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THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

REPORT

relating to the proposed provision of

ENGINEERING SERVICES TO SUB-DIVISIONS OF RACECOURSE WEST, MORRIS SOAK AND BRADSHAW DRIVE

at

Alice Springs, Northern Territory

(TWELFTH REPORT OF 1970)

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PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

ENGINEERING SERVICES TO SUB-DIVISIONS OF
RACECOURSE WEST, MORRIS SOAK AND BRADSHAW DRIVE
ALICE SPRINGS, NORTHERN TERRITORY

R E P O R T

On 29 July 1970, His Excellency the Governor-General in Council, referred to the Parliamentary Standing Committee on Public Works for investigation and report to the Parliament the proposal to provide engineering services to the sub-divisions of Racecourse West, Morris Soak and Bradshaw Drive at Alice Springs in the Northern Territory.

The Committee have the honour to report as follows:

THE REFERENCE

1. The work in this reference involves residential sub-divisional development of three separate areas on the western side of the Alice Springs township providing services to 920 residential lots and 31 special sites. In and around the sub-divisions, the proposal includes

- roadwork and drainage, including road pavements, kerbs, gutters, footpaths and stormwater drainage;
- water supply, including mains, fire hydrants and house connections;
- reticulation sewers; and
- electricity supply, including both high and low tension distribution and street lighting.

2. Services outside the sub-divisions but associated with those already described involve main stormwater drainage and major sewerage reticulation and treatment works.

3. The estimated cost of the work is \$5.25 million.

THE COMMITTEE'S INVESTIGATION

4. Written submissions were made to the Committee by the Northern Territory Administration and the Department of Works. Evidence was taken in Alice Springs from representatives of these departments and locally interested organisations and from the Member for Alice Springs in the Legislative Council of the Northern Territory.

GROWTH OF ALICE SPRINGS

5. Alice Springs is the urban focus of Central Australia and has developed into a busy modern town, being the regional centre for medical, education, government, social and business purposes. It has grown quickly since World War II, especially in the last decade. Factors particularly contributing to this growth are tourism, the transport, cattle and building industries and the establishment of the Joint Space Defence Research Facility, near Alice Springs.

6. Tourism By virtue of its location, Alice Springs is the headquarters for tours of scenic attractions in Central Australia, including such well known features as Ayres Rock, the Olgas, Simpson's Gap, Standley Chasm, Ross River, Palm Valley etc. The town area itself also has a number of tourist attractions which add to the impact on the town and its services.

7. It has been estimated that in 1966, 26,600 tourists visited Alice Springs and that in 1969 the number had grown to 38,000. Expert forecasts of future trends predict continuing growth to 50,000 per annum by 1971 and 150,000 by 1980. Tourist promotion activities are increasing including the Northern Territory Tourist Board acting jointly with airlines, bus lines and tourist agencies.

8. The effect on urban Alice Springs of increasing tourist activity is well illustrated by the growth in visitor accommodation from 832 to 997 beds in the last 12 months. Further accommodation projects are under construction or are planned. The staff required to service this accommodation and businesses affected by tourism is making a considerable contribution on the growth of permanent population in the town.

9. Caravan parks also provide for significant numbers of tourists as well as catering for many permanent residents. In the five caravan parks in Alice Springs there are 44 caravans permanently on site, sites for 200 itinerant caravans, 12 cabins and 1,958 camp sites.

10. Transport As the northern terminal of the Central Australian Railway and the southern terminal of the Stuart Highway, Alice Springs is an important link in the transport network in the Northern Territory. It acts as a transit point for overland supplies to northern areas, especially Darwin. A co-ordinated rail/road service transports goods from southern States to Darwin with the road link operating between Alice Springs and Katherine or Larrimah. The importance of the rail link with South Australia can be gauged from the fact that in 1969 Commonwealth Railways at Alice Springs handled some 85,000 tons of northbound freight and 42,000 tons of southbound freight as well as 54,000 head of cattle.

11. There are 24 haulage contractors with headquarters or branches in Alice Springs and 13 firms provide tourist or passenger services.

12. Building Statistics suggest that building activity in Alice Springs has increased about threefold in the last three years. This trend seems certain to continue because apart from such government projects as a new high school, hospital, powerhouse, hostel, Aboriginal college, offices, and a police station,

which are about to commence or are planned, proposed private investment in major buildings includes extensions to hotels and motels and a new high rise hotel/motel.

