

Action Plan for Heritage Conservation and Environment Improvement of Erangal Precinct

Inception Report

May 2010



submitted to:
**Mumbai Metropolitan Region - Heritage Conservation Society
(MMR-HCS)**



prepared by:
**HCP Design and Project Management Pvt. Ltd.
(HCPDPM)**

Action Plan for Heritage Conservation and Environment Improvement of Erangal Precinct

INCEPTION REPORT

May 2010

Submitted to



Mumbai Metropolitan Region – Heritage Conservation Society (MMR-HCS)
MMRDA, Bandra Kurla Complex, Bandra (East), Mumbai 400 051

Prepared by



HCP Design and Project Management Pvt. Ltd.
Paritosh, Usmanpura, Ahmedabad- 380 013

PROJECT TEAM

Project Director

Shirley Ballaney, Architect – Urban and Regional Planner

Project Leader

Bindu Nair, Geographer – Urban and Regional Planner

The Team

Sonal Shah, Architect – Urban Planner

Archana Kothari, Architect – Urban Planner

Krupa Bhardwaj, Architect – Urban Planner

Rashmita Jadav, Architect

Atul Patel, CAD Specialist

Suresh Patel, CAD Technician

CONTENTS

1 Background to the Project

- 1.1 Significance of the Project
- 1.2 Objectives of the Project
- 1.3 Scope of Work (TOR)
- 1.4 Outputs and Schedule

2 Detailed SOW and Road Map

- 2.1 Detailed SOW and Methodology
- 2.2 Work Plan
- 2.3 Changed Focus of the Project

3 Base Map

4 Introduction

- 4.1 Location and Connectivity
- 4.2 Regional Context
- 4.3 History and Growth of Erangal

5 Preliminary Assessments

- 5.1 Development Plan Proposals
- 5.2 Built Fabric and Settlement Structure/Pattern
- 5.3 Access and Road Networks
- 5.4 Land Use
- 5.5 Intensity of development/FSI utilization
- 5.6 Land Ownership Pattern
- 5.7 Landmarks and public spaces
- 5.8 Community Pattern
- 5.9 Occupational Pattern
- 5.10 Typology of Structures
- 5.11 Cultural Practices
- 5.12 Sewerage
- 5.13 Solid Waste Management
- 5.14 Social Amenities

6 Review of the Precinct Boundary

- 6.1 Rational for Revising the Precinct Boundary
- 6.2 Details of the Revised Precinct Boundary and the Buffer Zone

Appendices

- Appendix 1: Review of some of the Material
- Appendix 2: Questionnaire

LIST OF MAPS

| | |
|------------|--|
| Map No. 01 | Location of Erangal Precinct in Greater Mumbai |
| Map No. 02 | Location and Connectivity |
| Map No. 03 | Regional Context |
| Map No. 04 | Growth of Erangal Gaothan |
| Map No. 05 | Coastal Regulation Zone |
| Map No. 06 | DP Reservations |
| Map No. 07 | Built Fabric |
| Map No. 08 | Land Use Plan |
| Map No. 09 | Intensity of Development |
| Map No. 10 | Land Ownership |
| Map No. 11 | Community Pattern |
| Map No. 12 | Revised Precinct Boundary |

LIST OF SKETCHES

| | |
|---------------|--------------------------------|
| Sketch No. 01 | Typical Bhandari Dwelling Unit |
|---------------|--------------------------------|

LIST OF TABLES

| | |
|--------------|--|
| Table No. 01 | List of people interviewed during preliminary site visit |
| Table No. 02 | List of acts, books and reports reviewed |
| Table No. 03 | List of DP Reservations |
| Table No. 04 | List of types of owners |
| Table No. 05 | List of CTS Numbers |

1 Background to the Project

1.1 Significance of the Project

Mumbai with its long history has areas that possess strong architectural and urban character. The layers of history are reflected in the built form and impart an image and character to the city. The older buildings / fabric represent history of the communities, embodying their traditions, fusion of various cultures and political ideologies. It is crucial to maintain and preserve/conservate this heritage as it would not only mean a tremendous loss but if are to perceive these as assets as most western cities have, they can offer great living environments, enhance the attractiveness of the cities and can be leveraged as places of tourist attraction. Mumbai has been at the forefront of recognizing the importance of built heritage and there are several studies, projects and ongoing initiatives to conserve the built heritage.

In particular the Mumbai Metropolitan Region Heritage Conservation Society (MMRHCS) has been specifically set up to spearhead efforts in the area of heritage conservation. It has already undertaken the tasks of heritage listing for Greater Mumbai and has initiated the same task for the rest of MMR. As a part of the heritage listing that was undertaken for Greater Mumbai, an important feature that emerged and were listed were 'areas of historic significance or cluster of structures' wherein each structure may not be of great individual merit but the group of structures had historic / cultural value. These areas were listed as PRECINCTS. The precincts included the traditional GAOTHANS or SPECIAL AREAS that were developed by specific communities. Hence not only are they important from the view point of the physical fabric, but more so from the socio-cultural aspects. Each of the precincts have a unique character and significance on account of their distinctive architectural character, social fabric, cultural practices, traditions, historic context and economic activities.

Mumbai has about 189 gaothans today interspersed in the modern urban fabric and each is like a small enclave engulfed or surrounded by a built fabric that offers a total contrast in terms of the pattern, scale etc. These gaothans which were once an indelible part of Mumbai's landscape are now struggling to exist given the development pressures. Typically issues facing these traditional enclaves are – insufficient infrastructure, inappropriate development guidelines / regulations, crowding, incongruent redevelopments, destruction of the historic structures, changes in the economic base which impacts the physical fabric and high real estate development pressures.

