

The amount of land required limited the choice of ground. Fifteen square miles was needed by the Military authorities for a Cantonment which was to be placed in proximity to the Imperial City. The needs of the Imperial Capital itself, though not finally decided, had been estimated to cover 10 square miles, and, besides this, land for isolation zones and future development was needed which would vary with the precise location of the new town. In choosing a site the possibility of using through lines of railway communication for the new city had also to be taken into consideration.

The sites may now be discussed in detail by the Committee.

6. *The land on the eastern bank of the Jumna.*—The land on the east bank of the Jumna is hallowed by no historical associations except for the site of Lord Lake's battle of Delhi which is 6 or 7 miles away from the present city. To be recognised as an integral part of Delhi, a new capital, if located on this side of the river would have to be placed on the bank immediately opposite the walls of the Fort. After examination of this ground the Committee came to the conclusion that it is altogether unsuitable for the location of the new capital. The banks of the Jumna are flat and liable to encroachment by the river. Large portions of this riverbank are subject to flood and are unhealthy. The land behind the riverbank is flat and uninteresting with a high subsoil water level. The whole site is cut up by the main line of the East Indian Railway which is in high embankment as it rises to pass over the Jumna bridge. Another bridge across the river would have to be built at great expense if any large settlement is made on this bank. The Committee are of opinion that nothing can be made of this area as a site for a new city.

7. *The sites in the north of Delhi on the west bank of the Jumna. The Durbār area.*—It was in this area that the stones commemorating the change of capital had been laid by Their Imperial Majesties. For every reason this tract deserved and received the most thorough consideration at the hands of the Committee. The Ridge and Civil Lines were identified with and consecrated to the British Raj. In the Barāti plain the great Durbar commemorating the accession of King Edward the VIII had taken place, to be followed in 1911 by the splendid pageant when for the first time in history a King-Empire announced face to face to his Indian subjects his assumption of the Imperial Crown of India.

There were some general advantages in the site. For example this area is upwind and upstream from the present city of Delhi. The ruins and remains of the Delhis of the past do not cumber the ground. While the external communications might need improvement, the tract is fairly well served by existing railways. Roads and canals and the internal communication could be made convenient without excessive expenditure. A good deal of money has already been spent on the area; some of the objects on which this expenditure took place might conceivably have been worked into service when laying it out for a town. It was close to the main line to the summer Capital of the Government of India. At the northern end water effects could be obtained in the vicinity of the river. But when this site came to be considered in detail, the Committee found many disadvantages and difficulties. The area may be considered in detail.

The land between the ridge and the Jumna on the side of Delhi city is perhaps a square mile and a quarter in extent. This comprises the Civil Station with some 120 bungalows, the Metcalfe Estate and a tongue of land running up the river bank by the Magazine to Wazirabad. This area in the past has developed in a haphazard fashion. In any town-planning scheme worthy of an Imperial City, it would probably be necessary to purchase all the interests and remodel it *ex toto*. From estimates supplied by the Deputy Commissioner of Delhi, it appears that acquisition and treatment of this area would be very costly and would involve a dislocation of all the present European population, the majority of whom represent the business houses of Delhi.

The next area is the Ridge itself, approximately a square mile in extent. This is the only commanding position on the site; but the Committee understands that sentiment will not permit of new buildings being erected on the better half of it. The portion from Flagstaff Tower to Hindu Rao's house and the Mutiny Memorial must remain sacrosanct; the Ridge can therefore never be more than

a rough park garnished with plain but hallowed buildings, while it runs across the best portion of the site and shuts out the view both of old Delhi and the river Jumna.

The actual site of the Durbar camps is some three square miles in extent. Most of this land is flat and featureless, and any view which it has of Delhi is of its worst side. It has already been explained that much of the land here is liable to flooding and the subsoil water stands high. From the health point of view, the vital statistics of the villages in the area show an unhealthy past history, and recent examination of spleen index on the spot confirm the existence of bad malarial conditions. Much of the land is sour and retentive in character, resulting in an undesirable surface after rain and the ponding of water for considerable periods owing to the very finely divided nature of the surface soil. Little of this land is at present fit for permanent occupation. More areas could no doubt be added by a considerable expenditure on drainage and protection from floods, but in the end a considerable portion of the area would have to remain under a ban as far as building is concerned, and the only feature which could be obtained would be artificial water, while it would be costly and possibly dangerous to health to provide even this feature.

