In the Service of the Sacred

Development for Conservation

by
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For

Suni
Mummy & Pappa
&
Prem

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In the Service of the Sacred
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Submitted to the Department of Architecture
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Abstract

Urban historic-core precincts, throughout India, provide some of the most unforgettable images of the Indian vernacular. Many are now 'protected' by the Heritage Commissions, strictly regulating new development and making renovation/conservation a part of the government's planning/urban design agenda. But due to the lack of funds, the government has been unable to sustain these environments leading to the deterioration of some of the most distinct quarters in the country.

This thesis looks at one such quarter in Bombay, arguing that this deterioration could be stemmed if new development, within the precinct, is made to cross subsidize conservation/preservation efforts. The thesis discusses the various opportunities within the project area for this new development and the regulations that would be necessary to control the new landscape, and encourage prospective investors. The guidelines for the sites earmarked for new development are drawn out keeping in mind *characteristics of the context, the contribution these new buildings will make to the precinct* and *the real estate package.* As most of these areas are rent controlled, owners have no incentive to maintain the buildings and with government subsidies almost non-existent, revenues generated from new development will help take the load off the government and provide for the urgent repair of the existing built landscape.

The study also looks at the historical evolution of Bombay, up to the late 19th century establishing the importance of Banganga and the references made by the British, in their planning initiatives outside the Fort, to the precinct.

This thesis concentrates on the quality of these precincts and the *derivation* of formal guidelines from the existing morphology. It is the contention of the thesis that given the distinct character of such precincts new development should primarily respond to the character and the sense of place. The market forces will have to play a subservient role to the architectural and urban design agenda generated from the existing typology.

Banganga, is the last of the religious tanks in Bombay. Due to unique topographical conditions 'big' development has been slow to invade the sacred quarter and a lot of the old fabric continues to coexist with the skyscrapers of Malabar hill. In drawing up the master plan for the precinct, this thesis will revisit:

- The strong generators of form within the context
- The existing bylaws, Development Plans and Heritage regulations and their implications, and,
- The kind of development a sensitive combination of these could produce today.

It is the classic struggle of change vs. continuity, and if the old is to be conserved, as a living entity, the careful infusion of the new is imperative.

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The temples of *Rameshwar Shiva* and *Ganpati* at the south-west corner of the Banganga tank at Walkeshwar.
by
Edwin Lord Weeks
c. 1892.

From
Whither the Towers?
The Changed View of Malabar Hill
Pheroza J. Godrej
Bombay To Mumbai: Changing Perspectives
1996.

"In Maurilia, the traveler is invited to visit the city and, at the same time, to examine some old post cards that show it as it used to be: the same identical square with a hen in the place of the bus station, a bandstand in the place of the overpass, two young ladies with white parasols in the place of the munitions factory. If the traveler does not wish to disappoint the inhabitants, he must praise the post card city and prefer it to the present one, though he must be careful to contain his regret at the changes within definite limits: admitting that the magnificence and prosperity of the metropolis Maurilia, when compared to the old, provincial Maurilia, cannot compensate for a certain lost grace, which, however, can be appreciated only now in the old post cards, whereas before, when that provincial Maurilia was before one's eyes, one saw absolutely nothing graceful and would see it even less today, if Maurilia had remained unchanged; and in any case the metropolis has the added attraction that, through what it has become, one can look back with nostalgia at what it was.

Beware of saying to them that sometimes different cities follow one another on the same site and under the same name, born and dying without knowing one another, without communication among themselves. At times even the names of the inhabitants remain the same, and their voices' accent, and also the features of the faces; but the gods who live beneath names and above places have gone off without a word and outsiders have settled I their place. It is pointless to ask whether new ones are better or worse than the old, since there is no connection between them, just as the old post cards do not depict Maurilia as it was, but a different city which, by chance, was called Maurilia, like this one."

-Invisible Cities, Italo Calvino, 1972.

INTRODUCTION:

Method of **Inquiry.**

Bombay was central, had been so from the moment of its creation: the bastard child of a Portuguese-English wedding, and yet the most Indian of Indian cities. In Bombay all Indias met and merged. In Bombay, too, all-India met what-was-not-India, what came across the black water to flow into our veins. Everything north of Bombay was North India, everything south of it was the South. To the east lay India's East and to the west, the world's West. Bombay was central; all rivers flowed into its human sea. It was an ocean of stories; we were all its narrators, and everybody talked at once.
The Moor's Last Sigh, Salman Rushdie

Far away from the Fort, on the hill, is the village of Brahmins. It has been here for centuries and tenaciously holds its own against the new incumbents. This is the story of this village. In the city of contradictions here is one more. Bombay baffles the observer. At once it is the colonial city and the 'native' town. At once it is modern India and its ancient self. Throughout its checkered history the past reasserts itself. Ancient islands reappear in modern maps and invisible pilgrims haunt its antique streets.

In reciting the story of Walkeshwar the story of the city itself is told. The coming of the Portuguese and the sacrilege at Malabar Point, the British tolerance and Ramaji Kamath, the vellard at Mahalakshmi, new roads and new pilgrims, the congestion and the plague. I begin with the colonies, the early descriptions and the invention of a city. All through the struggle to create more land and consciously construct an urban agglomeration from scratch, vestiges were found of old towns and villages on the islands' shores, citadels in Mahim and pagodas on Malabar hill. The colonials were not alone.

This story is about the present too. The Bombay of today, as amorphous as it has always been, a city that would reveal itself fully only to the patient observer. No single image can capture its essence; no single people make its multitudes. The city exists beyond these, finding its raison d'être in its multivalence and contradictions. The village of Brahmins is but one of many places where the city finds utterance, but here certainly is one of its earliest voices.

The preservation of Walkeshwar as a living entity is imperative in order to maintain that tenuous connection we, as Indians, have to our identity. In this most European of Indian cities we can still find our roots, but barely so. With the continuing struggle to preserve fragments of the city's past it is easy to overlook this politically and economically sidelined precinct. New heritage regulations make token gestures to the effort, carelessly demarcating precinct boundaries and offering no specific plan for the area.

It was in '93, that I first visited the precinct. A friend had asked me to see the place assuring me that my first reaction would be unforgettable! I took bus 106 from VT and after a long arduous bus ride in what was once the 'native' town, meandering through a Bombay rarely seen and yet somehow more real, more Indian, I reached Walkeshwar bus depot. With directions from the *paan* shop I made my way to the precinct, largely underestimating what was in store. A long narrow lane lead to Banganga flanked by a nondescript Municipal school and a generic Bombay high rise. Finally I was through and there it was. Arun was right. The contrast couldn't have been stronger. The precinct had miraculously persisted in spite of Malabar hill! Small intimate lanes ran down to the sea, elaborate temple spires crowded the skies and the ethereal waters of the tank shimmered under the winter sun. I spent the whole day discovering my treasure. In another age, at another time, will this still be here? How much longer before all this will simply be a memory?

As part of my under-graduate thesis I investigated the essences one could draw from the existing fabric, using these to design a public facility within the precinct as a transitional element. I soon realized that a simple design exploration would never realistically provide answers to my questions. The area had to be preserved and an armature had to be developed to do this and to provide the opportunity for the careful infusion of the new into the old. The project had to take on a larger goal addressing the precinct as a whole and developing a policy by which both could coexist.

The present study takes my under-graduate work a step further in that direction. Looking at the precinct with a much larger frame, clarifying for myself, the importance of the precinct, historically and today. The study also proposes a set of guidelines for this new fabric, developing many of the concepts initiated in my earlier project. This is an ongoing exploration and

I intend to continue work on my proposal in the coming months and submitting the findings to the Heritage Advisory Commission (HAC) in order to initiate a revision of the current HAC proposal.

The study is in three parts. The first segment deals with the history of Bombay, its development from a scarcely populated archipelago to the bustling colonial city of the 19th century and the importance of Walkeshwar and the holy precinct of Banganga in this story. Given this background, the second segment looks at the precinct more carefully, studying the present physical conditions and the existing opportunities and constraints. The third segment outlines a plan for the careful infusion of new development within the precinct, earmarking certain sites for this purpose and regulating this with a set of guidelines derived from the study of the existing morphology. The basic real estate model by which this will be achieved is also proposed.

As far as the first segment is concerned, it is my contention that the formative plans laid out by the British, especially in areas outside the Fort walls, were related and a continuation of existing pre-British and Portuguese settlements, religious pathways and political domains. In looking at the Precinct more carefully today and comparing it with the 1870 Laughton's survey maps, it is evident that a lot of the original indigenous fabric still exists. The present precinct boundary according to the Heritage Regulations, 1995, is inadequate in addressing the extent of the precinct, both in terms of character and related functions. The present conditions also indicate the continued migration of squatters into the precinct[1] primarily on the western shore. In developing a plan for the area it is imperative to understand that without allowing new construction within the precinct it will be difficult to generate revenue to preserve the old fabric. My proposal outlines the regulations that will apply to these new buildings in terms of plot coverage, land use, FAR[2], building height etc. There will also be a Master plan developed for the whole precinct proposing alternate land assembly, cooperative development, new roads and landscape development.

The Urban design component of the thesis is relevant only if the market will invest in this precinct. As the project developed it became apparent that new development and private investment were not just a possibility, that was to be sensitively regulated, but a requirement for the conservation agenda.

A very basic model is proposed to structure the way present property owners within the precinct can transfer development rights and benefit from new market rate housing within the prescribed precinct boundaries. Infrastructure improvements and revised rent controls are also envisaged as added incentives for this new development.

The land assembly and co-operative development propositions are usually difficult to carry out, but within this context the possibilities for an alternate route are limited. Squatters currently occupy most of the waterfront property and this land is very arbitrarily divided and will continue to inhibit prospective investors due to the lack of sites large enough to accommodate feasible projects and infrastructure.

As part of the study, a detailed survey was conducted earlier this year and this material is presented here in the form of maps in the Appendix. Harshad Bhatia's thesis and subsequent work in Banganga have been a great source of information. My surveys in January, this year, dealt primarily with specific buildings and updating data previously recorded. As part of the on-going project I intend to collect more demographic and architectural data, since very little information exists concerning the precinct.

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[1] Banganga is in the 'D' Ward of the development plan, which has shown an increase in population at a rate of 16% in the last decade.
Banganga originally had just 40 inhabitants, according to early British surveys and today the population within the precinct boundary is close to 6000. During festivals this number shoots up to around 9000.

[2] Floor Area Ratio

A COLONIAL ENTERPRISE

From the **Portuguese** (1509)
To **The Port Trust** (1873).

"...cities simply cannot be 'explained' by their locations or other given sources. Their existence as cities and the sources of their growth lie within themselves, in the processes and growth systems that go on within them. Cities are not ordained, they are wholly existential."

Jane Jacobs, *The Economy of Cities,* 1970.

Bombay as a city was simply never meant to be yet today close to 20 million people call it home. Though planners and statisticians keep predicting its inevitable death, the city continues to grow. The city has a distinct character, but today, civic spaces of importance are being devoured by public and private agencies. Walking around in Kalbadevi in January this year, I stumbled upon an urban space, undoubtedly a designed artifact, with carefully scaled buildings making its edge, yet the space is currently a large parking lot and street intersection. Without a map and some luck, one could completely miss the gesture. Civic improvement schemes have often tackled the need for public amenities without a thought for cultural and symbolic amenities. Old sacred water tanks have become bus depots and fire stations. The city is bursting at its seams, but interventions into its fabric have to be careful and sensitive. Layers of history pervade its every street and every street lamp has a story to tell. In realizing the importance of this legacy lies our wisdom not to defile it. Though Bombay is primarily a result of colonial enterprise, vestiges remain from a time much before *vellards* and sunken piles.

In 1509 when the first Portuguese reached its shores, Bombay was an archipelago of anywhere between three to seven islands depending on the tides. The only advantage of these islands was the ease of their defense from the land. Everything seemed to work against the success of this enterprise. There was no economic hinterland, no rivers to help penetrate inland, the Konkan coastal strip adjacent to the islands was relatively infertile and the Western Ghats prevented easy access to the Deccan plateau for trade. In fact, when the Portuguese offered the islands to the British as part of the dowry[3] of Catherine of Braganza, sister of King Alphonso VI, who married Charles II of England, there was a general feeling that they had exaggerated the amenities of the place. The East India Company had acquired a toehold at Surat at this time and was eager to establish a base elsewhere on the western coast of India. The Mughal Empire was on the decline after Shah Jehan's death and this acquisition was thought to be strategic in establishing a strong English presence here. Little did the Portuguese know how important these islands would prove to be while handing them over to the British as dowry in 1661. The marriage was solemnized in 1662 and the young Duke of Marlborough along with the Governor designate were sent to claim the islands. When they reached India in November of that year they found that the Portuguese settlers there were reluctant to let go of their holdings, suspecting the authenticity of the Duke's claim and the extent of what they had been given as dowry. Three years passed by, during which the governor-designate passed away from sickness. Eventually Humphrey Cooke, his secretary, received the property from the reluctant Portuguese in 1665. But the Portuguese were still trying to give away as little as possible despite the fact that the extent of the islands was easily discernable as they had been governed as an entity from Bassein on the mainland. Finally in 1666 the whole archipelago was handed over under orders from Portugal.

'I confess at the feet of your majesty that only the obedience I owe to your majesty as a vassal could have forced me to this deed...I forsee the great trouble that from this neighbourhood will result to the Portuguese and that India will be lost on the same day on which the English nation is settled in Bombay." -Antonio de Mello de Castro, Viceroy of Goa writing to the king of Portugal a month before the islands were ceded to the British.

Some early maps of the city show seven islands, the biggest of them being an H-shaped landmass called Bombaim. Going from the north, the other islands were Mahim and Worli on the west, Sion Dharavi and Parel forming a single island and Mazagaon on the east, Bombaim in the center and Old Woman's island *(Al Omani Island)* and Colaba in the south, populated mainly by *koli* fishermen.

1

2

[3] *"Not only was there in England a feeling of jealous alarm at the growth of Dutch commerce and Dutch sea power, which seemed a threat to the national security, but in addition there was special cause for apprehension in the progress made by the Hollanders in their attacks upon the Portuguese possessions in India. Should these succeed – and there appeared to be little doubt that they would – the Dutch would acquire a complete monopoly of the spice and pepper trade in the East, and the English share in that branch of commerce would be menaced with destruction. Portugal, therefore, was ready to bid high for an English alliance, and for this purpose territorial concessions seemed the most attractive bait."* –*The English Factories in India, 1661-64,* Sir William Foster.

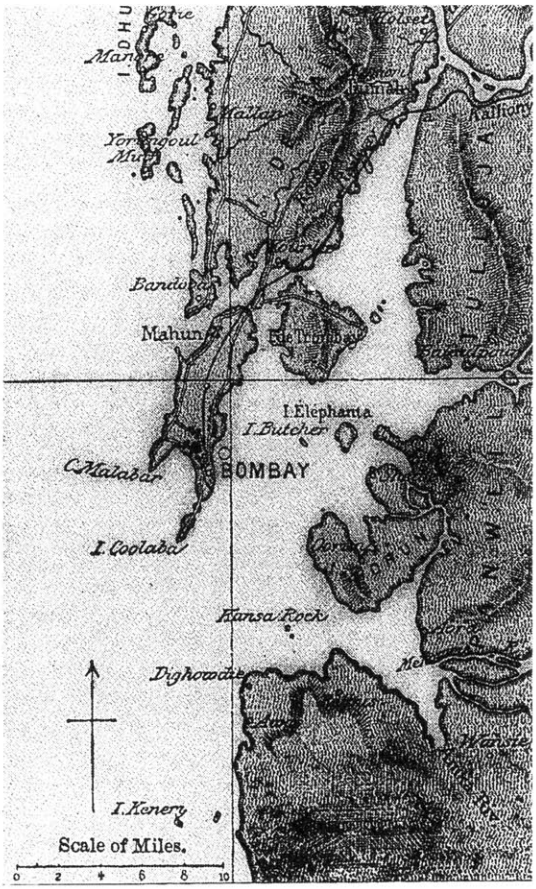

Fig. 1
Map of Bombay Island from Louis Rousselet's India and its Native Princes, 1882, showing the Island City and its environs. The Western Ghats are on the northeast of the Island.
From ***Bombay: The Cities Within,*** *Rahul Mehrotra and Sharada Dwivedi.*

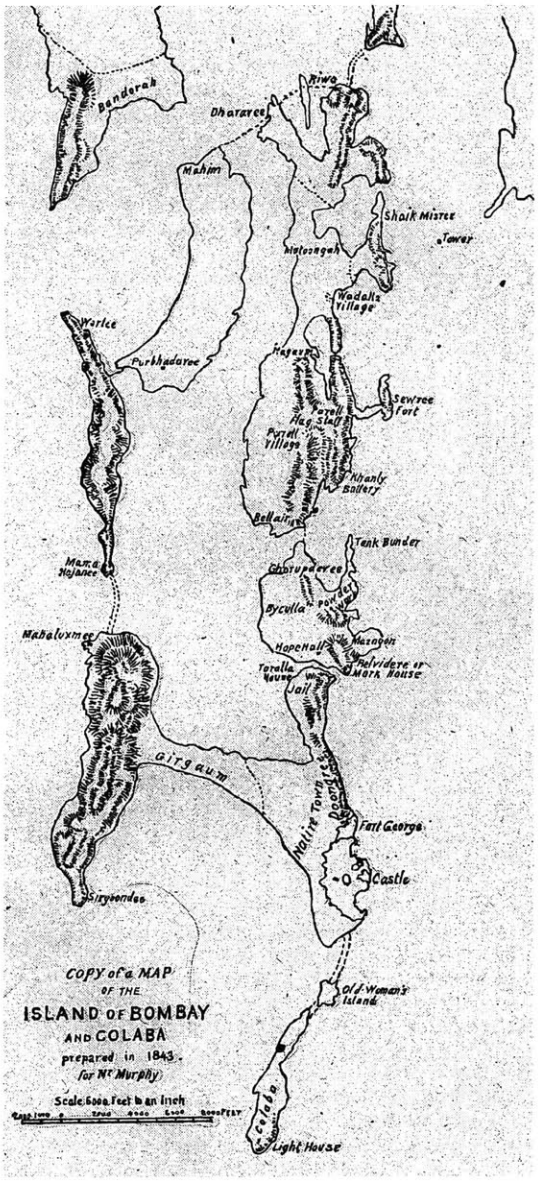

Fig. 2
Copy of the map of the Island of Bombay and Colaba, prepared in 1843, for Mr. Murphy.
From ***The Gazetteer of Bombay City and Island.***

It was on the Eastern Shore of Bombaim that the earliest colonial settlements came up. It had a long tongue of land to the north, on the eastern side, then called Dongri, Dongaree or Dungharry, on the tamarind dotted foreshore where *koli* fishermen dried their nets and built their boats, and a far more important promontory on the western side forming the curve of Back Bay and consisting of Malabar hill and its smaller neighbor Cumballa hill[4].

The hills were separated from the island on the northwest, Worli, by a breach through which the sea at high tide 'poured with all the fury and pleasure of an Arabian colt.'[5] On the northeast, the creek of the fig tree (Umarkhadi) separated Dongri from Mazagaon and the foot wash (Paidhoni). Not far from the foot wash was a grove of *bhendi* and a hamlet sacred to the *naga* or serpent, and here also, to the south of Dongri stood a shrine of Mumbadevi, the patron deity of the *koli* fisher folk, thought to have given the city its name. On the southeastern portion was a landing place (Apollo Bandar) used by the fishermen and beyond that a wide and level plain dotted with palm-groves, tamarind trees, amid which nestled the habitations of the Bhandaris[6], Agris and others.

Between Dongri and Malabar hill lay groves and orchards of Ack trees, Brabs, Ber trees and plantains extending to and perhaps covering the outskirts of the considerable hamlet which formed the original nucleus of the modern Girgaum. A pathway known as *Shidi* (the ladder) led from the village (near present day Chowpatty) and the shrine of the local Gramadevata or village Goddess up the jungle covered slope of Malabar hill, and then through babul plantations to the great Banyan-girt temple of Walkeshwar and the Shri Gundi or stone of purification on the very edge of the sea.[7] On the northern foreshore of Malabar hill had once stood the temples of the three Goddesses, Mahalakshmi, Mahakali and Saraswati...later destroyed by Muslims.[8]

In 1554, Garcia da Orta[9], a physician and noted botanist leased this island from the King of Portugal for £85 per annum. He probably constructed the *Quinta* or manor house on the Castle site in the Fort area, behind the present day Asiatic Society building, often cited as 'Bombay's first civilizing influence.'[10] The island was attacked a number of times by the Malabars[11] and in 1661, just before the British acquired it, the island was attacked by Arab marauders who left "little more than the walls" of the *Quinta.* The British chose this very site to build the first fortifications. Of the seven islands parts of the northern ones were still under Portuguese control. The British had Bombaim, Colaba and Old Woman's island in the south, Worli in the west and Mazagaon and Parel in the east. Sir Humphrey Cooke annexed Mahim and attempted to confiscate Roman Catholic (i.e., Portuguese) plantations when the incumbents refused to renounce the Pope. Cooke was getting on the wrong side of the Mughals as well, affecting the trade and business that the East India Company had in Mughal ruled provinces. He was soon sacked and the next two Governors also proved to be ineffective. Finally the East India Company, wanting to safeguard their trade interests, decided to acquire the islands. In fact the Company had had its eye on the islands from the very beginning, attempting to annex them by force in the Anglo-Dutch campaign in 1626. The king, uninterested in his distant possession, agreed to hand it over to the Company in return for a loan of £50,000, repayable at 6% interest and a yearly rent of £10. The contract was signed in May 1668 and the news arrived in Bombay four months later.

Sir George Oxinden was the Governor when the Company got possession of the islands. He was based in Surat and was not interested in the new acquisition. His successor, Gerald Aungier, was familiar with the islands and tried in vain to shift the Company's center of government from Surat to Bombay. Finally, in 1672, he shifted his own headquarters to Bombay and spent the next several years laying out the city. He established the Courts of Justice under English Law, built new docks, a printing press and a mint. He started the Company militia, the precursor to the East India Company Army, which was to eventually become the Indian Army. His was a governance of tolerance and vision. He encouraged local traders to set up businesses in

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[4] *City of Gold,* Gillian Tindall, 1982, pp. 26.
[5] *Bombay City Gazetteer,* Vol. I, 1909, pp.3.
[6] The Bhandaris, whose name is derived from by some from the Sanskrit *mandharak* (a distiller) and by others from *bhandar* (a treasury), constituted one of the oldest communities in Bombay island. They seem to have originally come from the southern Konkan and Goa.
Ibid., pp.231-232.
[7] *Ibid.,* pp.3.
[8] The Muslim dominion over the Bombay region lasted for about two centuries. Except for a couple of events this period is insignificant. The Muslim rulers seem to have followed a policy of persecution of non-Muslims. According to the accounts of Friars Jordanus and Oderic (who stayed in Thana from 1321-24), the Muslims from their capital in Thana, persecuted the Hindus and destroyed their temples. The Christian churches also were not spared. *History of Bombay,* M.D. David, 1973, pp.14-15.
[9] "Drake, Clive ad Hastings all rolled into one – a most striking individual."
[10] *Origin of Bombay,* Gerson da Cunha,
[11] From the Malabar Coast, around 500 miles away.

Bombay, and made plans for each ethnic community to have their own official representative. Under Aungier, Bombay's society became more diverse and with the decay of the Mughal Empire and the subsequent instability, 3 merchants from all over began to take refuge here. It was also in Aungier's time that the first Gujarati speaking merchants migrated from the north bringing with them their lifestyle and the traditional Gujarati building type. Even today large segments of the city just outside the fort area show remnants of the *pol* type of morphology- large clusters of joint-family houses, usually peopled by the same caste enclosed within a common wall and protected by a single gate. The houses are usually long single corridor units with an internal courtyard and shared walls.

"At a distance enough from the Fort lies the town, in which confusedly live the English, Portuguese, Topazes [Indo-Portuguese], Gentoos [Hindus], Moors [Moslems], Coolies and Christians – mostly fishermen...There is a reasonably handsome bazaar at the end of the town looking onto a field where cows and buffaloes graze..."
- Fryer, John, 1675.

When Aungier died in 1677, he was the fourth Governor out of five in less than a decade to do so in India. Bombay was not a very healthy place, given that a large portion of the territory between the islands, known as the Flats, was perennial swamp.

4 *'one of the pleasantest spots in India seemed no more than a parish graveyard, a charnel house...Which common fatality has created a Proverb among the English there, that two monsoons are the age of a man.'*
- Ovington, Rev. J., 1689.

The ravages of disease expedited the proposal to dam the breach on the West that fed the Flats and to reclaim this land for agriculture. As early as 1668, a proposal was made to this effect but it wasn't until fifty years later that the Great Breach was dammed. The diseases that ravaged the colony were attributed to the 'pestilent vapours' rising from the Flats right from 1680. Smaller creeks that separated islands elsewhere, like at Umarkhadi ('the Fig-tree Creek'), between the main island and Mazagaon, on the opposite side of the Great Breach and between the northern islands were dammed reducing the amount of water that made it to the Flats seasonally. The Company encouraged the speculators to stop the breaches by allowing them to hold the land they reclaimed for a term of years, free of rent, reserving only a small quit-rent for the Company.[12] In 1712 work began on the Great Breach but it was soon abandoned. The proposed wall ran in a straight line from the northern promontory of the Cumballa Hills to the southern tip of Worli. The reason why the work was never completed has been variously attributed to the Muslim saint whose mausoleum still stands on an island that would have otherwise been part of the proposed wall and to the Goddess Mahalakshmi whose temple had been destroyed earlier by Muslims on Cumballa hill.

It was not until 1720, though, under the governorship of Charles Boone, that the present semi-circular wall that bridges the Breach was completed. This too, was apparently because the contractor, Ramji Shivji had appeased the Goddess by building her a temple on the promontory where it can be found to this day. The large Flats were now available for agriculture and the present day roads that go north to Parel, Sion and Mahim run on the same lines that were laid out under him.

" the sea had so gained upon the land with its irruption that it almost divided the island in two and made the roads impassable."
- Grose, 1772.

This wall was only partially successful and in 1797, almost sixty years later, it was further 5 reinforced with a causeway-road called Hornby's Vellard, probably designed by Governor William Hornby (1771-1784). Governor Boone was also responsible for strengthening the works on the smaller breaches and constructing the first walls around the town as per Aungier's vision[13]. In spite of the large civil works efforts Bombay continued to be a liability for the Company and the cities value as a seaport was often debated. Surat or Bassein were considered better sites for this purpose. And we will soon see that the city began to flourish only when the Company began to lose control.

The abrupt decline of the Bombay holdings due to disease and revolts also raised further questions about its usefulness compared to other contemporary colonies. But there were other issues that further dampened the islands' cause. Compared to the other British Colonies in India, Calcutta and Madras, the value of the islands was yet to become apparent. Bombay's territory was very small and seemed precarious given that the Marathas, the most serious adversaries of the British, controlled most of the surrounding landscape. Calcutta on the other hand was already at the heart of a large British controlled province 6 including present day W. Bengal, Bihar and parts

[12] Warden's report.

[13] To have a walled town by enclosing it from Dongri in the North to Medham's point in the south.