13. Cattle Industry Alice Springs is the focal point of the cattle industry in Central Australia and besides handling the export of marketable cattle to South Australia by rail, provides goods and services to stations. An abattoir recently built at Alice Springs meets local needs and supplies quartered beef for interstate markets. There was an increase in turnoff in the Alice Springs area from 23,000 head in 1966/67 to 59,000 head in 1968/69.

14. Joint Space Defence Research Facility Establishment of this facility gave the Alice Springs economy a considerable boost. Over 200 houses were built in the town for civilian personnel attached to the facility and although the number of staff there could now level off, its continued operation will maintain the local demand for goods and supporting services.

POPULATION

15. The following figures illustrate the growth of Alice Springs' population in the past decade.

<u>Year Ended 30 June</u>	<u>Population</u>
1961 (Census)	4,648
1966 (Census)	6,390
1968 (Estimate)	7,810
1969 (Estimate)	8,785

16. Although these figures indicate a growth rate of 11% compound since 1966, that same period saw the construction of the Space Research Facility and associated housing which boosted the figure in a manner unlikely to be repeated.

The Government's estimate of future population trends is that a rate of 8% to 10% will be maintained for the next five years and will taper off slightly after that.

17. Private witnesses expressed a contrary view, it being submitted that the assessment is most conservative and that, for planning purposes, a rate not less than 10% would be more realistic. It was pointed out that natural growth had, in the past, been partly stifled and discouraged because of the shortage of residential land or the availability of housing for prospective residents employed by private enterprise. The submission was also made that the prediction of 8% to 10% does not recognise the impetus Alice Springs is likely to feel if mining development and the exploitation of natural gas in the vicinity of the town occurs.

18. Nevertheless, the Committee accept that for planning purposes it is reasonable at this stage to adopt the 8% to 10% basis. However, population trends and the growth rate and the impact that both of these have on the demand for urban services and residential land do, we believe, need to be re-assessed regularly to ensure that undue pressures for land do not occur. It is also important that long term planning of basic urban services has sufficient flexibility to ensure that inadequacies in them do not inhibit development.

EXISTING URBAN DEVELOPMENT

19. Responsibility The provision of serviced residential lots in Alice Springs is the responsibility of the Northern Territory Administration which also provides the usual municipal services using day labour. Maintenance of roads and drains is carried out by the Department of Works. Garbage and sanitary pan clearances for premises outside serviced areas are carried out under contract to the Administration.

20. The municipal affairs of the town likewise are under the control of the Northern Territory Administration with the District Officer as local representative. The Town Management Board, comprising five elected and four appointed members, advises the Administrator on matters affecting the town.

21. Extent The Alice Springs township which presently extends both sides of the Todd River immediately upstream and north of Heavitree Gap, has about 2,130 residential lots. Apart from those located in or immediately adjacent to the business centre, they are placed at East Side, to the north-east, Racecourse to the north-west, Traeger Park and the Gap to the south and Gillen to the west and south-west. The most recent sub-divisions to the south-west have been made possible by the relocation of the Town Site Aerodrome and the use of this and adjoining land.

22. Apart from the major sub-division of 256 lots in Gillen in 1968 for priority housing for the staff of the Space Research Facility, the approach to other urban development has been to service relatively small parcels of land. Designs have corresponded with the Alice Springs Town Plan but development has been piecemeal and there has always been an unsatisfied demand for serviced lots.

23. The proposal considered by the Committee in this instance is a larger scale approach to the urban development problem than attempted before, in an effort to overcome some of the backlog and to provide regular and orderly urban expansion in the future. A secondary but important aspect is that it will also enable a rational programme of associated major works to be planned including stormwater and trunk sewerage works. Within this framework, the rate at which lots are to be serviced and made available for housing development will depend on an assessment from time to time of the demand for sites and the availability of finance.

THE DEMAND

24. The growth factors already discussed have created a heavy demand for serviced residential lots in Alice Springs, well beyond the supply. The extent of the demand is reflected in the lengthy waiting time for both Housing Commission and Government accommodation and the high prices paid at public auction by those wishing to build privately.

