LISTING AND GRADING OF HERITAGE BUILDING & PRECINCTS IN RURAL AREAS OF RAIGAD DISTRICT IN MMR FOR MMRHCS

August 2012: Stage 4: Final List With Grading

FINAL REPORT **VOLUME I**



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PART 3

Final List in DCR 67 format

Taluka Alibag

Taluka Panvel

Taluka Uran

Taluka Karjat

Taluka Khalapur

Taluka Pen

INTRODUCTION

The FINAL LISTING process formally commenced post the Draft Listing Report stage. The primary aim was to cover all the 565 villages to rule out any possibility of missing any heritage. After the detailed surveys, detailed assessment and the process of elimination the challenge was to include the finest examples and avoid clutter. The Final List thus includes 109 sites from the region.

REPORT REVIEWS

The Inception Report was reviewed by the MMRHCS Sub-Committee on 15 February 2010 and approved therein. The Committee made following primary suggestions:

- Develop a historic narrative to guide the heritage identification.
- Enlarge Archival framework
- Contact local experts, elders
- Develop a clear framework to identify the heritage

The Draft List with Grading was reviewed by the MMRHCS Sub-Committee on 24 November 2011 and approved with following key suggestions:

- Forests areas may be included with cultural significance.
- Rivers should be excluded
- Matheran Eco-sensitive zone should be delineated as heritage zone.
- The Kanakeshwar Temple and surroundings should be delineated as a Precinct.

The suggestions were incorporated and the revised draft list was submitted on 31 January 2012.

STRATEGY FOR HERITAGE IDENTIFICATION

Post the survey and the inception report the strategy for heritage identification was streamlined in 3 broad categories. The known heritage properties, either documented previously or identified during the survey were grouped together. These were to be studied and documented at a later stage. The second group was the one identified through research. The third group was the one to be identified on field.

Strategy for Grading of Heritage

The grading strategy is based on the guidelines provided by DCR 67. A standard numerical matrix was developed based on the value classification. The format is given below:

All the structures were marked on a scale of 100 for each of the values. These marks are as follows:

Very good (80+)

Good (60 to 80)

Average (45 to 60)

Poor (up to 45)

KNOWN HERITAGE

As a strategy it was decided to include all World Heritage sites, ASI properties, all forts, forest, etc. in the draft list. Post the actual visit and in discussions with MMRHCS this list could be critically reviewed and eliminations could be done. The natural heritage values are presently not included in DCR 67 but the process has commenced.

The List of Known heritage is given in Annexure 1.

HISTORICAL RESEARCH

The historical research commenced even prior to the survey and was used to give directions for the actual search in the field. This research was also categorised further for ease of documentation and to prepare an independent checklist of heritage properties. The checklist is attached at *Annexure 2*.

Literature survey

Various books, gazetteers, journals, magazines, travelogues, articles were referenced in the major libraries and even local libraries for indications of any heritage footprint. Government offices, archives, reports and studies by various study or NGO's were also referred. Alternatively, heritage which was identified through the field survey was also checked for historical mentions or noting. The bibliography of the key books referred to is attached at *Annexure 3*

Resource persons

Historians, Local historians, Research scholars, students, were identified and were contacted for directions as well as information. Apart from these, during the survey visit the local gram panchayat offices – gram sevaks were of great help. Senior citizens, social workers, journalist were accessed for information. Interestingly, it was also noted that teenagers, especially with local dhaba's or travels, were good field guides and helped in identifying heritage in the non populated areas. A list of resource persons is attached at *Annexure 4*

Maps

A conscious effort was made to find old maps of the region to help to identify built heritage within the region. These were overlapped with the present day maps for locating the existing footprints. A list of maps referred to is attached as *Annexure 5*, along with the maps.

Internet

The internet gave access to e-books, websites, blogs which added to the information collected through the literature survey. The list of websites referred to given at *Annexure 6*

Data recording

The data collected during the survey was recorded in pre-decided format. These made the data collection and analysis easier. The formats used for recording were given in the inception report.

Base maps were prepared for survey, route mapping and zoning. These were useful not only in the field but also to locate the heritage property on Google maps / Grampanchayat maps.

Interviews with local resource persons were audio recorded.

RURAL RAIGAD – A HISTORICAL RETROSPECTIVE

250 BC to 100 AD -

During this era, the Mauryan Empire expanded southwards to include the Konkan region of Maharashtra. The policies of the rulers led to flourishing trade and the development of Buddhist learning in that region. With the disintegration of the Mauryan Empire, Maharashtra came under the rule of the Satavahanas who ruled Maharashtra from circa 230 BC to AD 225. Two types of structures are associated with early Buddhism: Viharas and Stupas. Originally, Viharas were temporary shelters used by wandering monks during the rainy season, but these structures later developed to accommodate the growing and increasingly formalized Buddhist monasticism.

Heritage structures built during this period: Kondane Caves

100 AD to 1000 AD -

The Vakatakas (AD 250 to 525) brought the region under their rule and, during that period, Maharashtra witnessed an overall development in the fields of learning, the arts and religion with their generous support. The next important dynasty of Maharashtra was that of the Chalukyas, from AD 550 to 760 and then again from AD 973 to AD 1180. The Rarashtrakutas, defeated the Chalukyas by AD 753 and established their dynasty, with their rule ending in AD 973 by the Kalyani Chalukyas.

Heritage structures built during this period: Gharapuri Island Complex, Dhak Complex

10th century to 15th century -

The Kalyani Chalukyas continued their rule up to AD 1189, when the Yadavas of Devagiri caused their downfall. The Yadavas extended their authority over a large territory, practised religious tolerance, patronised the Marathi language, which received the status of a court-language, and included in their clan the great saint-poet Dnyaneshwar, the pioneer of the Bhakti devotional movement in Maharashtra. In the early fourteenth century the Devgiri Yadavs were overthrown by the northern Muslim powers. These waging wars for the power prompted many forts being built in treacherous territories.

Heritage structures built during this period: Kankeshwar Mandir Complex, Karnala Fort

16th Century -

Heritage structures built during this period: Palasdari Fort

17th Century -

The Maratha Empire was founded and consolidated by Maharaja Shivaji Bhosale. He created an independent Maratha Kingdom with Raigad as its capital and successfully fought against the Mughals to defend his kingdom. The British East India Company was also struggling to secure commercial monopoly on the west coast and regarded the growing power of Shivaji as a potential danger. Shivaji shrewdly guessed of British intentions of territorial acquisition under the guise of trade and commerce. The Maratha Empire is also credited for the laying the foundation of the Indian navy and bringing about a considerable change in naval warfare

Heritage structures built during this period: Alibag, Khanderi and Underi Forts

18th Century -

The Peshwas did not anticipate the opportunist British mentality. Peshwa Nanasahab invited them to crush the Angres of Kolaba in 1754. The Marathas thus dug their own grave and the British slowly worked the fall of the Maratha Empire.

Heritage structures built during this period: Kolgaon Navigation Beacon, Sagargad

19th Century -

When the third and final war broke out with the British in 1817, Bajirao II finally submitted to the British on June 3, 1818, and the glory of the Maratha power vanished.

Heritage structures built during this period: Bhor Ascend

20th century -

Heritage structures built during this period: Sculptor V. P. Karmarkar's House and Museum

THE HERITAGE FABRIC

The Built Heritage

The built heritage covers a wide variety of residential, public/ religious structures including Wadas, Step-wells, Mandirs, Schools

The Unbuilt Heritage (Natural Heritage)

The Unbuilt Heritage covers natural elements and ecosystems covering, forests, groves, hill ranges, beaches and fresh water bodies (natural as well as human-made). A few prominent ones having cultural significance are listed under this category.

The mangroves near the Rewas Port have been included in this listing. The Matheran Range Precinct listed in this survey includes the peaks and forts from Badlapur Hill in the north to Irshalgad in the south.

THE PEOPLE

The Raigad region has a diverse number of ethnic and religious communities.

