
INFORMATION, CONDITIONS AND PARTICULARS
FOR GUIDANCE

IN THE

PREPARATION OF COMPETITIVE DESIGNS

FOR THE

FEDERAL CAPITAL CITY

OF THE

COMMONWEALTH OF AUSTRALIA.

C.7611.

INFORMATION, CONDITIONS AND PARTICULARS FOR GUIDANCE IN THE PREPARATION OF COMPETITIVE DESIGNS FOR THE FEDERAL CAPITAL CITY OF THE COMMONWEALTH OF AUSTRALIA.

Department of Home Affairs,
Melbourne, 30th April, 1911.

INVITATION TO COMPETITORS.

1. The Government of the Commonwealth of Australia invites designs for the laying out of its Capital City, and undertakes to remunerate the authenticated author or authors of the Designs that may be placed respectively first, second, and third in order of merit at the final adjudication upon the Designs in accordance with the "Conditions of Competition," as follows:—

For the Design placed first	..	..	Premium £1,750
For the Design placed second	..	..	„ £750
For the Design placed third	..	..	„ £500

2. The conditions under which Designs are invited and will be received by the Commonwealth, follow under the heading "Conditions of Competition."

3. Information and particulars are also given, solely to assist intending competitors, under the respective headings:—

Historical and Introductory;
Requirements; and
Description.

The statements contained therein do not form part of the contract between the Commonwealth and the competitor.

4. Information for the guidance of intending competitors will be available free of cost, at the following places:—

Australia ..	..	The Department of Home Affairs, and the Public Works Department of each State.
New Zealand ..	..	Public Works Department, Wellington.
Canada ..	..	Public Works Department, Ottawa.
South Africa ..	..	{ Public Works Department, Pretoria. Public Works Department, Cape Town.
London ..	..	Office of the High Commissioner of Australia.
Paris ..	..	The British Embassy.
Berlin ..	..	The British Embassy.
Washington ..	..	The British Embassy.
New York ..	..	The British Consul-General.
Chicago ..	..	The British Consul-General.

5. Applicants must establish their *bona fides* as intending competitors before being supplied with information.

6. The information comprises the following :—

(a) Historical notes ; conditions of competition ; requirements ; general information ; descriptive matter ; and statistics relating to meteorology and climatology.

(b) Map of preliminary Contour Survey of country about Canberra.

Scale, 20 chains = 1 inch.

(c) Map of Contour Survey of site of Federal Capital at Canberra (2 copies).

Scale, 400 feet = 1 inch.

Contours, 5 feet vertical intervals.

Note : The Trigonometrical Meridian may practically be regarded as the local true Meridian.

(d) Topographical map of Federal Territory of about 900 square miles.

Scale, 6,000 feet = 1 inch (approximately).

(e) Map of the State of New South Wales.

(f) Map of the south-eastern portion of the State of New South Wales.

(g) Geological map of the City Site, Scale, 800 feet = 1 inch, and two reports by the Government Geologist of New South Wales.

(h) Map showing rainfall and temperature statistics of the Site for the Federal Capital and surrounding district.

(i) Report by the Commonwealth Meteorologist on the climate of the Yass-Canberra district.

(k) Reproductions of landscape sketches taken from points within the City Site.

7. Competitors will be bound only by the Conditions of Competition, a copy of which must accompany any Designs forwarded by any competitor.

CONDITIONS OF COMPETITION.

1. In these Conditions the Government shall mean the Government of the Commonwealth of Australia; the Minister shall mean the Minister of State administering the Department of Home Affairs; the Board shall mean the Board referred to in Clause 12 hereof.

2. Geometrical plans and sections should be prepared to scales based on the British standards of measurement, and the general plan of the City Design shall be drawn on Contour Map (c of paragraph 6, Invitation to Competitors).

3. No other restriction is placed on the method and character of the drawings submitted.

4. It is desirable that at least suggested outlines of the more important public and other buildings, parks, gardens, bridges, and principal constructional features be indicated, in so far as they illustrate the general Design.

5. The drawings shall be mounted on linen and on stretchers, and it is desired that these should not greatly exceed the dimensions of the Contour Map referred to in paragraph 2.