MMR HCS is taking a step further by undertaking a pilot project to "Prepare an Action Plan for Conservation of Heritage Precincts in Mumbai Metropolitan Region". In the pilot project the following 5 precincts are being taken up as separate tasks:

| No | Task No. | Name of the Precinct | Location |
|----|------------|---|-------------------------------------|
| 1 | Task – I | Erangal Village Precinct | Mumbai-Western Suburbs |
| 2 | Task – II | Chembur Precinct (3 Sub Precincts) Chembur Gaothan Old Chembur St. Anthony's Society | Mumbai-Eastern Suburbs |
| 3 | Task – III | Deulwadi Precinct | Uran (Navi Mumbai Notified Area) |
| 4 | Task – IV | Jama Masjid Road Precincts | Kalyan City |
| 5 | Task – V | Agashi Talav Precinct | Vasai-Virar Sub-Region |

HCP Design and Project Management Pvt. Ltd. is assigned to prepare an action plan for Task – I Erangal Village Precinct in Mumbai, Western Suburbs.

An overarching objective of the pilot project is to start with a suggested methodology and scope of work of the current TOR and evolve more refined methodology to prepare action plans for other precincts in future.

1.2 Objectives of the Project

The objectives of the project are:

1. To evaluate the current status and condition of the precinct through detailed documentation and analysis of key issues
2. To identify schematic projects, programmes for conservation of precincts through participation of local communities and stakeholders
3. To formulate financial, institutional, regulatory strategies for project implementation, phasing, operation and maintenance
4. To prepare draft guidelines for conservation of the heritage precinct

1.3 Scope of Work

The scope of work for the project includes:

Stage 1: Review of Available Data and Inception Report

Stage 2: Detailed Condition Assessment

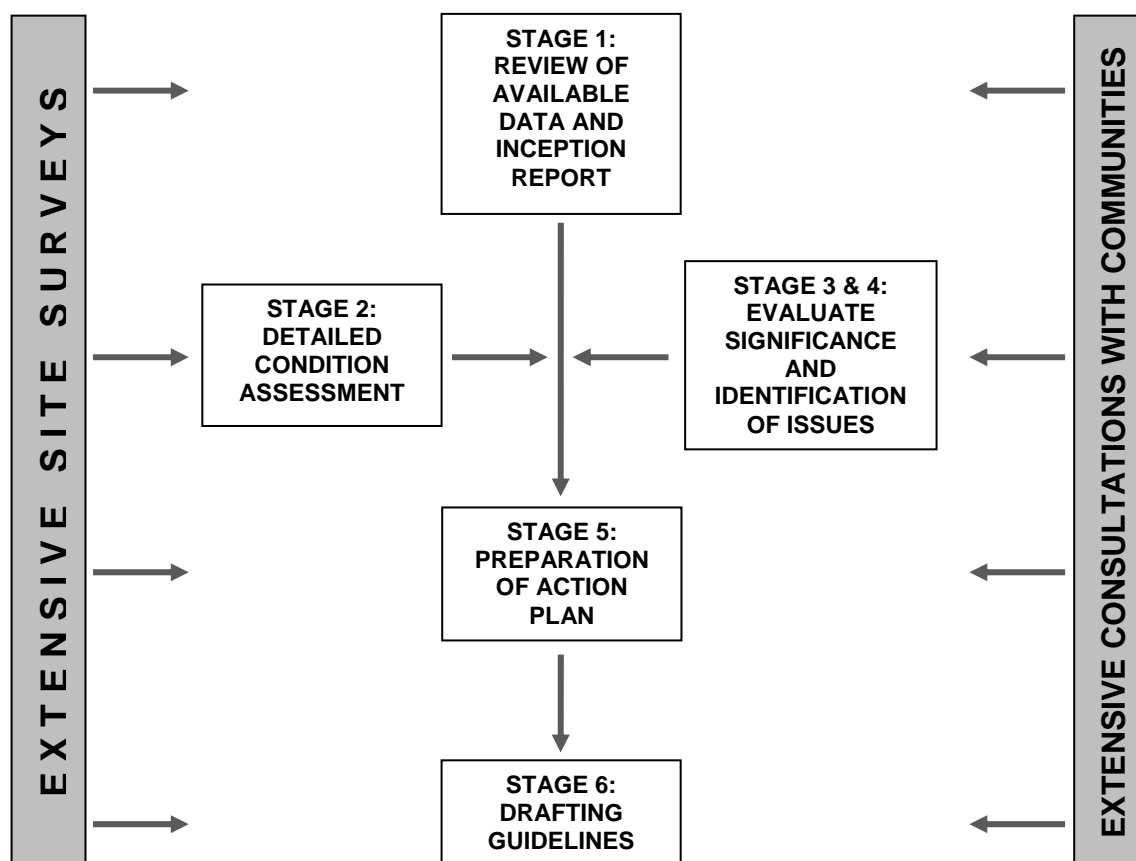
Stage 3: Evaluation of Significance

Stage 4: Identification of Issues

Stage 5: Preparation of Action Plan

Stage 6: Drafting Guidelines

The overall methodology is illustrated in the chart below and detailed activities under each stage are described below:



Stage 1: Review of Available Data and Inception Report

In this stage, compile and review all data on the particular precinct available with the MMR-HCS and also in the public realm.

Conduct reconnaissance surveys, update data and provide details of location, history, origin and growth, context with respect to the region, understanding of built fabric and settlement pattern, community pattern, development plan reservations, ownerships, land use, note on cultural aspects, etc. Review the present precinct boundary and suggest revision if required.

Establish contact with the local community and other stakeholders. Based on the reviews, surveys and consultations, produce an inception report specifying a detailed methodology of work.