It should not be forgotten that if the Imperial Capital is to be favourably situated so as to present an effective appearance, it should, if possible, be approached along a line of rising ground. Here, unfortunately, the opposite is the case, and the approach from Delhi to the new centre of population would necessarily be along a falling line leading towards lowlying land flanked by flooded areas.

The suburb of Sabzi Mandi comes at one of the best points in the site, where the principle road for communication direct with Delhi would have to be through the break in the ridge. No fine scheme could be put forward for the site by the Committee, which would not entail the removal of this manufacturing suburb. The Deputy Commissioner of Delhi has not had time to work out an estimate of the exact cost of removal of the half square mile of buildings; but he estimates it to be very heavy, and there is the great disadvantage that such a removal would entail the disturbance of mills and the chief manufacturing settlement of Delhi.

The gardens north and west of Sabzi Mandi cover some four square miles. The value of these garden lands is estimated by the Deputy Commissioner at a large sum. The gardens are at present heavily water-logged, the environs of the gardens are unhealthy and the retentive soil does not allow water to drain away quickly. While their present condition could be remedied, the eventual gain, as far as a site for an Imperial City is concerned, would only be some flat country which would have been obtained at a considerable price and only made fit for building at a disproportionate expense. The open country in the direction of Pitampura offers no view of Delhi, and is generally a flat uninteresting country with a high subsoil water-level and mostly lying under the 700 foot contour line. The fall for drainage is very small. This plain would only be suitable for the expansion of the new city. This was not one of the areas which commended itself to the military authorities for the new cantonments. In all probability, if any of this area was occupied by a large permanent settlement, there would have to be a somewhat expensive diversion of the Najafgarh drain. The whole site, while easy to supply with water, is difficult and expensive to drain.

To sum up the points against the Durbar area the Committee consider that—

- (a) To put forward any scheme worthy of the Imperial Capital would involve the acquisition of the Civil Lines, Sabzi Mandi, and the Delhi gardens, entailing a large expenditure of money on land alone and disturbing important business and manufacturing interests.
- (b) Though the cost of water-supply on this site would be cheap, sanitation and drainage would be expensive. Much of the area lies in the danger zone as regards health at present and the site instead of being naturally healthy or normally healthy would have to be made

healthy. Subsoil drainage, river embankment and sewage disposal would be troublesome and expensive items on the site. The natural outfall is near Wazirabad above both the intake of the water works and the present city of Delhi.

- (c) The site is cut up by the Ridge, the Najafgarh drain, the Eastern Jumna Canal, the Grand Trunk Road, and the Delhi-Ambala-Kalka Railway. Difficult and expensive diversion and realignment would be entailed.
- (d) There is a lack of sufficiently good building land near Delhi which could only be met by an extension into more distant and undesirable areas. The physical shortcomings of the riverain and Durbār area site would push the Imperial City out towards the Pithampurā plain into a country naturally flat and featureless and with no view or association with Delhi. The surface drainage of the Pithampurā plain is extremely poor; the fall is almost negligible, and great difficulty would be experienced in providing satisfactory drainage here. The site is cramped owing to its peculiar physical condition, and even if, by including some doubtful building land, the city could be built at all in the tract, there would be no suitable area for future expansion and it would be impossible to imagine the growth of a great city at some future date in such a situation. The site is generally flat and uninteresting, and unless striking artificial water effects are permissible, which from the present point of view of health seems unlikely, it would lack all features of scenic beauty.

The indictment against this area is overwhelming, and the Committee feel that it is out of the question for them to advise the Government of India to select this area for the site of the Imperial Capital.

8. *The western slope of the hills to the south of Delhi.*—This area may be alluded to for the sake of convenience as the Naraiāna plain. The plain has already been described in paragraph 4 of this report. Its characteristics are a good slope and a skirt of alluvial soil going high up into the hills. It is, in many ways, well suited for the location of a town, and the isolated rock on which Naraiāna stands offers fine possibilities for striking building effects. This plain is open to the prevailing winds at Delhi and there is nothing in its past history to make the Committee consider it anything but naturally healthy. It has already gained the informal approbation of the military authorities as an ideal site for a cantonment, combining a high and healthy location for the cantonment itself with magnificent expanses of grounds for manoeuvres in close proximity. There is one reason however which, in the Committee's opinion, puts this tract out of court as a site for the new Imperial Capital. That is that this could not be considered to be Delhi. The plain is destitute of historical associations. The rocky flank of the ridge which runs out towards Rohilla Serai shuts out all view of Delhi, while it permits the smoky chimneys of the Delhi factories to be the sole evidence of where Shahjahan's Delhi lies. The main ridge obstructs all view of the older Delhi of the past. The rocky outcrop on the flank of the ridge at the northern end of the plain is inimical to free communication with Delhi, while the valley which lies between the ridge, its flanks and the city must, almost of necessity, be earmarked for the expansion of the present city. The natural tendency for extension is already in this direction and the presence of the railway enclosing one side of the valley offers a good line for the development of commercial and manufacturing settlements in the future.