6. Descriptive and other matter accompanying the Designs must be either in print or typewritten, and not in manuscript. It is not obligatory to use the English language.

7. The Designs must be so prepared as to facilitate their successful reproduction, it being the intention of the Government to furnish the leading technical journals interested in the subject and willing in the public interest to publish them, with copies of the more important of the drawings.

8. The Designs and descriptive matter shall be submitted without any distinguishing mark, motto, or name, but a sealed packet containing the name and address of its author must be securely attached to each Design, such packet to be held, and opened after adjudication, only by His Excellency the Governor-General or his deputy.

9. An attempt by an author to disclose his identity in any other manner will disqualify his Design, and such Design will not be included in the competition, neither will it be returned to the author.

10. The Designs must be delivered to the Secretary, Department of Home Affairs, Melbourne, on or before the 31st day of January, 1912. Omission to so deliver will involve disqualification unless the Board referred to later on is satisfied that the delay has not occurred through remissness on the part of the competitor, and provided that such delay is only for a period that will not interfere with the work of investigation and adjudication.

11. All Designs must be delivered at the Department of Home Affairs, Melbourne, free of cost to the Government. Non-premiated Designs will be repacked and shipped or posted for return to the several competitors at one of the following addresses to be named by him in delivering his Design, namely:—

Australia	..	..	The Department of Home Affairs, and the Public Works Department of each State.
New Zealand		..	Public Works Department, Wellington.
Canada	..	..	Public Works Department, Ottawa.
South Africa		..	{ Public Works Department, Pretoria.
			{ Public Works Department, Cape Town.
London	..	..	Office of the High Commissioner of Australia.
Paris	..	..	The British Embassy.
Berlin	..	..	The British Embassy.
Washington	..	..	The British Embassy.
New York	..	..	The British Consul-General.
Chicago	..	..	The British Consul-General.

who will be advised of their despatch. Freight and other charges will be paid by the Government as from Melbourne to the address so named by the competitor. Insurance will be effected by the Government should the competitors state in their sealed particulars the intrinsic value they place on their drawings, but the Government may fix the values upon which insurance will be effected without incurring any liability to the competitors.

12. The Designs delivered and admitted to competition will be submitted to a Board consisting of—

- An engineer ;
- An architect ;
- A licensed surveyor ;

appointed by the Governor in Council for investigation and report to the Minister.

13. In the event of any member of the Board resigning or being from any cause prevented from carrying out his duties, or declining or neglecting to carry out his duties promptly, then the Minister may accept the resignation of such member or remove him from the Board and appoint some other person to fill the vacancy so caused, but such departure from the originally constituted Board shall not affect the conditions of competition.

14. The Minister will adjudicate upon the Designs admitted to competition, after they have been submitted to the Board, and such adjudication will be final and without appeal.

15. The decision of the Minister will be announced in Melbourne within two months of the date of receipt of the Designs, or as soon thereafter as is possible. The result will be submitted for publication as soon as possible in the leading technical journals devoted to such matters both in Australia and in such other places as the locale of designers may indicate, and the Minister approve of.

16. Immediately after the announcement of adjudication it is intended to publicly exhibit in Melbourne for a reasonable period, all Designs admitted to competition. Should the competitors desire on their own behalf to arrange a second exhibition in London or elsewhere, the Minister will, if requested, supply as exhibits reproductions from the originals of the premiated Designs only.

17. Competitors must understand that publication, whether of premiated Designs or of other Designs will in no way entitle competitors to any claim for compensation against the Minister or the Government in regard to proprietary or other rights.

18. The premiated Designs shall become the property of the Government for its unrestricted use, either in whole or in part. Any claim for further remuneration by one or by all of the authors or their assignors or legal representatives will not, under any circumstance, be recognised.

19. The Government, in consideration of the undertaking to pay the premiums mentioned, becomes entitled to call for, and to be furnished with, additional information, including such elucidating plans, sketches, and reports, as it may be advised by the Board referred to in Clause 12, are requisite. Such information need not necessarily be in the nature of working drawings or specifications, but similar in character to the original designs themselves, and such as it may not have been practicable to fully develop in the first instance without such further information.