Fig. 3.
Typical *pol* morphology, from Ahmedabad.
*From **Urbanism, Tradition and Continuity in Ahmedabad**, Vivek Nanda, MIMAR.*

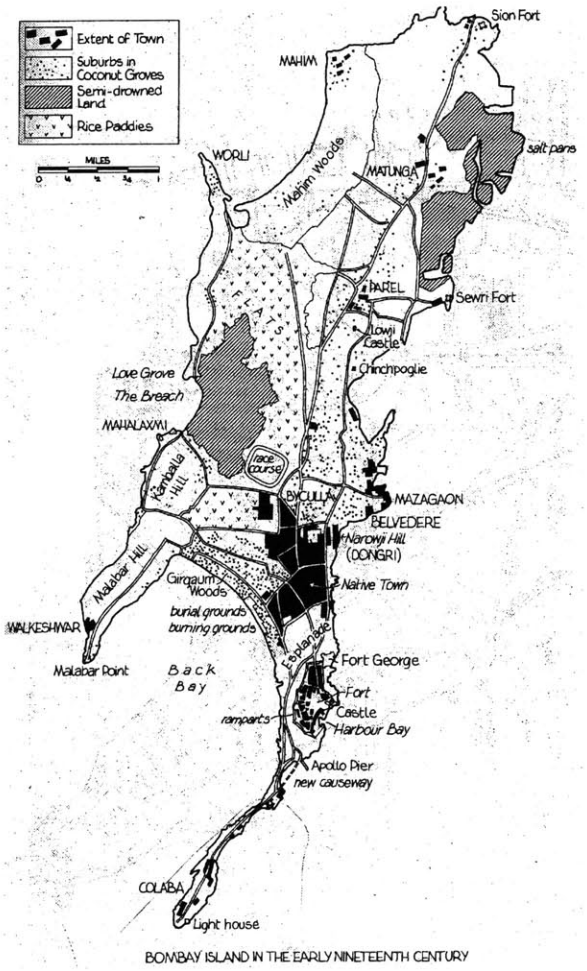

Fig. 4.
Bombay Island in the early 19th Century, showing the Flats and the Great Breach.
*From **City of Gold**, Gillian Tindall, 1982.*

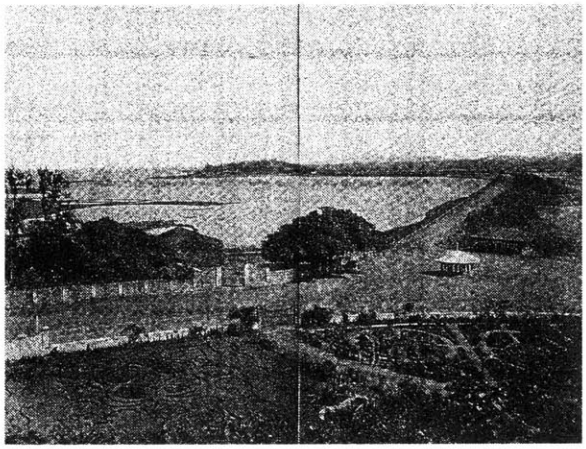

Fig. 5.
Hornby Vellard as viewed from the northern end of Cumballa hill looking towards Worli. By an unknown photographer, 1872.
*From **Evolution, Involution, and the City's Future: A Perspective on Bombay's Urban Form**, Rahul Mehrotra, **Bombay to Mumbai, changing perspectives**, 1997.*

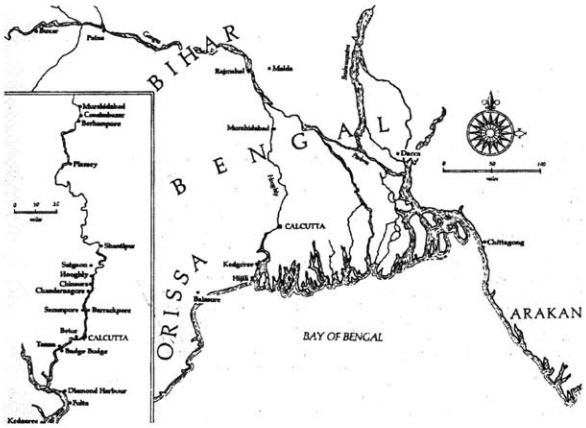

Fig. 6.
Map showing the position of Calcutta vis a vis the Ganges delta.
*From **Calcutta: City of Palaces**, J.P.Losty, 1990.*

of Uttar Pradesh, covering some of the most fertile land in India.

The development of Bombay as a profitable colony depended on two things, the fall of the Marathas and the improvement of the port facilities on the island. Trade from India was primarily to Europe and China. If Bombay began functioning as a port then this would drastically reduce the travel time from Europe to Asia. But if the Marathas continued to control the plains surrounding Bombay connections to China would remain severed and the port would be useless. In 1818, the British and the Marathas signed the Treaty of Bassein, formally sealing the fate of Maratha rule and soon thereafter the Deccan was annexed. A year later, with the capture of the last of the roving galleys, Bombay extinguished piracy from her waters.

Another factor that was a tremendous fillip to the growth of the city's economy was the removal of the Company's monopoly on trade with India. This initiated a large influx of private merchants dealing in goods ranging from cotton to opium. The revision of the trade monopoly also saw the arrival of the Parsi shipbuilders who invested in diverse businesses like banks, cotton mills, silk factories, rail roads, quays etc. With the subsequent freeing of trade from the Company's clutches, business thrived and the large cotton and opium trade to Britain and China respectively, burgeoned. Two technological developments further impacted trade in Bombay: the coming of the steamers in c.1840 and the preference for the 'overland' route to Europe via the Mediterranean and the Red Sea, and the opening of the Suez Canal in 1869. Bombay was now the chief port in India with access to the huge cotton market thanks to the cotton mills first started in 1854 at Tardeo in Central Bombay. Bombay was now shifting gears and soon Central Bombay was bustling with new mills.

"The mercantile system seemed all of a sudden to burst the swaddling clothes of the East India Company in which it had been swathed for one hundred and fifty years: now it scorned all tutelage."
- Douglas, J., 1893.

In 1857, the Sepoy Mutiny in Bengal, though not directly affecting Bombay, forced the Crown to reconsider having such a vast and important dominion controlled by a private corporation. In 1858 Queen Victoria's sovereignty was announced from the steps of Bombay's town hall forever transforming this trading town into an industrial port town. This was during the governorship of Sir Elphinston, who was responsible for setting up the Vihar Water Works to improve the town's water supply.

The 1850s also brought the railways to Bombay. In 1849 the Great Indian Peninsula & East Indian Railway Companies were incorporated and in 1853 the line from Bombay to Thana on the mainland was inaugurated. Soon the Railway lines linked the cotton growing districts in Deccan and Gujarat. It was around this time that the American Civil War broke out and suddenly the cotton supplies from the Southern states of America were no longer available to Britain. This led to a Cotton boom in Bombay from 1862-5. With cotton prices escalating and leading to what Arthur Crawford, a later Municipal Commissioner of Bombay, was to call 'those silver times.' The Cotton Boom had an effect on land and property prices and by January 1865 there were no less than 31 banks, 16 financial associations, 8 land companies, 16 press companies, 10 shipping companies, 20 insurance companies and 62 joint stock companies.[14] General Lee's surrender in March 1865 sounded the death knell for a lot of the ambitious enterprises set up during the boom. Many individuals and companies did survive the crash, though, but land wealth was primarily transferred to the hands of a few wealthy families who had made a complete recovery. It was during the ill-fated Cotton Boom that the then Governor Sir Bartle Frere (1862-7) dismantled the walls that surrounded the town and made plans to restructure the city. The coming down of the walls in 1864 was characteristic of the times. Vienna lost her walls in the same year and Haussmann was restructuring Paris. The move was also symbolic of the rapidly degenerating conditions within the Fort walls and around the city itself due to the growing population. Frere's dream was 'to make good the omissions and neglect of former ages' and help Bombay 'take her place among cities, owing as much to art as she does to nature and position.'

"All round the island of Bombay was one foul cesspool, sewers discharging on the sands, rocks used only for the purposes of nature. To ride home to Malabar hill along the sands of Back Bay was to encounter sights and odours too horrible to describe, to leap four sewers whose gaping mouths discharged deep black streams across your path, to be impeded as you neared Chaupati by boats and nets and stacks of firewood, and be choked by fumes from the open burning ghat and many an "ancient and fishlike smell."
- Maclean, J. M., 1875.

If Frere's dream was to come true these conditions had to be remedied. In 1858, just before Frere's time Nichols and Co. launched The

[14] *City of Gold...op.cit.*, pp.175.

Elphinston Land and Press Company[15] with the sole objective of reclaiming land for new docks between Mody Bay, south of the Castle, and Mazagaon. The crash of '65 forced the private Company out of business and the government realizing the magnitude of the effect reclamation was going to have on trade and living conditions set up the precursor of municipal councils and other Government subsidiaries, The Port Trust, in 1873. Many of the schemes for reclamation were already in the works even before the Cotton Boom and it could be argued that the Boom and the shifting of control from private enterprises to Government subsidiaries expedited these plans. The major reclamations were the Back Bay reclamation primarily initiated to run a line of the Central Railway all the way down to the Colaba Cotton Green and the extension of the docks on the eastern foreshore between Apollo Bunder and Mazagaon.

Within the island, swamps and low lying areas were filled up and roads were laid out in anticipation of the new settlements envisioned here. With the Back Bay reclamation large tracts of land were now available for housing on the waterfront. The demolition of the ramparts enabled government to fill up the old ditches and hollows on the Esplanade, while the Municipality took in hand the partial reclamation of the Flats with town sweepings. What was a dismal swamp just a few years ago was now covered up with thoroughfares. In areas where drainage was difficult the low-lying land was filled to the surrounding level.

Looking at a map of present day Bombay
8 it is easy to discern the various additions made to the original landmasses. Wherever the land was reclaimed the street pattern betrays a strict geometrical order. The older areas read more organically and even the exact position of the Ramparts are easily read in these maps.

It would be interesting to look at the public works initiatives of the British outside the Fort to ascertain the existing morphology of the native settlements. In 1806 due to the existing condition of the roads a Government order was issued to widen certain key streets in the native town. Six years later the Rule, Ordinance and Regulation III of 1812 followed this initiative. Article I of the ordinance stated, 'the main street through the bazaar should be enlarged to the breadth of 40 feet from house to house; Moody's street should be enlarged to the breadth of 35 feet; Bora's street should be enlarged to the breadth of 25 feet; and all cross streets within the Fort should be of the breadth of 16 feet.' Article II laid out that all streets comprised in the area of the great fire of 1803[16] should be 60 feet wide. Article III, 9
the most interesting, enacted that, ' the great roads through the island, commonly called the Parel road (Ebrahim Rahimtulla Road) and Breach Candy 10
Road (Jagannath Shankarshet Road)[17] respectively, shall be enlarged to the breadth of 60 feet each, and that the roads or streets commonly called Sheik Memon and Dungaree shall be in like manner enlarged to the breadth of 40 feet each, and that all other principal streets without the walls of the Fort and within the island of Bombay be made of the breadth of 30 feet; that all roads branching from either of the greater roads aforesaid be made of the breadth of 40 feet, and all lanes, cross streets and passages, now hereafter to be made without the said walls, be of the breadth of 20 feet clear from house to house, and not less.'[18]

With the damming of the Great Breach in the late 18th century and the completion of the Sion Causeway in 1805, large tracts of land were now available for development. Satellite townships were planned and numerous arterial roads were laid out to connect these. In fact a careful inspection of the roads is illuminating with regards to the nature of the existing settlements on the island at the time. On 1st October 1839, Grant road (M. Shaukat Ali Marg) "from the obelisk to the garden-house of Jagannath Shankar Sett at Girgaum" was opened to the public and was described as requiring a parapet wall on either side owing to its great elevation above the adjoining lands.[19]

Between 1860 and 1870 around 35 new
roads were commissioned. Among the great roads 11
laid out during this decade are, an 'eastern boulevard' from Elphinston Circle (Horniman Circle) to Bazaar Gate, Bazaar Gate Street (P. Nariman Street), Foras Road (R. S. Nimkar Marg) from the Victoria Gardens to Mahalakshmi (completed in 1868), a hundred foot road from Bazaar Gate to the native town, Esplanade Market Road (Dr. Dadabhoy Nowroji Marg), and a new

[15] A reclamation company seems to have been in existence as early as 1836-7. *Bombay City Gazetteer...op.cit.*, pp.65.

[16] *"So great and violent was the conflagration that at sunset the destruction of every house in the Fort was apprehended. The flames directed their course in a south-easterly direction from that part of the bazaar opposite to the Cumberland Ravelin quite down to the King's Barracks. During the whole of the day every effort was used to oppose its progress, but the fierceness of the fire driven rapidly on by the wind baffled all attempts; nor did it visibly abate till nearly a third part of the town within the walls had been consumed."* – Governor Duncan.

[17] Also called *Girgaum Road.*

[18] *Bombay City Gazetteer...op.cit.*, pp.362.

[19] *Bombay City Gazetteer...op.cit.*, pp.363.

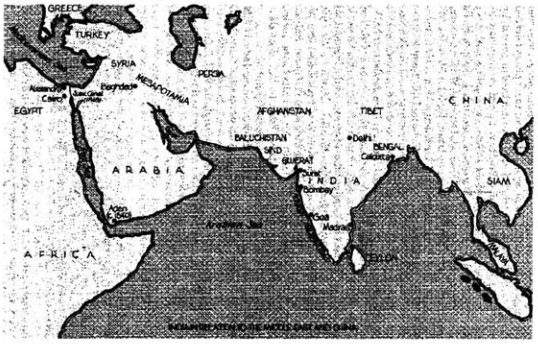

Fig. 7
Bombay in relation to the Middle East and China.
*From **City of Gold**, Gillian Tindall, 1982.*

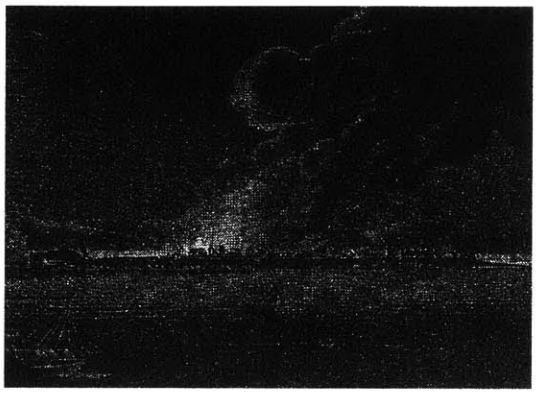

Fig. 9
"A view of Bombay from Malabar Point taken on the spot by Lieut. Col. Williamson during the dreadful fire of the night of the 17th February, 1803."
*From **Evolution, Involution, and the City's Future: A perspective on Bombay's Urban Form,** Rahul Mehrotra, **Bombay to Mumbai, Changing Perspectives**, 1997.*

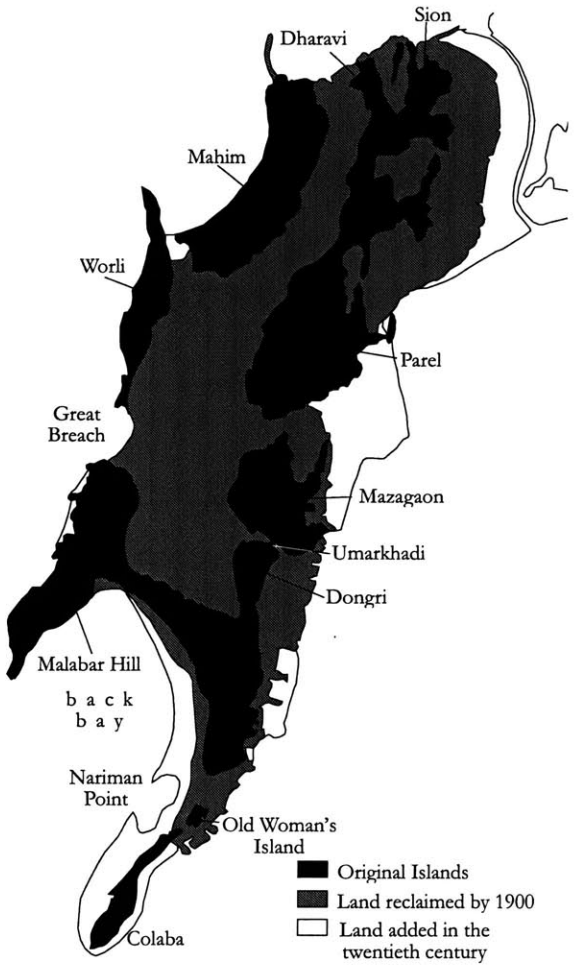

Fig. 8
Bombay's physical growth.
Map shows the original islands and the subsequent reclamations.
*From **City of Gold**, Gillian Tindall, 1982.*

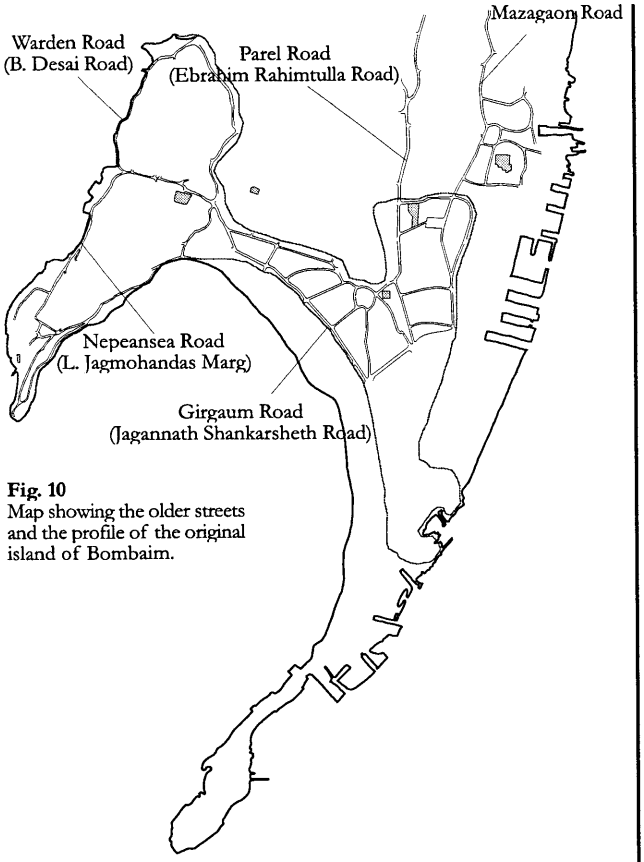

Fig. 10
Map showing the older streets and the profile of the original island of Bombaim.

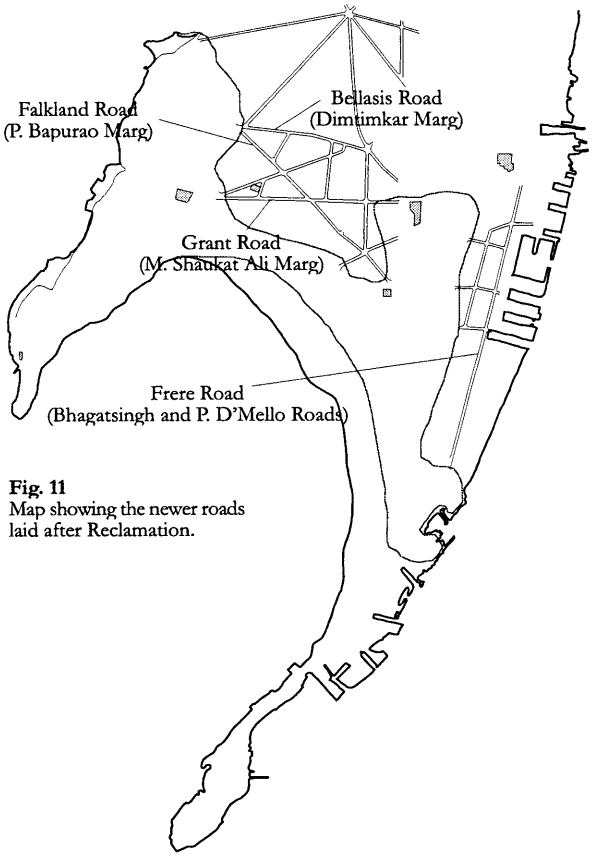

Fig. 11
Map showing the newer roads laid after Reclamation.

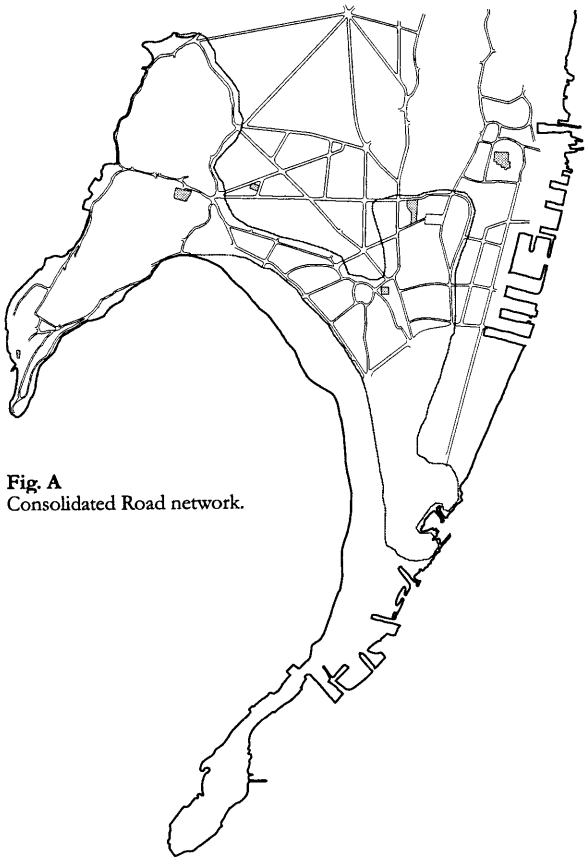

Fig. A
Consolidated Road network.

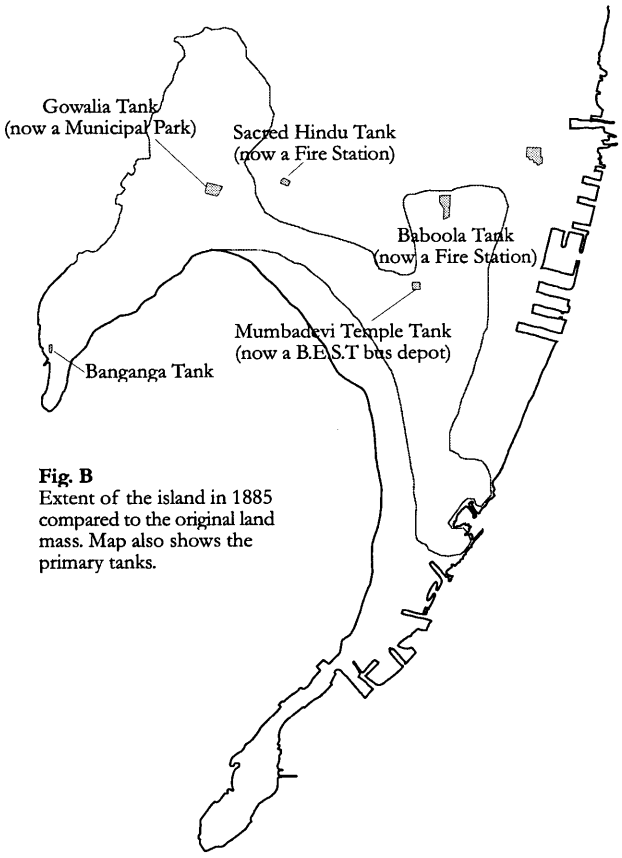

Fig. B
Extent of the island in 1885 compared to the original land mass. Map also shows the primary tanks.

road from Babula Tank to the Elphinston overbridge, Bellasis Road (Boman-Behram Marg, Dimtimkar Road). Ripon Road (M. Azad Lane), Fergusson Road (G. Kadam Marg) and Falkland Road (P. Bapurao Marg) were under construction in 1884-85. These new roads respond to the existing primary roads, Parel Road and Breach Candy Road, and to the topography. The majority of the roads were planned in the area once inundated by the Arabian sea and what was to become Bombay Central, the most densely populated area in the City.

Looking at a plan today it is easy to decipher how these roads were planned. They are predominantly geometric, axial streets connecting places of importance. Grant Road one of the earliest of these 'great roads' connected Gowalia Tank Road (the road that ran through the pass between Malabar hill and Cumballa hill), Girgaum, Khetwadi and other neighbouring precincts which were dotted with numerous large and small temples like *Gora Ram, Kala Ram* and *Thakurdwar,* to the Babula Tank Road. The localities connected by these arterial roads were the older denser parts of the native town, like Dongri, Girgaum, Khetwadi, Kamathipura, Bhuleshwar etc. It is also interesting to note that in early maps many of these precincts have a primary shrine, which is
12 usually accompanied by a sacred water tank, like Mumbadevi. The Gowalia Tank and a holy tank
13 for Hindus, situated north of Grant Road in Kamathipura[20] though not associated with a temple were considered sacred and facilities usually found in temple precincts were situated around these.[21] The Babula Tank though had no cultural significance and was used primarily as a reservoir. Today none of these tanks exist. The Babula tank, like many other tanks, was covered up in the early part of this century and made into a Fire station. The Mumbadevi tank is now a BEST bus depot and the Gowalia tank is a playground called 'August Kranti Maidan' in memory of the martyrs of India's freedom struggle!

Apart from Parel Road and Breach Candy Road, the other existing prominent roads followed the topography. Many of these clearly distinguish the edges of the landmass prior to reclamation, for instance, Nepean Sea Road (L. Jagmohandas Marg), Warden Road (B. Desai Road), Mahalakshmi Road, Tardeo Road, and Malabar Hill Road, clearly demarcate the extent of the Malabar and Cumballa hills along with Gowalia Tank Road marking the pass between them. Queens Road south of the Breach Candy Road ran along the waterfront before the Back Bay Reclamation and has buildings called 'Sea View' etc. signifying this fact.

Many of the streets in the native towns were also pilgrim paths connecting the prominent temples to each other setting up a sort of ritualistic pathway. There is no proof to augment the existence of an elaborate regional sacred geography but it would be safe to say that certain temples did attract pilgrims from nearby towns. (see da Cunha, p.6)

According to the *Bimbakyan*[22], the fact that Raja Bimb found just two temples on the main island (Bombaim)[23] on either side of the landmass is revealing. The Mumbadevi Temple initially stood near the old *Phansi Talao* (Gibbet Tank)[24]on a spot now included within the limits of the Victoria Terminus.[25] The Walkeshwar temple along with *Shri Gundi* or lucky stone situated at the extremity of Malabar Point, where pilgrims resort for the purpose of regeneration, to passing through a cleft rock, fancied to be the *yoni*, the symbol of the passive or female power, have been sacred since centuries. Shivaji, the great Maratha leader is said to have passed through this rock. The Breach Candy Road connects the former site of the Mumbadevi shrine to Chowpatty in the foothills of Malabar hill. Was this the route used by Raja Bimb, and pilgrims before him, to traverse the breadth of the island?

A map of 1843 showing chief local 14
features introduced by the Hindu period shows 16 villages and 9 shrines. The map also shows 4 temples, Walkeshwar, Mahalakshmi, a shrine of a village goddess and a shrine of Hanuman and 4 settlements, Girgaum, two *koli* villages and a *Bhandari* village south of Dongri, on Bombaim, the main island. There is a distinct east-west development related to the topography. All shrines and settlements tend to fall along the ridge, except for the two *Koli* fishing villages, which are on the seashore.

Assumptions regarding the connections to the north can also be made. Mahim was probably the first island to be inhabited in any considerable scale. The early temples at

[20] Although its name later became synonymous with the 'red light' district it was actually named after the *Kamathis*, artisans and labourers who came from the Nizam's dominions towards the end of the 18th century. *Bombay: The Cities Within,* Rahul Mehrotra and Sharada Dwivedi, 1995, pp.62.

[21] *Bombay City Gazetteer,* vol III, pp., 124, 304,337.

[22] Chronicles of Bimb or Bhim, written in 1139,

[23] His *Silhara* ancestors probably constructed the Walkeshwar shrine.

[24] Derives its name from the fact that murderers used to be hanged here and the gallows stood here in full view of the public.

[25] It was shifted to its present location when the Government set to enlarge the fortification.

Walkeshwar and Kalkadevi are attributed to the *Silharas* who migrated to Mahim in the 9th century. They probably constructed temporary bridges across the Great Breach and were also responsible for the roads that now circumscribe Malabar and Cumballa hill.

In any case, the significance of the old temples both on the hill and in the plains is clear. They mark probable sites where ancient villages existed and trace the route that pilgrims and early settlers used to traverse the island.

Bombay exists in these two realities, the reality of the Colonial Enterprise, a distinct image center, the Fort, and the reality of the 'native' town, a constant flux. They coexist and are not mutually exclusive. In fact it is this coexistence that is most fascinating. History in the Western context is more a subject of retrospection, whereas in the East it is very much a part of the present. History and Memory[26] collapse into one another and Indian cities cannot be associated with definite morphologies, like Western ones. The 'native' town in Bombay is a swarming, inchoate mass of a heterogeneous and multi-layered morphology. Colonial houses stand next to traditional Gujarati *havelis* and the juxtaposition doesn't seem contradictory.

"The concept that an individual building may, just because it is old, have accrued to itself layers of historical interest and be, in a sense, an embodiment of that lost past, seems foreign to Indian ways of thought. Perhaps this is, once again, because Hindus know time to be cyclic, while we know it to be linear. Or it may, in the case of Bombay, relate also to the fact that most of those who have settled there over the last three centuries have, by definition, been essentially nomadic, opportunist people – traders and itinerant craftsmen – not people, whose deepest identification is with the land, the quintessential place."

- *City of Gold,* Gillian Tindall, 1982, pp.95.

The duality is also evident in the various maps produced of the city. The British planned parts are clearly planned and mappable, whereas the 'native' town always appears as a swath of hatching with streets running through them almost capriciously.