Stage 2: Detailed Condition Assessment

Undertake detailed documentation of the precinct in consultation with the local community. The output of this phase will include:

- Detailed plan of the precinct showing existing condition (neighbourhood landmarks, nodes, street shrines, public spaces, open spaces, cultural practices, existing infrastructure, demographic characteristics, transformations, major activities).
- Other drawings like elevations, axonometric views, etc. showing the heritage characteristics (special architectural features, special buildings).
- Establishing the common characteristics, features and elements.

Stage 3: Evaluation of Significance

Assess significance of heritage in terms of architectural, historical, cultural, social, technological, environmental, economic significance, others and grading of the same through local opinion. (What needs to be conserved, why and to what extent?)

Identify strengths and opportunities to heritage characteristics in economic, cultural (including demographic), regulatory, institutional and environmental aspects, through detailed and empirical arguments.

Stage 4: Identification of Issues

Identify and categorize issues and analyze the same. Further, classify them into: needs urgent attention, significant attention, minimum attention.

Identify problems and threats to heritage characteristics in economic, cultural (including demographic), regulatory, institutional and environmental aspects, through detailed and empirical arguments.

Stage 5: Preparation of Action Plan

Based on the detailed documentation, significance and the identification of issues, develop an action plan for the precincts in consultation with the local community. The components of the action plan will include:

- The vision and strategies articulated for the conservation of precinct.
- Identified actions as set of regulations, projects and programmes.
- Block estimates for the projects and programmes including capital and recurring costs.
- Prioritization and phasing of the projects and programmes.
- Identification of financial sources for implementation of the projects and programmes. (This needs to be detailed and should include opinion from stakeholders who would be potential financial sources. The first contact will then need to be made.)
- Institutional mechanism for implementation (Identification and consultation with stakeholders)

- Establishment of steps for the activities to be undertaken in the next year.

Stage 6: Drafting Guidelines

Prepare specific guidelines for specific purpose (usage, redevelopment, renovation, alteration, maintenance and repair, conservation measures, sensitive design at building and locality level). These will be drafted in a manner that they are ready for notification as development control regulation.

1.4 Outputs and Schedule

The output and the project schedule are as follows:

| No. | Stage | Format & Copies | Time Limit from Date of Agreement |
|-------|---|-----------------|-----------------------------------|
| 1 | Inception Report | 12 | 6 weeks |
| 2 | Detailed Condition Assessment | 10 | 12 weeks |
| 3 & 4 | Evaluation of Significance and Identification of issues | 10 | 20 weeks |
| 5 | Preparation of Action Plan | 10 | 26 weeks |
| 6 | Draft Guidelines and Final Report | 20 | 32 weeks |

This is the first stage submission of the project wherein the project inception report is being submitted. The subsequent chapters describe:

- Detailed SOW and Road Map
- Base Map
- Introduction to the Precinct
- Preliminary Assessments
- Review of the Precinct Boundary

2 Detailed out SOW and Road Map

2.1 Detailed SOW and Methodology

Stage 1: Review of Available Data and Inception Report

Activity 1 Collect Secondary Information

Collect and review available secondary information such as:

- City survey maps
- Old topographical sheets
- Studies, reports, papers, publications on Erangal and historical information on the area in libraries, institutions, MMRDA, etc.
- Development Plan proposals and development regulations

This will be done through a preliminary visit and web research. This data will be useful in building the base map, constructing a historical background and a preliminary socio economic background of the area.

Activity 2 Familiarize with the Precinct and Establish Initial Contact with the Community

Get familiar with the precinct area and obtain preliminary perceptions and photo documentation. Simultaneously establish initial contact with the community in the precinct to explain the project objectives and identify key leaders or people would get involved in the preparation of the action plan. This will be done through a preliminary visit to the area. This will give first of all help confirm or modify the precinct boundary and set the stage for further detailed work in the area.

Activity 3 Prepare Base Map

A base map will be prepared which will be fairly accurate for the purpose of settlement mapping and analysis of various parameters.

- The base map will be prepared on the basis of available Google imagery and the city survey sheets.
- The base map will be prepared in the following manner:
 - Download Google Satellite Image (GSI) of Erangal Revenue Village, 2010.
 - Scan and digitize DP sheets.
 - Overlay DP layers (roads, village boundary, plots, DP reservations, CRZ, CTS numbers) and correct them on the Satellite Image.
 - Scan and digitize CTS sheets.
 - Overlay CTS sheets on Erangal precinct to cross check these as incorporated in the DP sheets.
 - Vectorize structures in and around precinct
- The base map will have the following layers:
 - Gaothan boundary as on CTS
 - Precinct boundary as given in the TOR
 - Major roads and minor roads
 - CTS plot boundaries
 - CTS numbers
 - Building footprints and structure numbers
 - DP Reservations
 - CRZ lines

Activity 4 Preliminary Assessments

Basic assessments will be made based on the findings of the preliminary visit and web research, with regards to the precinct and its surroundings.

Activity 5 Review the Precinct Boundary

The existing limits of the precinct will be reviewed. If necessary, the precinct boundary may be revised or extended to include certain areas outside the precinct, which have similar typologies to those inside the precinct.

Activity 6 Prepare Inception Report

The inception report will include:

- Detailed SOW and Road Map
- Base Map
- Introduction to the Precinct
- Preliminary Assessments
- Review of the Precinct Boundary

Stage 2: Detailed Condition Assessments

The detailed condition assessment will be undertaken at two scales / levels: one at the precinct level and the other at the individual structure level. These will be done through visits to the area, photo documentation, interactions with community groups and structured individual questionnaire surveys¹. As far as possible these will be mapped as various layers on the base map supported by relevant statistical data and inferences.