20. On the application by the Minister for such information, the competitor shall forward the same so that it may be received within four months from the date he should have received the application in the ordinary course of post, but such application shall be made, if at all, within two months of the date of adjudication upon the original Designs. The aforesaid premiums cover the cost of supplying the additional information referred to, and the Minister will not recognize any claim for payment beyond these amounts.

21. Of the several premiums, 75 per cent. will be paid on adjudication, and the remaining 25 per cent. on receipt of such additional information as may have been asked for, if any. Should, however, the Board consider the Designs as submitted to be sufficient, then the full premiums will be paid on the final adjudication.

22. No unsuccessful competitor shall have any claim for payment in respect of an apparent adoption of his proposals or any part of them as disclosed by any Designs he may deliver.

23. The Government by its own officers will give effect to the adopted Design.

24. The Government does not accept responsibility as regards safe transit, custody, or re-transit of the Designs or any documents forwarded or delivered by a competitor, but it undertakes that all reasonable care shall be exercised to prevent damage during the period in which they are in its possession.

HISTORICAL AND INTRODUCTORY.

1. *Statutory*.—The people of New South Wales, Victoria, Queensland, South Australia, Western Australia, and Tasmania, agreed to unite in one indissoluble Federal Commonwealth, under the Crown of the United Kingdom of Great Britain and Ireland and under an Act known as the “Commonwealth of Australia Constitution Act,” which was assented to in July, 1900.

2. Section 125 of the “Constitution Act” provides:—

“The Seat of Government of the Commonwealth shall be determined by the Parliament, and shall be within territory which shall have been granted to or acquired by the Commonwealth, and shall be vested in and belong to the Commonwealth, and shall be in the State of New South Wales, and be distant not less than 100 miles from Sydney.

“Such territory shall contain an area of not less than 100 square miles, and such portion thereof as shall consist of Crown lands shall be granted to the Commonwealth without any payment therefor.

“The Parliament shall sit at Melbourne until it meet at the Seat of Government.”

3. *District of Yass-Canberra Selected*.—The question of the selection of a site for the purposes of the Seat of Government of the Commonwealth was frequently debated in Parliament, and in December, 1908, the *Seat of Government Act 1908* was assented to. This Act provides that:—

“It is hereby determined that the Seat of Government of the Commonwealth shall be in the district of Yass-Canberra in the State of New South Wales.

“The territory to be granted to or acquired by the Commonwealth for the Seat of Government shall contain an area of not less than *nine hundred square miles, and have access to the sea.*”

4. With a view to giving effect to the foregoing Act, the Minister of State for Home Affairs issued instructions to the Surveyor to make a thorough topographical investigation of the Yass-Canberra district, in order to place such facts before the Minister as would enable Parliament to decide on the most suitable territory for the purposes of the Seat of Government within that district. The instructions issued to the Surveyor embraced the following:—

“(I.) Preliminary reconnaissance, covering the whole of the district and embracing the catchment area of the water supply governing the same.

“(II.) Topographical investigation of that portion or portions of the district which, during the reconnaissance, are shown to possess the requisite characteristics for the Commonwealth territory.

“(III.) Contour Survey of suggested site or sites for the Federal Capital City.

“The primary essentials of the territory were briefly summarized as follows:—

“(a) That it includes a site or sites possessing the necessary topographical characteristics for the Federal Capital.

“(b) That it includes the catchment area of the water supply for the Capital—such water supply must be of sufficient magnitude to place the question of volume at all seasons and purity beyond doubt.

“*Note*:—It is desirable that the catchment area shall be in the proximity of the Capital site, but should the topographical examination of the district disclose the fact that such a condition is not practicable, then the catchment area must be connected with the territory, including the site for the Capital, that is to say, severance must be avoided.

“(c) *Sanitation*.—That the site provides for a perfect system of sanitation not only so far as the City itself is concerned, but generally.

“(d) *Accessibility*.—It is requisite that the site be easy of access from Sydney and Melbourne, and, through them, to the other Capital cities, also from a suitable harbour on the coast.

