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THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

R E P O R T

relating to the proposed

LABORATORIES

for the

COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANIZATION

at

INDOOROOPILLY, QUEENSLAND

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PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

LABORATORIES FOR COMMONWEALTH SCIENTIFIC AND INDUSTRIAL
RESEARCH ORGANIZATION AT INDOORCOOPILLY, QUEENSLAND

R E P O R T

By resolution on 9th March, 1966 the House of Representatives referred to the Parliamentary Standing Committee on Public Works for investigation and report, proposals for the erection of laboratories for the Commonwealth Scientific and Industrial Research Organization at Indooroopilly, Queensland.

The Committee have the honour to report as follows:

THE COMMITTEE'S INVESTIGATION

1. The Committee received submissions from the C.S.I.R.O. and the Department of Works and took evidence in Canberra from representatives of these organizations. We inspected the site of the proposed work and the facilities currently used by the Divisions of Animal Health and Entomology at Yeerongpilly, Queensland.

THE PROPOSAL

2. The proposal submitted to the Committee is broadly for the construction of accommodation, facilities and services for research purposes in the fields of animal health and entomology. The requirement of C.S.I.R.O. is that the two major occupants, namely the Divisions of Animal Health and Entomology, should be accommodated in separate laboratory wings connected by a link housing facilities and administrative services common to both groups.

3. The aim is to rehouse self-contained groups from these two divisions which are working in unsatisfactory conditions at Yeerongpilly, to integrate various groups of the Division of Entomology, to provide for small groups from the Divisions of Plant Industry and Organic Chemistry, and to provide some room for future expansion.

PASTORAL INDUSTRY RESEARCH IN QUEENSLAND

4. Statistics show that in March 1963 Queensland carried 44.8 per cent of Australia's beef cattle and 23.5 per cent of dairy cattle. Of the Queensland rural production of \$575 million, more than half comes from sheep, beef and dairy cattle. At \$129.40 per head, Queensland in 1964 led all other states, on a per capita basis, in the net value of pastoral production.

5. Despite these impressive figures, the beef industry in particular is beset by a number of problems peculiar to tropical and sub-tropical environments. One of the major pests is the cattle tick which, because of its biting and blood feeding habits, not only damages hides and reduces the vitality of cattle, but also, as the vector of various protozoan organisms, transmits fevers which result in loss in condition and in deaths. It was estimated in 1959 that the direct and indirect depredations of the cattle tick caused the industry in Queensland at least \$20 million annually in loss of productivity and in expenditure on control measures.

6. Loss of production due to internal parasites is also significant. Research has suggested that the importance of different species of worms varies according to environment and husbandry. The movement of cattle bred in dryer zones, where they have little experience of and consequently little resistance to worms, to more favourable areas for fattening encourages the development of parasitic disease and reduces productivity.

7. The third major problem is contagious bovine pleuro-pneumonia. Although this disease is now almost completely under control in Queensland, the annual cost to the State in 1956/57 was estimated at \$1.5 million. The present satisfactory position on the control of this disease is due in large part to research conducted by the C.S.I.R.O.

8. The Cattle Tick Problem Cattle tick poses the greatest single pest or disease problem to the Queensland beef industry. A major section of the research programme in Queensland of the Divisions of Animal Health and Entomology is devoted to the problem of the control of the cattle tick. In this context "control" describes the situation in which measures are taken to reduce to a tolerable level the economic losses caused by the pest without exterminating the last one. On the other hand, eradication is taken to mean the extermination of the last of the pest species so that, given adequate quarantine, it will never again be necessary to take protective measures.

9. Eradication of the cattle tick would call for a thoroughness of treatment and a level of organization which is not possible under present conditions. For example, an eradication campaign in a tick infested area in northern New South Wales in 1956/57 failed, although the degree of development in this closely settled area made it more suitable for treatment than most other cattle tick infested areas in Australia. Reasons for the failure of this campaign are still being studied.

10. C.S.I.R.O. research is concerned almost exclusively with the control of the cattle tick. Usually it does not matter if control measures result in no sign of the pest being detected in the area for many years. With the cattle tick, however, serious consequences can result if tick populations are reduced completely or to low levels for long periods. This is because the tick transmits a disease of cattle known as tick fever. In areas where tick infestation occurs, cattle acquire an infection when young and with frequent superinfection they maintain an immunity for the rest of their lives. If, however, the tick population is completely removed or maintained at a low level for six to twelve months, the cattle may lose their immunity. They are then liable to develop tick fever when reinfested, resulting in

a high mortality rate. Thus the pastoralist usually attempts to ensure that some ticks always remain on his stock to maintain their immunity.