Activity 7 Precinct Level Assessments

- 1 Development Plan Proposals
Review of existing DP proposals such as zoning, reservations, roads and applicable regulations including coastal regulation zones
- 2 Built Fabric and Settlement Structure/Pattern
Mapping of built/open spaces with supporting data and inferences on the structure/pattern
- 3 Access and Road Networks
Mapping of access to and within the precinct, and road networks with supporting data and inferences
- 4 Land Use
Mapping of land use by structure/plot with supporting data and inferences on the land use pattern
- 5 Intensity of Development/FSI utilization
Mapping the number of floors to gauge FSI utilization (gross and net)
- 6 Land Ownership Pattern
Mapping properties owned by public, private, institutions and the community, with supporting data and inferences on land ownership patterns
- 7 Occupied and Vacant Structures
Mapping structures that are in use and disused with supporting data and inferences
- 8 Landmarks and Public Spaces
Mapping key land marks and major open spaces (including elements) in the settlement
- 9 Community Pattern
Mapping of types of communities with supporting data and inferences

¹ Refer Appendix 2

- 10 Occupational Pattern
Mapping of major and minor occupations with supporting data and inferences
- 11 Income Levels
Mapping of various income levels with supporting data and inferences
- 12 Typology of Structures
Review and mapping of the typologies of built structures with supporting data and inferences
- 13 Age of Structures
Mapping of age of structures with supporting data and inferences
- 14 Transformation of Structures
Mapping of change in typology and usage of structures with supporting data and inferences
- 15 Historical Significance of Structures
Mapping of structures with heritage value with supporting data and reviewing their historical significance
- 16 Demographic Characteristics
Review of demographics of inhabitants
- 17 Cultural Practices
Review of socio-cultural traditions
- 18 Water Supply
Mapping of water supply network and status on water supply
- 19 Sewerage
Mapping of sewerage network and status on sewerage
- 20 Solid Waste Management
Mapping of solid waste management – collection, route, dumping and status of services provided
- 21 Social Amenities
Mapping of amenities like education and health and status of amenities

Activity 8 Individual Structure Level Assessments

- 1 Typologies of Individual Structures
Mapping and analysis of individual structures in the precinct with supporting data, drawings, photographs and axonometric views
- 2 Typologies of Heritage Structures
Mapping and analysis of heritage value structures in the precinct with supporting data, drawings, photographs and axonometric views
- 3 Typologies of Heritage Elements
Mapping and analysis of heritage elements within the structures with supporting data, drawings, photographs and axonometric views

Activity 9 Establish common characteristics, features and elements

Common characteristics, features and elements will be identified and documented, in order to establish a coherent pattern, typical to the entire precinct.

Activity 10 Prepare Detailed Assessment Report

A detailed assessment report will be prepared and submitted as an output of this stage and will include:

- Overview, methodology and findings
- Precinct level maps showing the existing landmarks, infrastructure, demographic characteristics, level of transformation and condition of buildings in the precinct
- Master List of landmarks, buildings and major streets
- Proformas, photo plates, architectural drawings of housing typologies, landmarks and main streets
- Proformas, photo plates, sketches and views of individual buildings

Stage 3 and 4: Evaluation of Significance and Identification of Issues

The stage will begin with a secondary research on existing successful practices in conserving old precincts, along with intensive consultations with the community and site visits. A grading criteria will then be established, based on which the structures will be evaluated, and issues will be identified.

Activity 11 Establish Grading Criteria

Existing successful practices will be studied and reviewed to help establish grading criteria for evaluating the significance of heritage and identification of issues.

Activity 12 Grade Structures and Evaluate the Precinct

Structures will be graded according to the architectural, cultural, historical significance and local perceptions. An overall assessment of the precinct will also be done in this manner.

Activity 13 Identify Strengths, Opportunities, Problems and Threats

A SWOT analysis will be undertaken, with respect to the heritage characteristics in economic, cultural, regulatory, institutional and environmental aspects.

Activity 14 Prepare Report on Significance and Issues

The report will include a detailed and empirically argued analysis of the significance of the precinct, its problems and its assets.

Stage 5: Preparation of an Action Plan

Based on the issues identified in Stage 4, an action plan to strengthen the gaathan will be prepared. As far as possible the components of the plan will be mapped on the base map supported by relevant statistical data and inferences.

Activity 15 Prepare an Action Plan and Implementation Strategy Components

An Action Plan consisting of the following components will be prepared and submitted:

- Articulation of development vision, objectives and strategies
- Identification of projects and actions with inputs from community. These could be capital investments, regulatory proposals, guidelines, etc. For each project there will be rationale, features, costs, revenues, implementation mechanism and benefits.
- Calculation of total costs (capital and recurring)
- Prioritization and phasing of projects
- Identification of financial resources with inputs from community
- Implementation mechanisms for the whole roster of projects
- Next steps