This area also must, in the Committee's opinion, be left out of consideration as a site for the Imperial City.

9. *The eastern slopes of the hills to the south of Delhi.*—It is on the fringe of this tract that the Delhis of the past are situated. Standing a little to the Delhi side of the village of Malcha, just below the hills almost in the centre of the site, and looking towards the Jumna, Shahjahan's Delhi on the left fills the space between the ridge and the river. Following down from the present city on the foreshore of the riverain Fort Shah's Delhi, the site of Indra Prastha, Humayun's fort, Humayun's tomb and Sirajuddin's tomb take the eye in a continuous progress to the rocky eminence on which Ghiyasuddin Tughlak erected

his fortress city. On the right the Lal Kot, the Kutb, the Kila Rai Prithora, Siri and Jahanpanah complete the circle of the monuments of ancient Delhi. The mid space in the foreground is filled by Safdar Jang's Mausoleum and the tombs of the Lodi dynasty, while to the left, towards Delhi, Jey Singh's gnomons and equatorial dials raise their fantastic shapes. With the exception of the settlement near the Kutb the ancient cities of Delhi were placed within easy reach of the river, and water-supply practically dictated the location of each successive city. It is for this reason probably that the land lying between the road to the Kutb and the Ridge was not used for any ancient metropolis.

The slopes are thus divided into two portions—the portion fringing the Muttra road together with the narrow riverain in which the ancient cities lay, and the portion adjoining the Kutb road and stretching up to the hills. In the direction of the Delhi gate the former portion offers some building areas; but as the Muttra road advances to the south the land on the right adjoining the road becomes covered with tombs, and the triangle of country which has Nizamuddin's tomb as its apex and the Kutb and Tughlakabad as the points of its base is thickly studded with ruins and remains. The difficulties of dealing with such an area are considerable and, incidentally, the drainage does not offer the same striking advantages as that of the area nearer the Ridge. The latter area, however, is completely free from these drawbacks.

It was therefore to the latter area that the attention of the Committee was particularly drawn. The land in between the neighbourhood of the Kutb road and the Ridge lies generally above the 700 foot contour and has excellent levels for drainage purposes; and indeed the fact that storm water and drainage of all kinds can have a rapid fall and be given an outfall above flood level makes the area stand alone in regard to one of the most important factors which influenced the Committee in the choice of a site. The investigations of the sanitary officers prove that the villages in this area have the healthiest past history of any of the areas under the consideration of the Committee. Lying 15 to 20 feet higher than most of the tracts observed, it is entirely removed from possibilities of flood. The good natural drainage and the low level of the subsoil water obviate the dangers of water-logging.

The site is not man-worn. The monuments and remains of older Delhi, while they add to the attractions of the view from the site, lie in the lower land outside or to the east side of the site itself. Thus a free hand is gained in developing the site and the ground is not cumbered with monuments and tombs needing reverent treatment. Most of the soil is good and in continuous agricultural use. In the subsoil shallow beds of pea kankar occur; but they offer no obstacle to the treatment of the area. What appears to the Committee a point of extreme importance is that this site offers practically unlimited area for expansion over land suitable for building purposes. The site itself contains good points for the effective location of buildings of all characters and sizes, and offers opportunities of securing good views of the historical and archaeological remains of the ancient cities.

The site is near the present centre of the town of Delhi and there will be no difficulty in making a fine approach from good points in the old city, as well as other notable avenues. A new city located on the site would be served with direct communication, to the centre of the present city and its ends abutting on the Civil Station at one extremity and the Delhi Gate at the other.

It has already been stated that the Military authorities have informally approved of the Narnana plain on the other side of the Ridge with its wide expanses stretching towards Palam as a good site for a cantonment. The relation of this site to such a cantonment is almost ideal. The access to the Narnana plain at points near the centre of the site is easy to secure. The cantonment would be near but not too near the Imperial City. Amenities such as clubs, race courses, golf courses, polo, tennis, cricket, football and hockey grounds could be arranged for at a place where they could be made use of jointly by soldiers and civilians throughout the year. Railway communications can it is understood, be easily afforded, and there would be little difficulty in combining a single line of communications to meet the needs of the settlements on each side of the ridge.