11. In this difficult and complex problem, it is therefore necessary to strike a balance between the reduction of tick numbers and complete eradication, which would invite the development of tick fever. The situation is further complicated by the development by ticks of resistance to acaricides, by the complex problems associated with treating cattle with chemicals and by the problem of ensuring that acaricide residues of possible danger to humans do not accumulate in animal products. Moreover, in case the problem of resistance to acaricides should eventually prove insuperable, it is necessary also to study possible non-chemical methods of control.

12. The aim of the C.S.I.R.O's cattle tick control investigations is therefore to make the best possible use of chemical measures in a difficult and continuously changing situation and at the same time to search intensively for effective alternative methods of control.

THE DIVISION OF ENTOMOLOGY

13. Functions and Achievements The Division of Entomology is responsible for the development of control measures for insects and allied pests which are harmful to the Australian economy and for seeking means of employing insects in the biological control of pests and weeds or in the improvement of soil fertility.

14. Research by the Division has led to notable progress in the understanding of sheep blowfly strike and to the development of effective dressings and body strike preventatives. Success has been achieved also in reducing losses due to termites and to pasture pests such as the lucerne fly, red-legged earth mite and webworm. The introduction of insects which attack St. John's Wort have resulted in a reduction of the importance of this weed and parasites introduced

from abroad have reduced losses due to cabbage moth, cabbage butterfly and the green vegetable bug. Ecological studies have indicated methods of improving the control of codling moth and light brown apple moth.

15. Work on the control of cattle tick has embraced as many aspects likely to lead to practical results as staff and facilities have permitted. The application of studies of the biology and ecology of the tick has led to material advances in the degree of control on many properties. The study of the natural resistance of some cattle to ticks points to a means of permanently reducing losses due to ticks and there is promise that studies in tick physiology will lead to an understanding of the mechanism of resistance.

16. In common with many other pests, ticks have developed resistance to materials that earlier were effective against them. Means of countering resistance generally cannot be prepared in advance and a team of skilled workers must be available to meet each situation as it arises.

17. In the course of the cattle tick investigations, studies are carried out with the Divisions of Animal Health and Animal Genetics. Close liaison is also maintained with the Faculty of Veterinary Science at the University of Queensland, with the Queensland Department of Primary Industries, the New South Wales Tick Research Station at Wollongbar and research branches of some chemical firms.

18. The Division's work on the buffalo fly resulted in the early development of effective means of control of value to the cattle industry. Because there are problems now associated with the use of chemicals, the value of dung beetles and maggot predators is being studied.

19. The Division and the Queensland Government collaborated closely in the earlier studies on the buffalo fly, and with the Divisions of Animal Genetics and Tropical Pastures is now working

with the Division of Entomology in a programme for the introduction of dung beetles. Joint research on the sheep blowfly is also carried out at Yeerongpilly by the Divisions of Entomology and Animal Health and the Queensland Department of Primary Industries.

20. In fields other than veterinary entomology, the Division's work has produced important results in Queensland, notably in the reduction of the importance of lantana.

21. Organization and Programme The headquarters of the Division of Entomology are at Canberra and field stations are situated in Hobart, Perth, Brisbane, Sydney, Armidale, Trangie and Albury. A biological control station for the study of the sirex pest of pine trees is maintained at Sunninghill in England, and an officer is at present stationed in Hawaii for the study of pests which attack lantana.

22. Field stations may be temporary, in keeping with the short term nature of an investigation as in the case of an experimental property which was closed down recently near Ingham, Queensland, after the completion of a particular phase of cattle tick research. On the other hand, the main body of the cattle tick research in Brisbane will be on a much longer term basis and will also cater to some extent for regional requirements. The staff of the Division includes 52 research scientists and 174 ancillary staff.

23. Whilst it is often possible to control less important and relatively local pests by the application of established principles, many of the problems the Division investigates do not yield readily to conventional approaches. Some of the formidable pests under study are termites, locusts, phasmatids, red-legged earth mites, the lucerne flea, orchard pests, weevils, grain moths, leafhopper vectors of plant viruses, blowflies, bush flies, fruit fly, buffalo fly and cattle tick. Some of these are widespread and are difficult to attack by known means. Accordingly, an important part of the research programme has been to complement direct investigation of

the pests by broad studies in the fields of insect behaviour, physiology, biochemistry, population dynamics, genetics and taxonomy. The need for this approach is emphasized by the history of insecticides in recent years where many species of insects have become resistant to chemicals and there has been increasing concern about chemical residues in human foodstuffs.