“In the consideration of (a) the Surveyor will bear in mind that the Federal Capital should be a beautiful city, occupying a commanding position, with extensive views, and embracing distinctive features which will lend themselves to the evolution of a design worthy of the object, not only for the present, but for all time, consequently the potentialities of the site will demand most careful consideration from a scenic standpoint, with a view to securing picturesqueness, and also with the object of beautification and expansion.

“The foregoing covers the main essentials which occur to me, and I have no doubt but that the experience of the Surveyor will enable him to realize what is required from him.

“I should be glad if the Surveyor could enter upon the work at the earliest possible date, and, in the first instance, conduct the reconnaissance of the district, from which possibly certain territories will be shown to stand out as possessing the necessary advantages. These territories could then be more critically examined and reported on.”

5. In compliance with these instructions the Surveyor, in February, 1909, reported that he had made an examination of the area embraced in the Yass-Canberra district and submitted reports upon possible sites for the purposes of the Federal City.

6. *Selection of Territory*.—The Minister for Home Affairs thereupon appointed a Board to consider the Surveyor's report and to advise him generally with respect thereto. This Board concurred with the Surveyor in his selection of the Federal territory, and recommended its adoption. This recommendation was approved by the Minister and subsequently was confirmed by the Commonwealth Legislature. In December, 1909, the *Seat of Government Acceptance Act* 1909 was passed, in which the territory to be granted to or acquired by the Commonwealth for the purposes of the Seat of Government is determined.

7. The territory comprises an area of about 900 square miles, as indicated on the Topographical map hereto appended (d of paragraph 6, Invitation to Competitors).

8. *Proclamation*.—On the 20th January, 1910, the following Proclamation was published in the *Commonwealth of Australia Gazette*, No. 4 of 1910 :—

PROCLAMATION

Commonwealth of Australia to wit, CHELMSFORD, Administrator of the Government.	By His Excellency the Right Honorable FREDERIC JOHN NAPIER, Baron Chelmsford, Knight Commander of the Most Distinguished Order of Saint Michael and Saint George, Administrator of the Government of the Commonwealth of Australia.
---	--

WHEREAS by the *Seat of Government Acceptance Act* 1909 it is enacted that that Act shall commence on a day to be fixed by Proclamation, after the Parliament of the State of New South Wales has passed an Act ratifying and confirming the agreement mentioned in and set out in the first-mentioned Act, and surrendering the Territory specified in the said first-mentioned Act to the Commonwealth :

AND WHEREAS the Parliament of the State of New South Wales has passed an Act, No. 14 of 1909, called the *Seat of Government Surrender Act* 1909, ratifying and confirming the agreement before mentioned and surrendering the Territory before mentioned to the Commonwealth :

Now therefore I, Frederic John Napier, Baron Chelmsford, the Administrator aforesaid, acting with the advice of the Federal Executive Council, do hereby fix Saturday, the twenty-second day of January, One thousand nine hundred and ten, as the day upon which the *Seat of Government Acceptance Act* 1909 shall commence.

Given under my Hand and the Seal of the Commonwealth, this eighteenth day of January,
One thousand nine hundred and ten, and in the ninth year of His Majesty's reign.

By His Excellency's Command,

(L.S.)

GEORGE W. FULLER,
Minister of State for Home Affairs.

GOD SAVE THE KING !

and in November, 1910, the Commonwealth Legislature passed the *Seat of Government (Administration) Act* 1910, which provides the necessary machinery to enable the Commonwealth Government to efficiently administer the Territory.

9. The final step with regard to the acceptance of the territory by the Commonwealth was taken under Proclamation issued on the 8th December, 1910, as follows :—

PROCLAMATION

Commonwealth of Australia to wit. DUDLEY, Governor-General. By His Excellency the Right Honorable William Humble, Earl of Dudley, a Member of His Majesty's Most Honorable Privy Council, Knight Grand Cross of the Most Distinguished Order of Saint Michael and Saint George, Knight Grand Cross of the Royal Victorian Order, Governor-General and Commander-in-Chief of the Commonwealth of Australia.