25. There is a steadily growing unsatisfied demand for Housing Commission accommodation. At 30 June 1970, 290 applicants were on the waiting list, the average waiting time being 18 months. The Committee were told that due to the lack of serviced lots for individual houses, the Housing Commission has decided to build a flat complex of 58 units in 1970/71 in an attempt to satisfy part of the demand.

26. The Northern Territory Administration is responsible for providing accommodation for the staff of Commonwealth departments, except the Department of Defence. At 30 June 1970, 32 employees were listed for houses at an average waiting time of 11 months. We noted the view of the Administration witness that this waiting period is thought to seriously affect the recruitment of suitably qualified and experienced staff.

27. The only serviced residential lots available in Alice Springs for housing construction other than for Housing Commission or Government housing is that sold by the Government at public auction. Some 120 lots have been made available in this way at five auctions in the last three years, the average highest bid being \$1,905. There is undoubtedly a significant unsatisfied demand for serviced lots for private housing, the scale of which cannot be precisely measured but the rate of release of lots through auction is governed by the needs of Housing Commission and government housing and the availability

of finance for these purposes. We believe that if future urban growth in Alice Springs is to be orderly and balanced and that if population expansion occurs for the reasons suggested above, then there is good reason to suggest that a greater proportion of lots should be disposed of for private housing development.

28. Committee's Conclusions The Committee found that there is a need for the Commonwealth to continue to service residential allotments in Alice Springs. The longer term planning of urban development as proposed in this reference is commended, providing serviced land is released so that housing can be constructed at a rate designed to satisfy actual needs.

29. The Committee also concluded that more serviced land than previously made available should be auctioned for private housing purposes in an endeavour to meet the current demand in that sector and so that the future growth of Alice Springs is not prejudiced.

THE PROPOSAL

30. Outline The total yield from the works proposed in this reference is -

	<u>Residential Lots</u>	<u>Special Lots</u>
Bradshaw Drive	418	14
Morris Soak	102	5
Racecourse West	400	12
	<u>920</u>	<u>31</u>

31. The proposal is to phase construction in the light of actual requirements and in accordance with the level of funds available. The first phase involves the servicing of 182 residential and four special lots in 1970/71 as well as the external stormwater drainage and sewerage works in this reference.

32. Sites The land to be serviced for housing construction is vacant Crown land and the layouts and designs proposed accord with the Alice Springs Town Plan. All three areas are on the western side of the town, in each case immediately adjoining existing residential development. In the case of the Bradshaw Drive work, the western extremity of the sub-division will be skirted by Bradshaw and Larapinta Drives which are the arterial roads encircling the suburb of Gillen. The proposed work will complete the residential servicing of that suburb.

33. External Services Besides the services within the sub-divisions providing access and water, sewerage, drainage and electrical connections to individual lots, there is a requirement to supplement services outside the areas concerned and in particular main stormwater drainage, and trunk sewerage reticulation and sewage treatment works.

34. Stormwater Drainage Protection of the sub-divisions from stormwater intrusion is required to be in two parts. The first is proposed to be a 120 ft wide unlined channel west of the Bradshaw Drive/Morris Soak areas following generally the route of Larapinta Drive and then Bradshaw Drive and draining eventually into the Todd River near Heavitree Gap. Drainage of the Racecourse West area is to comprise an extension of the West Side drain in underground pipe where it passes through the residential area and a diversion channel north of the sub-division to drain stormwater from areas above to the Charles River on the east. It also involves improving and increasing the capacity of the West Side drain in its lower reaches to take the extra flow.

35. Sewerage Works As existing sewer mains and treatment facilities are reaching their capacity, it is necessary to supplement both elements of the system to cope with the extra loadings the additional development will impose.

36. The reticulation system now drains generally into the 18 in. trunk main sewer which runs southerly through the centre of the town on the western side of the Todd River through Heavitree Gap and one mile to the south-west to the treatment works. This system follows the natural drainage. Sewage is treated in a series of lagoons. There are now two primary lagoons and a third is under construction. From these, effluent is lifted into four secondary lagoons which will be augmented by two more under construction. Disposal of effluent is by evaporation and seepage from large holding areas to the south.