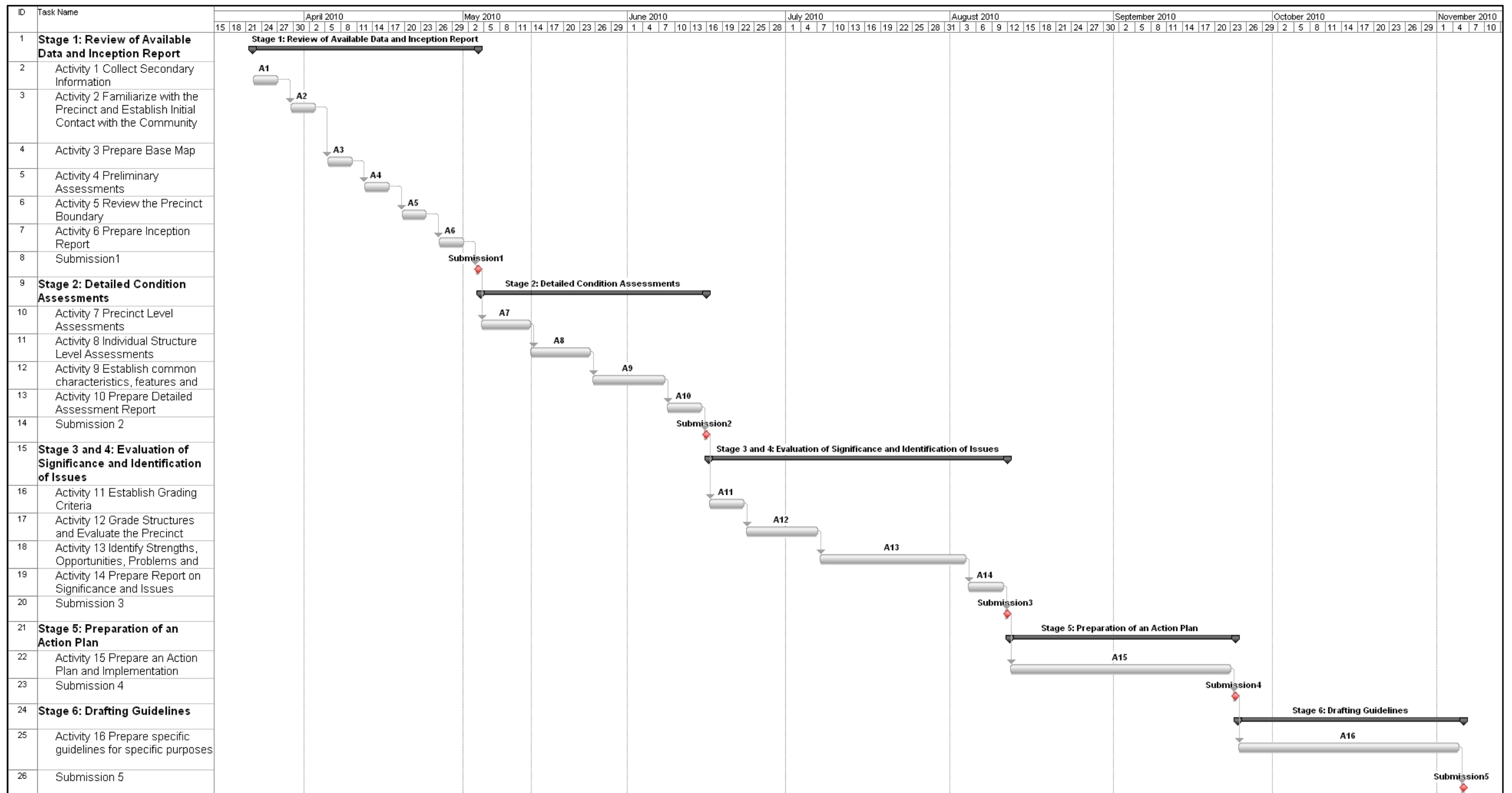
Stage 6: Drafting Guidelines

Based on the action plan, specific guidelines will be drafted to control and monitor further development within the gaothan.

Activity 16 Prepare specific guidelines for specific purposes

Specific guidelines will be prepared for usage, redevelopment, renovation, alteration, maintenance and repair, conservation measures and sensitive design at building and locality level.

2.2 Work Plan



2.3 Changed Focus of the Project

Existence of Erangal village can be traced since 1530's (Portuguese times) and has several references in the history of Mumbai. However the history of the built fabric is much recent. The settlement was completely evacuated and razed to the ground during the World War II. The people were shifted to nearby settlements, mainly in the settlement of Orlem. The settlement was rebuilt and inhabited much later – about 7 years after the War. From the discussions with the community it appears that the people rebuilt on the same parcels/ locations. Hence the character of the settlement appears like an organic village settlement but there is no 'richness' in terms of architectural elements which may have been there in the past (again one does not know about this). However the nature of the built fabric, open spaces etc do display a certain value for which the area was listed as precinct along with historical significance and that it is a pocket dominated by a particular community and reflects its culture. Further the area has witnessed several transformations – there are several new structures added on the periphery, there are extensive additions to the existing structures and in many cases the structures have been extensively remodelled / rebuilt.

The new structures on the periphery are of two kinds – expansion of the gaothan and new weekend homes / second homes by people from not within the settlement. These structures use new materials and new built typologies that are a product of the modern development regime.

The additions to the structures are in terms of additional rooms, floors, toilets etc which are being done using new construction materials and techniques and do appear incongruent at some places. Redeveloped structures also employ new construction techniques and materials.

Infrastructure services have been introduced in a haphazard manner – there are no networks, the roads are not well maintained, septic tanks and toilets have been introduced on a need basis etc.

The character of the settlement has been changing and yet there is a certain amount of historical and cultural significance to the place. To retain the physical character of the settlement as a whole certainly special regulations / development guidelines are required. More importantly it appears on preliminary examination that substantial environmental improvements are required – well planned water supply and sewerage systems, better streets, better solid waste management etc.

With this in view we propose the project also focus on environmental improvement projects that are developed through the participation of the community with commitments to be involved in their implementation at a later stage.

3 Base Map

The base map for the precinct has been prepared and the process followed is described in the subsequent steps.

3.1 Downloading the Google Satellite Image

The Google satellite image was downloaded for the entire Erangal revenue village. The image is of January 2010 and was downloaded at 2000 ft altitude. The downloaded images were joint to create a seamless satellite image.

3.2 Scaling the Satellite Image

The seamless image was brought into AutoCAD in a jpeg format and scaled.