24. There has thus been an increase in research into methods of control not involving insecticides and some outstanding advances have been made. Examples are the successful use of synthetic sex lures to lure moths into traps, the liberation of sterile moths to destroy the reproductive potential of the screw worm fly and the application of specific disease organisms to crops for caterpillar control. Ecological studies have also pointed the way to methods economising in the use of insecticides.

THE DIVISION OF ANIMAL HEALTH

25. Functions and Achievements The Division of Animal Health is one of a group of four divisions of the C.S.I.R.O. engaged in animal research, the others being Animal Genetics, Animal Physiology and Nutritional Biochemistry. The Division has had a long and successful record of assistance to livestock industries. It has, for example, conducted most of the research which resulted in the control of bovine pleuro-pneumonia and in the national plan of eradication which seems to be close to its objective. It developed and demonstrated the improved Miles' operation for the control of blowfly strike in sheep, studied "black disease" of sheep and produced a suitable vaccine, conducted the essential research which resulted in the general use of Strain 19 vaccine against brucellosis (contagious abortion) in dairy herds and provided the only major group of research scientists working on parasites of sheep.

26. It has also established a virus research unit which has revealed a number of viruses not previously recognised in Australia

as causing diseases in livestock. This unit is making a significant contribution to knowledge and would be vital if an exotic virus disease were to enter Australia. The Division also conducted the research that provided the basic data necessary for the eradication of foot rot and did the basic work on the myxoma virus including that which proved that the disease of myxomatosis could kill rabbits in Australia without causing a health risk to domestic livestock or native animals. Of particular importance to North Australia are the Division's research activities on cattle tick and tick fevers conducted in Queensland.

27. Organization and Programme The headquarters of the Division of Animal Health are in Melbourne where the main laboratory is adjacent to the Veterinary Research Laboratories of the University of Melbourne. The associated field station is at Maribyrnong. There are also field stations at Tooradin and Werribee. In New South Wales the main laboratory is the McMaster Laboratory in the grounds of the Sydney University. It has a field station at Badgery's Creek.

28. In Queensland a self-contained research group is housed at the Veterinary Parasitology Laboratory at Yeerongpilly with a field station at Jimboomba. The Division in Queensland is concerned primarily with long term research on ticks and tick fevers of cattle and on bovine helminthosis.

29. The Queensland Department of Primary Industries on the other hand is working mainly on disease diagnosis and on some ad hoc investigations. The Faculty of Veterinary Science at the Queensland University has freedom in the type of work undertaken and is not restricted to the problems of primary industry. Nonetheless, there is close liaison on the problem of ticks and tick fevers of cattle between workers of all groups, both formally and informally. The position with work on cattle helminths is somewhat different since the only significant work in this field is carried out by the Division. However, discussions between workers engaged in parasitology are held frequently.

EXISTING FACILITIES

30. Yeerongpilly Self-contained units of the Divisions of Animal Health and Entomology are at present housed in a very old wooden building owned by the Queensland Department of Works and made available to the C.S.I.R.O. in 1945 as temporary accommodation. The State authorities now wish to use the building for their own purposes and are anxious for the C.S.I.R.O. to vacate the site.

31. The building, which is of timber and iron, is an adaptation for laboratory purposes of a private house built in 1885. The structure, to which a laboratory wing has been added, stands on 1.6 acres of land. On this small area, which cannot be increased, animal accommodation immediately adjoins the laboratory building and the present programme of research cannot be properly maintained or extended. A wooden stable and a caravan are being used as extra laboratories and parts of the wooden verandah of the main building have been enclosed as an office and an autoclave room. The fire risk is high.

32. The facilities at Yeerongpilly are grossly overcrowded and are far below the standard required for research purposes.

33. It was established to the Committee's satisfaction that there is a need for new accommodation for the Divisions of Animal Health and Entomology in Brisbane. We believe that the need is extremely urgent in order that the Divisions' research activities can be carried out under suitable conditions.

34. The Committee were appalled that the accommodation of important research groups such as those established at Yeerongpilly should deteriorate so far below acceptable standards before action is taken to provide alternative quarters. It would be difficult to assess the extent to which research has been adversely affected or inhibited by the poor facilities or the influence they have had on the C.S.I.R.O.'s ability to recruit and retain staff. We noted that the position will deteriorate even further before the proposed accommodation is built, at the earliest towards the end of 1963.