WHEREAS by the *Seat of Government Acceptance Act 1909* it is enacted that the Governor-General is thereby authorized to declare by Proclamation that, on and from a day to be fixed by the Proclamation (in that Act referred to as the proclaimed day), the Territory described in the Second Schedule to that Act, and surrendered by the State of New South Wales to the Commonwealth, is accepted by the Commonwealth as a Territory of the Commonwealth, and that the effect of the Proclamation shall be that, on and from the proclaimed day, the Territory shall be accepted by the Commonwealth and be acquired by the Commonwealth for the Seat of Government :

AND WHEREAS it is desirable that a Proclamation should be issued accordingly :

NOW THEREFORE I, William-Humble, Earl of Dudley, the Governor-General aforesaid, acting with the advice of the Federal Executive Council, do hereby declare that on and from the first day of January, One thousand nine hundred and eleven, the Territory described in the Second Schedule to the said Act and surrendered by the State of New South Wales to the Commonwealth is accepted by the Commonwealth as a Territory of the Commonwealth.

Given under my Hand and the Great Seal of the Commonwealth of Australia this fifth day of December, in the year of our Lord One thousand nine hundred and ten, and in the first year of His Majesty's reign.

By His Excellency's Command,
KING O'MALLEY.

(L.S.)

GOD SAVE THE KING !

10. *Selection of the City Site.*—The Minister for Home Affairs, on the advice of the Board referred to in paragraph 6, instructed the Surveyor to carry out such surveys as were necessary to determine the site within the territory most suitable for the purposes of the Federal Capital. Upon the completion of these surveys, the Board recommended that the City site should be at Canberra.

11. *Population of City.*—For the purposes of the design, the population of the Federal Capital City may be assumed at 25,000 persons, and may be expected to increase at least proportionately with the increase of population throughout the Commonwealth, estimated at present at 4,421,795 persons.

12. As a typical example of the growth of population under not dissimilar conditions, the following table of the population of Washington, 1800–1900, and its relation to that of the United States, is appended :—

Year.			Population of Washington.	Population of the United States.	Ratio of Population of Washington to that of the United States.
1791	..	..	Year of formation of District of Columbia		
1800	..	..	8,144	5,308,483	.001534
1810	..	..	15,471	7,239,881	.002137
1820	..	..	23,336	9,638,453	.002421
1830	..	..	30,261	12,866,020	.002352
1840	..	..	33,745	17,069,453	.001977
1850	..	..	51,687	23,191,876	.002229
1860	..	..	75,080	31,443,321	.002388
1870	..	..	131,700	38,558,371	.003416
1880	..	..	177,624	50,155,783	.003541
1890	..	..	230,392	62,622,250	.003679
1900	..	..	278,718	75,568,686	.003688

REQUIREMENTS.

1. *Requirements.*—The Federal Capital City will be the permanent Seat of Government of the Commonwealth of Australia, the place at which the Federal Parliament will meet, where all Commonwealth Legislation will be enacted, and where the Governor-General will have his official residence. The city will, therefore, be primarily the official and social centre of Australia.

2. The special consideration of designers must be given to the allocation of appropriate areas, suitably situated, and embracing sites for the following:—

Houses of Parliament (should be so placed as to become a dominating feature of the city. The building will probably have a frontage of 600 feet and a depth of 200 feet).

Residence of the Governor-General.

Residence of the Prime Minister.

Public Offices as follows:—

The Department of the Prime Minister.

The Department of External Affairs.

The Attorney-General's Department.

The Department of Home Affairs.

The Department of the Treasury.

The Department of Trade and Customs.

The Department of Defence.

The Postmaster-General's Department.

Courts of Justice.

Places of Public Worship.

Mint.

National Art Gallery and Library.

State House.

Printing Office.

Government Factories.

University.

Technical Colleges.

City Hall.

General Post Office.

Museum.

Central Railway Station.

Railway Marshalling Yards.

Military Barracks.

Criminal and Police Courts.

Gaol.

Hospitals.

National Theatre.

Central Power Station.

Gas Works.

Markets.

Stadium.

Parks and Gardens.