3.3 Scanning and Vectorization of DP Sheets.

The hard copy of DP sheets was provided by MMRDA. The DP sheet number 41 covering the Erangal precinct and the surrounding area was scanned. After scanning the sheet relevant information was vectorized:

a. Roads

The roads in the revenue village boundary were digitized under the following categories

- Existing Roads
- Proposed DP Roads

b. Village boundary and plots

The Erangal revenue village boundary was digitized along with the plot boundaries and survey numbers from the DP sheet.

c. Reservations

The reservations indicated in the DP sheet in and around the Erangal gaothan was picked up

d. Coastal Regulation Zone

The CRZ lines and the category as indicated in the DP sheet was picked up

3.4 Scanning and Vectorization of City Survey Sheets

The City Survey Sheets (1960) of the Erangal revenue village were obtained from the City Survey Office, Goregaon. Erangal revenue village is covered in two sheets – 15 and 16. These were scanned and mosaiced. The following information was vectorized:

- Revenue village boundary
- Building footprints
- Roads – internal roads
- Plot boundaries plot numbers
- Wells etc.

3.5 Overlaying the Vectorized Information on Google Image

The vectorised layers from the DP and CTS sheets were overlaid on the satellite image and corrected on the image to create a preliminary base map.

- DP Sheet
 - The following layers were taken from DP sheet and overlaid the Google image – roads, revenue village boundary, plots and plot numbers.
- City Survey Sheets
 - Many of the plot numbers were missing in the DP Sheet which was incorporated from the City Survey Sheets.
 - Similarly the plots within the gaothan boundary and the CTS numbers were not show in the DP sheets which were incorporated from the City Survey Sheet.

- The building footprints and wells were also taken from the City Survey Sheets. The plot boundaries and building footprints on the CTS sheets were scaled and rotated to match those on the satellite image. The number of structures has considerably increased as compared to the existing development observed on the Google. These are not added in the preliminary base map at this point of time.

3.6 Preliminary Base Map

A preliminary base map is prepared by placing and correcting all the above mentioned layers. This base map will be used to carry out the detailed assessments and corrected in the process.

4 Introduction to Precinct

4.1 Location and Connectivity

Erangal is located on a picturesque peninsula jutting into the Arabian Sea, popularly known as Madh Island separated by Malad creek from the main land. The peninsula is located on the western part of Mumbai popularly known as Madh Island (Refer Map No. 01).

Erangal Gaothan is located along the coast of this peninsula positioned between Akse and Madh gaothan. The gaothan falls within the P/N ward of the MCGM and has Arabian Sea to the west, agricultural land to the north and east and sparse development of bungalows to the south.

Erangal Gaothan can be accessed via road Malad Marve road. A road from Malad Marve road bifurcates at the start of the gaothan and passes through it to lead to the coast near St. Bonaventure Church. The BEST buses ply on this road. The gaothan can also be accessed from Versova via ferry to Madh jetty and by bus to Erangal gaothan (Refer Map No. 02).

4.2 Regional Context

The villages of Rathodi, Malavni, Marve, Akse, Erangal and Madh are all important coastal villages of the Salsette island linked by the Malad Marve road (Refer Map No. 03). Erangal gaothan is one of the few pre-industrial settlements developed along the western coast of Mumbai. Its origin can be dated earliest to the arrival of the Portuguese in Vasai in 1534. It is akin to other coastal settlements such as Versova, Madh, Akse, Manori, Gorai, Culvem, Chowk and Pali. However it is sustained by agriculture and increasingly service sector.

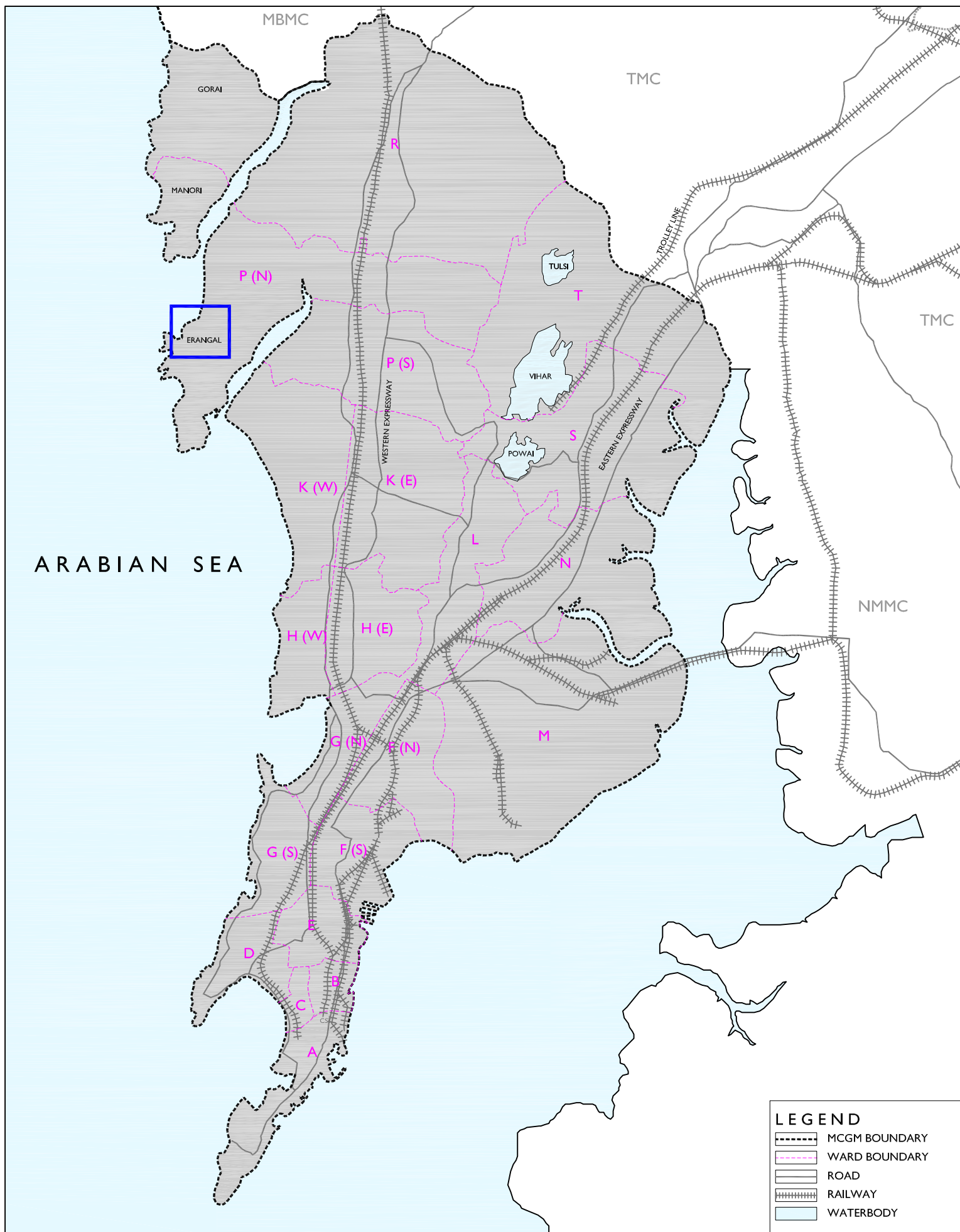
The limited connectivity to the mainland and the area demarcated as a “No Development Zone”, as per the prevailing Development Plan, to a large extent has contained external development pressure. It is largely surrounded by agricultural land and other scattered settlements like Bhattigaon, Madh and Akse villages. Its surrounding areas have become popular destinations for resorts, weekend getaways and shooting locations. The St. Bonaventure Church is one such popular location for shooting. These resorts generally G-G+1 storeys with a few exceptions like Hotel Retreat.

