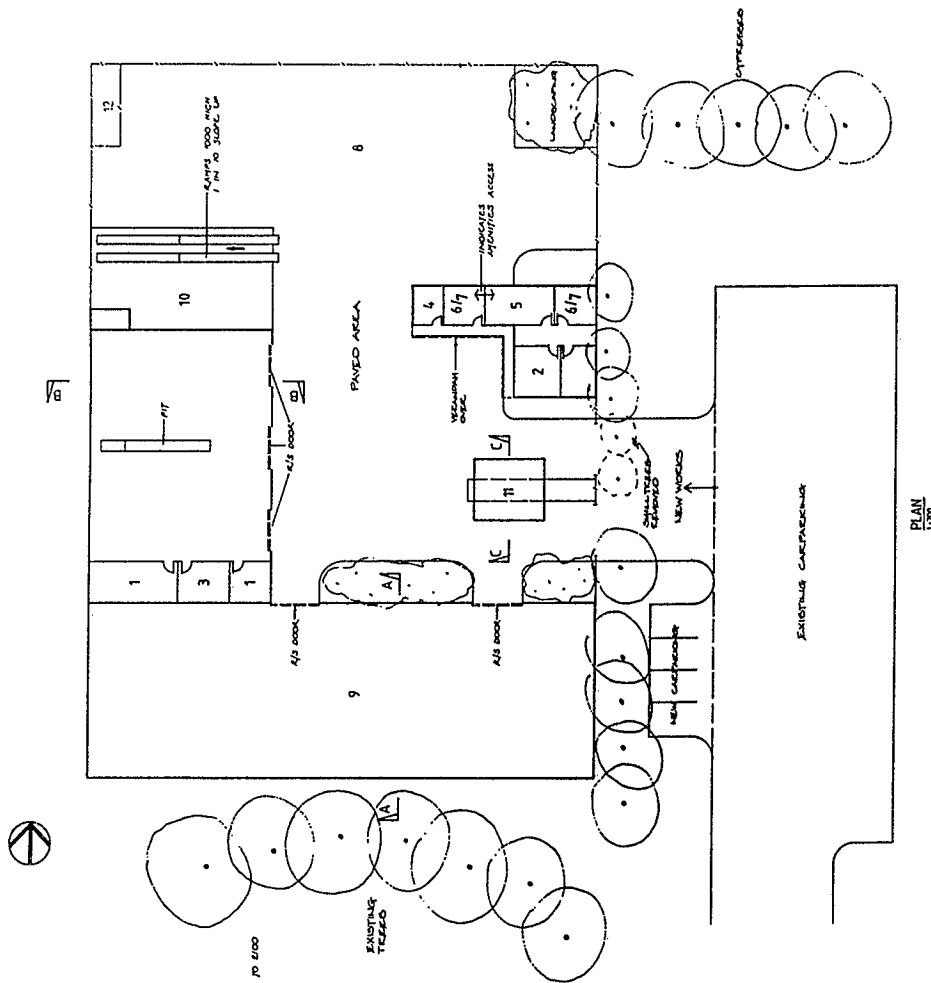


ELEVATIONS

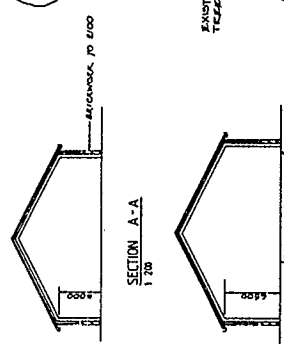
• KINHILL • HENDERSON & LODGE • RIDER HUNT
NOVEMBER 1982

MOTOR TRANSPORT COMPOUND HIMAS CERBERUS

KINMILL · HENDERSON & LODGE · RIDER HUNT
OCTOBER 1992



PLAN
1:200



SECTION A-A
1:200

SECTION B-B
1:200

SECTION C-C
1:200

Room No.	Function	Area (sqm)	Volume (cu m)
1	Travellers' Washrooms, Store and office	45	135
2	Travellers' Office (2)	32	96
3	Change Room and Ablutions-Male	20	60
4	Office area	14	42
5	Drivers Restroom/Washroom	34	102
6	Day Drivers Canteen-2 B.m.	20	60
7	Cabin ablutions	4	12
8	Large vehicle parking area	770	2310
9	Over-vehicle garage area	150	450
10	Washroom area	150	450
11	Recessed non-ventilated garages	50	150
12	Edifice-vehicle base Area	30	90
TOTAL (see also)		1315	3945

PLAN & SECTIONS