3. In addition to the foregoing, areas must be laid out within the city for commercial, residential, and industrial purposes. (It is probable that the manufacture of military equipment and other productions for Commonwealth use will be undertaken within the territory.)

4. *Railway.*—The proposed route shown on Contour Plans (*b* and *c* of paragraph 6, Invitation to Competitors) while occupying the best position, having regard only to gradients, curves, and cost of construction, is subject to modifications both as regards location and formation-levels in order to minimize the ill effect due to severance, provide the freest access, and secure harmony with the general city Design.

5. *Tramways.*—Designers should bear in mind the necessity for providing inter-communication between distant parts of the city by means of tramways.

6. *Ornamental Water.*—Two sites for weirs across the Molonglo River have been examined—one at the rocky bar, almost in line between trigonometrical stations "Sullivan" and "Shale," and the other beyond the western boundary of map (c of paragraph 6, Invitation to Competitors).

7. The catchment area of the Molonglo River and its tributaries, may be taken as 700 square miles, over which the annual rainfall is approximately 23 inches, and the annual evaporation from extensive areas of water surface may be assumed to be 40 inches.

8. Regulating weirs, at least 14 miles above the city site, will be constructed on the Molonglo and the Queanbeyan Rivers to control flood waters, to equalize the flow of the river, and to maintain a constant level behind any weir within or near the city site. It may be assumed that a flow of not less than 20 cubic feet per second could be maintained at the site during successive years of minimum rainfall.

9. *Water Supply.*—A water supply for city purposes will be provided on the basis of 100 gallons per capita per diem, which will be delivered by gravitation from a service reservoir at an elevation of about 2,250 feet above sea level, the position of which has been determined. The supply will be available within the city area below the 2,150 feet level.

10. *Sewerage.*—Sewerage will be water-carried by gravitation and delivered at treatment works at a level of 1,800 feet, such works being 6 miles westerly from Camp Hill Trigonometrical Station.

11. *Central Power.*—A suitable site for a central power station must be provided. The prime mover will be a steam plant using coal.

12. *Storm Water.*—The Design must indicate a scheme for the interception and disposal of storm water discharging within the city area.

13. *Scientific Observatories.*—A site for scientific observatories has been selected at a distance of some 6 miles from the city.

14. *Traffic and General.*—The contour of the surface and the panoramic value of the city surroundings should influence the designing of the main avenues, the principal means of inter-communication, and the location of the park lands, together with the adornment of the whole.

15. Competitors are reminded that the city site lies in latitude 35° south, and that attention must be paid to the treatment of the Design as regards arboreal and other shelter.

16. *Town Planning.*—The occasion for the Design of the Federal Capital City of the Commonwealth of Australia is unique in recent times, and it is expected that competitors will embody in their Designs all recent developments in the science of town planning. The Conference held under the auspices of the Royal Institute of British Architects in October last, at which many authorities on the subject of town planning were present, must have a marked influence upon city Design from the utilitarian, the architectural, the scientific, and the artistic stand-points.

DESCRIPTION.

1. *Description.*—The selected site for the Federal Capital is in latitude $35^{\circ} 15'$ south, and longitude $149^{\circ} 15'$ east, on the western side of the main Dividing Range separating eastern from western rivers, which range attains in this locality an average altitude of 3,000 feet above sea level. The Capital site is distant from the Dividing Range about 30 miles, and from the eastern coastline of Australia about 70 miles in a direct line.

2. Lying in the valley of the Molonglo River, the greater part of the city area is on the southern side of that river; on the northern side of the river it is bounded on the east by Mount Ainslie, and a prominent range of hills running almost due north and south, terminating abruptly on the northern bank of the Molonglo River. On the west, the boundary is Black Mountain and a range somewhat similar to that on the eastern boundary, but of lower altitude and less prominence, and practically parallel.

3. The slopes towards the valley enclosed by these two ranges are at first abrupt, often rocky, occasionally precipitous and clothed with an open forest of eucalypt, this forest extending to the junction of the lower slopes with the gently undulating land, and here and there projecting well out towards the centre of the valley. These two ranges are, roughly, 3 miles apart, the steeper slopes extending for a distance of about $\frac{1}{2}$ mile on either side, a narrow stretch of moderate inclination abutting upon the wider area of gentle undulation, which is relieved at intervals by elevated points rising some 50 feet above the general level.