In contrast to the distinctly British architectural and urban design agenda in the Fort area, the native towns outside the Fort walls and separated from it by large Esplanades[27], were largely indigenous settlements. In fact, the British, in the early 19th century, numbered no more than one percent of the total population.[28] Merchants and traders from all over continually migrated to the city in search of capital and work and by the late 18th century British administrators pointed to widespread encroachment on and sale of government lands. As discussed earlier, the deteriorating conditions in Mughal-ruled provinces and instability of other princely states in Gujarat, Kutch and Saurashtra, further influenced this migration. Apart from these new settlers, Bombay also had its own indigenous population. They were primarily Dravidian fisher folk and were called *Kolis.* A few of their fishing villages still survive

"Our men captured many cows and some blacks who were hiding among the bushes, and of whom the good were kept and the rest killed."

- First Portuguese landing in Bombay, 1509.

Early subdivisions of the Island under the Company followed patterns laid out in ancient times especially in the outlying, older areas like Mahim. As long as the sea was allowed free ingress the divisions were easy. But as population grew and spread away from the Fort it became necessary to make these divisions definite. Other reasons for the detailed land use and ownership surveys conducted twice in the 19th century were the growing importance of the city vis-à-vis the territory and the chronic shortage of revenue. Dickenson's survey of 1811-1827 and Laughton's survey of 1865-1872[29] were primarily conducted to clearly demarcate government owned property, leased land, reclaimed area and other assets like plantations and orchards.

Mahim on the north west was probably one of the oldest islands to be occupied. According to the *Bimbakyan,* the Solanki ruler Bhimdev, migrated from Anahilwada and established his capital in Mahim (Mahikavati). He is said to have surveyed the islands finding them covered with forests, fishermen colonies and temples built in an earlier age. Of the temples the two mentioned in Gerson da Cunha's rendition[30] of the chronicles are the Mumbadevi temple and Sri Walkeshwar on Malabar hill. Along with the King came a large colony of Patare Prabhus,[31] Palshis, Pachkalshis,[32] and Bhandaris, the earliest

15

[26] History & memory quote ROSSI.

[27] In 1772, when the American War of Independence was in the offing and the English in Bombay feared a French attack, large tracts of land (800 yards) outside the ramparts were cleared of buildings and trees to have a free field of fire.

[28] *Bombay City Gazetteer...op.cit.*

[29] After Lieut. Thomas Dickenson and Lieut. G.A. Laughton.

[30] *Origin of Bombay...op.cit.*

[31] "The Pathare Prabhus were one of the oldest Bombay communities and are alleged in tradition to have journeyed hither with Bhimdeo who colonozed the island of Mahim about the year 1293 A.D. (?) The Prabhus reached Bombay from Gujarat and neighbouring tracts." *Bombay City Gazetteer...op.cit.,* pp.241.

[32] "The Pachkalshis formed a portion of the same wave of immigration which, during the Silhara and later epochs, found its way from Gujarat to the island" *Bombay City Gazetteer...op.cit.,* pp.237

1. Shrines of Mahakali, Malakshmi, and Mahasaraswati.
2. Walkeshwar Temple
3. *Shri Gundi*
4. The Ladder or *Siri.*
5.Shrine of Village Goddess.
6. Hill Vilage or Girgaum.
7. *Koli* holdings.
8. Kolwar (Cavel Village).
9. Bhandari Settlement.
10. Shrine of Hanuman.
11. Fort

A. Colaba.
B. Old Woman's Island.
C. Bombaim
D. Worli
E. Mazagaon
F. Parel
G. Mahim

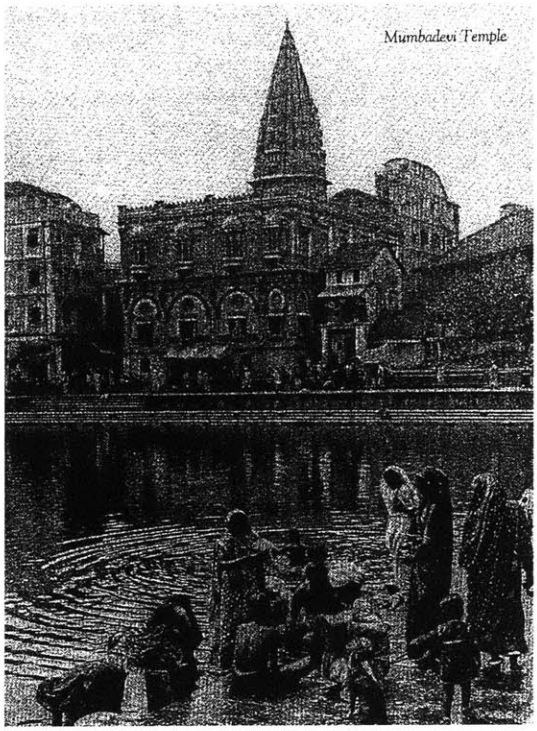

Fig. 12
Mumbadevi shrine and Tank.
*From **Bombay: The Cities Within**, Rahul Mehrotra and Sharada Dwivedi, 1995.*

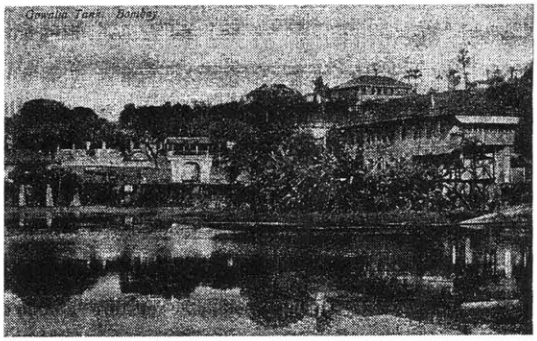

Fig. 13
The Gowalia Tank at Cumballa Hill, 1860s.
*From **Banganga: Sacred Tank,** Rahul Mehrotra and Sharada Dwivedi, 1996.*

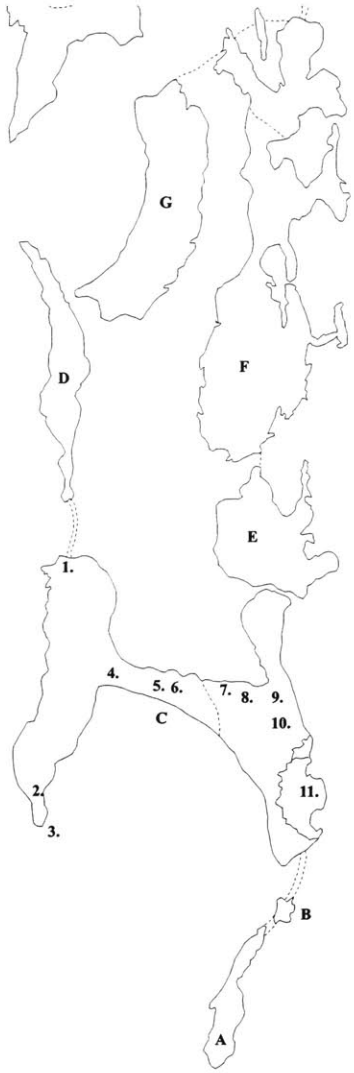

Fig. 14
From a map of the Island of Bombay, 1843, showing chief local features introduced in the Hindu period..
*From **The Gazetteer of Bombay City and Island.***

Fig. 15
The Pathare Prabhus, one of the earliest settlers in Bombay.
*From **Bombay: The Cities Within,** Rahul Mehrotra and Sharada Dwivedi, 1995.*

settlers. Bhimdev divided his kingdom into 15 *mahals* or districts, each subdivided into 12 sections called *pakhadis*. He built a palace and a temple at Prabhadevi and also established a court of justice. Later day British administrative divisions were to follow these districts and sections.

The Muslims were the next to establish rule here. With the invasion of Salsette on the mainland by the Muslim forces, Mahim now belonged to the kingdom of Gujarat. The Muslim period was rather insignificant. They were responsible for a few mosques and a Fort in Mahim. Muslim rule also saw the emergence of a new class of people called Konkanis, believed to be descendants through the liaisons of Arab men and Hindu women. During Muslim rule, in the 15th century, the tomb of Haji Ali was built at the northern foot of Malabar hill. With the gradual transformation of the singularly Hindu character of the hill, the temple at Walkeshwar evolved as a focus that provided a sanctuary for the Hindus. As more and more temples came to be built in nearby areas, the precinct became a well defined center of a more tangible Hindu temple complex which by then comprised *dharmashalas, matths,* and *samadhis* together with many shrines and temples.[33]

Contrary to popular belief the islands were not inhabited only by the aboriginal *Kolis*. In fact it would be safe to presume that, though there were no large cities existing before the Portuguese, there were settlements on the islands with temples and bazaars and most of them were connected. Sources, like da Cunha's book on the origins of Bombay[34] explicitly describe religious pathways that linked various settlements around the main island of Bombaim. It seems as though an urban order existed prior to 1509 and that later street layouts and widening proposals recognized this and were planned in continuum with the existing patterns.

"Another very old temple is situated on Siri Road. This road is called Siri from the Marathi word for 'ladder' or staircase, from its steep slanting position on the way from Chowpati and Malabar hill. It is the oldest and shortest way of pilgrims from Bombay to Walkeshwar. This temple was built in the 8th century of our era by a Kumbhar, or potter, called Lakha, hence the Goddess is called Lackadevi."

- da Cunha, Gerson, 1900.

Other existing temples mentioned in the book include Mumbadevi, Kalkadevi (probably in present day Mahim), Gramdevi, Lackadevi, a temple in Girgaum and Mahalakshmi on Cumballa hill. Of these all except Kalkadevi are on the main island and fall along present day primary roads. It is my contention that the temples at Walkeshwar were regionally important and pathways existed that lead to the precinct from the north via Mahim and the east via Parel.

It was during this time that Walkeshwar became important in the British scheme of things. With the reclamation of the Flats and laying of new roads Walkeshwar and the rest of Malabar hill became more accessible and soon wealthy European and Indian businessmen began to shift to its salubrious environs. In the 1830s, the Governor's residence was shifted to Malabar point and Walkeshwar Road was laid out connecting Chowpatty in the foothills to the estate.

Major General Sir John Malcolm writing about Bombay between 1827 and 1830 referred to *'an excellent road made to Malabar Point, the temporary bungalows at which have been made permanent, so as to afford excellent accomodation for the Governor.*[35]

Lady Falkland, wife of the Governor of Bombay from 1848-53, Lord (later Viscount) Falkland, writes,

"...and an entrance in it, from which a long flight of steps leads down apparently to the sea. The further you proceed, the more your curiosity excited. Halfway down this flight there is a handsome temple to the right, where I stopped to sketch a small, curiously carved window and beyond are more and more temples with red-flags waving on their roofs...full of life and animation – it was like a dream. In the middle of a large square is a tank round which are built temples, houses and tall, white obelisk-shaped pillars called deepmals, painted in parts red and green, on which lamps are suspended on great festivals and numbers of little alters containing the Tulsi plant. Temples of all forms and sizes are here: there is the lofty one shaped like a sugar loaf – here one with a domed roof, on it a pinnacle and turret with similar ones at each corner and a third elaborately carved in which are small images of gods in niches placed in the numerous turrets on the roof. Then there are flat-roofed temples and little square ones, standing about four feet high with pointed roofs and built under trees."

The village of Walkeshwar, hence, was already a considerably populous area with a large Hindu community. The new European settlers here were captivated by the unique character of the village and there are numerous records of the place, including photographs of the area dating back to the 1860s.

Walkeshwar may have benefited from this suburban development. In other religious

[33] *Banganga: Sacred Tank,* Rahul Mehrotra & Sharada Dwivedi, 1995, pp.17-18.

[34] *Origin of Bombay...op.cit.*

[35] *The Government of India,* Sir John Malcolm, 1833. The construction of the road to Malabar Point, enabled the Governor to make over his old residence in the Fort, which had not been regularly used for many years to the Secretaries to Government. *Bombay City Gazetteer...op.cit.,* pp.362.

precincts within the 'native' town the demand for land superceded the religious concerns and all large temple complexes were used for public utilities.

Though the British planning initiatives recognized the importance of Walkeshwar, the new settlers on the hill were only slowly discovering the precinct.

The next chapter introduces the many myths associated with the precinct's origins and its present day form. The importance of the precinct is evident by the number of pilgrims who visit it every year.

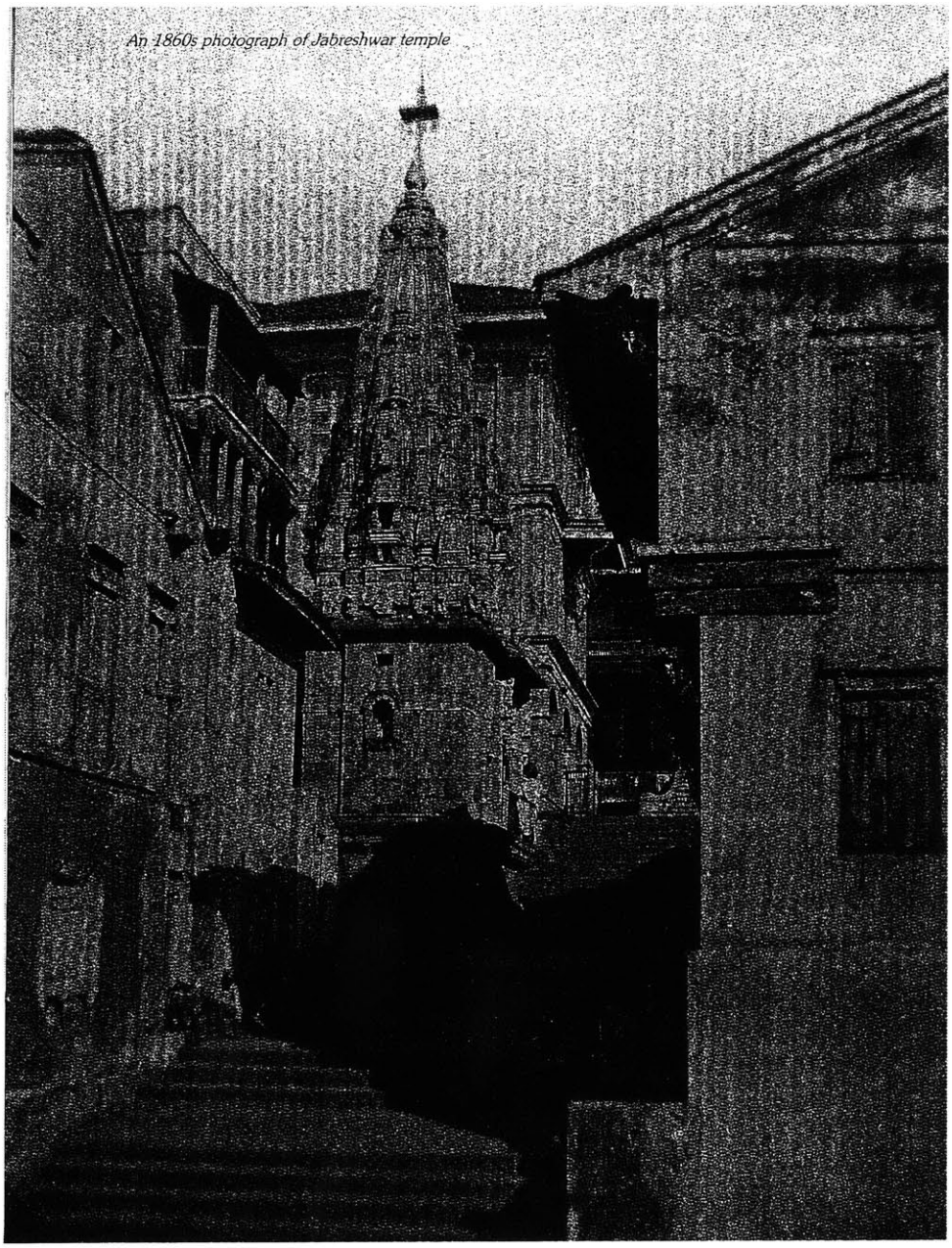

Fig. 16
The Jabreshwar Temple, from a photograph taken in the 1860s.
*From **Banganga: Sacred Tank**, Rahul Mehrotra and Sharada Dwivedi, 1996.*

BANGANGA: RELIGIOUS CORE

Existing Condition
& Challenges.

"Flower-like the heels of the wanderer,
His body groweth and is fruitful;
All his sins disappear,
Slain by the toil of his journeying."
Āitareya Brāhmana
Ŗg Veda.

The institution of pilgrimage to holy places (*tīrtha yāthrā*) is an ancient and continuing religious tradition of the Hindus. Like in all religions, Hinduism too has its sacred foci to which the faithful converge periodically. The innumerable sacred places of the Hindus can be conceived as a system of nodes having various degrees of religious import. Within this system, some places may be the focal points for pilgrims from the entire vast Indian subcontinent. Other, more modest places may serve as centers of congregation of devotees from the immediate vicinity. Between these two extremes there are sacred places of several intermediate levels.[36]

Though the Walkeshwar temple finds a mention in the *Purānas* and the Rāmayanā [37] it doesn't fall under the category of places, which are focal points for the rest of the country, but is important in the region. During the festivals[38] people come here from many places in the state.

Unlike many of the other religious precincts in Bombay, Banganga has remained relatively untouched. Early photographs depict the tank and its environs much as it is today. Probably the earliest account of the tank and Malabar hill can be found in John Fryer's, *A New Account of East India and Persia, being Nine Years' Travels 1672-1681.*

"On the other side of the great inlet to the sea is a great point abutting against Old Woman's Island, a rocky woody mountain which sends forth long grass. Atop of all is a Parsee tomb, lately reared: on the declivity, towards the sea is the remains of a stupendous Pagoda near a tank of fresh water (Walkeshwar) which the Malabars visited it mostly for."

The *Silharas* probably built the original Walkeshwar temple, which stood at Malabar point, near the flagstaff. The Portuguese desecrated it in the early 17th century as part of their religious agenda. When the British took over from them the persecution ended and merchants and traders were encouraged to make Bombay their home. The authorities not only permitted but also encouraged the construction of religious buildings on the hill, which was a safe distance from the commercial center within the Fort. The Parsi tower of silence built here in the 18th century and the donation of land by the British for the purpose of rebuilding the temple at Walkeshwar is evidence of their attitude.[39]

Ramaji Kamathi Lotlikar, a prominent member of the *Shenvi* or *Gaud Saraswat Brahmin*[40] community was granted a piece of land close to the present site and was responsible for the rebuilding of the temple in 1715 (or 1724). In 1772, another visitor to Bombay, J.H. Grose, published his *Voyage to the East Indies*, in which he described the new temple. "*On this hill which is far*

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[36] *Hindu Places of Pilgrimage in India*
Surinder Mohan Bhardwaj, 1973,p.3,7.

[37] The *Skanda Purana* tells us that Parashurama (the sixth *avatar* of Vishnu) destroyed the Kshatriya race and gifted all the land to the Brahmins. Having no place for his penance he requested the sea, Sagara, to recede, thus creating a large tract of land west of the Sahayadri mountains. Here he took *sanyas* to perform *tapasya.* This new territory called Parashurama Kshetra, he divided into 7 regions comprising the Malabar coastal areas of Travancore and Cochin (now Kerala), North Kanara and the region where Tulu was spoken, Gokarna and Gomantaka (Goa), the Konkan area of Malvan, Vengurla and Ratnagiri, North Konkan and Kolaba, Nasik Surat and Bharuch districts around the river Vaitarna and finally, the region comprising Shurparak, Thane and the Bombay islands. For religious needs of the inhabitants, Parashurama with the aid of his *Parashu* or battle axe, established fourteen *swayambhu* (self-created) *jyotirlingas* (radiating lingas) and near each, he shot an arrow to pierce the ground and release a gushing natural spring that emanated from the Ganges. The most sacred of these thirtha sthanas was considered to be '*Valukesho Mahashreshttho Banganga Saraswati*' – Banganga on one of the seven Bombay islands.

Another story related to the Walkeshwar temple has to do with Lord Rama. On his way to Lanka with his brother Lakshmana, to rescue his wife Queen Sita, who had been kidnapped by King Ravana, He stopped to rest on the shores of a hillock (later called Dandi or Malabar point) on a large island in the Bombay archipelago. Gautam *rishi* and other Brahmin ascetics meditating in the vicinity on hearing of his arrival came to behold his *darshan.* Seeing his anguish, they advised him to worship Lord Mahadeo or Shankar, who they believed would aid his search for Sita. The *rishis* told Rama to get the most superior and potent *lingam* he possible could from Varanasi (Benares) and perform on it a *panchamrit puja* (worship with five nectars) and Rama sent Lakshmana fortwith to acquire the *lingam.* Meanwhile, Gautam Rishi, fearing that Lakshmana would not return in time, induced Rama to fashion a *lingam* of sand and together with the other *rishis*, helped him perform the *prana-pratishtha* or life creating ceremony over the *lingam.* The deity was therefore called *Valuka Ishwar* or God of Sands, and the locality called Walkeshwar.

[38] The main festivals being *Kathikpurnima* and *Mahashivaratri.*

[39] *Banganga, Sacred Tank,* Rahul Mehrotra...*op.cit.*, pp.19.

[40] The *Gaud Saraswat Brahmins* were originally from Goa, migrating to Bombay during the Portuguese rule. They were also responsible for the temples at Walukeshwar, Bhuleshwar, Thakurdwar at mahim and the Vyankatesh Mahadeo temple in the Fort. *Banganga, Sacred Tank,* Rahul Mehrotra...*op.cit.*, pp.19.

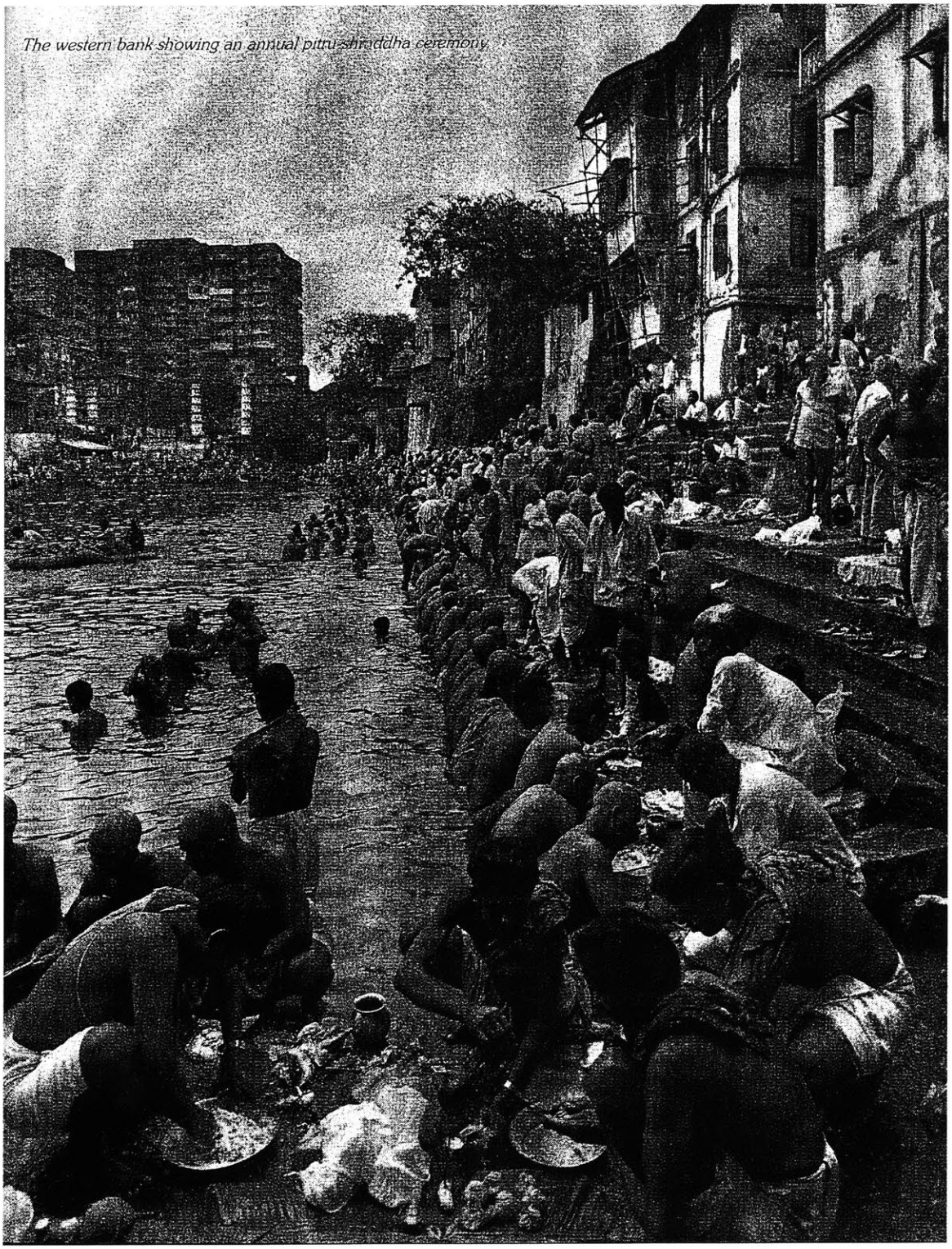


Fig. 17
The annual *putri-shraddha* ceremony.
From ***Banganga: Sacred Tank****, Rahul Mehrotra and Sharada Dwivedi, 1996.*

from a high one and of easy ascent, about a mile from that ascent, after passing a plain a-top of it, on a gentle declivity to the sea-side, stands the Gentoo pagoda, with a large tank or pond a few feet from it, and is of fresh water, formed by the draining of the rains, though not many yards from the sea, with which it is near on level, on the side that is open to it, all but where the pagoda stands between a part of it and the shore."[41]

The *Shenvis* laid claim to the entire village of Walkeshwar as part of the temple property. The hill was sparsely populated (around 40) at the time and robbers and bandits frequented its wooded slopes. To improve conditions in the area the *Shenvis* invited other Hindus to settle down in the village granting them land to build other temples and *dharmashalas*. With the reclamation of a large part of the Flats and the building of the *vellard* across the Great Breach, the temples on the hill were now easily accessible, and the number of pilgrims also increased.

Mostly Hindus, many of who are the direct descendants of the early settlers, today populate the precinct. The total population within the precinct boundary is around 7,000. During the peak season the population jumps to 9,500. There are many *dharmashalas* where the pilgrims stay and these are usually caste based. The largest of these, the Kavale Matth, occupies an area of 11,471 sq. yds. on the northern end of the tank. It is also the oldest and was founded by members of the *Gaud Saraswat Brahmin* community.

The area is a stark contrast to the rest of Malabar hill, which is today one of the most affluent parts of the city. With the construction of new roads to Malabar Point in the 1870s the hill became more accessible. Many of the prosperous Indian and European merchants preferred the salubrious living conditions there to the congestion in the inner city.

"Some of the houses display a richness and sumptuousness truly Asiatic. Columns support the verandahs and porticoes, and large flights of steps, bordered by china vases, lead to terraces on which are collected works of art both of European and Asia-status, cups, fountains. The gardens contain some of the best-cultivated trees of the country."

- Louis Rousselet[42], 1882.

Some of these 'sumptuous' bungalows can still be found, but many have been demolished to make way for high-rise buildings on plots ideal for this type of development.

The land use is predominantly residential with as many as 30 temples and shrines within the project area. Of these the prominent ones are:

the **Walkeshwar** temple, originally built in the 18th century by Ramaji Kamath and replaced by the present RCC structure in the 1950s,

the **Rameshwar** temple, built in the mid 19th century by Raghoba Jivaji Jayakar, a prominent member of the Prabhu community,

the **Jabreshwar** temple, built in the 1840s by Nathubhai Ramdas, father of a leading Bombay merchant, Sir Mangaldas Nathubhai,

the **Parashuram** temple, built in 1965 on a site donated by Hariganga Ranchhodas Bhansali,

the **Siddeshwar** temple and samadhis, built in the 1830s, forms part of what was once known as Jairamgir Bawa's *matth*, where *samadhis* of ascetics of the orthodox Giri Smarta sect were erected,

the **Jagannath Mahadev** temple, built in 1858 by Lakhmidas Jagjivandas, a Bombay merchant,

the **Balaji** temple, believed to have been originally founded by the *kolis*. The present temple was built in 1781, by Diveshankar. [43]

16

Small-scale commercial activity is also present and is mostly temple-related, selling condiments, flowers, sweets and religious artifacts. There are many tailoring shops too where many of the women are employed.