4.3 History and Growth of Erangal

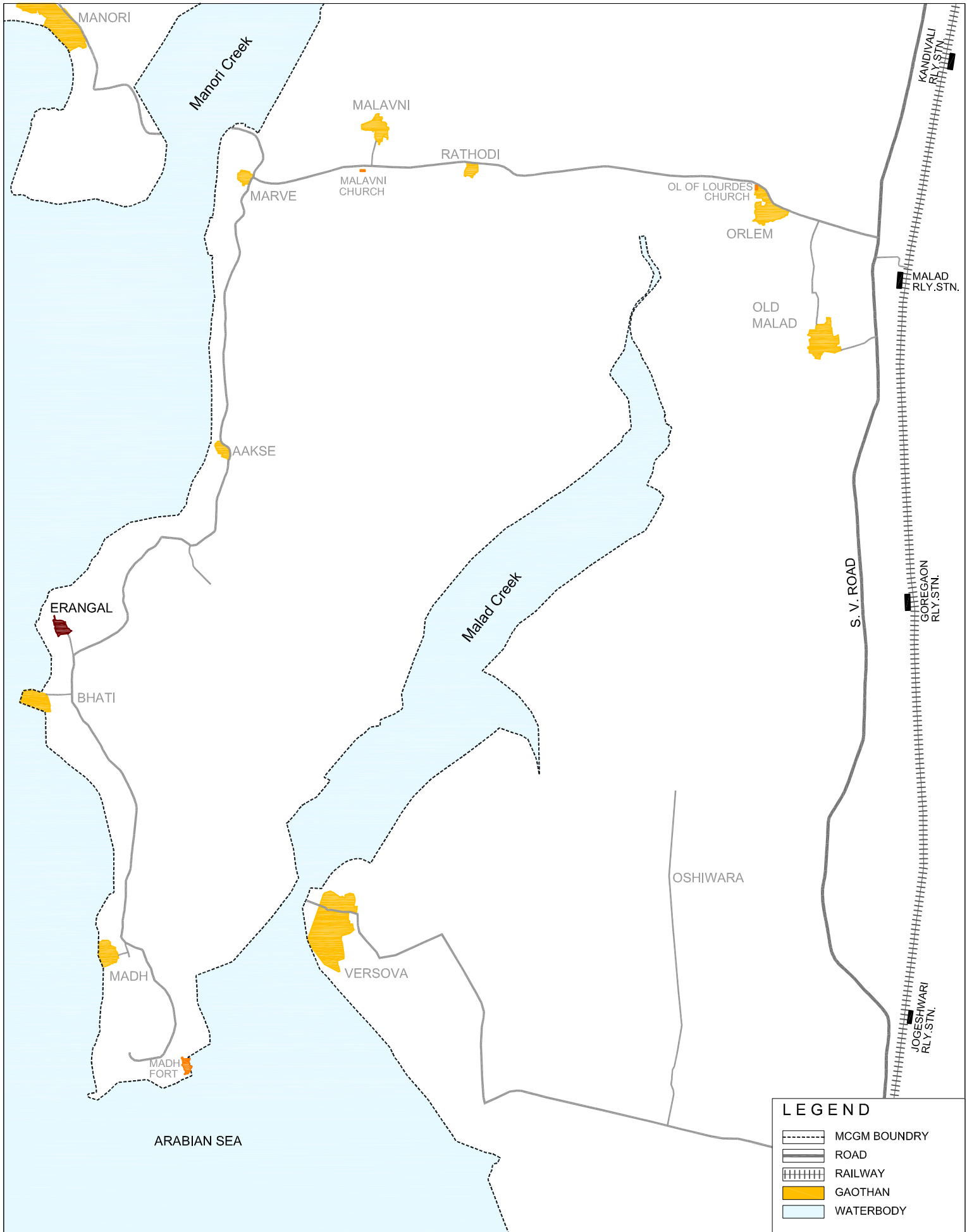
The first church to be built on Madh island was in the village of Erangal (Yarangal). The village of Erangal was acquired by the Franciscans between 1554-57, as an investment for the upkeep of the school at Mt. Painsur. There they built a church, in honour of St. Bonaventure in 1599 (St. Bonaventure Church) for the people of the surrounding villages. At one time Erangal may have accounted a large number of Catholic families: today there is only one catholic family there. According to the residents of the gaothan they are successors of a Chimnaji Appa who was a warrior and was one of the first people to come on the island. Chimnaji Appa was brother of Peshwa Bajirao & a general of the Maratha army. He fought with the Portuguese rulers & governors many times and it was during one of those battles that he came here, along with the Kshatriya Bhandari's, and settled in the place.