Kolis:

The Koli community is mainly engaged in fishing and farming and are spread across the Konkan belt. Most of their colonies are found close to the seashore and called as Koliwadas. Kolis almost exclusively speak Marathi language, though some Koli communities speak a variant dialect of Marathi. The Koli community has its own distinct identity and lively dances. Most Kolis have Khandoba and Bhavani as their family deity. Besides these worship of many local deities is common with special affinity to goddess Ekveera of Karla.

Marathas:

The Maratha community is situated all the way from Mumbai to Karwar (Karnataka). Marathas in Raigad speak pure Marathi. All Royal families of Marathas have migrated to Konkan area from the Marathwada region of Central Maharastra. These royal Marathas have also brought Karhade Brahmins along with them. As these people are from royal families along with these Kshatriyas, a large number of people dependent on them like 12 Balutedars (Sutar, Lohar, Nabhik, Shimpi) and other service class communities like Dhobi, Khatik also migrated with their Dhani (owner).

Siddis:

The Siddis are North African pirates who were shipwrecked near Ratnagiri. They quickly organized themselves and gained control of the surrounding territory. The Janjira fort was occupied and held by them for a long time. They are Muslims and are found around Ratnagiri and Raigad.

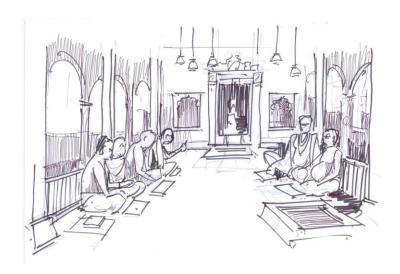
Bene Israeli:

The Bene Israelites were originally Teli by caste, Vaishyas or Shudras specializing in the extraction of vegetable oil and its commerce. It is claimed that they descended from Jewish refugees in the Konkan. However, their mother tongue is Marathi, not Konkani.

Tribals:

The main inhabitants of this area are tribals.

Three tribes, viz. *Thakurs, Mahadev Kolis* and *Katkaris* constitute a majority of the population. *Thakurs* and *Mahadev Kolis* own land and practise agriculture but *Katkaris* are generally landless. *Mahadev Koli* tribals are relatively better off while *Thakur* and *Katkaris* are poor. The *Katkari* tribe has been notified as one of the three "primitive" tribes in the state of Maharashtra. They live in abject poverty and most of the families work as bonded labour on brick making enterprises.



Brahmin community



Agri women

Tribal women



Koli Community

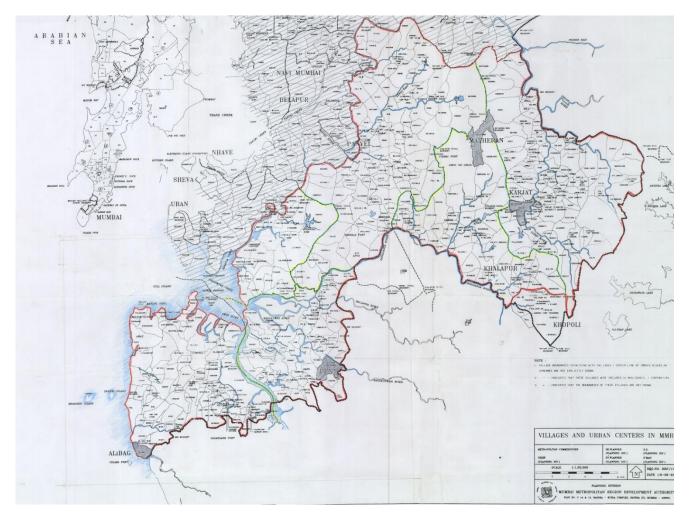
FIELD SURVEY

The field survey was planned as a twofold approach; one consisting of administrative boundaries and second consisting of natural or manmade features.

ADMINISTRATIVE DIVISIONS

The entire site was divided into 6 zones based on the administrative boundaries i.e. the talukas and villages. The list of villages provided by MMRHCS was used as a checklist to cover all areas.

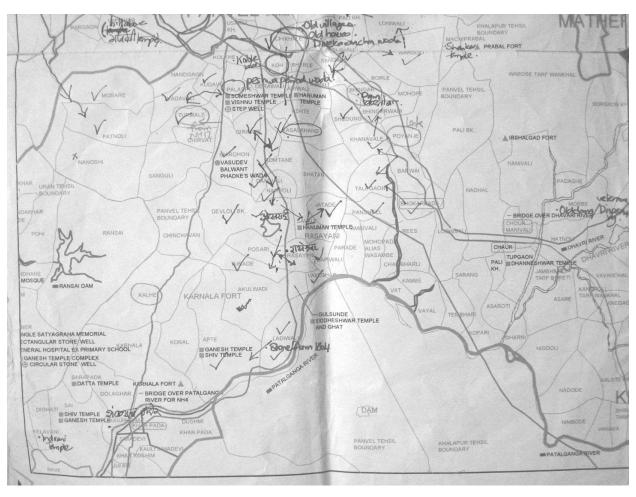
Talukas & Villages

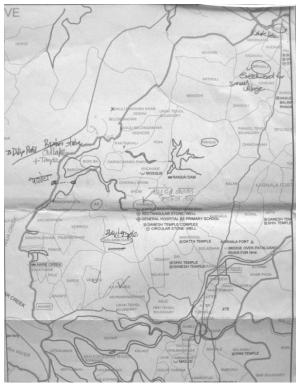


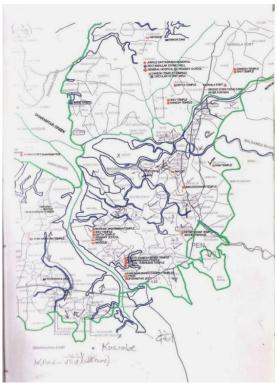
MMR RAIGAD DISTRICT VILLAGES & TOWNS

- Alibag 107 villages; Karjat 108 villages; Khalapur 62 villages;
- Panvel 153 villages; Pen 74 villages; Uran 61 villages

The aim was to cover all the 565 villages in order to ensure that the no area was left uncovered. The route map used for the site survey is given below. One week period was devoted to each taluka for the survey. Another week was devoted for all the talukas to cover the missing links







SURVEY BASE MAP

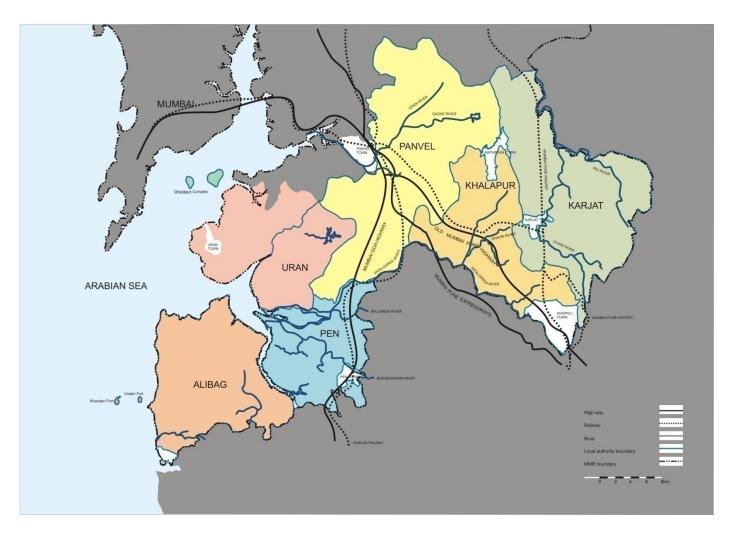
Specific Zones

Apart from the villages specific zones were surveyed to identify heritage sites. These were:

• Mumbai Pune Railway Line

There are three main railway lines that pass through the scope of our study. The first is the Bombay-Pune line via Kalyan-Karjat till Jambrung, the second is the Karjat-Khopoli line and the third is the Karjat Panvel line. Of these three lines, the first two lines are quite important as far as railway heritage are concerned. The Bombay-Pune line via Kalyan-Karjat was built in phases in the mid nineteenth century and so was the Karjat Khopoli line. The main Bombay to Karjat line of the Great Indian Peninsula Railway (GIPR), India's first railway, today called Central Railway, was ready by 12 May, 1856 and the Khandala to Pune line was ready by 14 June, 1858. There was a gap between Karjat and Khandala as construction due to mountainous region took time. The Karjat - Khandala section, also called the Bhor Ghat ascent, was finally opened in May 1863.