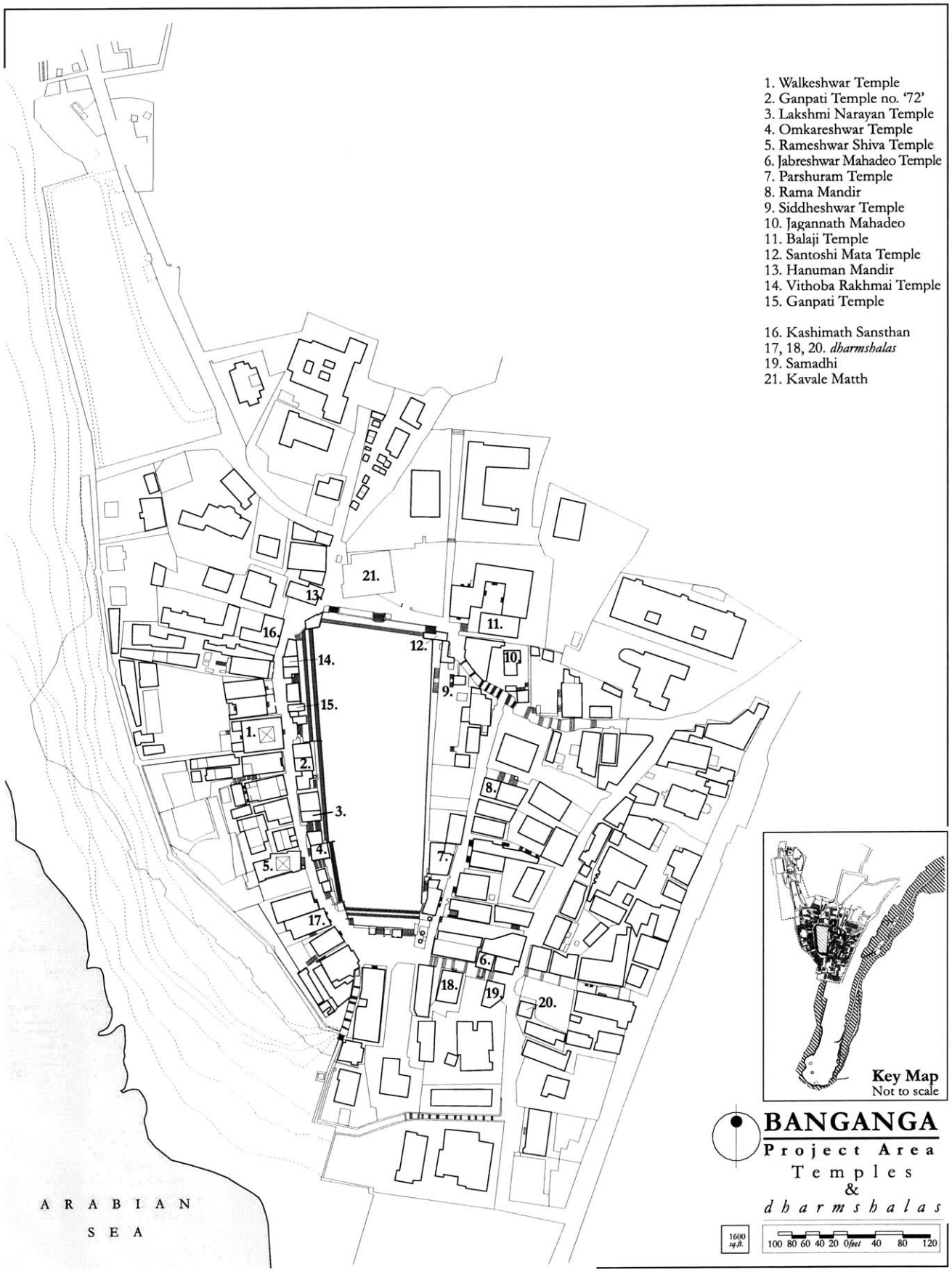
Till recently the precinct was a pedestrian zone, but with the improvement of the Bhagwanlal Indrajit Marg and the construction of elevator flats close to the tank, cars can be seen using the street that circumscribes the tank. This street is still too narrow to allow the free passage of vehicles and early government schemes proposed the widening of streets within the precinct. The majority of the vehicular traffic coming to Banganga, though, still runs on Walkeshwar Marg from the East. The main bus stop and taxi stand is on this road and there is no vehicular connection from here to the tank. In the case of an emergency it is difficult to get to the tank easily because of the width of the existing street around the tank and the lack of connection to the main road.

A large segment of the houses along this street are of historic value, some of them more than a 150 years old. It is illuminating to compare the Laughton's Survey maps from the 1870s with

[41] *A Voyage to the East Indies, with Observations on various parts there,* J.H. Grose, 1757, 1766, and 1772.

[42] As quoted in *Banganga, Sacred Tank,* Rahul Mehrotra...*op.cit.,* pp.34.

[43] See Map No.


1. Walkeshwar Temple
2. Ganpati Temple no. '72'
3. Lakshmi Narayan Temple
4. Omkareshwar Temple
5. Rameshwar Shiva Temple
6. Jabreshwar Mahadeo Temple
7. Parshuram Temple
8. Rama Mandir
9. Siddheshwar Temple
10. Jagannath Mahadeo
11. Balaji Temple
12. Santoshi Mata Temple
13. Hanuman Mandir
14. Vithoba Rakhmai Temple
15. Ganpati Temple
16. Kashimath Sansthan
17, 18, 20. dharmshalas
19. Samadhi
21. Kavale Matth
ARABIAN SEA
Key Map
Not to scale
BANGANGA
Project Area
Temples
&
dharmshalas
1600 sq.ft.
100 80 60 40 20 0 feet 40 80 120

the Laughton's Survey maps from the 1870s with the present ward maps. A large portion of the residential fabric is intact and the configuration of the tank is almost identical. The only drastic differences between the two documents are the slums that have appeared on the seashore, the various connections from the surrounding fabric to the tank, and the quality of the edge defining the street around the tank.

The condition of many of these older buildings is poor.[44] They are predominantly wood-framed buildings with brick in-fill walls.[45] The woodwork in many buildings is in disrepair and the wooden truss roofing in most cases is inadequate. Asbestos sheets have replaced the Mangalore tiles in many cases and this adversely affects the character of the precinct. Small shacks have come up within the area of the tank, on the steps, and around the precinct, usually built with scrap and roofed with asbestos. In at least two historically important buildings the structure is still reasonably intact but the roofing has completely fallen to pieces. This has been replaced with inexpensive canvas/plastic sheets that are completely alien to the context.

Some of the wood framed houses have been reinforced with steel columns and reinforced concrete. Many of the old features have been covered over and it is difficult to trace a genealogy. A few though are clearly indigenous, Gujarati style houses, with a verandah (*otla)*, central corridor, courtyard and detailed woodwork on the façade. A few buildings have classical details on the façade and in the verandah, and were probably remodeled indigenous buildings. Most buildings were intended for a single family with common toilet facilities and a series of rooms along the corridor.

Today each room (around 100 sq.ft.) is rented as a unit for Rs.100-200/month. Due to the area being rent-controlled, the rents have remained practically unchanged for the past 25 years. The taxes, though, have increased periodically but the revenue made from the rents is insufficient to pay for the maintenance of the buildings. The current land value on the rest of the hill is phenomenal. 1000 sq. ft. apartments in Malabar Hill are rented out for Rs.15,000-20,000/month, 10 times the cost in Banganga! [46]

Some of the buildings in the precinct are occupied by the owners themselves and are in better structural condition. The majority of the people who stay here work for the residents of Malabar hill, either as launderers (*dhobis*) or as maidservants. The squatters are primarily here because of this demand for household help. The government has constructed two *dhobi ghats*[47] near the seashore for the *dhobis,* on land previously owned by the temple trust and this has attracted many new squatters.

Due to the dense slum the sea is physically inaccessible for the most part. A visual connection to the sea is maintained because of the central corridor that runs through most of the buildings on the western rim of the tank and the elevation of the street from the seashore. This is an interesting feature of the precinct where one is sporadically reminded of the larger orders of the sea and the tank, giving a sense of stability and orientation to an otherwise chaotic environment.

In spite of the scale of the surrounding context, which completely dwarfs the precinct, the careless renovation of the older buildings and the destruction of the 'edge' of the street surrounding the tank, the precinct continues to possess a unique character primarily due to the large tank. 19

The tank is around 115 meters long (377 ft.) and 40 meters wide (131 ft.). It is fed by a spring on the northeastern corner and a valve connects it to the sea. Rituals performed at Banganga include those pertaining to daily worship comprising morning and evening libations and circumambulation; auspicious *pujas* or ceremonies connected with *sanskaras* like the thread ceremony, pregnancy, childbirth or marriage; rites of cremation and rituals for ancestors and seasonal rituals and ceremonies connected with important festivals like Mahashivratri (in August).[48]

It was badly contaminated a few years ago because the water was stagnant due to a blocked valve and pilgrims were immersing foodstuff and using the water for washing. This was corrected in the 80s, thanks largely to the efforts of Mr. Rocky Crasto. During his tenure as Municipal Commissioner he was responsible for the cleaning of the tank, the removal of large amounts of debris because of the failure of the eastern retaining wall, the construction of new steps in many places around the tank and the continuing maintenance of the area. It is periodically cleaned and the use of detergents and bathing soap is now strictly prohibited. The efforts of this one man may have saved the tank, but the surrounding fabric continues to deteriorate, and without swift action we may lose the vestiges of a time that predates Bombay.

[44] See Appendix: Maps 9
[45] See Appendix: Maps 7
[46] See Appendix: Maps 8

[47] The Municipality has constructed large concrete tubs in which water is filled and used for cleaning clothes. The *dhobi ghat* is the place where the washermen wash clothes.
[48] *Banganga, Sacred Tank,* Rahul Mehrotra...*op.cit.,* pp.50.

Comparing old photographs it is apparent that the scale of this street has also changed. In fact floors have been added to most of the older buildings and new construction has decidedly been out of scale, the two apartment buildings on the street being 7 and 9 stories high (an average height of 80 feet, compared to 50 feet, the maximum height in the old fabric).

Many of the changes seen within the precinct have to do, directly, with the Development Plan proposals, sanctioned in 1981. The existing bylaws show a total lack of foresight and sensitivity to the nature of this precinct. The next chapter revisits the existing regulations and proposes a fundamental shift in the way authorities should address special precincts like Banganga.

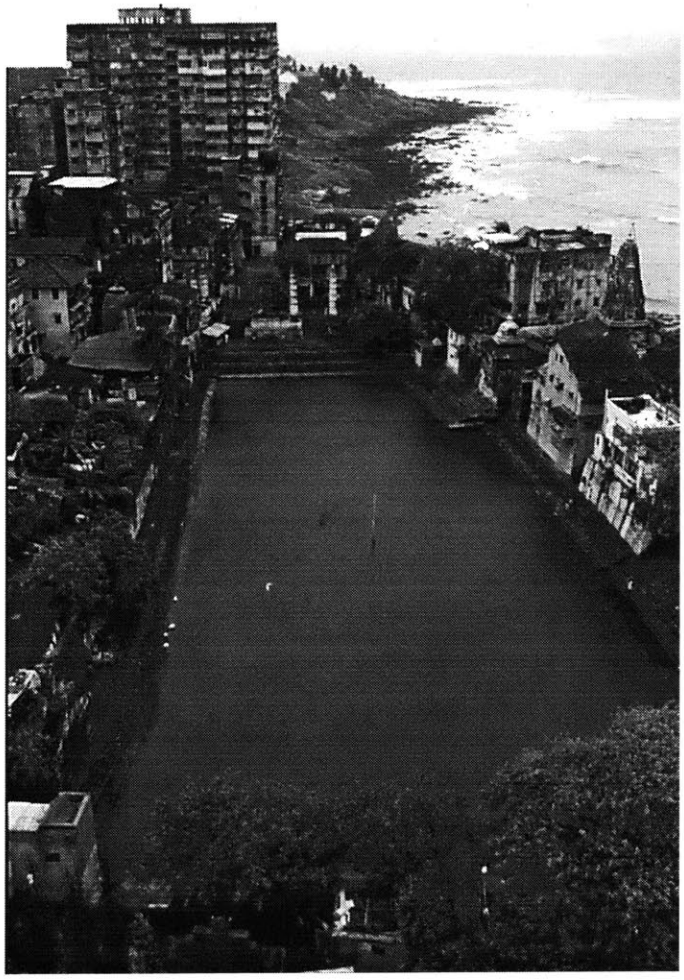


Fig. 19
The Banganga Tank, seen from the north

PRESERVING A LEGACY

The **Heritage** Advisory Committee & Drawing Precinct **boundaries.**

A. G.K. Menon in his article, Conservation of Historic Towns in India[49], outlines the tasks to study historic towns as follows:

1. *Identification and definition of significance.* This will require the listing and grading of monuments, analyzing the activity patterns and their spatial ecology.
2. *Definition of the parameters of the protected zone.* This will emerge as concentric zones of diminishing influence or significance.
3. *Specification of protection of the monuments, spaces and activities within the zone.*
4. *Specification of the instrumentalities needed for effective protection.* These will include, *inter-alia,* issues relating to skills, materials, finances and legal aspects of the case.
5. Strategies and phasing including alternatives and other options to meet contingencies; *the objective would be to control and guide development rather than inhibit or forestall it.*

The Island of Bombay is only a part of the area delineated as Greater Bombay. Greater Bombay comes under the jurisdiction of the Municipal Corporation of Greater Bombay (M.C.G.B). The development plan is prepared by M.C.G.B. for the Greater Bombay area and then synchronized with the New Bombay Development Plan (prepared by CIDCO[50]) by the Bombay Metropolitan Region Planning Authority (B.M.R.D.A.), to form a regional plan.[51]

The Greater Bombay area is further divided into three areas:

- The Island City, divided into 7 wards (A to G)
- The suburbs, divided into 5 wards (H, K to N), and,
- The Extended Suburbs, divided into 3 wards (P, R and T)

20

Walkeshwar falls in the 'D' ward. The Development Plan, 1981-2001, prepared by M.C.G.B., envisions close to 60% of the land use to be residential and around 11% as recreational for the project area. The Plan denotes the Tank as a recreational land use and no provision has been made for water bodies existing within the ward boundaries. Another glaring omission is that there is no clear plan for the waterfront. Today squatters have appropriated large portions of the shore and the sea is no longer accessible. The Plan does address this issue and has earmarked sites within the project area to re-house the squatters freeing up large tracts of land on the water's edge but does not tell us what this land will be used for.

There is no special provision within the Plan to address the special nature of the Banganga precinct. In 1990 the Government of Maharashtra introduced its modifications to Bombay's Development Control Rules, to protect 633 buildings and precincts and set up the Heritage Advisory Committee to oversee and regulate new development and conservation in selected sites and buildings.

These listed buildings and precincts are divided into 3 grades.

- *Grade I* comprises of buildings, and precincts of national or historical importance, embodying excellence in architectural style, design technology and material usage.
- *Grade II* comprises of buildings of regional or local importance, possessing special architectural or aesthetical merit, cultural or historical value, though of a lower scale than in Grade I. They are local landmarks contributing to the image and identity of the City, and
- *Grade III* comprises of buildings and precincts of importance for town scape; they evoke architectural aesthetic or sociological interest though not as much as in Grade II. These contribute to the character of the locality and can be representative of life style of a particular community or region.

The Banganga precinct (Sr.No.384) is cited here but is not assigned a grade. As far as the scope of changes is concerned

- no intervention is permitted either on the exterior or interior unless it is necessary in the interest of strengthening and prolonging the life of the buildings or precincts in the *Grade I* category;
- In *Grade II,* internal changes and adaptive reuse is generally allowed, but external changes are subject to scrutiny, and in
- In *Grade III,* external and internal changes and adaptive reuse is allowed. Changes and additions, however, should be in harmony with and shouldn't detract from the existing fabric especially in height and façade.

The Planning Authority with the involvement of the Heritage Conservation Committee, is responsible for granting

[49] *Historic Towns & Heritage Zones,* A.G.K. Menon and B.K. Thapar, 1988.
[50] **C**ity and **I**ndustrial **D**evelopment **C**orporation.
[51] *Unpublished thesis,* SPA, 1984, Harshad Bhatia

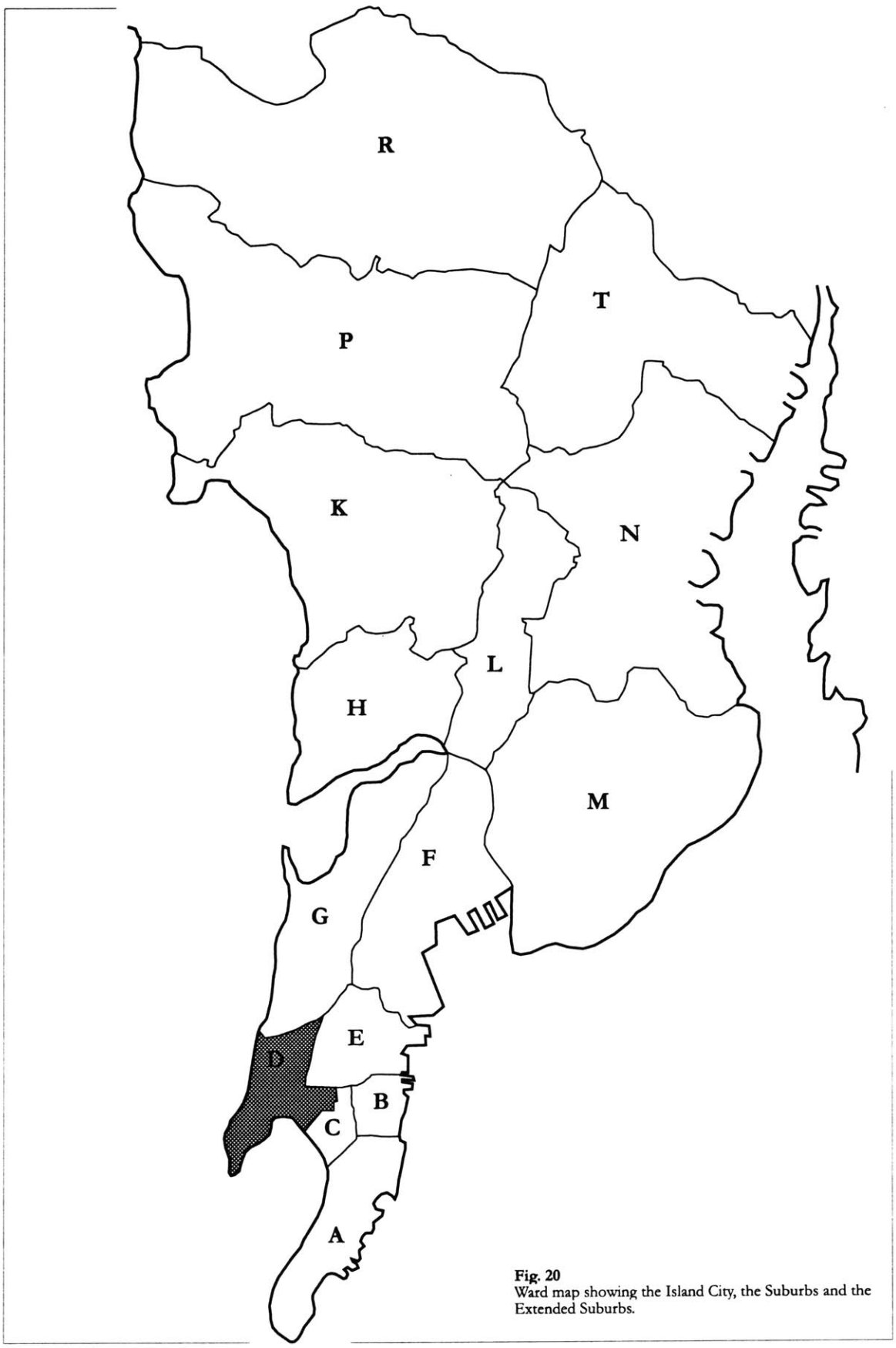


Fig. 20
Ward map showing the Island City, the Suburbs and the Extended Suburbs.

development permission in all three cases. There is a regulation on development in the surrounding areas only in the case of *Grade I* buildings and precincts.[52]

Eight areas in Greater Bombay have been earmarked as heritage sites and precinct boundaries have been proposed for these. Among the others are the Mahalakshmi precinct, the Gaumdevi precinct, the Khota Chiwadi precinct and the Fort.

The proposed boundary[53] for the Banganga precinct is far from adequate in addressing the complex issues at hand. It does not sufficiently encompass all the areas that are visually and functionally a part of the religious core. The boundary lines exclude certain sites within the core leaving them free for unregulated development. It is my proposal to have two boundaries to demarcate the site. The reason for this is that there exists an area within the precinct that is visually coherent and should have strict development guidelines based on the visual impact and the response to the scale and character of the existing fabric. The precinct also includes sites that are related, symbolically and functionally to the tank and the temples. These sites are a bit removed from the core of the precinct itself but should be part of a larger plan that addresses this connection.

Hence, two precinct boundaries[54] have been drawn up. The first one pertains to the visually coherent core, which includes the tank and its immediate surroundings, and the second pertains to the larger functionally/symbolically related area, which includes *dharmashalas*, burial grounds etc. within the precinct.

The guidelines drawn up for the area within the first boundary will have to do more with the architectural qualities of the fabric, regulating building heights, choice of materials, FAR, land use, type of construction, plot coverage and roofing. For the area within the second boundary the regulations will apply only at a master plan level, envisioning new connections and probably new land uses in keeping with the nature of the site. The FAR, coverage and setback regulations within this second boundary will be as per the existing bylaws.

As for the scope of changes in the precinct, I recommend that the provisions be a mix of *Grade I* and *Grade II*. New development is to be allowed within the precinct, but these should follow the guidelines prescribed herein. Internal changes and adaptive reuse is also allowed. The biggest concern, however, is the development in neighboring areas within the boundary of the Project Area. The existing precinct includes sites that were developed in the 1970s in accordance with the prevailing bylaws. The 'D' Ward allows an F.S.I. of 1.33 with site coverage of 30%. Large setbacks are required and as a result the building typology does not correspond to the existing character of the precinct.

The Sanctioned Development Plan (DP),[55]1981-2001, proposes major land use changes within the project area. The Banganga tank has been denoted as a recreational area and one is tempted to think that the tank may be converted to a park. A large recreational area is denoted on the waterfront and a secondary school is proposed on the site now used as a municipal *dhobi ghat*. This site belongs to the temple trust. One existing *dhobi ghat* is retained on the north west of the tank. Next to the Walkeshwar bus stop on the northeast the plan proposes a large parking lot and B.E.S.T bus depot. A park is envisioned close to this and separated from it by a proposed municipal market. The plan does not address the precinct as being a special area and merges it with the rest of ward D. There is no provision in the plan for the re-housing of the squatters and the importance of existing facilities like the *dhobi ghat* have been overlooked.

The one big move in the DP is the proposed road connecting Doongarsee Road and Narayan Dabholkar Marg. This move will make the precinct more accessible. But the disadvantage is that the existing pedestrian environment will be lost and the narrow lanes in the precinct will be used for parking vehicles. The other public facility envisaged in the plan is a Municipal Dispensary at the southern end of the tank. This dispensary has since been built and is now a mixed-use building with the dispensary on the ground floor and private housing on the next three floors. The coverage and FAR regulations at the time have forced the construction of the building setback within the site thus destroying the strong edge condition existing in the immediate context. The plot is publicly owned.

Many of the proposals of the DP have since been bypassed. The development of multi storied apartment buildings on sites earmarked as recreational areas and the growth of the squatter settlements on the waterfront, also on proposed recreational area, show that much has changed since the plan was sanctioned in 1981 and that the DP has almost totally been ignored.

[52] *Heritage Regulations for Greater Bombay*, 1995.
[53] See Appendix: Maps 3
[54] See Appendix: Maps 4
[55] See Appendix: Maps 1

Regional Scale Proposal:

Given these new conditions the DP has to be revised and provisions have to be made for these. At the regional scale and as part of the revised Plan two big moves have been proposed in this thesis:

- The squatters on the seashore are to be re-housed in two areas within the project boundary, the first of these being an abandoned residential property on the north east of the tank and the second is presently occupied by the squatters. The migration here is primarily due to the demand for household help in the form of maid servants and launderers. Re-housing the squatters on sites far away from this source of livelihood will prove to be unsuccessful and so sites close to the existing location have been earmarked.
- The proposed new road connecting Doongarsee Road and Narayan Dabholkar Marg is to be completed as suggested by the DP and a new road is envisioned on the water front servicing new sites for residential development on the sea face.

Precinct Scale Proposals:

At the precinct scale, three propositions are made in this thesis:

- The existing public amenities like the Municipal *dhobi ghat* and recreational areas within the squatter settlements are retained and improved.
- The existing fabric is to be preserved as far as possible and sites have been earmarked for the development of new residential fabric and public amenities like a secondary school (already proposed by the DP) and a public garden and pilgrim facility. The existing and preserved fabric is to remain rent-controlled and development on certain sites will be sold at a market rate to cross subsidize the preservation and conservation costs within the precinct boundary. As part of this plan a 5% increase in residential land use is envisioned.[56]
- All new development within the outer project boundary sold at market rate will have to cross subsidize preservation costs by paying a part of the revenue towards this. A pool is to be set up for this purpose run by a committee made up of representatives from the community and members of the Heritage Commission.

Identification of sites for new development:

After conducting a survey of the condition of the fabric within the inner project boundary, buildings have been evaluated depending on their age, historical and contextual significance, the type of construction, present structural condition, use, roofing style and condition and tenure type. Based on the conclusions drawn from these diverse aspects and from comparisons with the Laughton's survey maps of the area, a large part of the existing fabric is earmarked for preservation, re-use and conservation. Of the 123 sites within the inner boundary 12 sites and the squatter settlements have been earmarked for demolition[57], a mere 13% of the total area (excluding the tank and circulation) of which 7% is the area of the slums.

Apart from these, certain sites have the area to accommodate new construction.[58] These sites already have buildings on them, but these buildings do not consume the prescribed FAR and occupy only a margin of the site. The largest of these sites is the Walkeshwar temple site (59), which has an area of 1,575 sq.mts. The temple itself occupies a small portion of the site and the rest of the site is currently used as a *dhobi ghat.* The Siddheshwara temple site (96) is also relatively underbuilt and the empty portion next to the tank is now used for drying clothes. In fact, sites all along the eastern rim of the tank have very little development. This may be due to the fact that the retaining wall had collapsed in the '60s and after its repair development was planned on site no. 97 but due to litigation construction has been stalled and new development has stayed away. The temple trust authorities have expressed their concern over the strength of the new retaining wall and have dissuaded prospective developers from building here.

Consolidating the sites freed by the demolition of the slums and dilapidated structures and those that have the capacity to accommodate new development, we get 26 sites, 17 of which are vacant (Site nos. 1, 2, 13, 64, 65, 66, 69, 70, 71, 73, 75, 76, 97, 98, 99, 119, 120) and 2 of which have been earmarked for public facilities (Site nos. 59 and 96).[59]

Unlike in other cities, in Bombay the juxtaposition of economically different classes of society is common. Within the inner precinct three

[56] All new development on the waterfront parcels is predominantly residential. Two public amenities are envisioned in the plan, a school and temple-related facilities. The new residential fabric introduced adds up to a 5% increase in the total residential landuse, which accounts for 60% of the total landuse, within the precinct, at present.

[57] See Appendix: Maps 10

[58] See Appendix: Maps 11

[59] See Appendix: Maps 12

apartment buildings have come up since the early '70s. None of the tenants work within the precinct and very few work on Malabar hill. Most of them commute to work in the Fort. In the older buildings, a majority of the senior tenants are employed close by, many in the temples and *dharmshalas*. The newer generation though has begun to look for work outside the precinct. Investors have shied away from the precinct primarily because of its inaccessibility by car and the unavailability of sites large enough to accommodate the new building types. The existing setback and coverage restrictions make construction in the narrow sites, usually found in the precinct, difficult and unattractive. These rules have to be revised in order to cater to the new demands and in some cases the existing parcel divisions will have to be readjusted to help encourage the investors. From the consolidation of possible sites for new development we find that a large majority of the sites are on the waterfront.

This new construction and the sites where this is to be allowed have to be selected so as not to adversely affect the character of the precinct. The precinct may be divided into 4 separate layers based on the contours.

- Walkeshwar Marg is on the ridge and the hill slopes away towards the sea.
- Banganga Marg forms the intermediate level between the precinct and the ridge
- The Inner street is at the third level, and
- The seashore is the lowest point.

Given that the majority of the sites available for development are on the seashore this works to our advantage. Taller buildings could be situated here without impairing the visual quality of the precinct and yet allowing a higher density of development. Moreover these buildings will also have a view to the sea. The proposed road on the waterfront would service these buildings along with the other developments already here enabling the pedestrianization of the inner precinct street.