37. As the 18 in. trunk main is being used close to capacity, it is proposed to provide a 33 in. main from just north of the Gap to the treatment works. This will be sufficient, with the present main, until the population reaches 50,000. Upstream of the trunk main, it is proposed to provide two new sub-mains, the first of which will be a 18 in. line required to sewer the new sub-divisions being developed on the western side of the town. It will relieve some of the load on the existing main sewer which will then be able to take an increased flow from the central area.

38. When the additional lagoons at the treatment works are completed, the treatment plant will be able to cater for a population of 11,000. The present reference includes three more primary lagoons covering 6.4 acres together with a comminutor and pumps to boost this capacity to 15,000 population.

39. The Committee noted that proposals are being studied with a view to using effluent for irrigation and for watering recreation areas in Alice Springs. The design of the proposals submitted to the Committee is consistent with the use of effluent in this way if the feasibility of the proposal is demonstrated.

40. Sub-Divisional Works The Committee have reported to the Parliament since 1965 on urban development proposals in the Darwin suburbs of Alawa, Jingili, Moil and Wagaman. The standards for the works in those references are being adopted for the current proposals in Alice Springs and include perimeter and distributor roads with 3/4 ft pavements, minor roads being 24 ft wide. Bradshaw and Larapinta Drives will each have road reservations permitting the construction of second carriageways when traffic densities warrant. Major roads will have a two-coat bitumen seal and minor roads and footpaths a single coat.

41. Stormwater drainage will be directed by kerbs and gutters into side entry pits and thence into the underground pipe system within the sub-division.

42. Water reticulation will be in cast iron cement lined pipes or asbestos cement pipes located within footpath reservations. Fire protection will be provided from 2 1/2 in. millocks on stand pipes at regular intervals.

43. Within sub-divisions, sewerage reticulation will be in varying sized mains with concrete manholes. Lines will generally be at the rear of blocks to minimise the length of connections.

44. Normal Northern Territory electrical standards for high and low voltage mains and distribution sub-mains are to be used. Street lighting to the S.A.A. traffic route lighting code will be provided on major roads and twin 20w fluorescent units on minor roads.

45. Committee's Conclusion The Committee recommend the construction of the works in this reference.

ESTIMATE OF COST

46. The estimated cost of all the work was \$5.25 million as follows:

Internal services for Bradshaw Drive,

Morris Soak and Racecourse West sub-divisions

	\$	\$
- Roads, footpaths and stormwater drainage	1,730,000	
- Water supply and sewerage	860,000	
- Electricity supply and other works	<u>680,000</u>	3,270,000

External services

- Main stormwater drainage	1,230,000	
- Main sewerage reticulation and treatment works enlargement	<u>750,000</u>	<u>1,980,000</u>
		<u>5,250,000</u>

PROGRAMME

47. It is expected that after an approval to proceed is given the preparation of designs and tender documents and drawings for the first phase of 182 residential and 4 special lots will occupy four months. Subsequent stages will require four to six months for documentation.

48. Construction time is expected to vary according to the number of stages into which the project is ultimately divided. A minimum of two years would be required for the completion of services to all blocks.

RECOMMENDATIONS AND CONCLUSIONS

49. 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.

Paragraph

1. THERE IS A NEED FOR THE COMMONWEALTH TO CONTINUE TO
SERVICE RESIDENTIAL ALLOTMENTS IN ALICE SPRINGS.

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|----|---|----|
| 2. | THE LONGER TERM PLANNING OF URBAN DEVELOPMENT IS
COMMENDED, PROVIDING SERVICED LAND IS RELEASED SO
THAT HOUSING CAN BE CONSTRUCTED AT A RATE DESIGNED
TO SATISFY ACTUAL NEEDS. | 28 |
| 3. | MORE SERVICED LAND THAN PREVIOUSLY MADE AVAILABLE
SHOULD BE AUCTIONED FOR PRIVATE HOUSING PURPOSES. | 29 |
| 4. | THE COMMITTEE RECOMMEND THE CONSTRUCTION OF THE
WORKS IN THIS REFERENCE. | 45 |
| 5. | THE ESTIMATED COST OF ALL THE WORK REFERRED TO THE
COMMITTEE WAS \$5.25 MILLION. | 46 |

C.R. Kelly
(C.R. KELLY)
Chairman.

Parliamentary Standing Committee on Public Works,
Parliament House,
CANBERRA, A.C.T.

26 August 1970.