35. Indooroopilly In 1960 the Queensland Government provided ten acres of land at Indooroopilly, at a nominal rent, to enable the permanent establishment of a veterinary parasitology laboratory of the Division of Animal Health. In anticipation of building a major laboratory on this site, C.S.I.R.O. has commenced development in accordance with a prepared plan. Pens for experimental cattle and associated facilities have been constructed and are at present used in association with the laboratory at Yeerongpilly. More recently the Queensland Government has made available an additional seven acres of land adjacent to that originally provided to house laboratories and other facilities of the Division of Entomology.

36. When the Committee inspected the pens and other facilities of the Division of Animal Health at Indooroopilly, we saw the post-mortem room used for the examination of carcasses. The Committee found that the killing and post-mortem facilities are inadequate and will require extensive improvement by the time the transfer of other sections of the Division from Yeerongpilly takes place.

THE INDOOROOPILLY SITE

37. Tenure The whole of the 17 acres of the site at Indooroopilly has been made available to the C.S.I.R.O. by a special lease granted under Section 179(1) of the Queensland Lands Act. The terms of the lease are that it is non competitive, for a maximum term of 30 years, and is renewable. At the expiration of the lease no compensation for improvements is payable, but the lessee has the right to remove the improvements. Yearly rental is one peppercorn if demanded.

38. Alternative arrangements considered before the special lease was concluded were -

- (a) acquisition, which would have cost of the order of \$192,000 ;
- (b) a 99 year lease, rent being 3% of the unimproved capital value, or \$5,760 p.a. and reappraisable after each ten years; or
- (c) deed-of-grant in trust at a nominal rental.

The relative economic disadvantages of (a) and (b) are obvious. A deed-of-grant in trust whilst equally economic as a special lease, has the drawback that the deed can be terminated without notice by the Governor-in-Council and is consequently less secure.

39. We believe that the arrangement for the special lease is satisfactory to the Commonwealth. We do not consider that there is a serious possibility of the lease being terminated because of the long history of harmonious relations between the C.S.I.R.O. and the Queensland Government and of the importance to the Queensland pastoral industry of the research work to be carried out at Indooroopilly.

40. Location The Committee considered the site at Indooroopilly is well located from the points of view of general and functional convenience including access to other establishments in Brisbane with mutual interests.

THE BUILDING PROPOSALS

41. Site Features The site is located at Long Pocket, Indooroopilly. It is about six miles from the Brisbane G.P.O. and 1½ miles from the Indooroopilly railway station which is connected to the Brisbane suburban train service.

42. The site, of about 17 acres, is irregular in shape. On the east the frontage of 1414 feet overlooks the Brisbane River. To the south the boundary of 726 feet adjoins Sir John Chandler Park whilst the northern boundary of 784 feet adjoins State owned land reserved for educational purposes. The western boundary of 1102 feet in part faces Meiers Road and adjoins Council land. The site contours vary from flat to gentle and steep grades. The Brisbane City Council is planning a future scenic drive along the Brisbane River parallel to Long Pocket Reach.

43. Existing development on the Animal Health portion of the site includes calf rearing pens, a tick fever unit, hay shed,

incinerator, sewage treatment plant and a caretaker's cottage. Access to these facilities is by a sealed road.

44. Development currently in hand for the Division of Entomology includes cattle stalls and a yard, a field laboratory and an access road. Tenders for an inflammable liquids store are to be called later this year.

45. Outline The highest flood level of the Brisbane River at R.L.24.00 was recorded in 1931 and the lowest floor level of the proposed buildings has been set at R.L.50.00. As the natural contours of the land on which the buildings are to be located run north and south, it has not been possible to site the buildings to take advantage of them without adversely affecting the desirable north/south orientation of the laboratory blocks. The site has therefore been benched to permit a suitably integrated complex of buildings to be developed comprising an administrative block flanked on either side by the laboratory blocks.

46. The spatial design of the complex achieves a well balanced architectural composition, with buildings prominently placed on the ridge overlooking the Brisbane River. Landscaping of the surrounding areas is proposed and the design of roadworks will allow a free traffic flow between the various units on the site. Car parking is to be arranged near the Entomology wing. The existing parking area near the animal pens will be extended and used by staff occupying the Animal Health wing.