The Karjat-Panvel line is a comparatively new line. Though planned in the early 20th century, it never materialised then. Its foundation stone was laid in January 1996 and was completed recently.

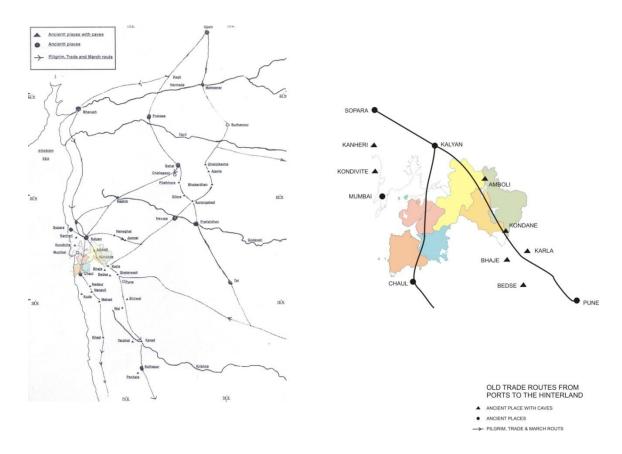


RAILWAY & HIGHWAY ROAD NETWORK

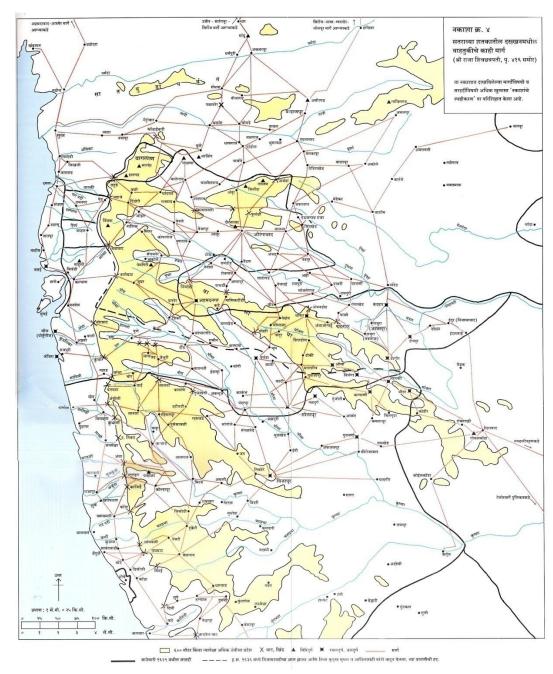
Fort circuit

The MMR – Raigad region has in all 10 hill forts and 3 sea forts constructed and repaired during varied periods. These are hugely popular as trekking and natural history destinations. The forts with their surrounding valleys, narrow paths form part of a very unique zone consisting of archaeological, historical, geological, architectural and natural history heritage. This area was independently explored from its various access routes.

Historical trade routes



TRADITIONAL TRADE ROUTES



TRADE ROUTE MAP DURING MARATHA PERIOD

The traditional trade and communication routes were independently explored based on maps and research notes.

• Literature survey checklist

A checklist of probable heritage sites was developed based on historical research. This list is attached at Annexure 2. The survey team ensured that each of this lead was verified on site for any sites or foot prints.

HERITAGE FABRIC - GLIMPSES

The Final List includes heritage properties which had individual buildings, cluster of buildings, water bodies, precincts, natural heritage, etc. In all 109 properties have been listed. All the listed properties can be broadly classified into individual sites, complex & precincts.

The properties include the World Heritage Site – Gharapuri Island (Elephanta Island); Islands of Khanderi & Underi; Kondane Caves; various forts; part of Mumbai – Pune Railway; Places of Worship; Residential & Religious; bridges; stepped wells; statues; hero stones, etc.

INDIVIDUAL PROPERTIES

The individual properties or sites primarily consist of domestic or religious architecture, large water bodies or infrastructure elements. Some of these are within village gaothan areas and some isolated – amidst agricultural fields.

Residential / Domestic architecture





SOUTH SIDE VIEW



VERANDAH & BALCONY



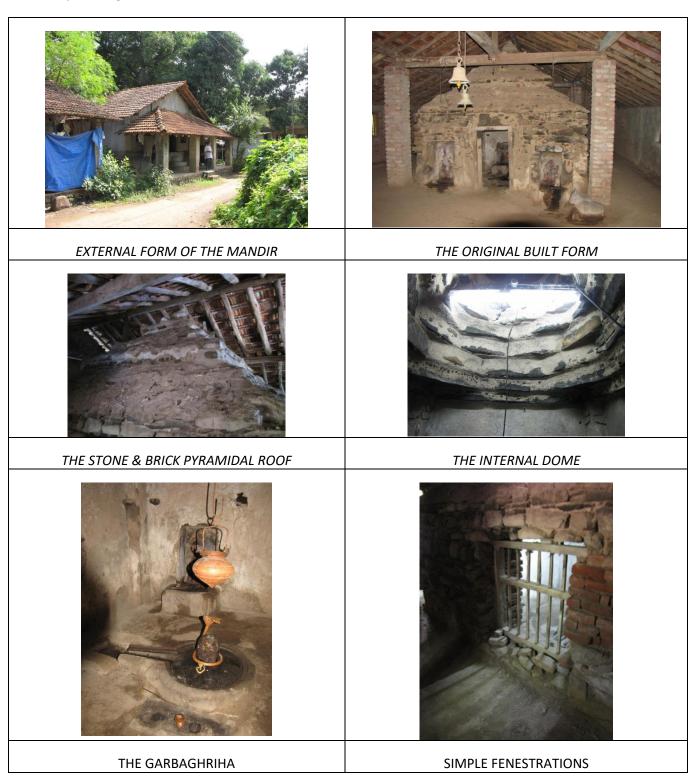
CAST IRON COLUMN

CAST IRON STAR OF DAVID BRACKET

Social, Cultural, Religious

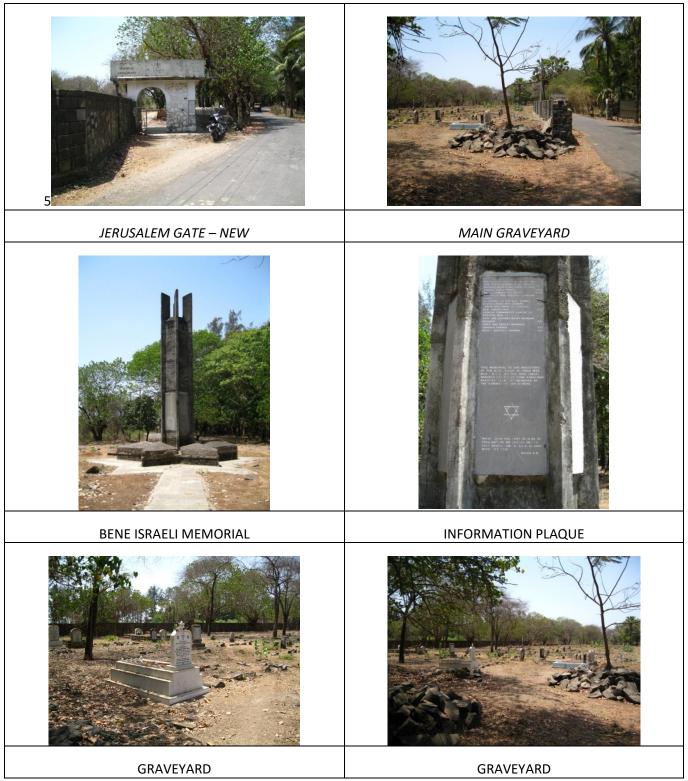
AMRUTESHWAR MANDIR, KIHIM, ALIBAG

A Simple single storey Shiv Mandir with Mangalore tiled sloping roof as an external protective enclosure. Internally the original shrine, constructed in brick and stone is intact



BENE ISRAELI CEMETRY, NAVEDAR NAVGAON, ALIBAG

The Bene Israeli community had a strong presence in this region. Synagogues, old cemeteries and settlements are recorded. As the community presence is reducing these heritage sites are under tremendous development and encroachment pressure.