Apart from the vacant properties, many of the sites large enough to accommodate new buildings have their vacant portions abutting the inner street. Comparing the present condition of this street to the Laughton's survey map, of 1870, one finds that the definition of the inner street and the access streets from Banganga Marg has been diluted due to new construction based on the current setback regulations and the demolition of the old fabric. The thesis proposal investigates the possibility of re-defining this edge to create a stronger sense of place. The building regulations proposed in the next chapter addresses the concerns of setbacks, coverage and the questions of light and ventilation. In the older fabric most of the attached buildings have interior courtyards to solve this problem but have a limited depth from the street. The street frontage is an important aspect of these buildings, usually contributing to the definition of the street edge and incorporating verandahs and *otlas* as offerings to the street.

The 1870s survey map shows a very clear civic structure, with the main public spaces being the tank and a large square off of the Banganga Marg on the east. Distinct connections from the east are seen to the tank. Like the two present stepped streets that lead to the precinct, a third Street is seen running all the way to the tank. Present maps show a more diluted civic structure. The basic structure is the same but due to the demolition of buildings on the eastern rim of the tank this area remains largely unbuilt and hence the street loses its definition. The third street is still there but there is no access to the tank from the eastern side anymore. The four main access stairs that led to the tank have now been covered over and two small accesses remain from within private properties. The large public space on the East is now completely built over. Large public spaces appear on the western seashore, one of them being the *dhobi ghat*.

The design regulations and land assembly proposals respond to the existing conditions and to the morphology of the settlement as shown in the Laughton's survey maps. The main conceptual goals are

- The redefinition of the inner street, the creation of a distinct edge,
- The Reconnection of the eastern part of the street to the tank,
- Formalizing existing public spaces on the waterfront, and,
- Establishing a distinct series of visual and physical axes to the sea from within the precinct.

The next chapter outlines the specific urban design proposals for the precinct and a schematic method of application.

Development *for* Conservation

Opportunities & Design **Interventions**

In this chapter a closer inspection will be made of the formal qualities of the place proposed and the method of enactment by which this will be made possible. We have already discussed the method by which sites have been chosen for demolition and/or extension.

It is the contention of this thesis that new development in Banganga is necessary to help preserve the old. Two existing conditions have prompted this view.

- The existing condition of the buildings and the infrastructure is bad. Due to the lack of maintenance and repair, old heritage structures are deteriorating. To remedy this, funds have to be generated to subsidize the cost of conservation and encourage house owners to maintain their property. These funds have been trickling in, thanks largely to the annual Banganga Music Festival, a privately sponsored and government supported endeavor, which has been gaining popularity over the last few years. The extent of conservation possible by way of these funds is negligible. Surface treatment, like painting etc have been made possible but a thorough preservation and conservation effort is still unfeasible.
- Large tracts of land are available very close to the core of the precinct and due to the physical conditions of the site, the regulations pertaining to the rest of the precinct may be relaxed to allow higher density, high rise construction. The visual impact of these buildings on the waterfront will be negligible due to the slope of the land toward the sea.

Having earmarked the sites for development it is imperative to develop a set of regulations to ensure that the new construction is in continuum with the old, enhancing the quality of the environment.

In the previous chapter the reconfiguration of the precinct boundary was proposed. The inner boundary defines the area that is visually coherent, associated to the core, and has a distinct character. The sites that fall within this inner boundary have to formally respond to the existing context. The regulations for these sites differ from those within the outer boundary. To develop these regulations (FAR, setbacks, coverage, building height, material/type of construction and roofing) an analysis has been made of the existing fabric, through measured drawings of prominent buildings and site surveys.

The older fabric in Banganga has a distinct character along with the tank that gives the precinct a unique identity. Here are a few formal essences of the precinct:

1. **Axiality**.

"...the word 'axis' expresses that we are referring to an organization relative to a line. The line does not have to be straight, but it must have a determined shape, in contrast to topological continuity where the shape is irrelevant. A line with a determined shape orders the elements in succession and gives the order a direction."[60] 21 22

Most of the older buildings are built along strong axes. On the western rim of the precinct the old fabric is made up of long slender buildings, usually 30 feet wide, made up of a ten-foot structural grid, and between 50 and 60 feet deep. These buildings do not have shared walls and the average set back between structures is 4 feet. These alleys formed both by the setbacks and the central corridors that run through the building provide glimpses of the sea beyond. The inner street is at an elevation compared to the sea level and hence one manages to get an unobstructed view of the sea.

Within the inner boundary new development has to continue the existing axes. The plot divisions have been worked out in such a way so as to encourage building in the same typology.

2. **Building Edge**.

" Make sure that you treat the edge of the building as a 'thing', a 'place', a zone with volume to it, not a line or interface which has no thickness. Crenelate the edge of the buildings with places that invite people to stop, make places that have depth and a covering, places to sit, lean, and walk, especially at those points along the perimeter which look onto interesting outdoor life."[61] 23 24

The inner street is strongly defined by the largely intact old fabric. The buildings abut the street without a set back and usually have a verandah on the ground floor with a depth varying between 6 and

[60] *Intentions in Architecture*, Christian Norberg-Schulz, 1966.
[61] *A Pattern Language: Towns, Buildings, Contruction*, Christopher Alexander, 1977.

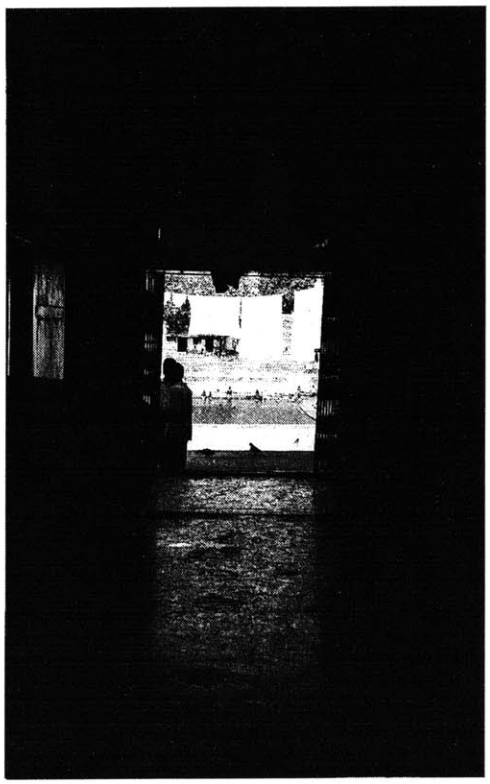
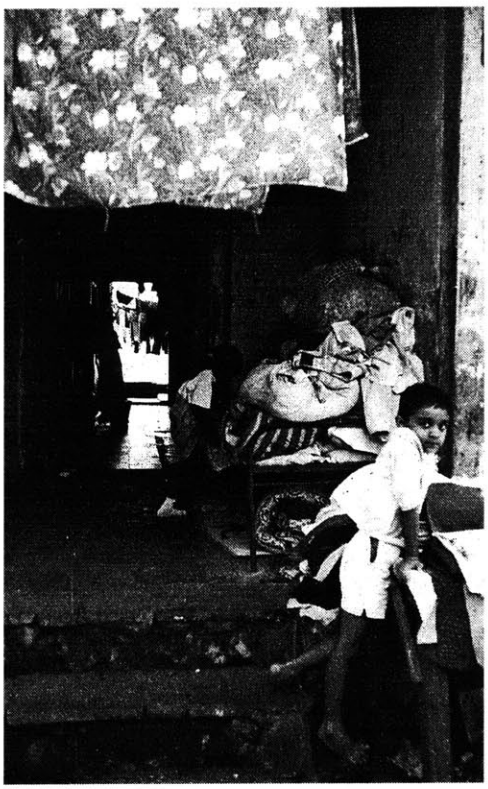


Fig. 21
View from within a building, looking towards the tank

Fig. 22
The central spine, looking towards the sea.



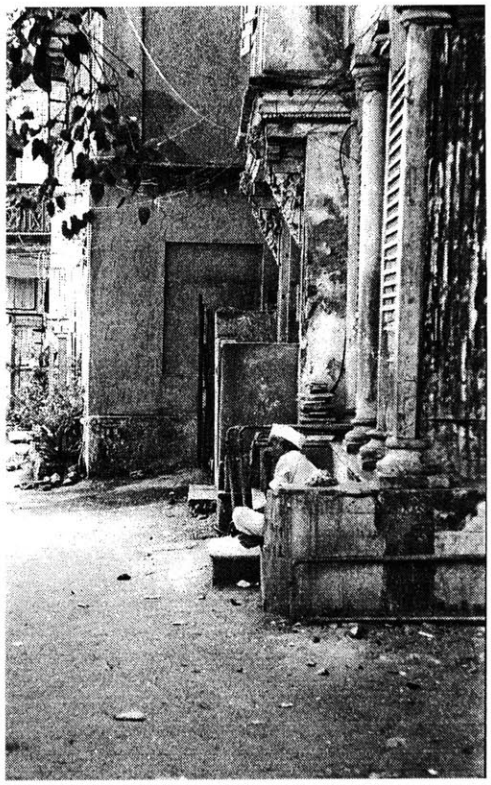
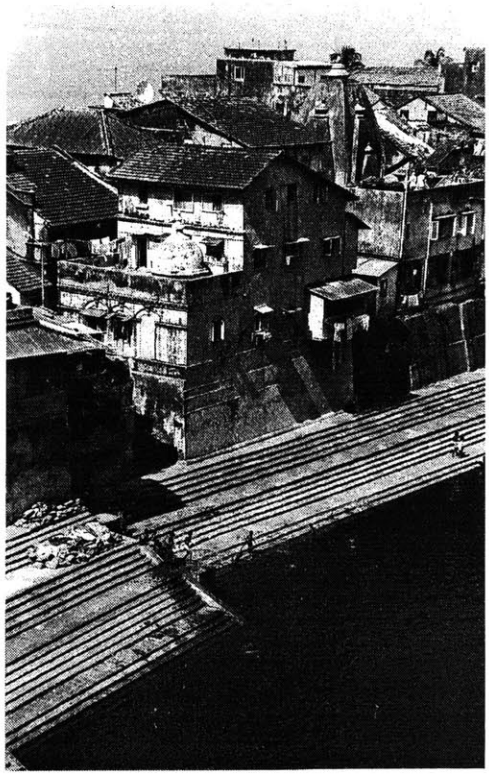


Fig. 23
The response to the street.
The plinth & the verandah.

Fig. 24
Building edge onto the tank.
Definition of boundary.



10 feet. This verandah has been covered up in some cases, but where it still exists one can see the old wooden columns and stone seats within the verandah. The plinth of most of the indigenous buildings is between 20 and 25 inches, whereas in the case of the colonial buildings the plinth is usually 15 to 20 inches high. This helps define the edge of the building in spite of the open verandah. This element serves as the transition between solid and void, between the street and the building. It is also interesting to see the attitude toward the tank. Buildings on the periphery of the tank usually provide a very distinct edge to the tank, defining it by large walls and minimal overhangs. The tank in effect reads as a figure, enclosed by these buildings.

The building edge has been disappearing around the inner street due largely to the incompatibility of the present DC[62] regulations and the existing plot divisions. With the maximum allowable coverage at 30% and minimum set backs at 3 meters the new development will alienate itself from the context and the strong envelope formed due to the old fabric abutting the street will lose continuity. The proposed regulations address this problem, creating more sensitive bylaws for buildings within the inner boundary.

3. Path & Node.

"...Man needs an urban environment which facilitates the image-making. He needs districts which have a particular character, paths which lead somewhere and nodes which are 'distinct and unforgettable' places."[63]

The inner street that circumambulates the tank is in many ways the armature that sets up our perceptions of the precinct. The route is a non-linear system with a distinct set of nodes associated with major civic institutions and/or as a response to the tank. The three main nodes within the system are

25 **A.** The major civic space used by the residents for community meetings, for community activities on special days etc. This space is at the southern end of the tank and is given prominence by the positioning of the *deepsthambhas.*[64]

B. Associated with the Balaji 26
Temple, this space is at the foot of the stepped street from Banganga Marg. The dome on the temple along with the stairs leading up to it set up a focus for the space.

C. This space is in front of the 27
Walkeshwar temple and links the steps leading to the tank and the temple. This space is used by hawkers to sell temple related goods. Some ceremonies are held here at the head of the steps.

4. Steps.

28
29
" Open stairs which act as extensions of the public world and which reach up to the very threshold of each household's and each workgroups own space solve this poblem. These spaces are then connected directly to the world at large. People on the street recognize each entry as the domain of real people – not the domain of corporations and institutions, which have the actual or potential power to tyrannize."[65]

Due to the terrain, steps are an important feature of the precinct. The two main accesses to the precinct are stepped streets from Banganga Marg on the east of the tank to the inner street. Due to the contours these streets curve along the terrain and provide a multi axial and exciting route to the precinct. The visitor never approaches the tank head on, but is made to discover it slowly. Most of the buildings too have external staircases and the tank itself is a series of receding granite steps.

Most of the older fabric is indigenous. It follows a pattern much like the *havelis* found in the other 'native' settlements outside the Fort.[66] The primary characteristics of this fabric are the high plot coverage, up to 80% in some cases, the absence of setbacks, the central spine that runs through the building[67], the *otla*, a verandah on the street front, an inner courtyard to provide for light and ventilation, and the timber-truss roofing

[62] **D**evelopment **C**ode

[63] *Image of the City*, Kevin Lynch, 1960.

[64] Ceremonial pillar with lamps.

[65] *A Pattern Language: Towns, Buildings, Contruction,* Christopher Alexander, 1977.

[66] For description see pp. 26

[67] In buildings on the Western side of the tank this spine provides glimpses of the sea. This sets up a pattern as one walks around.

Fig. 25
Node A

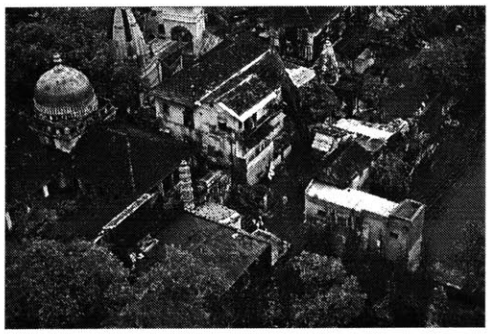
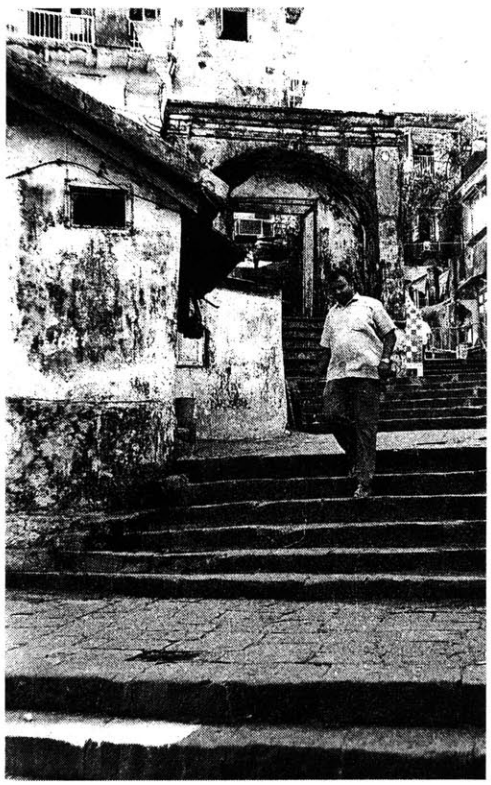


Fig. 26
Node B

Fig. 27
Node C

Fig. 28
Steps leading into a private residence from the inner street

Fig. 29
Stepped street linking Banganga marg and the inner street. the difference in level is negotiated by these long, winding streets.



system usually covered with Mangalore tiles. The maximum existing façade height onto the street is 30 ft. to the eaves. The predominant building materials are brick and wood. Many buildings have been reinforced using concrete and steel in recent times. The FAR achieved in the older buildings ranges from 2.5 to 3.

Another existing condition that has been examined carefully is the plot divisions. In sites earmarked for development on the western sea face we find that the existing plot divisions are too stratified and arbitrary to accommodate new development. Taking into consideration the existing civic structure, open space pattern and the morphology a system of plot divisions is proposed to help define the public and private realms. The inner precinct boundary follows the profile of these new plot divisions. These new sites are to be developed by co-operatives formed by the former owners of the sites that make up the new configuration. The percentage of their stake in the property depends on the percentage of the earlier site within the new parameters. The large public areas (site. no. 70) within the earlier morphology have been retained.

Site nos. 64, 65, 66, 69, 70, 71, 73, 75, 76, 119, and 120 are all on the western side of the tank and after the demolition of the earmarked buildings and the resettlement of the squatters, these plots will be free for a thorough re-design. The new plot divisions envisage a more ordered environment. Nine new sites are proposed.[68]

Each of these new sites is made up of parts of the older sites, for instance, proposed site A is a mix of sites 71, 119 and 77. Each of these sites make up a percentage of the new site...site 71 makes up 53% of site A, site 119 - 41%, and site 77 – 6%. This means that in the event that this new site is developed, 71 has a 53% stake in the endeavor. It is my contention that many of the present land owners will sell their land to private developers in which case the revenue made from this sale will be split up between the three parties depending on the percentage of land they own of the new site. This will be discussed in more depth later in this section.

New definitions have been given to the waterfront and the use of characteristic elements, like the *deepsthambhas,* have been introduced to define this edge. Three new connections are proposed to the waterfront from within the precinct. Two of these are seen as major public areas. The first one connects the inner street to a large square: its configuration is based on the existing square on site no.70. The second public space connects the large square on the inner street at the southern end of the tank to an amphitheater that steps down to the sea onto a large plaza incorporating the Ram *kund,* a holy pond for Hindus. This stretch is presently a garbage dump and this public use will help remove it and maintain the area. In fact, many of the alleys that pass between buildings are today filled with refuse and the new connections proposed by the master plan will prevent the dumping of trash here.

As far as the inner precinct boundary is concerned, the formal guidelines for development are as follows:

1. The maximum FAR for all sites within the inner boundary are not to exceed 3.
2. All buildings within the boundary are to be built to the site edge. No setbacks are allowed.
3. The maximum plot coverage should not exceed 85%.
4. The eaves height onto the street front should not exceed 24 ft.
5. Maximum height of buildings within the boundary should not exceed 50ft to the ridge of the roof.
6. All buildings within the boundary should have a verandah with a minimum depth of 6ft at the entrance.
7. The main circulation spine should follow the prescriptions shown in the master plan and continue the pre-existing axis to the sea.
8. For site nos. 59, 63, 96, 97, 98 and 99, special restrictions apply. 59 and 63 are the sites earmarked for the new *dhobi ghat* and squatter housing. Sites, 96, 97, 98 and 99 are earmarked for a public facility including staying facilities for visiting pilgrims and small scale commercial use related to the temples.
9. For sites 4, 5, and 104, the extensions are to follow the said regulations for sites within the inner boundary.[69]

[68] See Appendix: Maps 13

[69] The definition of the street is lost due to these new buildings that have large setbacks and smaller site coverage requirements. It is envisaged that new buildings could be constructed to define the edges. Plot 4 is a publicly owned property with a Municipal Dispensary and some housing. The existing building achieves an FAR of .75 and the new building proposed at the mouth of this site will be within the FAR requirements as per the existing DP (1.33)

10. For sites 115 and 114, the site boundary is to be reconfigured as per the master plan.[70]
11. All buildings within the boundary are to have pitched roofs with a pitch of between 25 and 30 degrees.

With regards to the outer precinct boundary, the regulations are as follows:

1. The regulations envisioned in the current DP, *viz.*,

- Maximum FAR not to exceed 1.33
- Plot coverage not to exceed 30%
- A minimum setback of 10ft.

This applies to all sites within the outer boundary. A few restrictions apply.

- Sites on the waterfront are required to step back their mass from the plot edge.
- The required set back is 12 feet.
- Parking for every building to be provided within the property and at ground level. Basements are not allowed.
- All buildings are required to have pitched roofs with a pitch of between 25 and 30 degrees.
- The maximum height is not to exceed 70ft. to the ridge of the roof.

Certain propositions have been made pertaining to the civic structure and circulation. New steps are being proposed connecting the inner street on the east of the tank to the tank. This is a natural extension of the stepped street that connects the inner street to Banganga Marg. The proposal highlights the necessity to define the public realm with distinct edges and an effort has been made to address this.

The majority of the proposed buildings are residential, except for the primary school on sites 75, 76, 73 and 74. The major infrastructure move is the proposed road on the water front connecting new development here to the closest motorable road (Narayan Dabholkar Marg). The proposal alludes to the Laughton's survey maps of the area in the type of development envisioned within the core of the precinct, especially on sites where extensions are to be made to existing buildings.

Method of Enactment

The ideas put forth in this section are propositions at a more conceptual level. They do not claim to be complete solutions for the existing conditions in Walkeshwar. The propositions of alternate land assembly and co-operative development are fraught with problems. The conditions in Walkeshwar are extremely fragile and these ideas have been put forth because other alternatives so far have failed to stem the deterioration of the precinct.

Given that two precinct boundaries have been proposed, development is seen as being of two distinct types. Within the first boundary, most of the new fabric is of the same typology as the old, with similar densities and character. The majority of the units that make up these new structures, built on sites acquired by the demolition of dilapidated and abandoned buildings, are to be rented out at rent controlled prices to the original tenants. The excess units, and there will be an excess because the proposed densities are higher than those that existed prior to demolition, are to be sold at the market rate. The new buildings within the second boundary are seen as being apartment flats, close to 7 stories high with large set backs and car parking facilities. A few of these types of buildings already exist within the precinct and the influx of this typology can be detrimental to the character of the precinct unless the position and quality of these buildings is carefully regulated. Most of these new buildings are on sites previously occupied by squatters. Hence no resettlement within these new properties is necessary and all the units generated from this development can be sold at the market rate, which is fairly high in Walkeshwar.

The plot divisions in most of the new developable area are too stratified to encourage developers to invest. Hence, new plot divisions have been proposed and co-operatives are to be set up between common owners who now own a piece of a larger site. Two factors make investment here more lucrative. Most of the taller modern buildings are located on the western seaboard and have undisturbed view of the sea. With the propsed road now connecting the western shore to Narayan Dabholkar Marg, access too is easily possible and hence these new sites will attract investors.

The new sites on the western side of the tank have been named A, B, C, D, E, F, G, H, I. These sites are made up of parts of the existing sites. Here is a break up of these:

[70] The civic structure of the precinct as seen in the Laughton's survey maps of 1870 show a large public plaza off of Banganga Marg. This is being reintroduced at the point where a new connection to the tank from here is proposed.

New Parcels	Plot Area sq.mts	% of Land Pool	
		Present Site No.	%
A	525	**71** **119** **77**	53% 41% 6%
B	318	**119**	100%
C	422.5	**83** **82** **120**	78% 18% 4%
D	194	**65** **66**	50% 50%
E	358	**64**	100%
F	132	**69** **66**	93% 7%
G	332	**76** **73** **69**	46% 38% 16%
H	163	**75**	100%
I	557	**97** **99** **98**	45% 51% 4%

Table 1. Land Pool.
See Appendix: Maps 13

Site no. 70 in the present survey maps, is being retained as a public space. Site I is earmarked for the Municipal school and site L is the associated open space.

Four new sites have been created outside the inner boundary. These sites are configured so as to allow for the prescribed setbacks and maximum densities. These are site F, site A, site B and site C. The total area of these sites is 1,623.5 sq.mts. (17,452.625 sq.ft.). As per the proposed FAR regulations, for sites within the outer boundary, (1.33) we can achieve 2159.255 sq.mts. (23,212 sq.ft) of new saleable area on sites previously unoccupied.

Within the inner boundary, the total area of residential sites is 878 sq.mts. (9438.5) and at the prescribed FAR of 3 within this boundary, we achieve a total built up, saleable area of 2,634 sq.mts. (28,315.5 sq.ft.). Compared to the present built up area (1336.5 sq.mts.) we achieve twice the area and provide more open, public space.

The public facilities within this new development are on sites I, L, and M, which amounts to a total area of 1052 sq.mts. Sites I and L are for the school and site M is earmarked for uses related to the temples, like a guest house for pilgrims and some small scale temple-related commercial use.

Hence, the total saleable area at market rate is 3456.755 sq.mts. (37,160 sq. ft.). Of this total, the total saleable area outside the inner boundary is to be taxed in some form to help pay for the upkeep of the precinct. This tax will be levied on new saleable property within the inner boundary too, but, the rate here will be less than the former. The percentage of the revenue made that should go towards conservation efforts is to be decided upon after a careful survey of the existing conditions to estimate the amount required to repair the old fabric and infrastructure. A part of this estimated amount will be funded by the government, a part by the Banganga Heritage Committee (the group who organize the music festival) and a part by private organizations. The pool generated by these contributions is to be overseen by a panel composed of representatives from each donor party and local residents.

To summarize:

- As proposed by the DP, the resettlement areas for the squatters is prepared. This includes the demolition of existing buildings on sites earmarked for this purpose and the construction of rehabilitaion units.
- The buildings earmarked for demolition within the inner boundary are removed. The sites are prepared for new construction.
- New survey numbers are assigned to these sites and plot divisions are formalized with the formation of co-operatives for each site shared by more than one owner.
- New infrastructure is laid out, including the proposed road on

the waterfront and underground electrical, sewage and water supply.

Thus with this foundation the new sites can be sold or developed by the present owners, with initial investment within the inner boundary cross-subsidized by development outside it. It seems reasonable that the larger sites outside the inner boundary will be the first to attract investment due to improved infrastructure connections and the waterfront location. These new developments will help initiate construction in the smaller sites.

The conservation of the precinct relies heavily on this new development and the creation of the money pool geared towards this effort. The model projected here for the purpose of encouraging high-density market rate housing may not be free of loopholes. The land assembly proposal and co-operative development schemes may impede the swift implementation of these ideas, but in the present condition new development will remain aloof due to the bad infrastructure and arbitrary plot divisions. The government has failed to provide a coherent and workable plan for the area, and continues to do nothing to preserve this fabric. Private organizations here, like elsewhere, have begun to play a more active role in preservation efforts. The major thrust for the implementation here is seen as coming from private bodies and, to attract investors Banganga and its unique place in the history of the city has to be marketed and made public knowledge. The Music Festival is one way to do this.

Harshad Bhatia, a practicing architect in Bombay, has been fighting a lone crusade with the planning authorities to revise their often short-sighted and inconclusive approach to preservation in historic core precincts in the city. His plan to market these places, like elsewhere in the world, is an apt way to ensure that Banganga does not follow in the footsteps of Gowalia Tank. With public awareness and sensitive planning regulations the precinct can continue to live and grow like an organic entity, enthralling visitors with its unique physical character and ancient stories.

Conclusion

This thesis began as a research into the pre-British and Portuguese settlement morphology on the seven islands of Bombay. Old religious pathways and ancient temples formed the basis for this research. Soon, however the project began to focus on one particular precinct, the oldest one, Banganga. From a simple historical narrative establishing the importance of Banganga, soon issues of conservation, of design interventions and Development Plans began to creep into the frame. And before I knew it the thesis found its thrust in the methods of application that would help maintain the character of the precinct and allow new development to come in and cross-subsidize conservation efforts within the area.

Siting here now at the end of what was a wonderfully challenging 5 months I find myself writing about things I had barely identified as being primary issues of this thesis. I thank Julian for this. I now see the effort as being much more meaningful and pointed. There are many good ideas, but only few find the means to realization. The thesis is an effort towards:

- Understanding the current conditions and challenges posed by Historic Core precincts and in particular by Banganga, and,
- Addressing these through a realistic urban design model.

To summarize, the following five-point program has been drawn up to address problems in areas like Banganga where a rich and unique order is being rapidly replaced by inappropriate new development,

1. *Precinct boundaries have to be carefully drawn up* so as to include:
   - The visually coherent fabric that gives the area a distinct character.
   - All functionally related sites close to the precinct and not necessarily of the same visual environment.
2. *The Development plans and existing building bylaws should be revisited and all new development within the area is to be carefully regulated with guidelines developed from the existing fabric.* Building within the visual boundary should be carefully monitored and a clear distinction is to be made between sites that are to be retained and those that are to be demolished, based on the following criteria:
   - Condition of structure
   - Architectural and Heritage Value
   - Age of structure
   - Type of construction
   - Contribution to the character of the precinct

   Sites should also be earmarked for new development. Private capital investment is seen as being imperative to sustain these environments and through the careful selection of sites for this purpose, this new development need not have to visually assault the older fabric.

   In many precincts, like Banganga, present day regulations ignore the older fabric and new development guidelines propose blanket FAR, coverage and building height restrictions irrespective of the context. One must be careful, though, that new regulations developed from a thorough reading of the existing morphology, does not inhibit investors.