47. The laboratory blocks are basically three storey buildings with large basement areas. They are to be erected on an east/west axis in order that consistent natural light will be available to the main laboratories on the south side of the wings. The associated offices, ancillary rooms, toilets and a number of small laboratories are to be located on the north sides of the buildings.

48. The Animal Health wing which will be built south of the administrative block will provide 17 laboratories as well as office

accommodation to meet the special needs of that Division. Apart from space allocated to the mechanical plant rooms, stairs and lift lobbies, the basement has been left as an open space for future expansion.

49. The basement of the Entomology wing will accommodate the main mechanical and electrical plant serving the whole complex. Four controlled environment rooms and a bulk sorting area are also to be located at this level. The two upper floors will include 24 laboratories and other accommodation required for research purposes.

50. The two storey administrative block has been planned around an open courtyard. It is designed to provide a future main entrance from the eastern side of the site from the scenic drive. It will be connected to the laboratory wings by means of covered walkways. The ground floor will provide general office accommodation, a conference room, P.A.B.X., library, lunch room, stationery store and reception area as well as a deep freeze, a hot and a cold room and a freeze dry room to serve the Animal Health wing. Two small laboratory groups from the Divisions of Plant Industry and Organic Chemistry will be located in the basement of this block. The lunch room, which will seat 100 persons, will also serve as a lecture theatre.

51. Fittings and Finishes The external end walls of the laboratory buildings will be of face brick. The longitudinal external walls will be framed in aluminium between the columns with fixed sashes above the sill and removable plastic panels below the sill to provide access to service piping located under the windows. The windows will be protected by concrete sun hoods. The external walls of the administrative block will be of matching face brick with windows in the western elevation protected by aluminium louvre sun shades. The insulated low pitched roofs of all buildings will be covered with galvanised steel decking. Windows will be framed in aluminium.

52. Generally the internal finishes will be of a good quality consistent with the nature of the building. Interior corridor walls and permanent cross walls of the laboratory wings and administrative block will be of brick. Other partition walls will be prefabricated timber units. The walls of rooms holding radio isotopes and the lift wells will be of reinforced concrete.

53. Internal brick walls will generally be finished with hard plaster but those in the lunch room, library, corridors, general stores, bulk sorting and mechanical and electrical plant areas, will be of face brick. The walls of toilets and glassware kitchens are to be tiled with glazed ceramic tiles from floor to ceiling. Generally the floors will be finished in vinyl tiles but in toilets, and in the general stores and bulk sorting areas they will be finished with ceramic tiles, and granolithic respectively. The floors of the radio isotope rooms will be covered with sheet vinyl. In the mechanical and electrical plant rooms and in the basement general store, the floors will be concrete with an industrial quality non-slip finish.

54. The ceilings of basement areas in the laboratory wings and the basement general store will have an off-form concrete finish. In the remaining rooms, excepting the controlled environment rooms, the false ceiling will be sheeted with fibrous plaster finished in enamel. The walls, floors and ceilings in the controlled environment rooms will be insulated for thermal protection. In the radio isotope laboratories walls and ceilings will be covered with a continuous jointless plastic coating to provide a smooth, impervious, washable and dust free finish.

55. Removable metal acoustic ceiling panels will be provided in the corridors and laboratory areas to allow access to the chilled water pipe and air supply ducts in the false ceiling space.

56. Laboratory Fittings Laboratories will be fitted with C.S.I.R.O. standard benches which will be provided, as required, with sinks and service outlets for hot and cold water, compressed air, gas and demineralised water. Carbon dioxide will be supplied to a number of laboratories in the Entomology wing. Fume cupboards will also be provided.

57. The glassware kitchens will be equipped with steam and boiling water sterilisers, gas fired atmospheric steamers, glassware washing machines and electrically heated drying ovens. Distilled water will be provided from stills in the glassware kitchens.

58. Construction Foundation conditions will allow the main frames to be carried on mass concrete footings and the load bearing brick walls of the administrative block on reinforced concrete strip footings. Generally the buildings will be located on excavated ground but three bays on the western end of the Entomology wing will be on filled ground requiring a pier and beam system.

59. The laboratory blocks will be constructed in reinforced concrete with shear walls at the ends of the buildings for lateral stability. Internal partition walls will be non-load bearing and timber framed except for corridor walls which will be of brick.

60. Concrete columns will extend to roof level and support steel roof trusses at ten foot centres carrying timber purlins. In the Entomology wing the roof construction in the bay carrying the cooling tower will be reinforced concrete. Reinforced concrete retaining walls will be used in the parts of the basements below ground level.