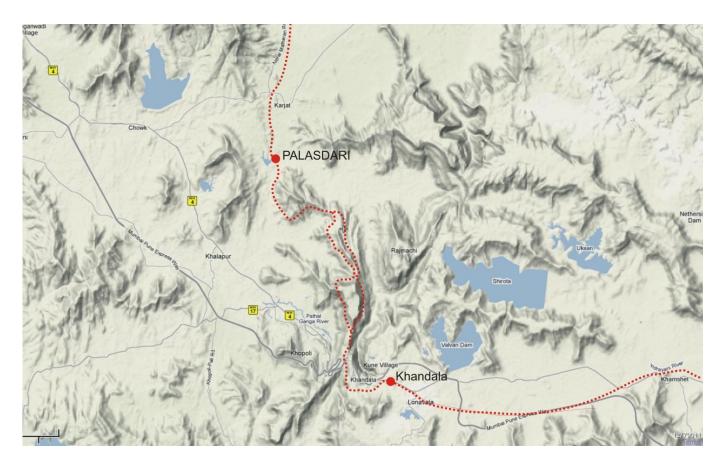


Infrastructural

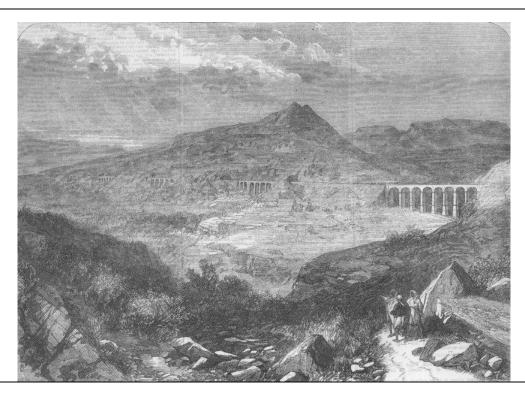
THE BHOR ASCEND

Bhor was a princely state 51 Kms south of Pune. The Satvahanas developed 3 main ghats to move the goods from the merchant ships from Mesopotamia, Syria & Egypt to Paithan their capital from the ports of Karanja & Rajapuri. These 3 ghats were Thal ghat, Nane ghat & Bhor ghat.

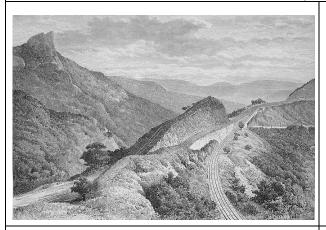
The main Bombay to Karjat line of the Great Indian Peninsula Railway (GIPR), India's first railway, today called Central Railway, was ready by 12 May, 1856 and the Khandala to Pune line was ready by 14 June, 1858. The Karjat - Khandala section, also called the Bhor Ghat incline, was finally opened in May 1863.



The Bhor Aascend starting at Palasdari upto Khandala



The 3 viaducts with Palasdari fort, Prabalgad & Matheran at background





Reversing station



Tunnel



Bhor ghat incline

One of the viaducts

CLUSTER OF PROPERTIES AS A COMPLEX

Mandir Complex

SIDDHESHWAR MANDIR COMPLEX, PANVEL

The Siddheshwar Madir complex spreads across the Patalganga River, Panvel taluka. The complex consists of the Siddheshwar Mandir, its ghats, Deepmal, the Rameshwar Mandir across the Patalganga River, the river itself.

The Siddheshwar Mandir constructed in 1867 is a fine example of Peshwa style. Intricate carvings, lime plaster decorative relief, animal motif relief panels are some of its features. The Mandir is beautifully set on the river bank. Just across towards the north sits the equally beautiful Rameshwar Mandir. However Rameshwar Mandir does not fall within the MMR and hence is outside the present survey scope. However it is strongly recommended that this entire complex should be treated as one entity, beyond the restrictions of administrative boundaries.





Mandir as seen from opposite bank

As seen from the road







Mandir + ghats

Main door

Ghats





Relief panel

Intermediate space



Rameshwar mandir, Karade



Rameshwar mandir, Karade



Main door, Rameshwar mandir



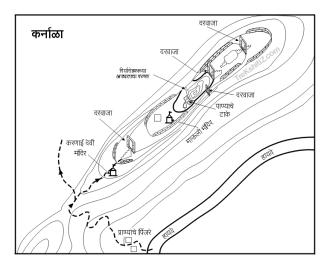


Precinct location map – google map

FORT

Part of the intricate defence architecture system, the hill and sea forts of Maharashtra were treasured by all Rulers throughout history. Manning the trade routes, these forts were well planned elaborate settlements within themselves taking advantage of the natural geography. The surrounding deep valleys not only gave a natural protection to the forts but its rich vegetation was protected and preserved zealously. This protection though borne out of the necessity for defence was an indirect boon for the natural biodiversity in the region. Even today they are much valued for their historical, natural and recreational aspects.

The core zone of the fort is documented as a complex, including its bastions, access pathways, features such as tanks, temples, doorways, etc. The vegetation is also listed under natural heritage



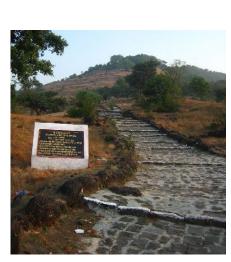


PRECINCTS AND COMPLEXES

MANDIR PRECINCTS









Kankeshwar Mandir & Devrai precinct





Shahbaz Mandir precinct

Memorial complexes









Vasudeo Balvant Phadke memorial and nearby pond





Chirner Jungle Satyagraha Memorial Complex

Neral Bazaar Peth Precinct













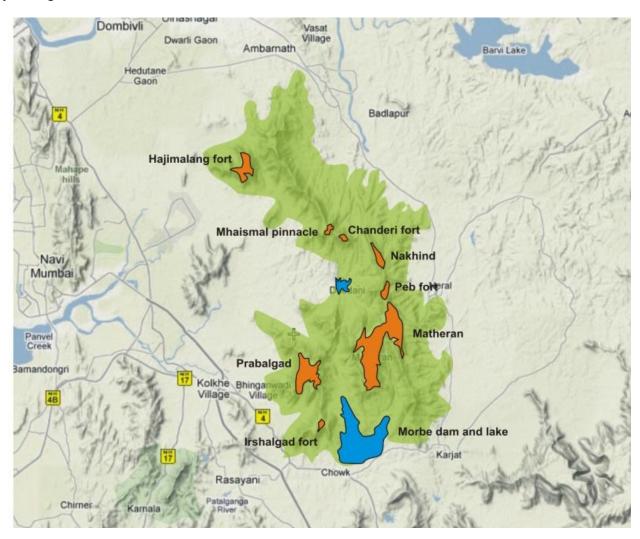
Matheran Range Precinct

An isolated hill range but part of a larger geological feature (Sahyadri Range)

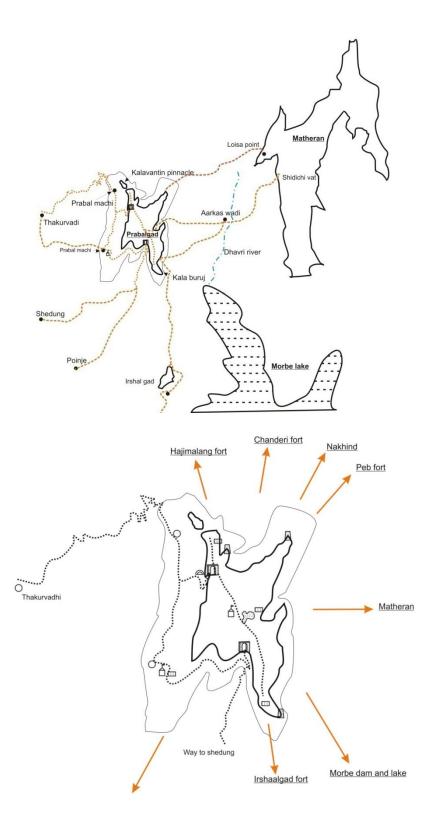
The boundaries of the proposed Range Precinct are similar to the Matheran Eco-sensitive Zone