   In Banganga, the thesis proposes two boundaries, and addresses both the existing context and the demands of the market. Within a certain radius buildings have to be strictly regulated, but new development should be encouraged close enough to the inner precinct, to enjoy the amenities provided by it, by infrastructure improvements, suitable land assembly and relevant FAR, coverage and setback regulations. This brings us to the third point.
3. Two issues inhibit new development within historic core precincts. *The inadequate infrastructure and the unavailability of sites large enough to accommodate feasible development.* Current bylaw regulations do not address the unique character of the place and so when buildings do manage to come up within such quarters they are usually inappropriate and destroy the scale and character of the precinct. After developing appropriate guidelines, infrastructure has to be improved and in areas earmarked for new development *existing property divisions are to be revised in order to structure the kind of development and respond sensitively to the context. Co-operative development is seen as a possible way in which these new sites could be developed. Another option is the sale of these new sites to private investors.* This money could be split up depending on the percentage owned by each of the parties forming the co-operative.
4. *People displaced by this new development are to be resettled within these new sites and revised FAR regulations should allow for an excess built up area to be sold at market rate to make the investment worthwhile.*

   In Banganga, squatters occupy many of the sites earmarked for new development. This means that a lot of the new development here can be sold completely at market rate and none of the people living here now need to be resettled within

the property. Sites have been earmarked at a Ward scale to rehabilitate the squatters. This makes development here more lucrative.

5. *The conservation of the older fabric is to be cross-subsidized by this new development.* All market rate housing/commercial development within the prescribed boundaries is to pay for the upkeep of earmarked buildings and property within the precinct. Apart from this fund, *corporate investment should also be invited.* The marketing of precincts, like Banganga, is essential for their survival. With more awareness, these precincts will be maintained and preserved.

The money generated from these various sources is to form a pool managed by a panel with representatives from the various agencies involved: The Heritage Commission, the corporate sponsors, the private developers, and the local residents/plot owners.

These recommendations form a part of the final proposal to be made to the Heritage Advisory Committee later this year. If the present apathy towards precincts like Banganga continue, the city will lose the last remaining vestiges of a past much before the colonials.

Banganga is a part of another Bombay. It is the only surviving remnant of a time all but forgotten. Its value as that relic is more important now, when our very identity as Indians lies confused and threatened.

"For, indeed, the greatest glory of a building is not its stones, nor its gold. Its glory is in its Age, and in that deep sense of voicefulness, of stern watching, of mysterious sympathy, nay, even of approval or condemnation, which we feel in walls that have long been washed by the passing waves of humanity. It is in their lasting witness against men, in their quiet contrast with the transitional character of all things, in the strength which, through the lapse of seasons and times, and the decline and birth of dynasties, and the changing of the face of the earth, and of the limits of the sea, maintains its sculptured shapeliness for a time insuperable, connects forgotten and following ages with each other, and half constitutes the identity, as it concentrates the sympathy, of nations: it is in that golden strain of time, that we are to look for the real light, and colour, and preciousness of architecture; and it is not until building has assumed this character, till it has been entrusted with the fame, and hallowed by the deeds of men, till its walls have been witnesses of suffering, and its pillars rise out of the shadows of death, that its existence, more lasting as it is than that of the natural objects of the world around it, can be gifted with so much as these possess, of language and of life."

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Lin, Chingyi, photographs of the model for the layer study, Appendix: Maps ***22***

All other illustrations and photographs are by the author.

Appendix

This section is primarily a collection of Maps prepared from data collected from the site and from various other sources including Harshad Bhatia's unpublished Master's thesis. Maps showing the various propositions are also included here and have been referred to in the text as 'Appendix: Maps 'page no."

Index:

Sanctioned Development Plan, 1981-2001 ***1***
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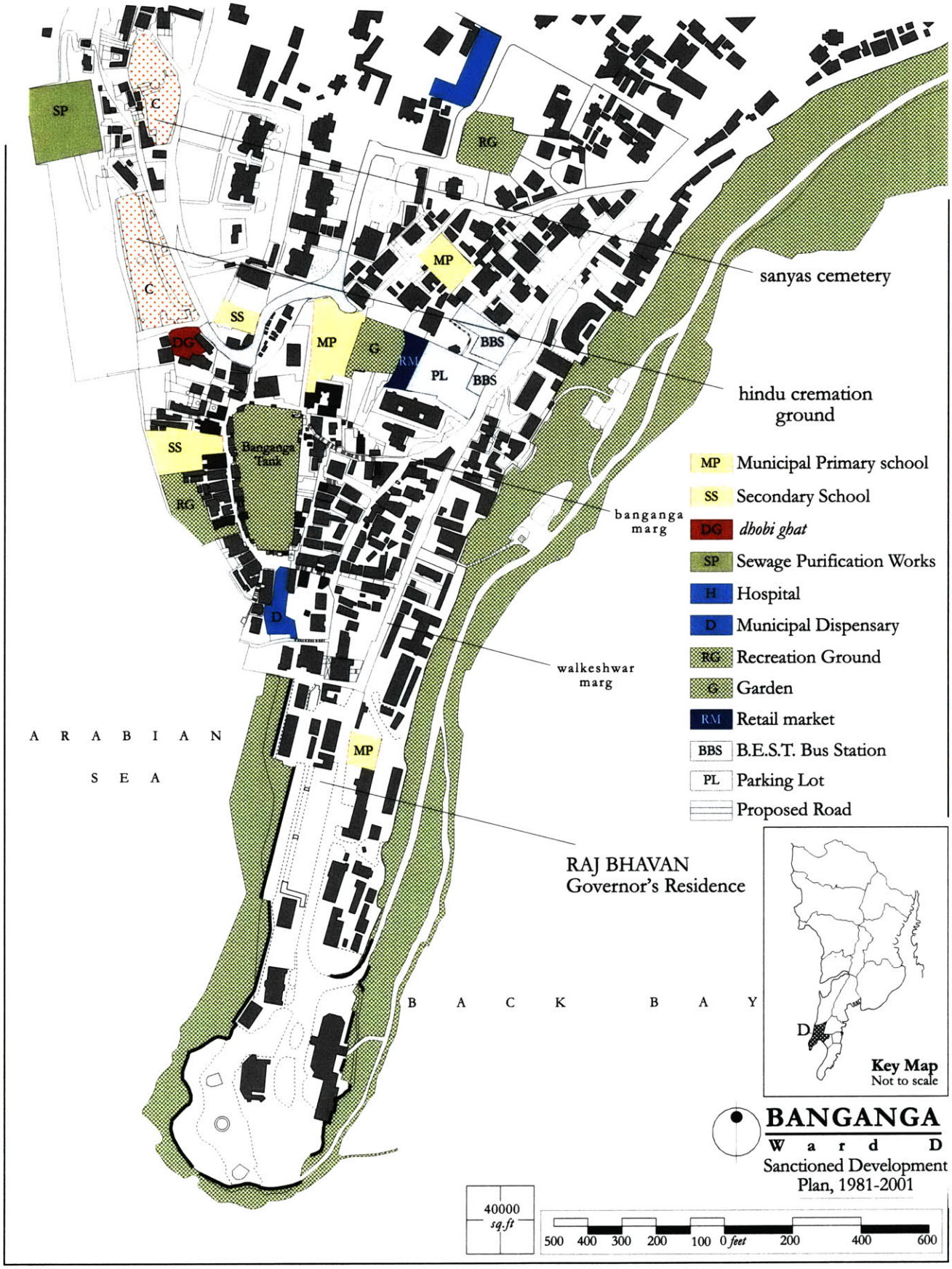
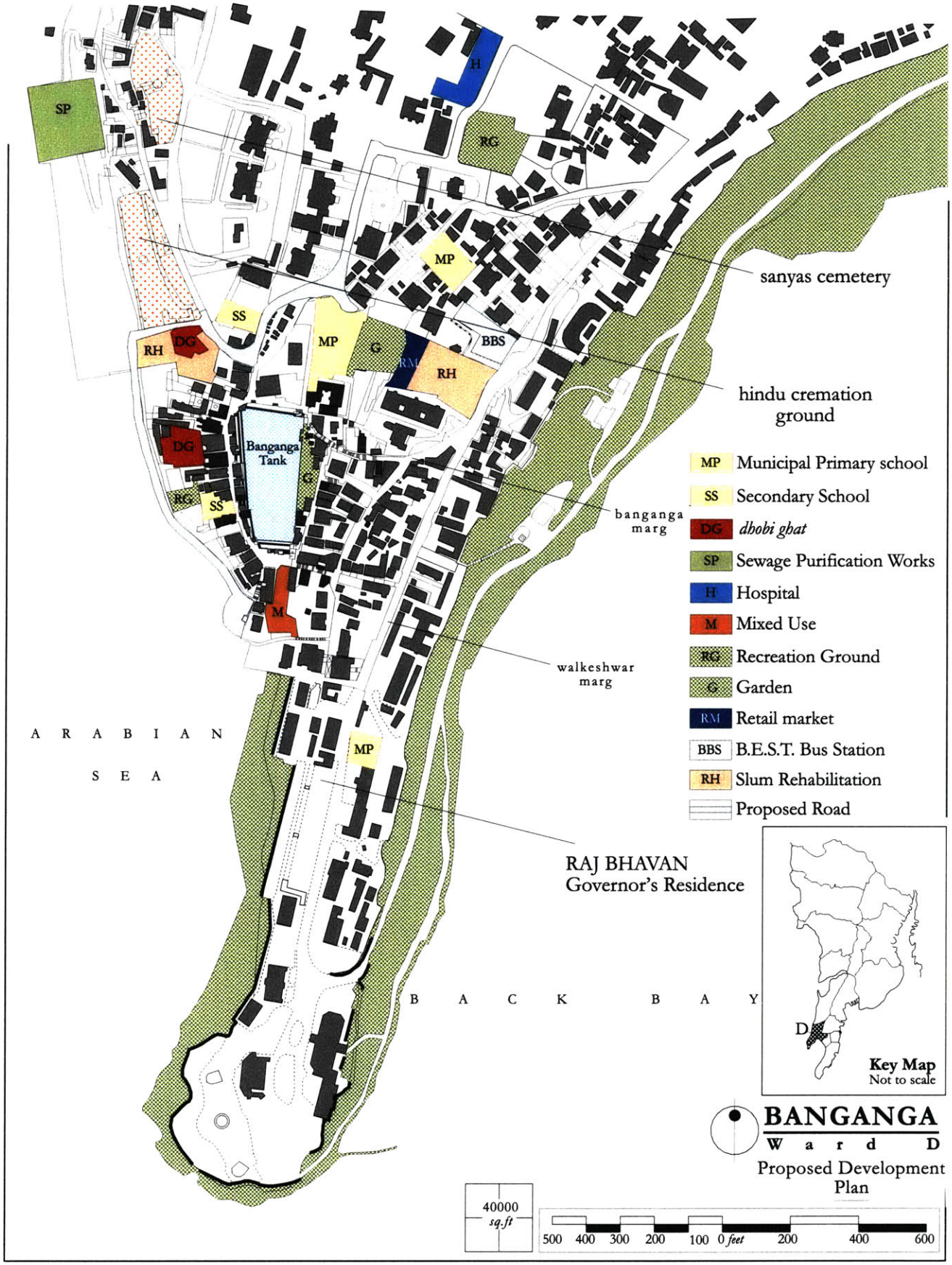
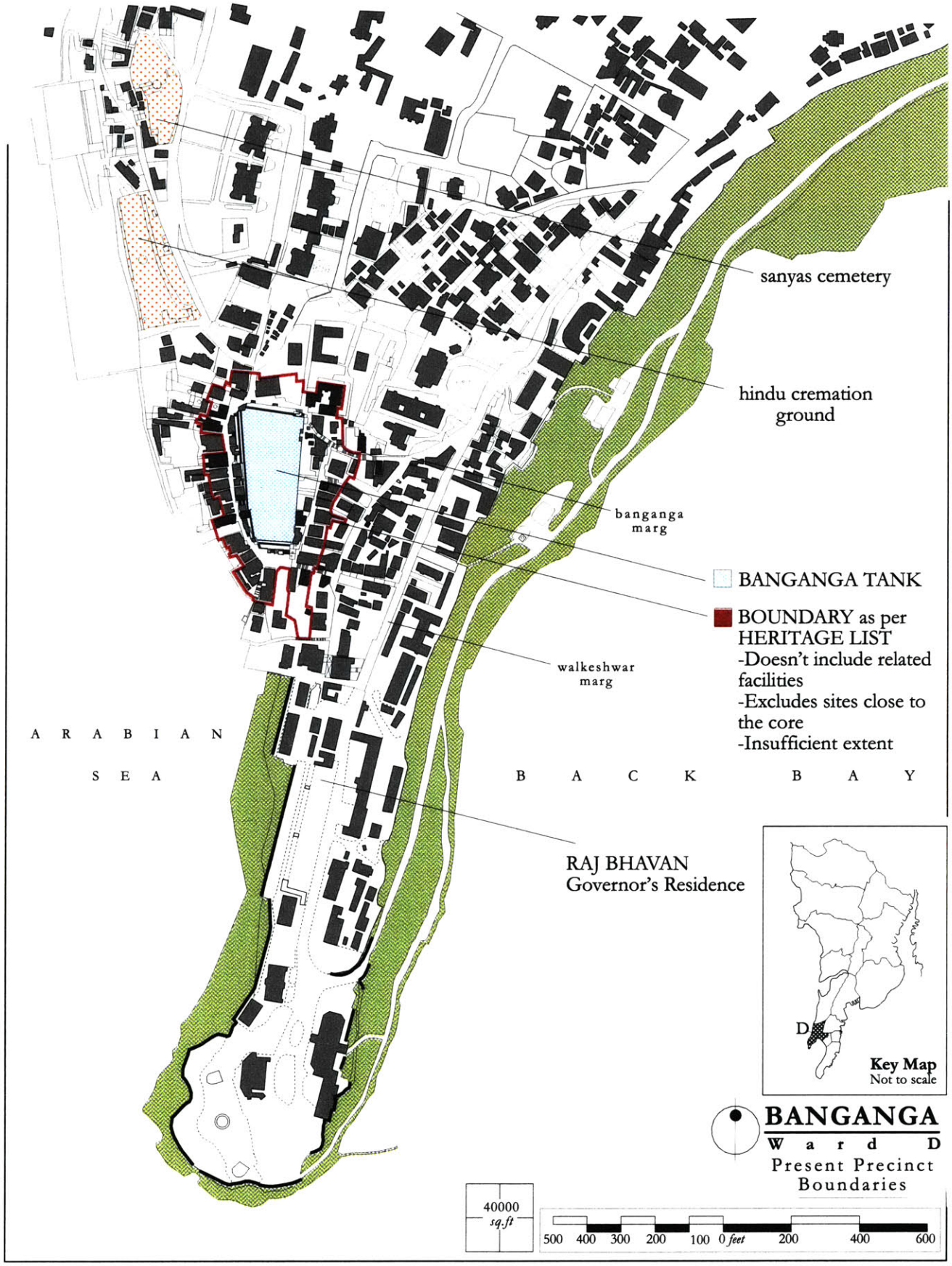
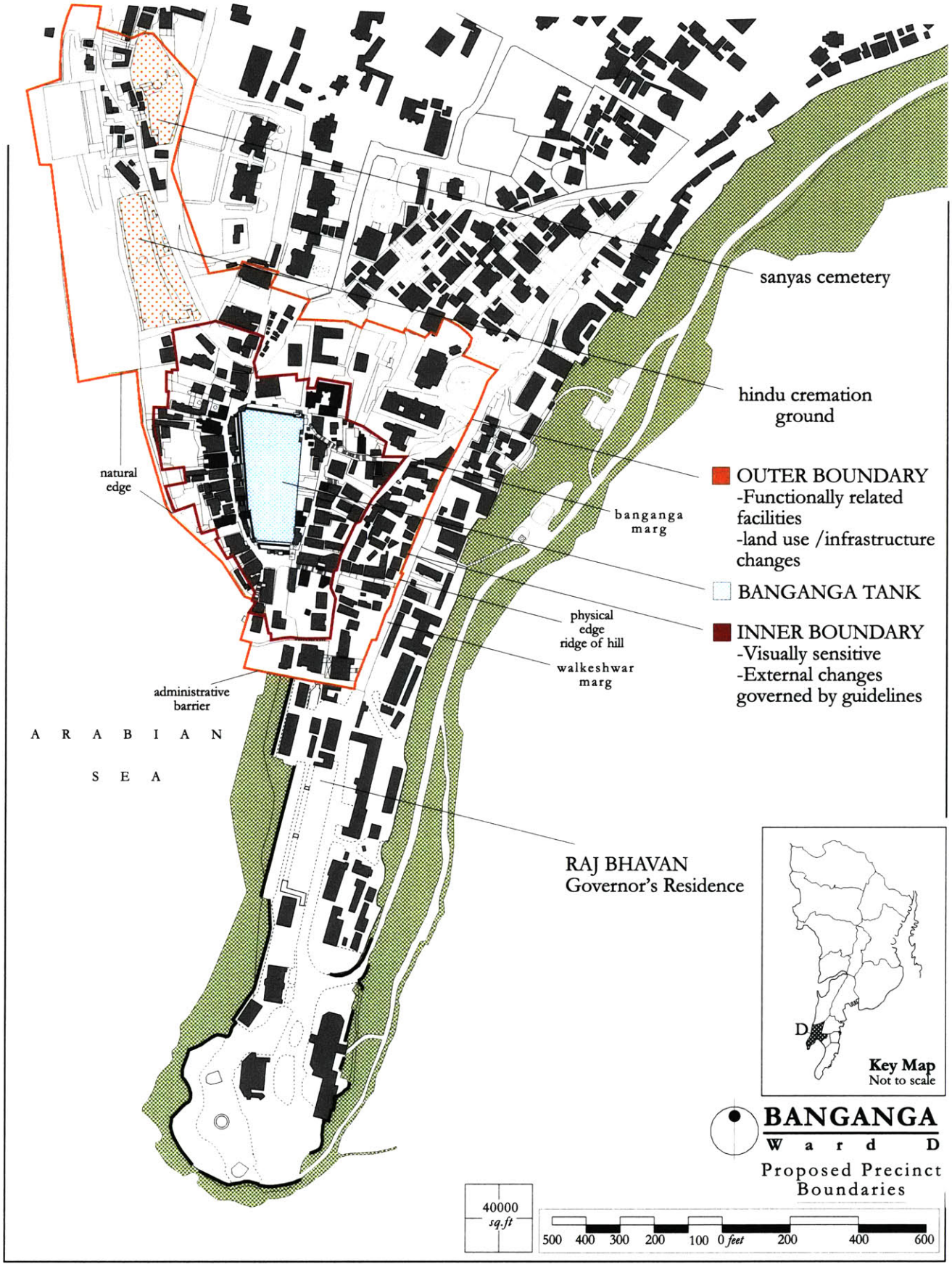

SP
C
C
RG
MP
SS
DG
MP
G
RM
PL
BBS
BBS
SS
Banganga Tank
RG
D
MP
sanyas cemetery
hindu cremation ground
banganga marg
walkeshwar marg
RAJ BHAVAN
Governor's Residence
A R A B I A N S E A
B A C K B A Y
MP Municipal Primary school
SS Secondary School
DG dhobi ghat
SP Sewage Purification Works
H Hospital
D Municipal Dispensary
RG Recreation Ground
G Garden
RM Retail market
BBS B.E.S.T. Bus Station
PL Parking Lot
Proposed Road
D
Key Map
Not to scale
BANGANGA
W a r d D
Sanctioned Development Plan, 1981-2001
40000 sq.ft
500 400 300 200 100 0 feet 200 400 600


SP
H
RG
MP
sanyas cemetery
SS
MP
G
BBS
RM
RH
RH
hindu cremation ground
DG
Banganga Tank
G
RG
SS
banganga marg
M
walkeshwar marg
A R A B I A N
S E A
MP
RAJ BHAVAN
Governor's Residence
B A C K B A Y
MP Municipal Primary school
SS Secondary School
DG dhobi ghat
SP Sewage Purification Works
H Hospital
M Mixed Use
RG Recreation Ground
G Garden
RM Retail market
BBS B.E.S.T. Bus Station
RH Slum Rehabilitation
Proposed Road
D
Key Map
Not to scale
BANGANGA
W a r d D
Proposed Development Plan
40000 sq.ft
500 400 300 200 100 0 feet 200 400 600


sanyas cemetery
hindu cremation ground
banganga marg
BANGANGA TANK
BOUNDARY as per HERITAGE LIST
-Doesn't include related facilities
-Excludes sites close to the core
-Insufficient extent
walkeshwar marg
A R A B I A N
S E A
B A C K B A Y
RAJ BHAVAN
Governor's Residence
D
Key Map
Not to scale
BANGANGA
W a r d D
Present Precinct Boundaries
40000 sq.ft
500 400 300 200 100 0 feet 200 400 600


sanyas cemetery
hindu cremation ground
natural edge
banganga marg
OUTER BOUNDARY
-Functionally related facilities
-land use /infrastructure changes
BANGANGA TANK
physical edge ridge of hill
INNER BOUNDARY
-Visually sensitive
-External changes governed by guidelines
walkeshwar marg
administrative barrier
A R A B I A N S E A
RAJ BHAVAN
Governor's Residence
D
Key Map
Not to scale
BANGANGA
W a r d D
Proposed Precinct Boundaries
40000 sq.ft
500 400 300 200 100 0 feet 200 400 600

1. Squatters
The slums are primarily on the western shore and account for close to 5% of the total land use

2. Western edge
The area is predominantly residential, with 60% of the total land use

3. Siddheshwar Temple
Temples and associate facilities constitute 20% of the total land use.

4. Main Square
Recreational/Public space makes up 10 % of the total land use.

- Residential
- Temples
- *Dharmshalas*
- Municipal school
- Squatters
- Mixed Use (Res.+Commercial)
- Mixed Use (Res.+Religious)
- Vacant
- Cremation Ground
- Banganga Tank

Residential and Institutional (temples and *dharmshalas*) land use account for 80 % of the land use. The water tank and other recreational areas within the precinct account for 10% of the land use. Public uses, like schools and dispensaries account

Narayan Dabholkar Marg

Banganga Marg

Walkeshwar Marg

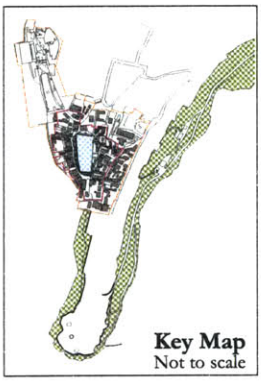
1.

2.

3.

4.

ARABIAN SEA



BANGANGA
Project Area
Land Use

1600 sq.ft.
100 80 60 40 20 0 feet 40 80 120

Over 100 years
Over 35 years
11 - 35 years
1 - 10 years
Under construction

1. Eastern Rim of Banganga Tank

Image shows the inner ring of buildings consisting of a majority of the older buidings and the outer ring next to the motorable Banganga Marg consisting many of newer the apartment buildings.

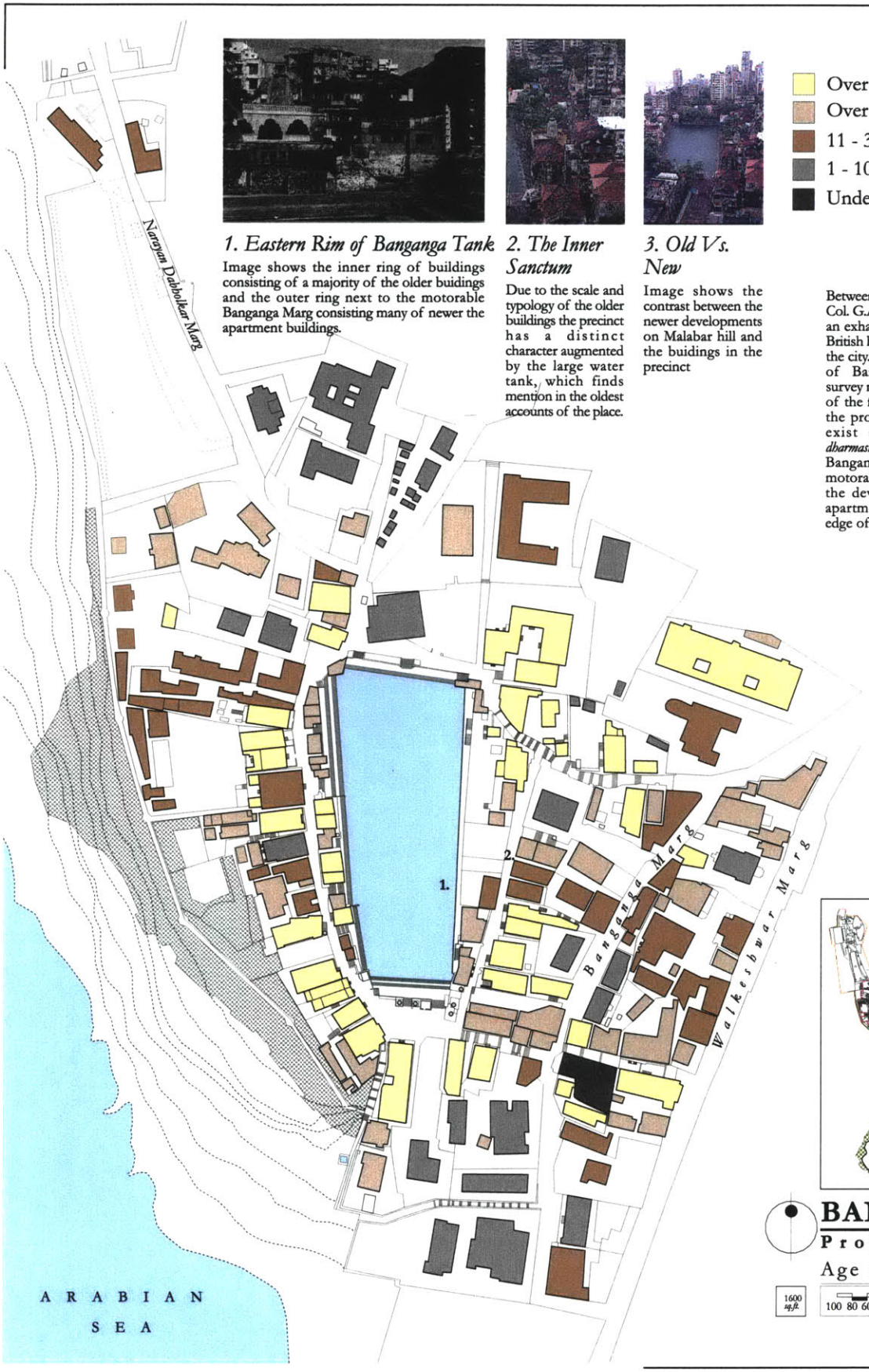
2. The Inner Sanctum

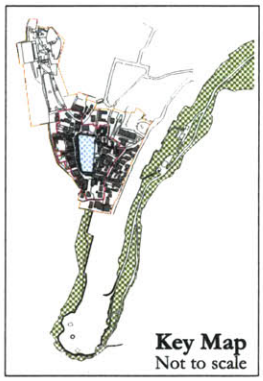
Due to the scale and typology of the older buildings the precinct has a distinct character augmented by the large water tank, which finds mention in the oldest accounts of the place.

3. Old Vs. New

Image shows the contrast between the newer developments on Malabar hill and the buidings in the precinct

Between 1870 and 1872 Lieut. Col. G.A. Laughon conducted an exhauastive survey of the British holdings in and around the city. Comparing the maps of Banganga with present survey maps we find that a lot of the fabric still remains.All the prominent temples still exist and most of the *dharmashalas* can still be found. Banganga Marg, the closest motorable road has initiated the development of many apartment buidings on this edge of the precinct.