61. The 2-storey administrative block will be of load bearing brick construction with reinforced concrete beams and floor slabs. Roof construction will be similar to the laboratory wings. The connecting bridges between the buildings will be of light steel construction.

62. Mechanical Engineering Services Most occupied areas are to be air conditioned. The laboratory and administrative areas will be served as required by ducted fresh air supply systems and fan coil units located under windows along all the external walls and supplied with chilled and hot water as required from the central mechanical plant room. The controlled environment rooms which need air conditioning on a 24 hour per day basis will be served by separate air conditioning plant.

63. Space provision is being made in the plant rooms for air conditioning equipment to serve future laboratory areas in the basement of the Animal Health wing. The lift machinery room, fume cupboards, glassware kitchens, the servery and a small number of laboratories from which it is not desired to return air, will be mechanically ventilated. Low temperature refrigeration plant will be provided to serve the cold rooms.

64. Electrical Engineering Services Electricity will be provided from the Brisbane City Council's supply by an underground high voltage cable to a 750 kVA transformer sub-station in the basement of the Entomology wing. Low voltage electricity will be reticulated from this sub-station in which the equipment will be provided without cost to the Commonwealth. The space allowed will permit a future increase in transformer capacity to 1500 kVA.

65. Artificial lighting conforming to codes of the Australian Standards Association will be provided from fluorescent fittings. Fixed electrical equipment will be direct wired. General purpose outlets will be provided for portable equipment including laboratory apparatus, office machines and other facilities.

66. The fire alarm installation will include thermal detectors in all areas excepting those housing electronic equipment where smoke detectors will be installed. The alarm control board will be connected to the switchboard at the Brisbane City Fire Brigade.

67. Two electro-hydraulic type goods/passenger lifts of 2800 lbs. capacity, with a speed of 65 feet per minute, will be provided in each of the Laboratory wings.

68. Other Engineering Services Extensions of the existing 4" mains will distribute water to fire hydrants and to the buildings. Sewage and wastes will be connected to the existing septic tank which is adequate in size.

69. Stormwater will be discharged into the gully in the Biological Control area.

70. Roads and parking areas will be korbbed and guttored and bituminous surfaced.

71. The Committee recommend the construction of the works in this reference.

ESTIMATES OF COST

72. The estimated cost of the proposals submitted to the Committee is \$1,150,000. Details are:-

Building Work	\$562,000
Electrical Services	\$160,000
Mechanical Services	\$376,000
Hydraulic Services	\$8,000
Roads, Landscaping, etc.	<u>\$44,000</u>
	<u>\$1,150,000</u>

PROGRAMME

73. The Committee were told that after an approval to proceed is given, 50 weeks will be required for the preparation of contract documents, tendering and letting of a contract. The building contract is expected to extend over 80 weeks.

RECOMMENDATIONS AND CONCLUSIONS

74. The summary of recommendations and conclusions of the Committee is set out below. Alongside each is shown the paragraph in the report to which it refers.

	<u>Paragraph</u>
1. THE FACILITIES AT YEERONGPILLY ARE GROSSLY OVERCROWDED AND ARE FAR BELOW THE STANDARD REQUIRED FOR RESEARCH PURPOSES.	32
2. THERE IS A NEED FOR NEW ACCOMMODATION FOR THE DIVISIONS OF ANIMAL HEALTH AND ENTOMOLOGY IN BRISBANE.	33
3. THE NEED FOR THE NEW ACCOMMODATION IS EXTREMELY URGENT.	33
4. THE KILLING AND POST-MORTEM FACILITIES OF THE DIVISION OF ANIMAL HEALTH AT INDOOROOPILLY REQUIRE EXTENSIVE IMPROVEMENT.	36
5. THE ARRANGEMENT FOR THE SPECIAL LEASE OF THE SITE AT INDOOROOPILLY IS SATISFACTORY TO THE COMMONWEALTH.	39
6. THE SITE AT INDOOROOPILLY IS WELL LOCATED.	40
7. THE COMMITTEE RECOMMEND THE CONSTRUCTION OF THE WORKS IN THIS REFERENCE.	71
8. THE ESTIMATED COST OF THE PROPOSALS REFERRED TO THE COMMITTEE IS \$1,150,000.	72

W. J. Brimblecombe
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Chairman

Parliamentary Standing Committee
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CANBERRA A.C.T.

3rd May, 1966.