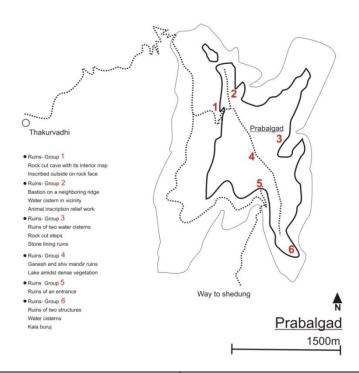
The Matheran Range Precinct includes Badlapur hill, Tavli, Hajimalang, Chanderi, Nakhind, Peb, Matheran, Prabalgad & Irshalgad. These are listed and detailed individually. A few surrounding lakes (Morbe and Chota Morbe lake which are geographically a part of the range but not within the Matheran Eco-sensitive zone are listed individually.

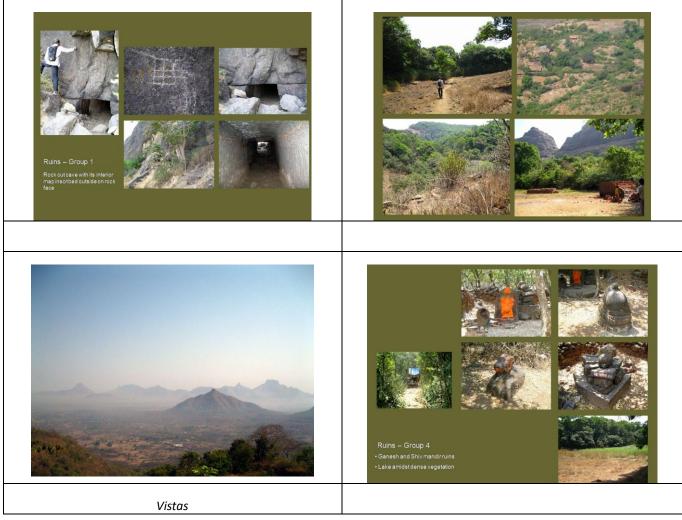
The precinct is bounded by the foothills of the Hajimalang range – Badlapur hill on the north; the foothills of the Matheran range on its east; by the old Mumbai – Pune highway on its south; the foothills of Prabalgad & Hajimalang on its west.



THE MATHERAN RANGE PRECINCT







FEATURES

Step-wells

One of the most pleasant discoveries of this survey was the findings of step-wells. Located as close as Palaspe village these wells are fine examples of Rainwater conservation as well as architecture. Constructed in black basalt, they have intricate carving. A total of 5 step-wells were located in the region; 2 in Palaspe; 1 in Kudave; 1 in Wadavli; 1 in Warsoli.



Virgals (Hero Stones)

A common element with many Mandirs in the region was the presence of idols placed outside the main structure. On closer inspection it was found that these were Virgals or Hero stones. These are not included in the Final List and we suggest that efforts should be made to relocate them to local Museum for better protection



Idols / Sculptures

A large number of shortlisted heritage were places of worship. These structures were old but the architectural footprint has been highly modified thus reducing its heritage value. Moreover they were listed only if it were a prototype.

However some of the places had good intricately carved idols which need to be protected. But these are not included in the list



Nandi idol, tamneshwar mandir, tamnath, karjat

The Unbuilt Heritage (Natural Heritage) - De-listed

Raigad District of MMR includes a few very important Natural Heritage sites which are not listed for certain reasons. However they have great significance in contribution to the overall natural environment, ecology and biodiversity of the region. The topography of the region is interesting with the main Sahyadri Range on the east and the secondary range running parallel and some spurs extending up to the Arabian Ocean. The western coast of Raigad District also has interesting natural and cultural features.

This topography has created unique River Valleys along with the network of their tributaries. These river valleys have natural, environmental, ecological and cultural value which has contributed to various socioeconomic aspects of Raigad District. The major River Valleys in the region are Ulhas, Gadhi and Patalganga including their tributary rivers and large streams. These rivers are swift-flowing and seasonal rivers and are partially dry in non-monsoon season. However due to the release of waters from various hydro-electric project some of them are perennial. These rivers form estuarine ecosystems as they meet the ocean and support unique mangrove ecosystem. Thus ecologically they support diverse flora and fauna both aquatic and terrestrial. These rivers are crucibles of biodiversity and are cradles of indigenous culture and civilization. They are traditional communication corridors and natural storm water drainage systems which help recharging of ground water and aquifers. Considering the importance of such river systems the Ministry of Environment of Forests and provided them protection by enacting laws to control the development in their periphery. It is important that these crucial environmental / ecological legislations are implemented sensitively in the MMR which is one of the fast developing regions of the country. We recommend that special River Authority should be created under MMRDA and specific environmental / ecological strategy should be formed. These norms should be made mandatory for any development in the region. Giving them a special heritage status will be another approach since many listed properties also fall within the eco-sensitive region of these rivers.

The western sea coast of Raigad district in MMR has interesting natural and cultural features. These coasts has excellent harbours and are major communication centres providing access to the mainland. They have natural features like sandy and rocky beaches, mudflats, islands and estuarine ecosystems including mangroves. These coasts are shelters of unique coastal flora and fauna. They are the feeding grounds for migratory water birds and breeding grounds for resident birds. The coastal communities depend on the marine natural wealth for their livelihood and a special culture has evolved along these coasts in the form of Koli and Agri communities and their settlements. These beaches along with the ethnic coastal villages are now protected under the CRZ Act of the MOEF. However apart from development controls there is need to conserve the coastal ecology and culture by giving them special heritage status. MMRDA should form an Authority to take care of these coastal features.

Village Precincts

Entire MMR is going through rapid transformation due to development pressures. The process of urbanization is changing not only landforms but also the ethnic cultures and human settlements. The traditional villages are changing very fast and it has become crucial to conserve at least a few ethnic settlements in the Raigad District of MMR. Most of such villages have already lost their cultural identity; however a few villages which still show ethnic character through their historical layouts / patterns and features should be given special attention by

giving them Heritage Village status and preparing heritage master plans for them. We recommend two villages from the region for such initiative: Village Chirner and Thal Koliwada.

Listed sites undergoing rapid transformation

Few of the listed sites are experiencing development pressures and have already undergone transformation to a large extent. Khareshwar Mandir at Bhokarpada village in Panvel is an example of such a site.