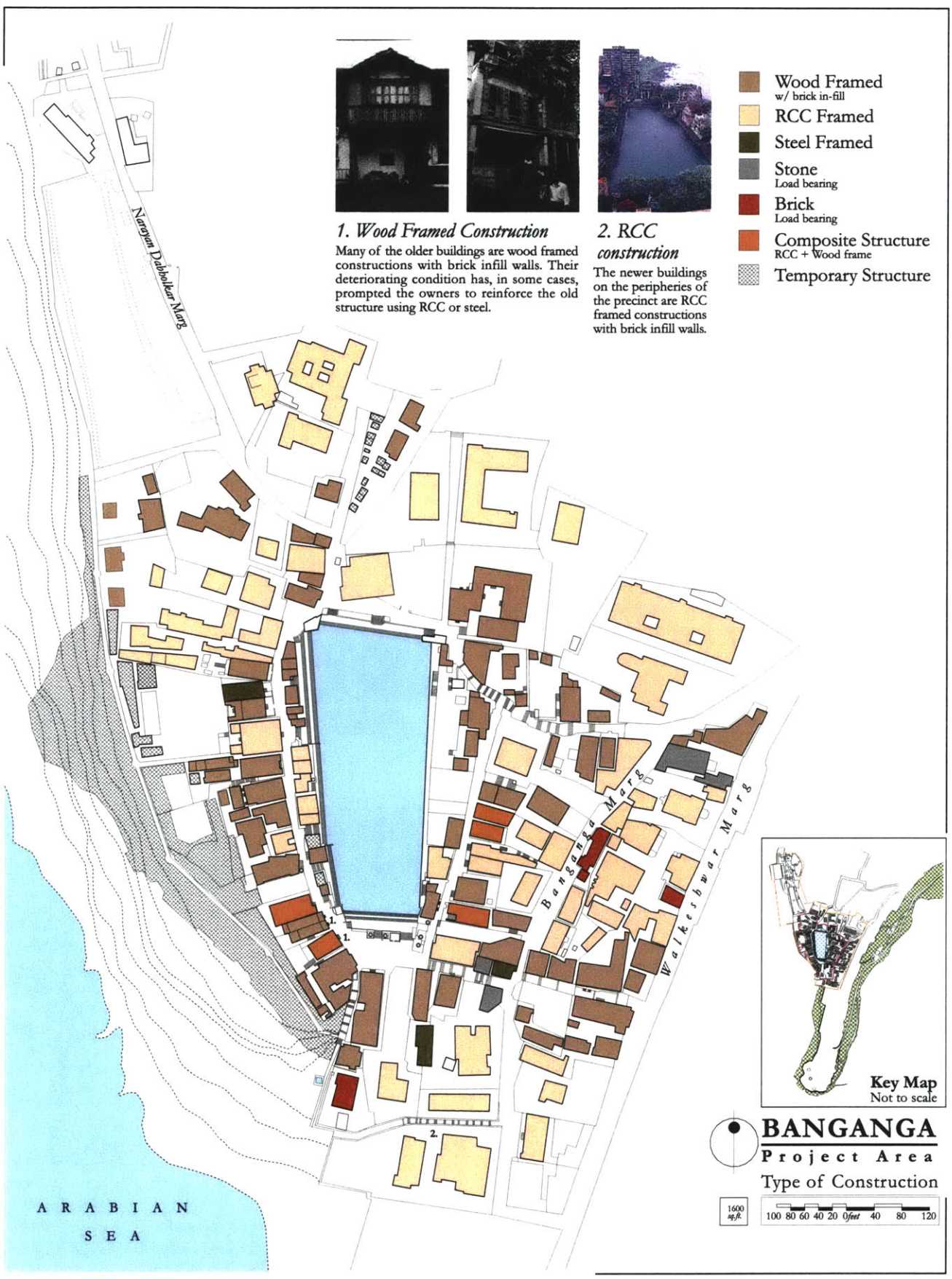


Key Map
Not to scale

BANGANGA
Project Area
Age of Structures

1600 sq.ft.

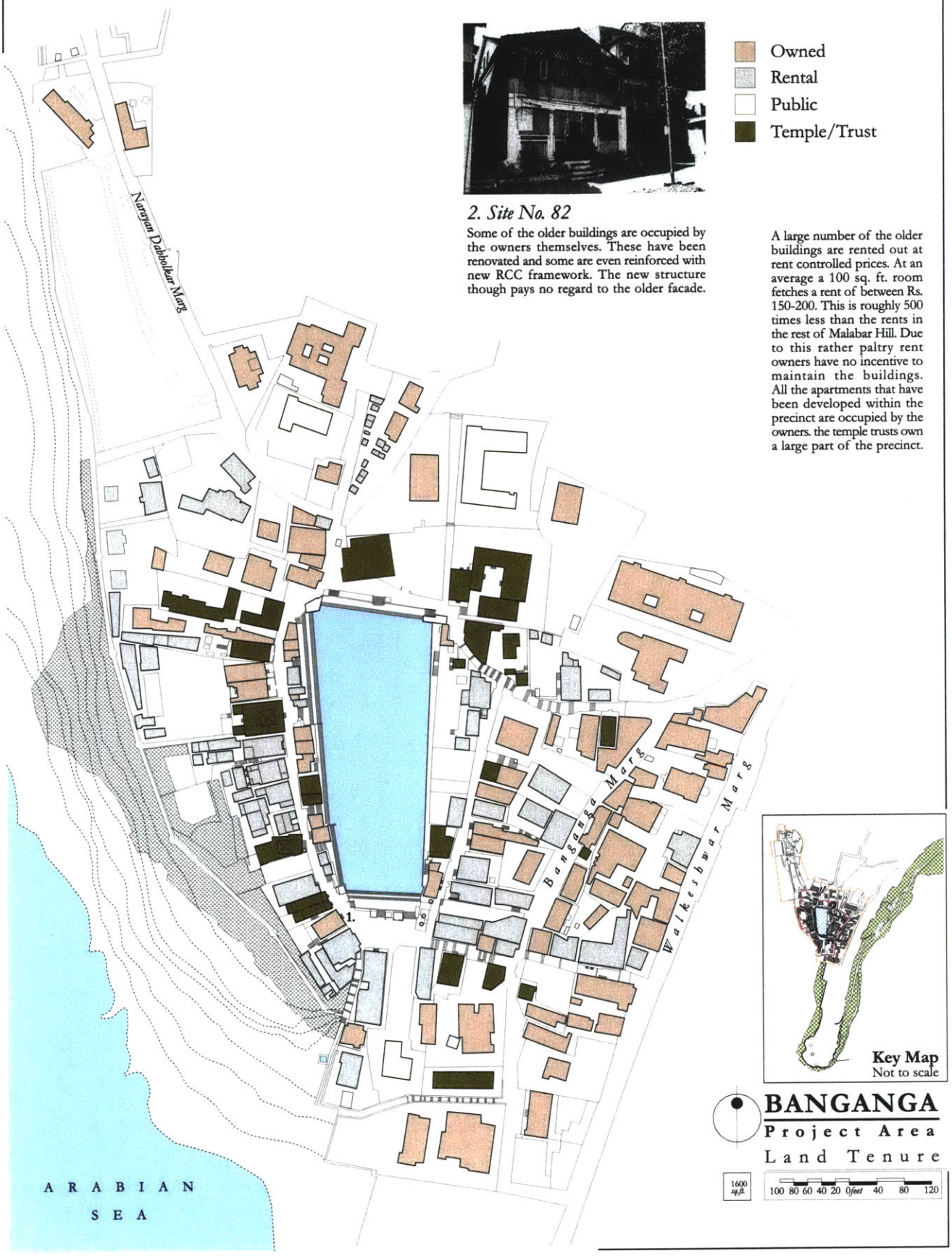
100 80 60 40 20 0feet 40 80 120


1. Wood Framed Construction
Many of the older buildings are wood framed constructions with brick infill walls. Their deteriorating condition has, in some cases, prompted the owners to reinforce the old structure using RCC or steel.
2. RCC construction
The newer buildings on the peripheries of the precinct are RCC framed constructions with brick infill walls.
Wood Framed
w/ brick in-fill
RCC Framed
Steel Framed
Stone
Load bearing
Brick
Load bearing
Composite Structure
RCC + Wood frame
Temporary Structure
Narayan Dabholkar Marg
Banganga Marg
Walkeshwar Marg
ARABIAN SEA
Key Map
Not to scale
BANGANGA
Project Area
Type of Construction
1600 sq.ft.
100 80 60 40 20 0 feet 40 80 120

2. Site No. 82

Some of the older buildings are occupied by the owners themselves. These have been renovated and some are even reinforced with new RCC framework. The new structure though pays no regard to the older facade.

A large number of the older buildings are rented out at rent controlled prices. At an average a 100 sq. ft. room fetches a rent of between Rs. 150-200. This is roughly 500 times less than the rents in the rest of Malabar Hill. Due to this rather paltry rent owners have no incentive to maintain the buildings. All the apartments that have been developed within the precinct are occupied by the owners. the temple trusts own a large part of the precinct.



1.Site No. 58

The deteriorating wood work and roofing have been substituted by cheaper materials like Tarpauline etc.

2. Site No. 3

During the annual Banganga Music festival certain visually important buildings are painted and renovated.

3. Site Nos. 59 and 63

The slums on the water front are mostly made of asbestos and waste. Some are in brick. They are mostly temporary.

Good Condition

Fair Condition
needs non-structural repairs and infrastructure improvements.

Bad Condition
needs structural repairs and infrastructure improvements.

Dilapidated

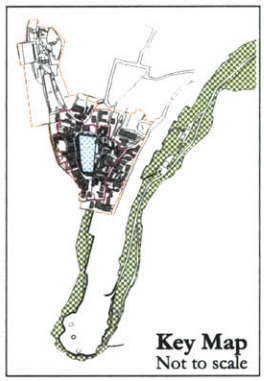
As most of the buildings come under the purview of the Rent Control Act, house owners cannot afford the high maintenance costs and buildings continue to deteriorate. Infrastructure within the precinct is completely unplanned, electrical and telephone lines run exposed, attached tentatively to wall surfaces and sewage and drainage haven't been addressed.

Narayan Dabholkar Marg

Banganga Marg

Walkeshwar Marg

ARABIAN SEA



Key Map
Not to scale

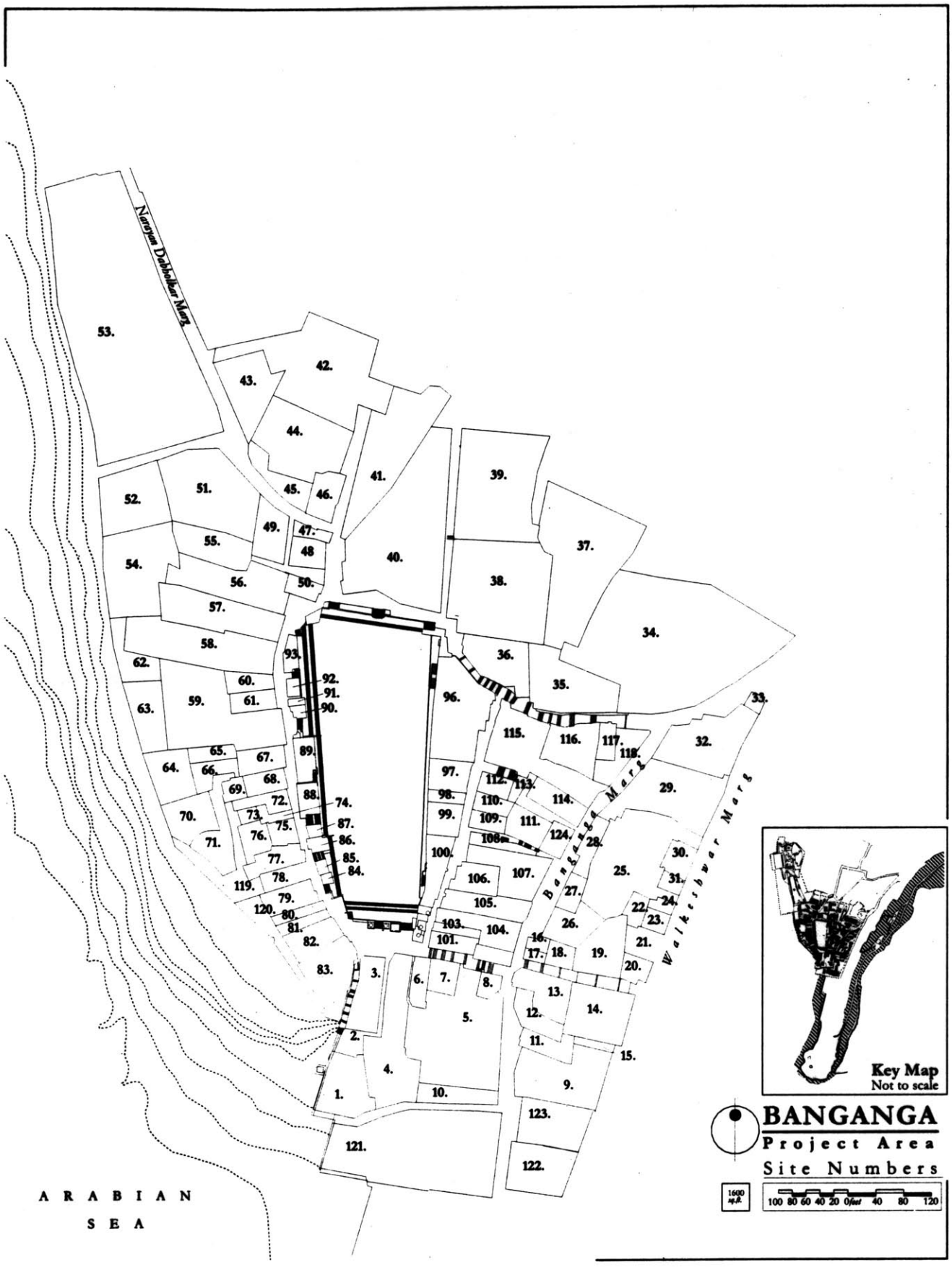
BANGANGA

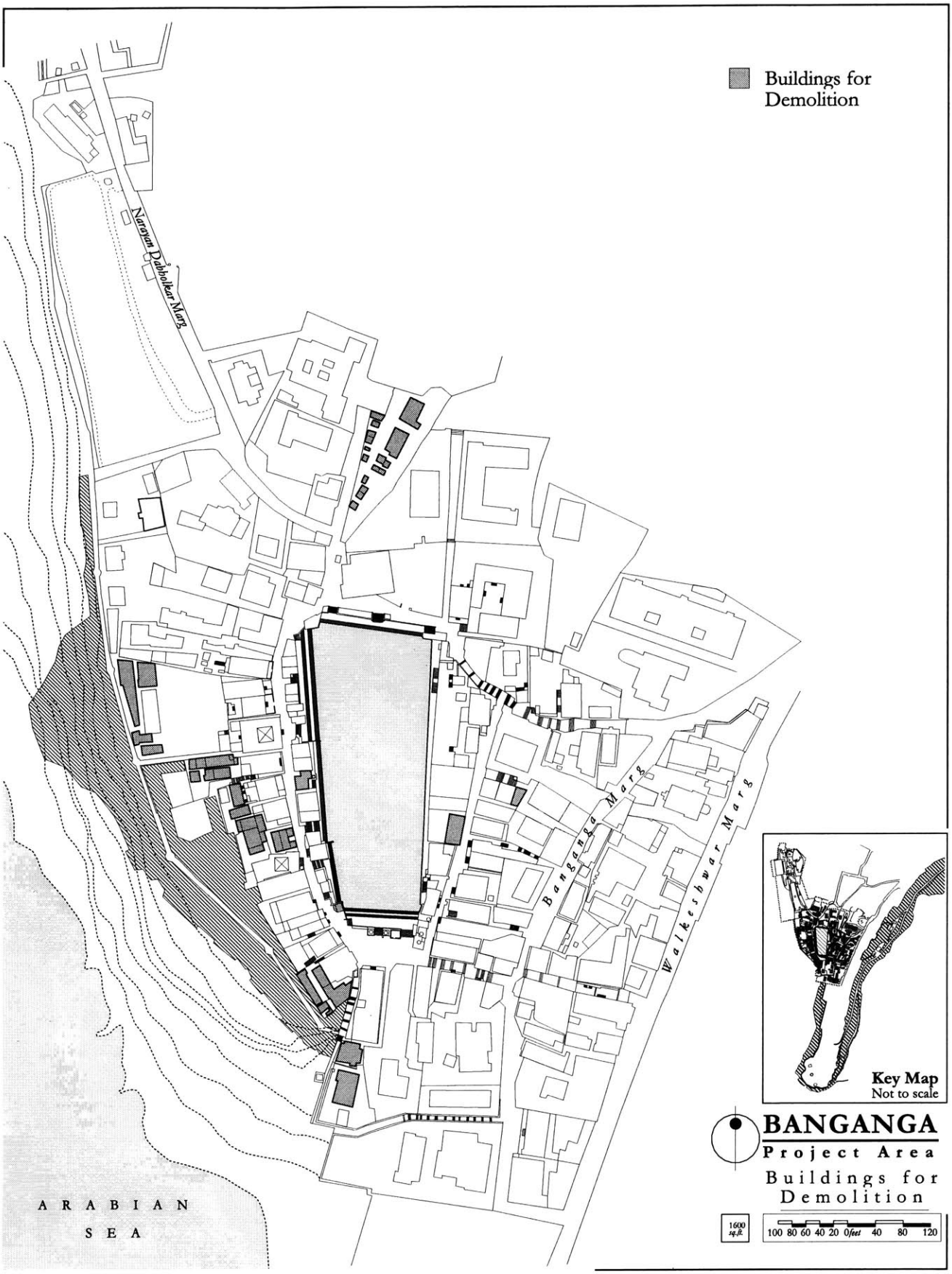
Project Area

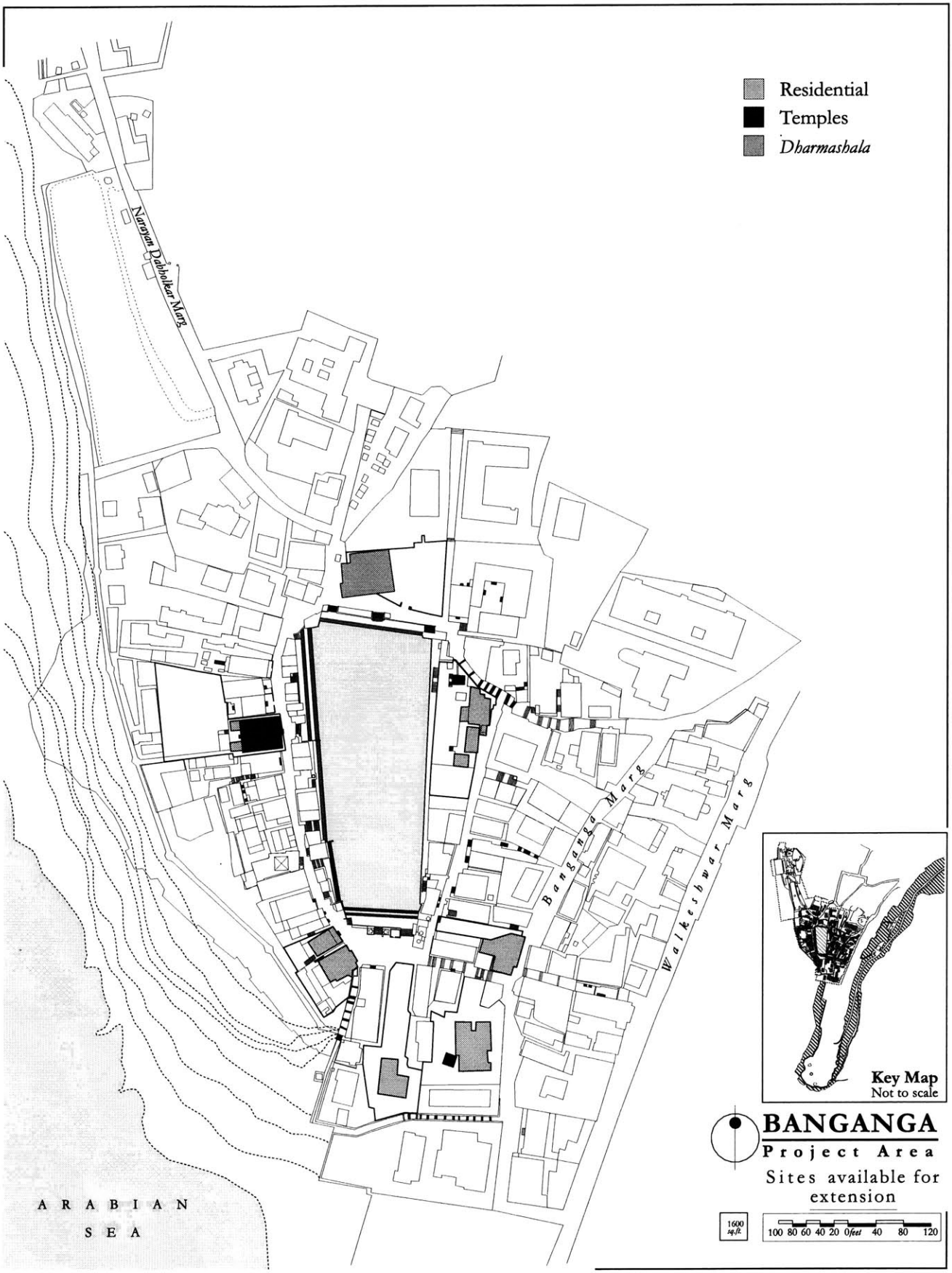
Building Condition

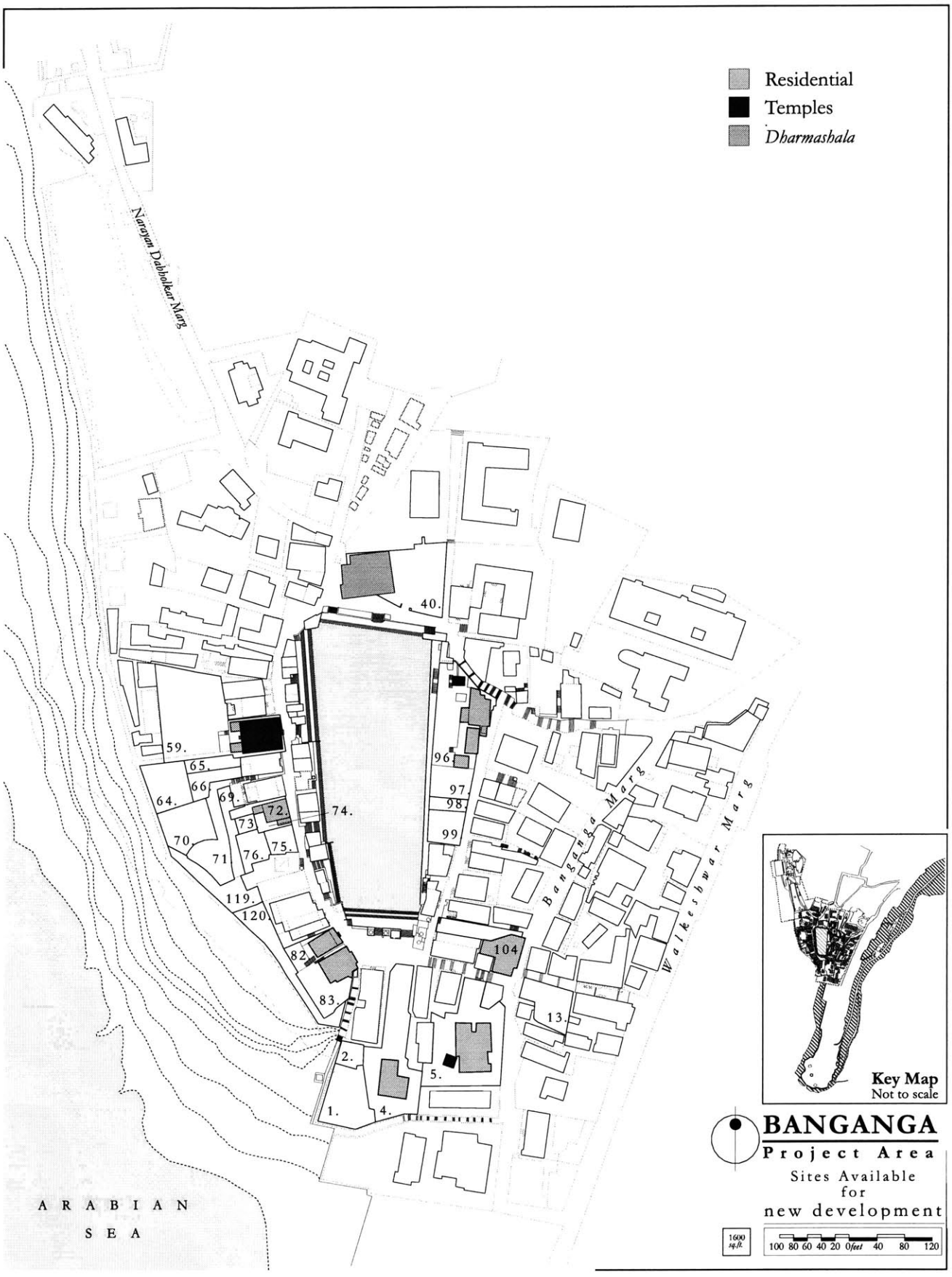
1600 sq.ft.

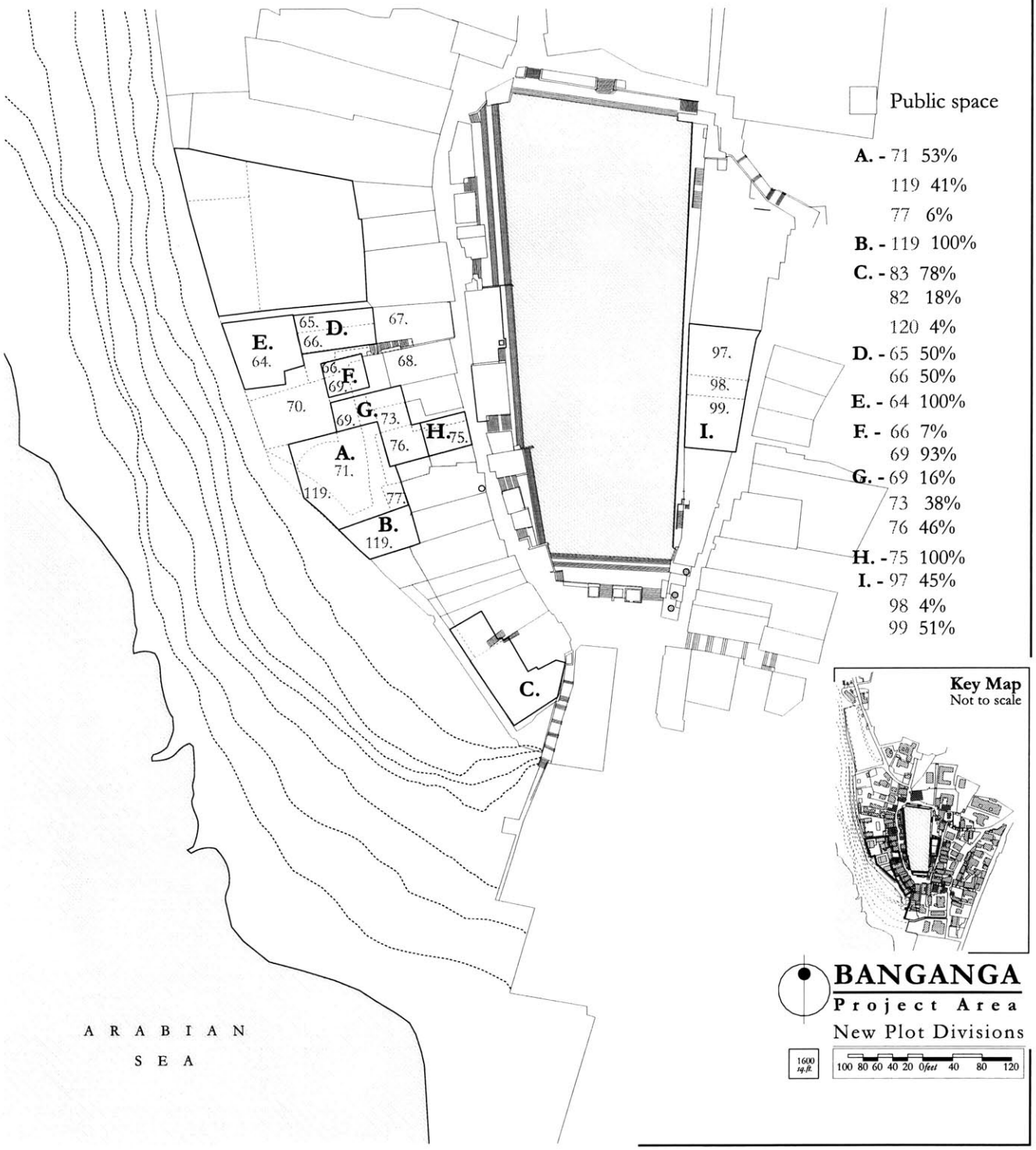
100 80 60 40 20 0feet 40 80 120


Narayan Dabholkar Marg
Banganga Marg
Walkeshwar Marg
ARABIAN SEA
Key Map
Not to scale
BANGANGA
Project Area
Site Numbers
1600 sq.ft.
100 80 60 40 20 0 feet 40 80 120