4. *North of Molonglo River.*—The valley between Mount Ainslie and Black Mountain is drained principally by a water-course on its western side near the foot of Black Mountain, which water-course for about $1\frac{1}{2}$ mile from its confluence with the Molonglo River is a running stream; beyond this point a grassy depression with a number of subsidiary branches ordinarily dry, but at times under the influence of heavy thunderstorms—all these depressions carry large bodies of water. A fall of 1 inch of rain within 30 minutes is not exceptional, and there are evidences in the *débris* carried far out on the plain that even this downpour has been exceeded. The area drained by this water-course is, approximately, 25 square miles, or 16,000 acres. The other water-courses within this valley drain relatively small areas.

5. The soil of the valley is everywhere adapted for arboriculture, and much of it is of high quality, suitable under modern methods of cultivation for the growth of all crops.

6. *South of Molonglo.*—South of the Molonglo River, the contour of the country is irregular, the Narrabundah Range, which culminates in Mugga Mugga—nearly 2,700 feet above sea level—runs in a north-westerly direction to Red Hill—2,360 feet; here there is an abrupt descent to a level of about 2,100 feet, and beyond this point the range divides into a number of radiating spurs. On the Narrabundah Range and its subsidiary spurs down to the 1,950 feet level, there is an open forest of eucalypt, the average height of the trees being about 50 feet.

7. No prominent water-course flows through this area, but the numerous shallow channels and broad depressions under the influence of heavy falls of rain experienced, most frequently during the summer months, carry rapidly rising turbulent streams.

8. Arboriculture will present no difficulty over any part of this land; even on the higher rocky points there is a fair growth of trees.

9. *The Molonglo River.*—The Molonglo River—which intersects the city site—is, ordinarily, a sluggish stream; it drains some 700 square miles of country and flows between steep banks cut in the alluvial soil. During periods of prolonged dry weather the river ceases to run. It is readily fordable at short intervals during the greater part of the year, though subject to sudden alternations in volume.

10. The highest recorded flood was experienced in the year 1891, when the waters reached the height shown on the Contour Plan of the Federal Capital Site; since that date there has been only one flood of any importance, or one which extended to any

distance beyond the river banks. It will, however, be noticed by reference to the records that the rainfall for the past 14 years has been below the average, and it is probable that floods will recur, but measures will be taken to control the flood waters.

11. *Prevailing Winds*.—The prevailing winds during the winter months are from points west of the Meridian, and as those from the south, south-west, and west pass over the snow-clad Alps, they are keen.

12. During the summer, hot dry winds from the west and north-west alternate with cool winds from the south, while the frequent north-east winds from the ocean are refreshing, and serve to modify the summer temperature.

13. *Temperatures, &c.*—The maximum shade temperature recorded is 104°, the minimum 11° Fahrenheit; the ordinary summer temperatures are high, while the nights are always cool. During winter the temperature frequently falls below freezing point; the minimum record for 1910 is 26°, but that winter was exceptionally mild. It is, however, rare for snow to fall upon the city site, and still more rare for it to remain unthawed for more than a few hours after sunrise. Fogs are neither frequent nor dense.

14. *Soil*.—Over practically the whole of the city area the soils contain a large percentage of sand, and, though rarely of high quality, give satisfactory results with careful treatment; the land is usually well drained naturally, and there is an almost total absence of marsh.

15. *Building Material, &c.*—Neither within the city area nor near it has any freestone (sandstone) been found of sufficiently good quality to be used in the more important buildings; one freestone quarry (sandstone) has been worked on the eastern side of Black Mountain, and from it the material used in building Canberra church and some of the larger homesteads, has been obtained. Freestone (sandstone) of high quality, and in unlimited quantities, is available within 100 miles of the city site, and will be accessible by rail.

16. Granite occurs in large quantity over a great part of the territory; none has yet been used for buildings, but it is probable that, with the demand created by the establishment of the Federal Capital, suitable quarries will be opened, while the porphyritic rock which outcrops frequently will no doubt provide valuable stone.