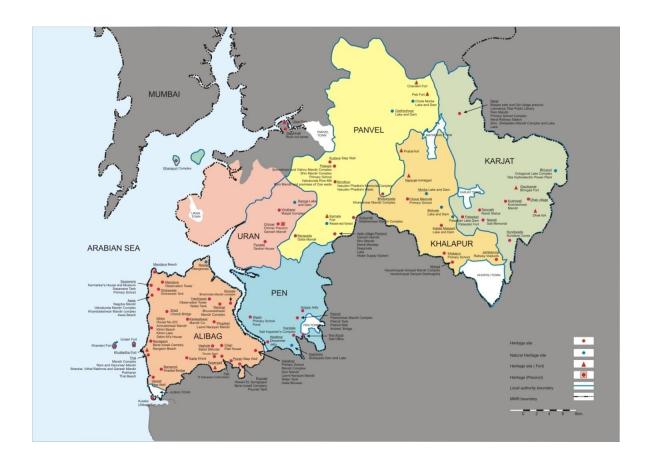




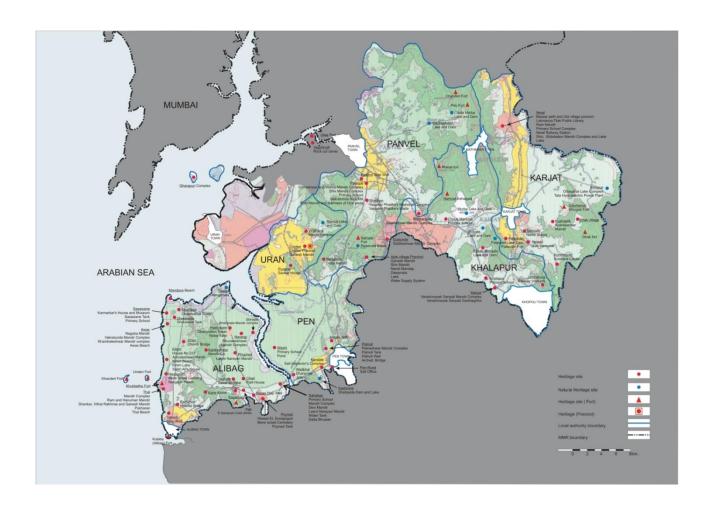
Khareshwar Mandir Dec 2010

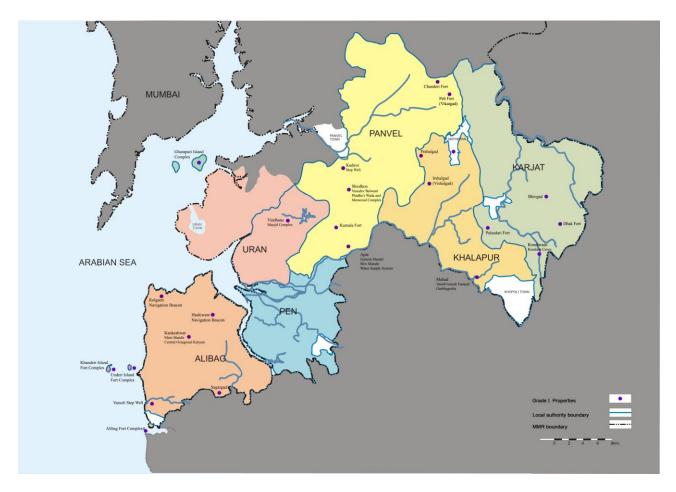
Khareshwar Mandir Mar 2012

STATISTICS

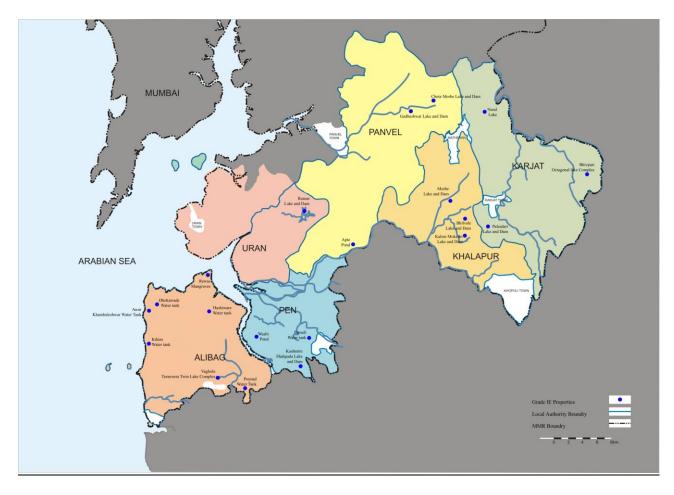


HERITAGE VIS-À-VIS MMR LANDUSE

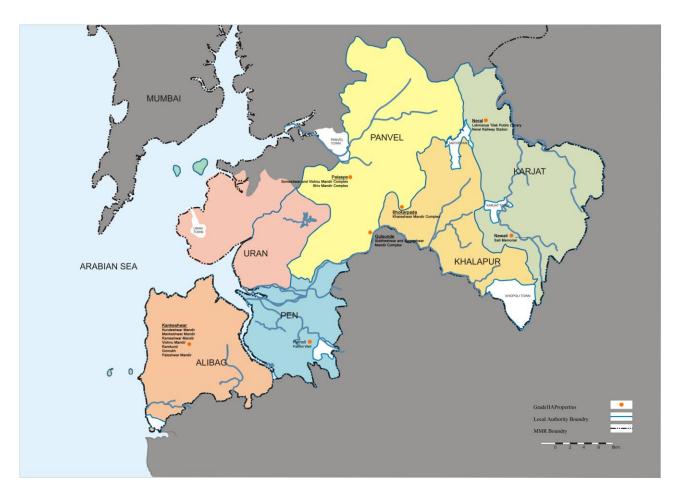




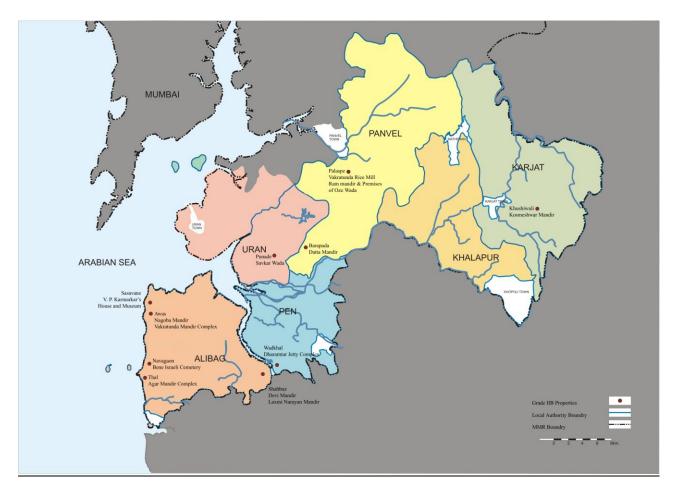
MAP SHOWING GRADE I PROPERTIES



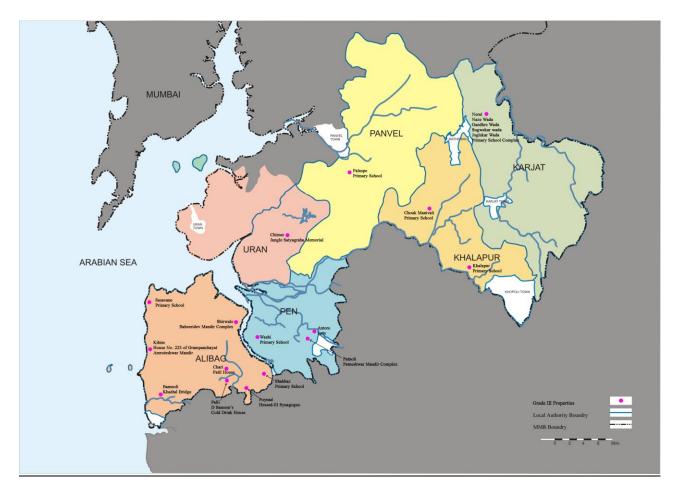
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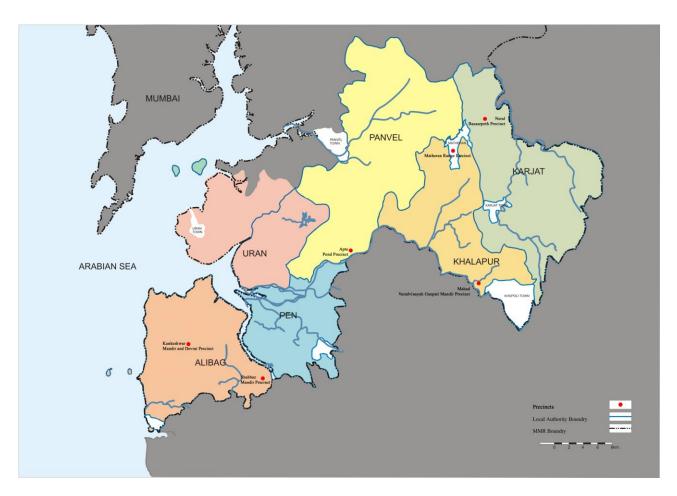
MAP SHOWING GRADE IIA PROPERTIES