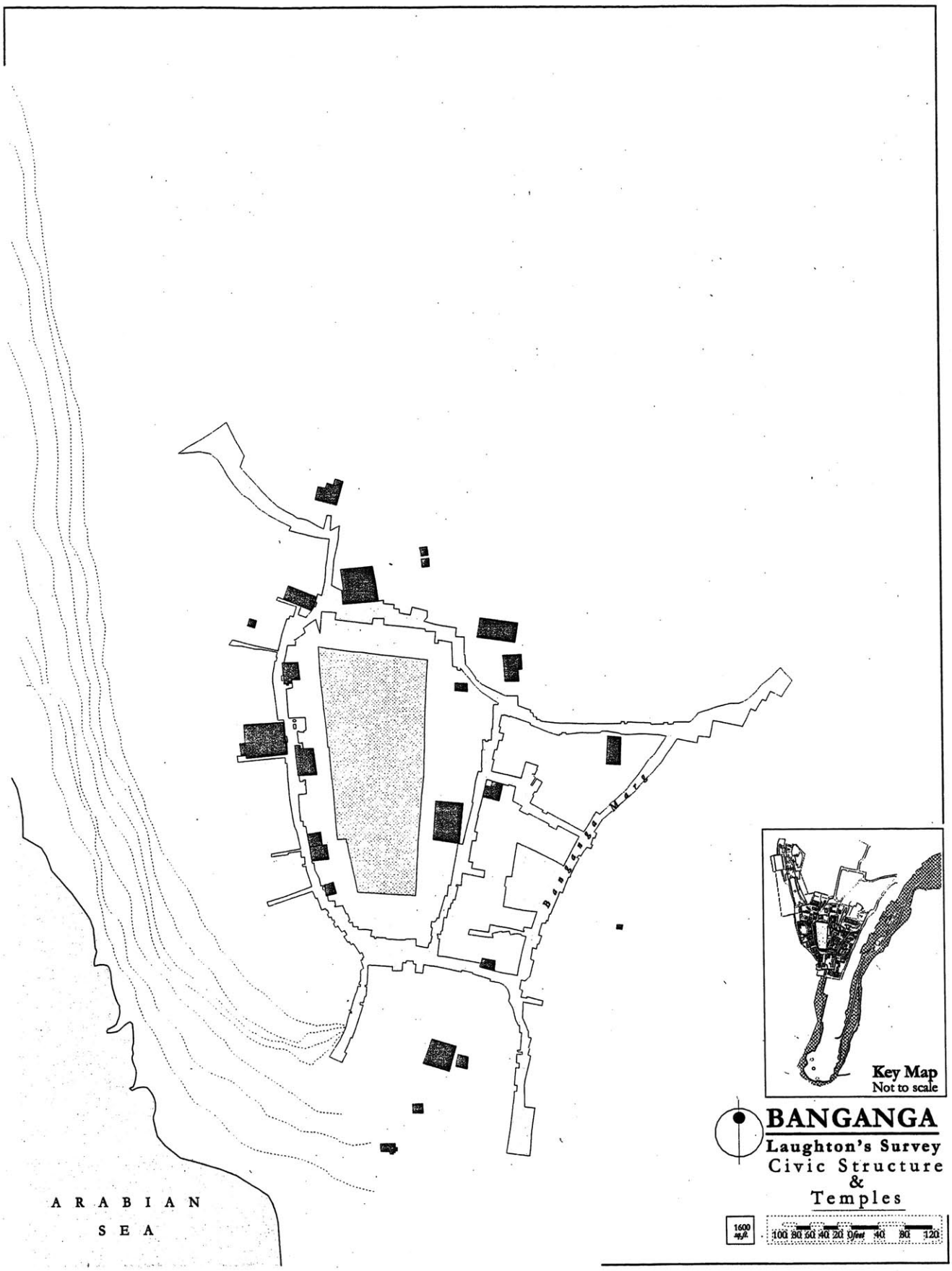

Buildings for Demolition
Narayan Dabholkar Marg
Banganga Marg
Walkeshwar Marg
ARABIAN SEA
Key Map
Not to scale
BANGANGA
Project Area
Buildings for Demolition
1600 sq.ft.
100 80 60 40 20 0 feet 40 80 120


Residential
Temples
Dharmashala
Narayan Dabholkar Marg
Banganga Marg
Walkeshwar Marg
ARABIAN
SEA
Key Map
Not to scale
BANGANGA
Project Area
Sites available for
extension
1600
sq.ft.
100 80 60 40 20 0feet 40 80 120

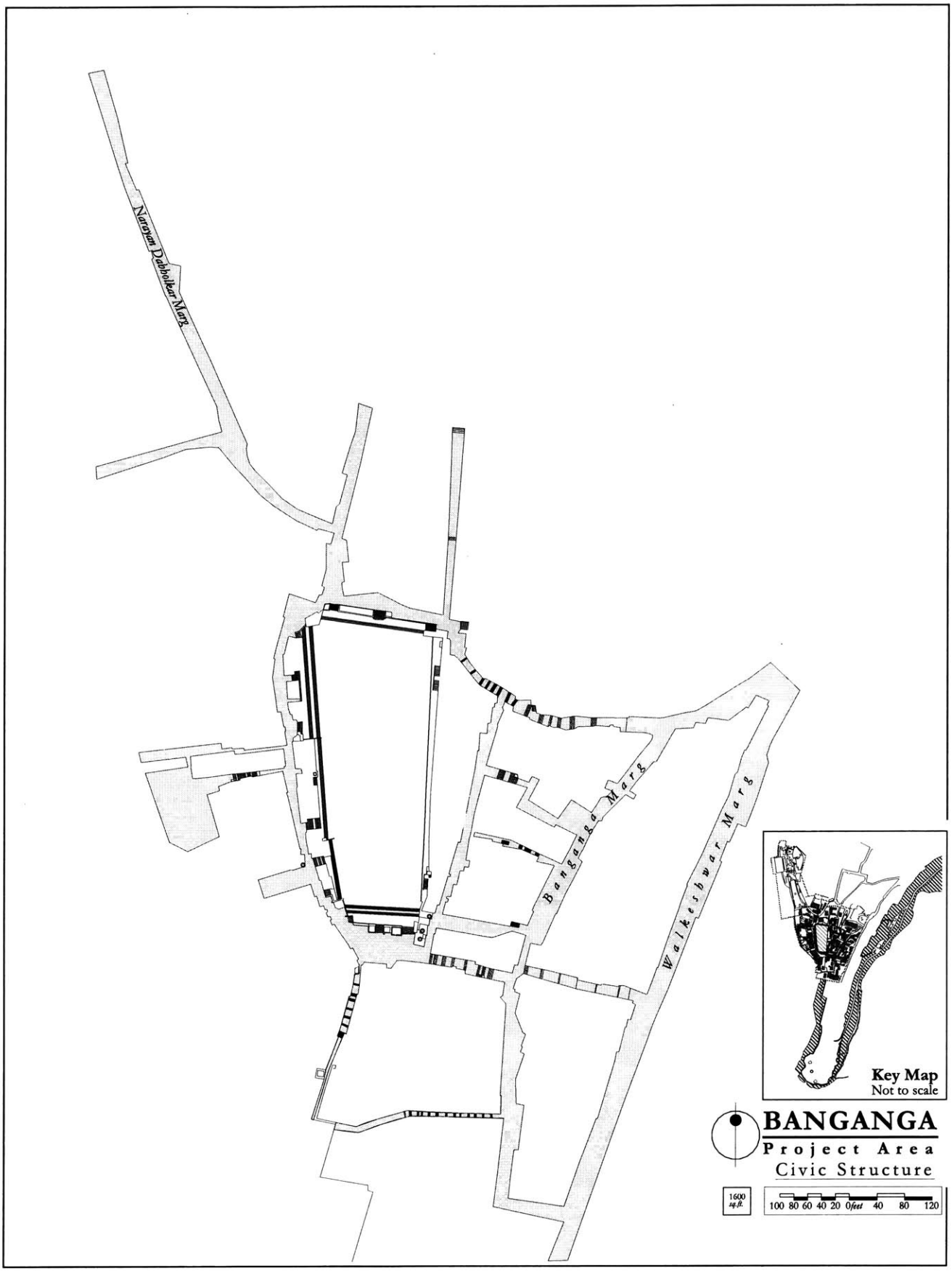

Residential
Temples
Dharmashala
Narayan Dabholkar Marg
Banganga Marg
Walkeshwar Marg
ARABIAN
SEA
40.
59.
65.
66.
64.
69.
72.
73
74.
70
71
76.
75.
119.
120.
82.
83.
104
96
97
98.
99
13.
2.
5.
1.
4.
Key Map
Not to scale
BANGANGA
Project Area
Sites Available
for
new development
1600 sq.ft.
100 80 60 40 20 0 feet 40 80 120


Public space
A. - 71 53%
119 41%
77 6%
B. - 119 100%
C. - 83 78%
82 18%
120 4%
D. - 65 50%
66 50%
E. - 64 100%
F. - 66 7%
69 93%
G. - 69 16%
73 38%
76 46%
H. - 75 100%
I. - 97 45%
98 4%
99 51%
Key Map
Not to scale
BANGANGA
Project Area
New Plot Divisions
1600 sq.ft.
100 80 60 40 20 0 feet 40 80 120
ARABIAN
SEA

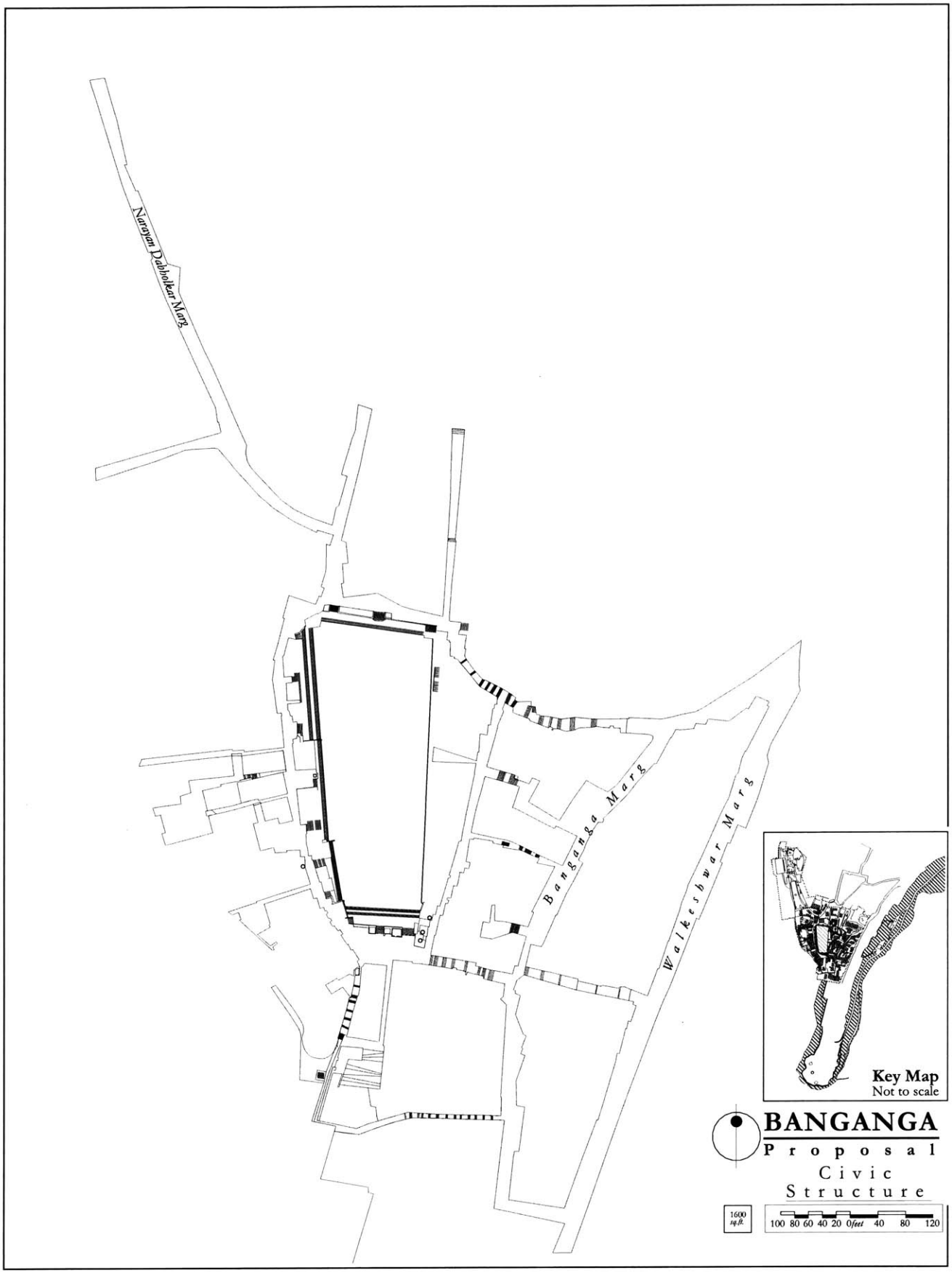
ARABIAN
SEA
Key Map
Not to scale
BANGANGA
Laughton's Survey
Figure Ground
1600 sq.ft.
100 80 60 40 20 0feet 40 80 120

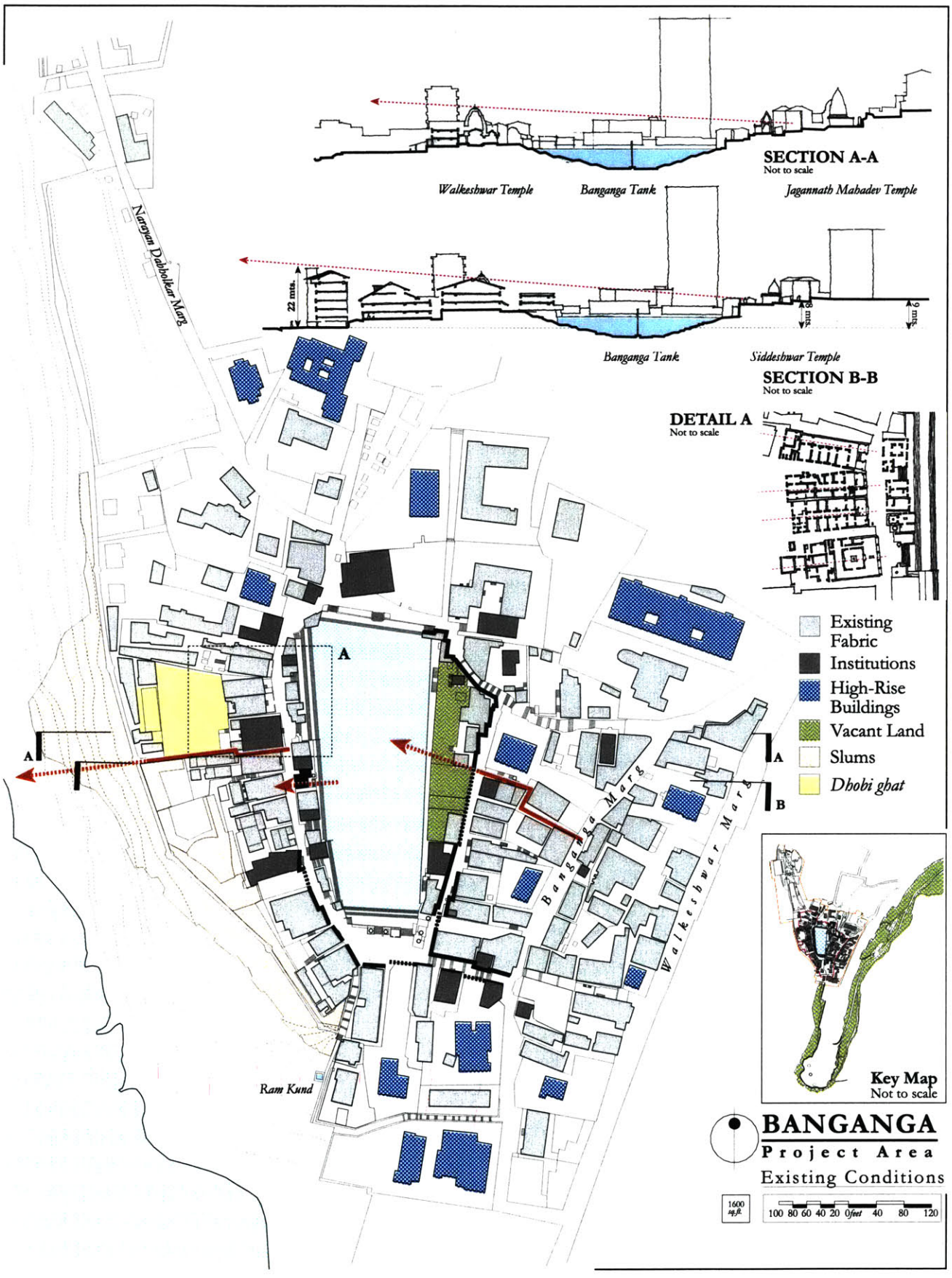

ARABIAN
SEA
Key Map
Not to scale
BANGANGA
Laughton's Survey
Civic Structure
&
Temples
1600 sq.ft
100 80 60 40 20 0 feet 40 80 120

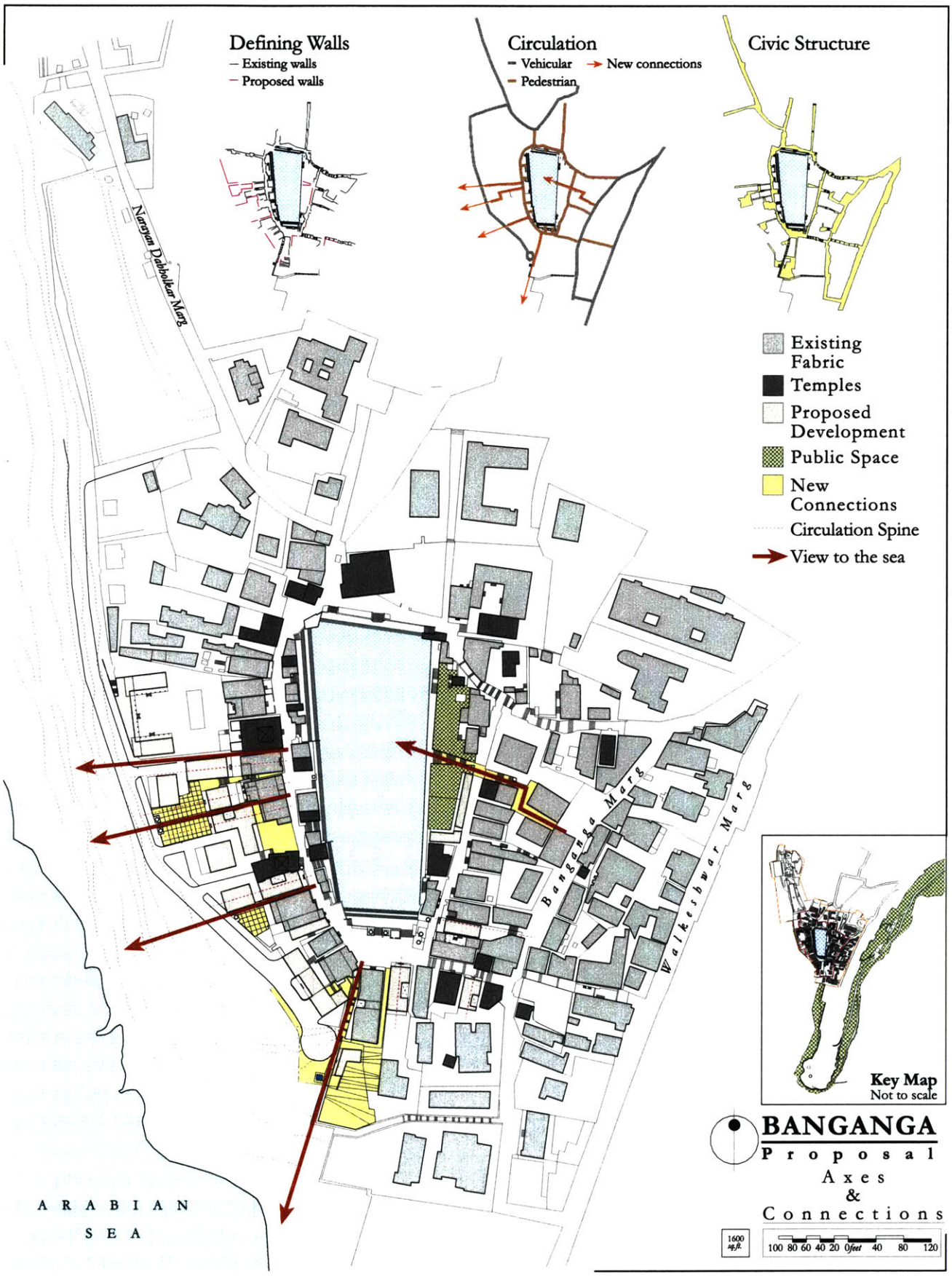
ARABIAN
SEA
Key Map
Not to scale
BANGANGA
Project Area
Figure Ground 1
1600
sq.ft.
100 80 60 40 20 0feet 40 80 120

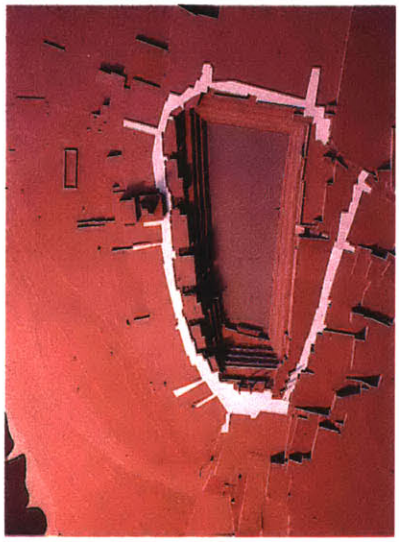

Narayan Dabholkar Marg
Banganga Marg
Walkeshwar Marg
Key Map
Not to scale
BANGANGA
Project Area
Civic Structure
1600 sq.ft.
100 80 60 40 20 0feet 40 80 120

Narayan Dabholkar Marg
Banganga Marg
Walkeshwar Marg
ARABIAN
SEA
Key Map
Not to scale
BANGANGA
Proposal
Figure Ground
1600
sq.ft.
100 80 60 40 20 0 feet 40 80 120

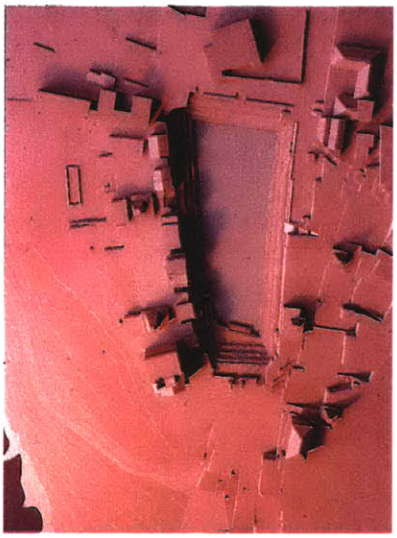

Narayan Dabholkar Marg
Bangalore Marg
Walkeshwar Marg
Key Map
Not to scale
BANGANGA
Proposal
Civic
Structure
1600 sq.ft.
100 80 60 40 20 0 feet 40 80 120


SECTION A-A
Not to scale
Walkeshwar Temple
Banganga Tank
Jagannath Mahadev Temple
22 mts.
8 mts.
9 mts.
Banganga Tank
Siddeshwar Temple
SECTION B-B
Not to scale
DETAIL A
Not to scale
Narayan Dabholkar Marg
A
A
A
B
Banganga Marg
Walkeshwar Marg
Ram Kund
Existing Fabric
Institutions
High-Rise Buildings
Vacant Land
Slums
Dhobi ghat
Key Map
Not to scale
BANGANGA
Project Area
Existing Conditions
1600 sq.ft.
100 80 60 40 20 0 feet 40 80 120

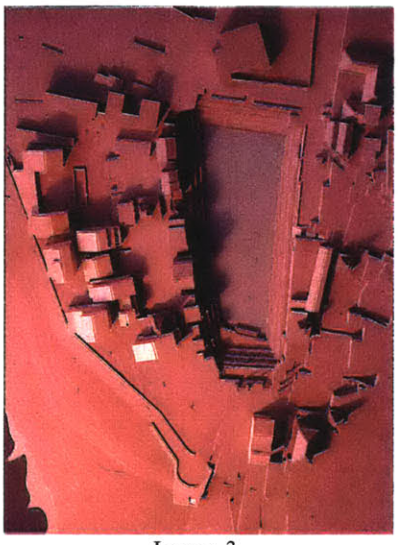

Defining Walls
– Existing walls
– Proposed walls
Circulation
– Vehicular → New connections
– Pedestrian
Civic Structure
Narayan Dabholkar Marg
Existing Fabric
Temples
Proposed Development
Public Space
New Connections
Circulation Spine
View to the sea
Banganga Marg
Walkeshwar Marg
ARABIAN SEA
Key Map
Not to scale
BANGANGA
Proposal
Axes & Connections
1600 sq.ft.
100 80 60 40 20 0feet 40 80 120



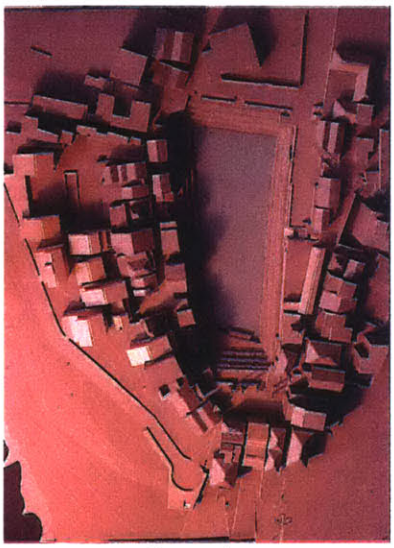
Layer 1.
The Inner Street



Layer 2.
Religious Institutions

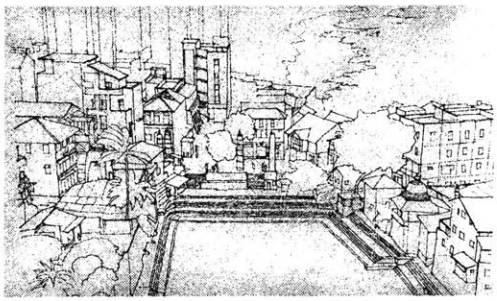


Layer 3.
Proposal
+
Religious Institutions



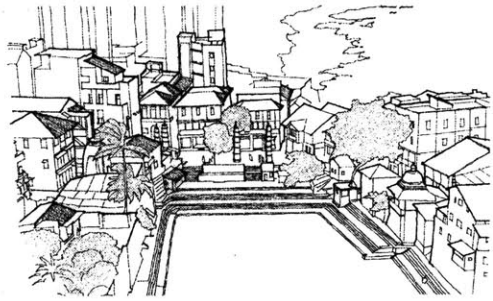
Layer 4.
Banganga:
Sacred Tank

BANGANGA
Proposal
Layer Study



Existing Condition

Site nos. 4 & 78
Site 4 is publicly owned and part of the plot is occupied by a new building housing a Municipal Dispensary and housing.
Site 78 is now a **park** looking out to the sea.

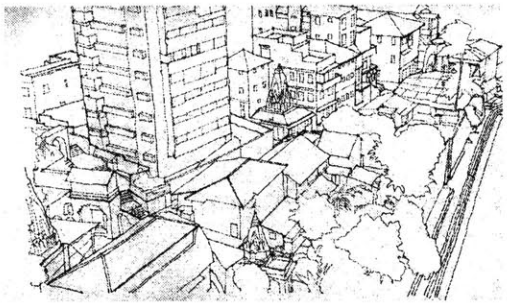


Proposed Development

Site nos. 4 & 78.
An **extension** is planned on site 4. This will be a **residential** building housing those who will be displaced during demolition.
A new **residential** building is planned on site 78. the strong site constraints produce a building much like the *havelis* - central corridor and courtyard.

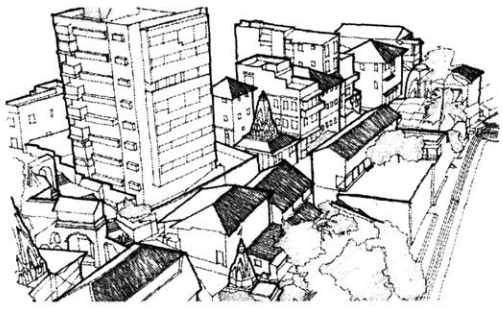
Banganga
Proposal

Views



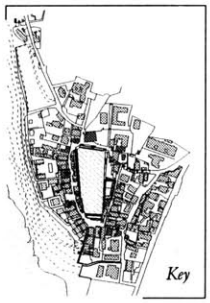
Existing Condition

Site nos. 97, 98, & 99.
The sites are now largely **unused**. Site no. 97 is under **litigation**.
Previous **connections** to the tank have been covered over after the retaining wall collapsed and the sites were refilled.



Proposed Development

Site nos. 97, 98, & 99.
Guest rooms for pilgrims and small scale **commercial** use.
The outer face of the structure follows the site edge and **defines** the inner street.



Banganga
Proposal

Views