17. Bricks of good quality will be made locally, while there is everywhere ample material for road construction.

18. *Shelter*.—The largest area sheltered from the more objectionable winds lies south of the Molonglo River on the eastern side of the Narrabundah Range and its tributary spurs; a more restricted sheltered area is situated east of Black Mountain.

19. *Range of View*.—Looking from the more elevated points on the northern side of the Molonglo River—such as Vernon Trigonometrical Station—towards the north, the view extends over a very gently undulating valley for some miles to the low range of timbered hills forming the northern boundary of the Federal territory—Mount Ainslie, Black Mountain, and Majura rising some 900 feet above the general level, being prominent features in the landscape.

20. Westerly and south-westerly through the gap between Black Mountain and spurs from Red Hill on the Narrabundah Range, successive ranges are visible, in which there are numerous peaks attaining an altitude of from 4,000 feet to 6,200 feet above sea level; in the middle distance undulating pasture lands relieved by the timbered slopes on either side of the Molonglo River and hills of pleasing contour, rising some 500 feet above the general level. In the foreground flows the willow-bordered Molonglo River. Southerly the view is limited by the range of which Mugga Mugga, nearly 2,700 feet above sea level, is the most prominent feature; but towards the south-east the outlook is more extensive, the timbered ranges lying to the east of the Goulburn-Cooma railway being visible as background for the open rolling pasture lands stretching for miles, the Molonglo River winding its sinuous way through the alluvial lands.

21. Looking from the Trigonometrical Stations, Camp Hill and Kurrajong, south of the Molonglo River the view towards the north is somewhat similar to that from Vernon Trigonometrical Station, but here the Molonglo is in the foreground, and its winding course can be followed on either hand for miles, the foliage of the willows

contrasting with the pale tints of the pasture lands, these again relieving the background of sombre-toned eucalypt-covered slopes of Mount Ainslie and Black Mountain. In the middle distance the Canberra village church and parsonage, encircled by well-grown plantations, are prominent objects.

22. Turning towards the north-east under the shelter of the hill upon which "Russell" Trigonometrical Station is established, lies Duntroon homestead, with its garden and ornamental grounds, the houses of the employés grouped on the rising land above the Molonglo River; beyond the homestead, glimpses of farms in the valley east of Mount Ainslie, undulating pasture land between, and for a background the forest-clad ranges on both sides of the Molonglo. Towards the east and south-east the country is of pleasing contour, with here and there a farm, the Goulburn-Cooma railway in the distance ascending the lower spurs which have their origin in the Main Dividing Range. Towards the south Mugga Mugga stands out prominently, and the range, as far as Red Hill, limits the view.

23. Looking from "Kurrajong" Trigonometrical Station towards the south-west and west, the mountain chains forming the watershed of the Cotter River, also those on the western side of the Murrumbidgee River are visible; they attain altitudes of from 4,000 feet to 6,200 feet above sea level, and are frequently snow-clad during the winter months. In the immediate foreground the wooded spurs from Red Hill intrude, but through the gaps in these spurs the rolling pasture lands of Yarralumla offer a pleasing contrast to the deeper tints of the distant mountains. North-westerly the scene is varied from either "Kurrajong" or "Camp Hill" Trigonometrical Station—timbered slopes in the foreground fall rapidly towards the Molonglo River with undulating pasture land and cultivated areas bordering the river; then stretches of the stream itself, and beyond, the steep partially cleared spurs from Black Mountain and the uneven contour of the range of hills dividing the Molonglo from one of its smaller tributaries, form one of the most charming views within the city area.

24. Westerly from "Kurrajong" Trigonometrical Station, the more elevated points on spurs originating near Red Hill, offer magnificent views partly obscured by the density of the forest growth, and somewhat restricted towards the east; these points, however, are exposed to the winter winds, being unsheltered towards the west.

MODEL.

A model of the City Site on a horizontal scale of 400 feet to 1 inch with a vertical scale of about 100 feet to 1 inch has been prepared, and a cast of the Model will be sent to each of the centres of distribution for inspection.