MAP SHOWING GRADE IIB PROPERTIES

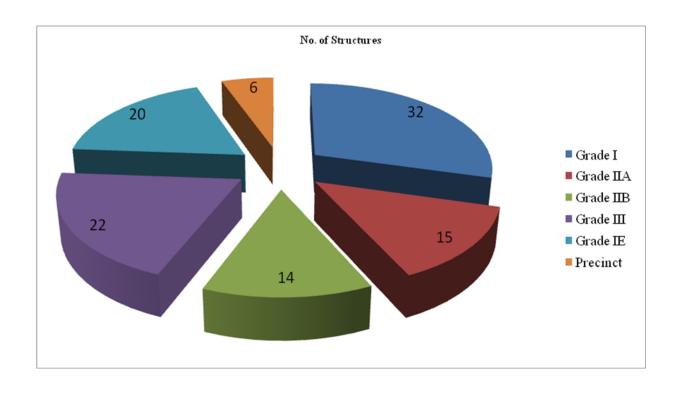


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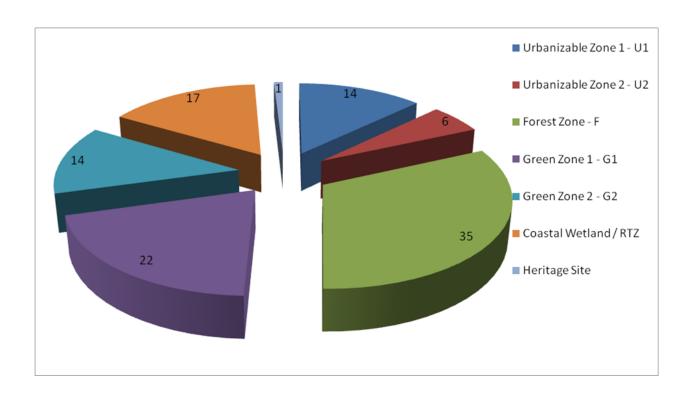


MAP SHOWING PRECINCTS AREA

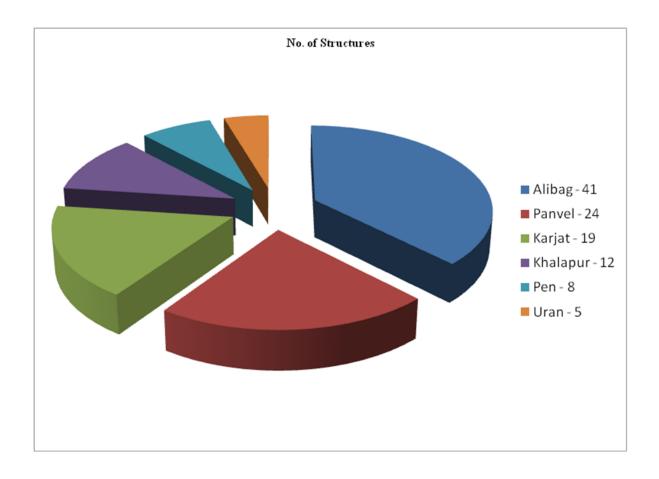
Grade wise distribution of listed structures



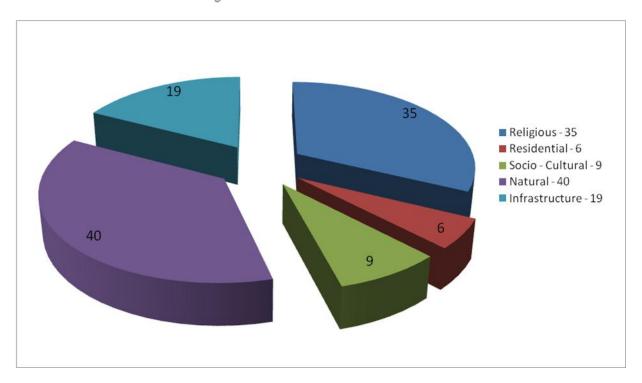
MMR Landuse wise distribution of listed structures



Taluka wise distribution of listed structures



Usage Wise Distribution of Listed Structures



ANNEXURE 1 - KNOWN HERITAGE

- 1. Gharapuri Island
- 2. Kondane Caves
- 3. Chanderi fort
- 4. Peb fort
- 5. Nakhind Pinnacle
- 6. Prabalgad
- 7. Irshalgad
- 8. Karnala fort
- 9. Palasdari fort
- 10. Sagargad
- 11. Khanderi
- 12. Underi
- 13. Alibag (Kulaba) Fort
- 14. Dharamtar Jetty
- 15. Kankeshwar Mandir Precinct
- 16. Vasudeo Balwant Phadke Memorial
- 17. Bor Ghat Ascent
- 18. Neral Railway Station
- 19. Varadvinayak Mandir, Mahad
- 20. Morbe Lake
- 21. Karmarkar Museum

ANNEXURE 2: FINAL LIST OF HERITAGE SITES WITH GRADING

Sr. No.	Taluka	Listed Properties	Grade
1	Α	004-A-Awas-01-Nagoba Mandir	IIB
2	Α	004-A-Awas-04-Vakratunda Mandir complex	IIB
3	Α	004-A-Awas-05-Khambaleshwar Water Tank	IE
4	Α	006-A-Bamanoli-01-Khadtal Bridge	III
5	Α	016-A-Chari-03-Patil House	III
6	Α	022-A-Dhokawade-01-Dhokawade Tank	IE
7	Α	032-A-Hashiware-01-Navigation Beacon	I
8	Α	032-A-Hashiware-02-Hashiware Water Tank	IIB
9	Α	035-A-Kankeshwar-01-Kankeshwar Mandir and Devrai Precinct	Precinct
	А	035-A-Kankeshwar-01a-Main Kankeshwar	1
10		Mandir	
11	Α	035-A-Kankeshwar-01b-Central Octagonal Kalyani	I
12	Α	035-A-Kankeshwar-01c-Kundeshwar Mandir	IIA
13	Α	035-A-Kankeshwar-01d-Mankeshwar Mandir	IIA
14	Α	035-A-Kankeshwar-01e-Rameshwar Mandir	IIA
15	Α	035-A-Kankeshwar-01f-Vishnu Mandir	IIA
16	Α	035-A-Kankeshwar-01g-Bramha kund	IIA
17	Α	035-A-Kankeshwar-01h-Gomukh	IIA
18	Α	035-A-Kankeshwar-01i-Paleshwar Mandir	IIA
19	Α	039-A-Alibag-01-Alibag Fort complex	I
20	Α	039-A-Khanderi-01-Khanderi Island Fort complex	I
21	Α	039-A-Khanderi-02-Underi Island Fort complex	I
22	Α	043-A-Kihim-02-House No.223 of Kihim Grampanchayat	III
23	А	043-A-Kihim-03-Amruteshwar Mandir	III

Α	043-A-Kihim-09-Kihim Water Tank	IE
Α	044-A-Kolgaon-01-Navigation Beacon	I
Α	067-A-Nevedar Navagaon-01-Bene Israeli Cemetery	IIB
Α	072-A-Poynad-01-Hessed-El Synagogue	III
Α	072-A-Poynad-03-Poynad Tank	IE
Α	078-A-Rewas-02-Rewas Mangroves	IE
Α	080-A-Sagargad-01-Sagargad	I
Α	082-A-Sasavane-01- Sculptor V. P. Karmarkar's House and Museum	IIB
Α	082-A-Sasavane-05-Primary School	III
Α	085-A-Shahbaz-01-Primary School	III
Α	085-A-Shahbaz-02-Mandir Precinct	Precinct
Α	085-A-Shahbaz-02a-Devi Mandir	IIB
Α	085-A-Shahbaz-02b-Laxmi Narayan Mandir	IIB
Α	096-A-Thal-04-Thal Agar Mandir complex	IIB
Α	098-A-Vaghole-02-Teenveera Twin Lake complex	IE
Α	101-A-Varasoli-03-Varsoli Stepped Well	1
Α	567-A-Pali-D Samson Cold Drink House	III
Α	568-A-Shirwale-Bahireedev Mandir complex	III
Р	116-P-Apte-01-Apte Pond Precinct	Precinct
Р	116-P-Apte-01a-Ganesh Mandir	I
Р	116-P-Apte-01b-Shiv Mandir	I
Р	116-P-Apte-01c-Apte Pond	IE
Р	116-P-Apte-04-Water Supply System	I
Р	120-P-Barapada-03-Datta Mandir	IIB
Р	127-P-Bhokarpada-01-Khareshwar Mandir complex	IIA
Р	157-P-Gulsunde-01-Siddheshwar and Rameshwar Mandir complex	IIA
Р	162-P-Karambeli Tarf Taloje-01-Chhota Morbe Lake and Dam	IE
	A A A A A A A A P P P P P P P P P P P P	A 044-A-Kolgaon-01-Navigation Beacon A 067-A-Nevedar Navagaon-01-Bene Israeli Cemetery A 072-A-Poynad-01-Hessed-El Synagogue A 072-A-Poynad-03-Poynad Tank A 078-A-Rewas-02-Rewas Mangroves A 080-A-Sagargad-01-Sagargad A 082-A-Sasavane-01- Sculptor V. P. Karmarkar' s House and Museum A 082-A-Sasavane-05-Primary School A 085-A-Shahbaz-01-Primary School A 085-A-Shahbaz-02-Mandir Precinct A 085-A-Shahbaz-02-Devi Mandir A 085-A-Shahbaz-02a-Devi Mandir A 096-A-Thal-04-Thal Agar Mandir complex A 098-A-Vaghole-02-Teenveera Twin Lake complex A 101-A-Varasoli-03-Varsoli Stepped Well A 567-A-Pali-D Samson Cold Drink House A 568-A-Shirwale-Bahireedev Mandir complex P 116-P-Apte-01a-Ganesh Mandir P 116-P-Apte-01a-Ganesh Mandir P 116-P-Apte-01c-Apte Pond P 116-P-Apte-01c-Apte Pond P 116-P-Apte-01-Awater Supply System P 120-P-Barapada-03-Datta Mandir

r	T		1
51	Р	165-P-Karnala-01-Karnala Fort	ı
52	Р	184-P-Kudave-02-Kudave Step Well	I
53	Р	191-P-Maldunge-03-Gadheshwar Lake and Dam	IE
54	Р	210-P-Palaspe-01-Someshwar and Vishnu Mandir Complex	IIA
55	Р	210-P-Palaspe-03-Shiv Mandir Complex	IIA
56	Р	210-P-Palaspe-05-Primary School	III
57	Р	210-P-Palaspe-06-Vakratunda Rice Mill	IIB
58	Р	210-P-Palaspe-07-Ram Mandir and premises of Oze Wada	IIB
59	Р	231-P-Shirdhon-01-Vasudev Balwant Phadke's Wada and Memorial complex	I
60	U	274-U-Chirner-02- Chirner Jungle Satyagraha Memorial	III
61	U	280-U-Gharapuri-01-Gharapuri Island Complex	I
62	U	308-U-Punade-02-Savkar Wada	IIB
63	U	309-U-Ransai-01-Ransai Lake and Dam	IE
64	U	320-U-Vindhane-01-Masjid complex	I
65	K	340-K-Bhivpuri (camp)-01- Octagonal Lake Complex	IIA
66	K	352-K-Dhak-01-Dhak Complex	I
67	K	359-K-Gaurkamat-02-Bhivgad	I
68	K	373-K-Kondiwade-01-Kondane Caves	I
69	K	377-K-Kushiwali-01-Kosmeshwar Mandir	IIB
70	K	389-K-Newali-01- Sati Memorial Complex	IIA
71	K	390-K-Palasdari -02-Palasdari Fort	I
72	K	390-K-Palasdari-01-Palasdari Lake and Dam	IE
73	K	429-K-Neral-02-Neral Bazarpeth Precinct	Precinct
74	К	429-K-Neral-02a-Lokmanya Tilak Public Library	IIA
75	К	429-K-Neral-02b-Ram Mandir	III
76	К	429-K-Neral-05-Primary School Complex	III
77	К	429-K-Neral-06-Neral Railway Station	IIA

78	К	429-K-Neral-07b-Neral Lake	IE
79	К	429-K-Neral-08-Naze Wada	III
80	К	429-K-Neral-09-Gandhre Wada	III
81	К	429-K-Neral-10-Sugwekar Wada	III
82	K	429-K-Neral-11-Joglekar Wada	III
83	К	K-03- Bhor Ascend	IIB
84	KP	435-KP-Bhilavale-01-Bhilavale Lake and Dam	IE
85	KP	439-KP-Chouk Manivali-03-Primary School	III
86	KP	447-KP-Kalote Mokashi-01-Kalote Lake and Dam	IE
87	KP	453-KP-Khalapur- 01-Primary School	III
88	KP	457-KP-Mahad-01-Varadvinayak Mandir Precinct	Precinct
89	KP	457-KP-Mahad-01a-Varadvinayak Garbhagruha	ı
90	KP	489-KP-01-Matheran Range Precinct	Precinct
91	KP	489-KP-01a-Badlapur Hill	ı
92	KP	489-KP-01b-Tavli	1
93	Р	190-P-Mahodar-01-Haji malang	ı
94	Р	237-P-Tamsai-01-Mhaismal Pinnacle	ı
95	KP	237-P-Tamsai-02-Chanderi Pinnacle	1
96	KP	237-P-Tamsai-03-Nakhind Pinnacle	1
97	KP	191-P-Maldunge-04-Vikatgad(Peb Fort)	ı
98	KP	489-KP-Warose Tarf Wankhal-01-Matheran	ı
99	Р	187-P-Loniwadi-01-Prabalgad	ı
100	KP	489-KP-Warose Tarf Wankhal-02-Irshalgad(Vishalgad)	ı
101	KP	KP-03-Morbe Lake and Dam	IE
102	PN	493-PN-Antore-01-Antore Jetty	III
103	PN	524-PN-Kashmire-01-Shahpada Dam and Lake	IE
104	PN	543-PN-Patnoli-01- Patneshwar Mandir Complex	III
105	PN	543-PN-Patnoli-03-Patnoli Tank	IIA
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106	PN	543-PN-Patnoli-04-Patnoli Well	IIA
107	PN	562-PN-Wadkhal-04-Dharamtar Jetty Complex	IIB
108	PN	564-PN-Washi-06-Primary School	III
109	PN	564-PN-Washi-09-Pond	IE

ANNEXURE 3: BIBLIOGRAPHY - BOOKS AND REFERENCES

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ANNEXURE 4: RESOURCE PERSONS

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ANNEXURE 5: LIST OF MAPS REFERENCED

- 1. Map of Bombay region, showing details of Raigad district 1925-34, compiled by US Army Map Service.
- 2. Map of Kalyan region, showing details of Raigad district 1925-34, compiled by US Army Map Service.
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- 21. MMR map with Navi Mumbai SEZ details and land use plans
- 22. Detailed SEZ map
- 23. Detailed airport map
- 24. SEZ new map by CIDCO
- 25. Raigad assembly segments map
- 26. Map of village and urban segments in MMR
- 27. Map of Kolaba Collectorate
- 28. Map of routes during Shivaji's period
- 29. Matheran map 1924
- 30. MMR Regional Map old
- 31. MMR Regional Map new

ANNEXURE 6: BIBLIOGRAPHY - WEB SITES

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ANNEXURE 7: TEAM

• Project Leaders: Ulhas Rane & Subodh Tari

• Project Coordinator: Pallavi Doke

• Survey Coordinator: Rahul Chemburkar

• Conservation Architect: Ramesh Bhole

• Senior Architect: Rajneesh Gore

• Senior Researcher: Rajendra Aklekar, Hawa Chonawalla

Data Manager: Shakunt Tari

Junior Architects: Vivek Tetwilkar, Varun Bhamare, Shraddha Bordekar, Mrudula Mane

• Historian: Dr. Sadashiv Gorakshkar

• External Assessor: Kailash Rao – Conservation Architect