During the Second World War the whole island was acquired by the Government for defence purposes and the Catholic population was forced to vacate the village and scatter all over Salsette. Most of the residents of the gaothan were shifted to Orlem in 1934 and stayed there for seven years. The military took over the village. St. Bonaventure Church served as the fortress of the British. After the war however, the lands were returned and

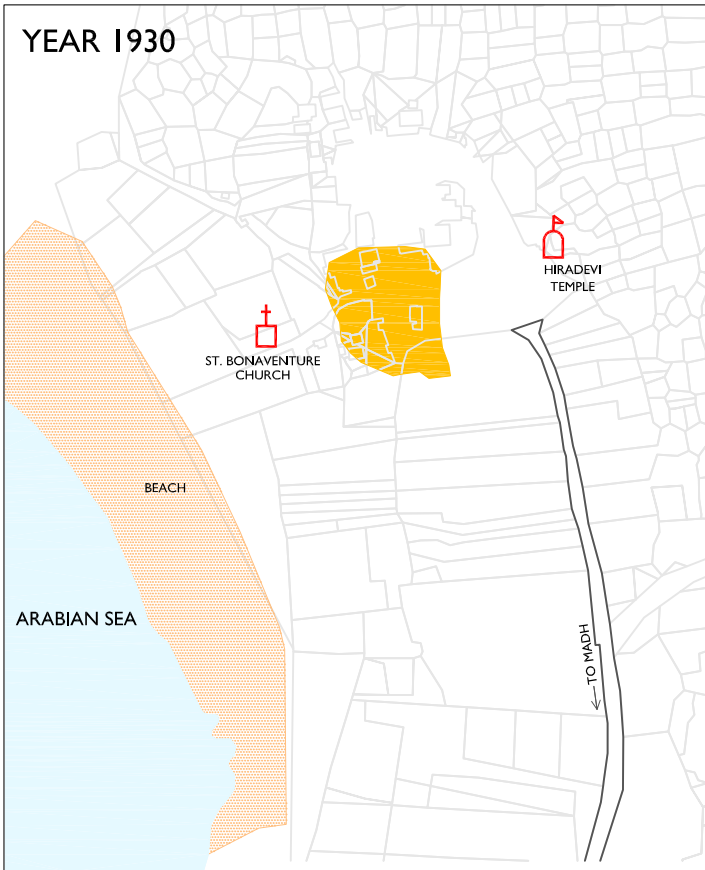
the villagers returned. The remnants of the walls/bastions built by the Portuguese can be still seen on the beach between Aksa and Erangal. Map No. 04 illustrates the growth of the gaothan.



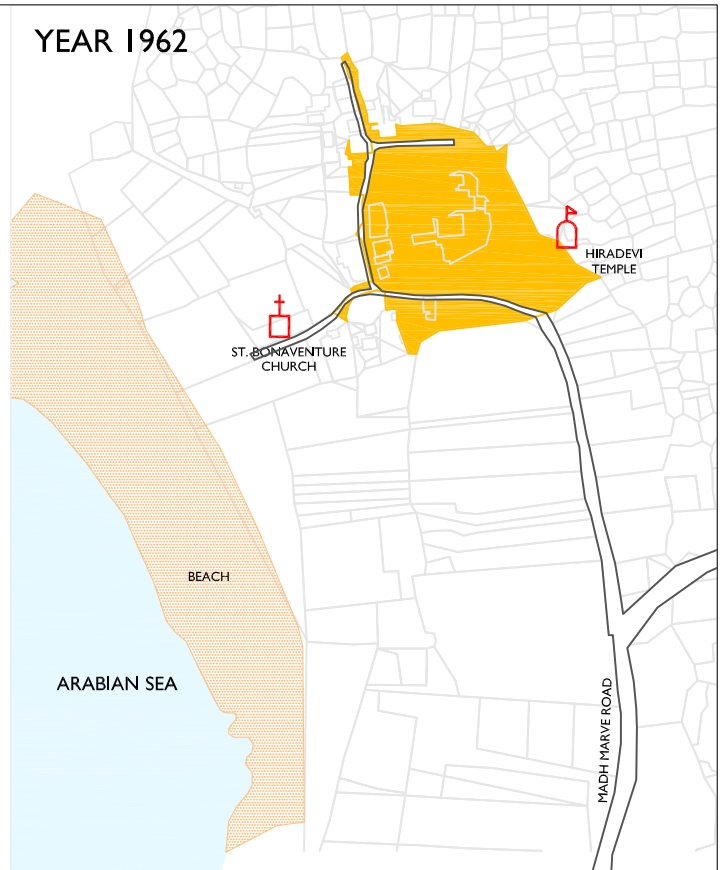




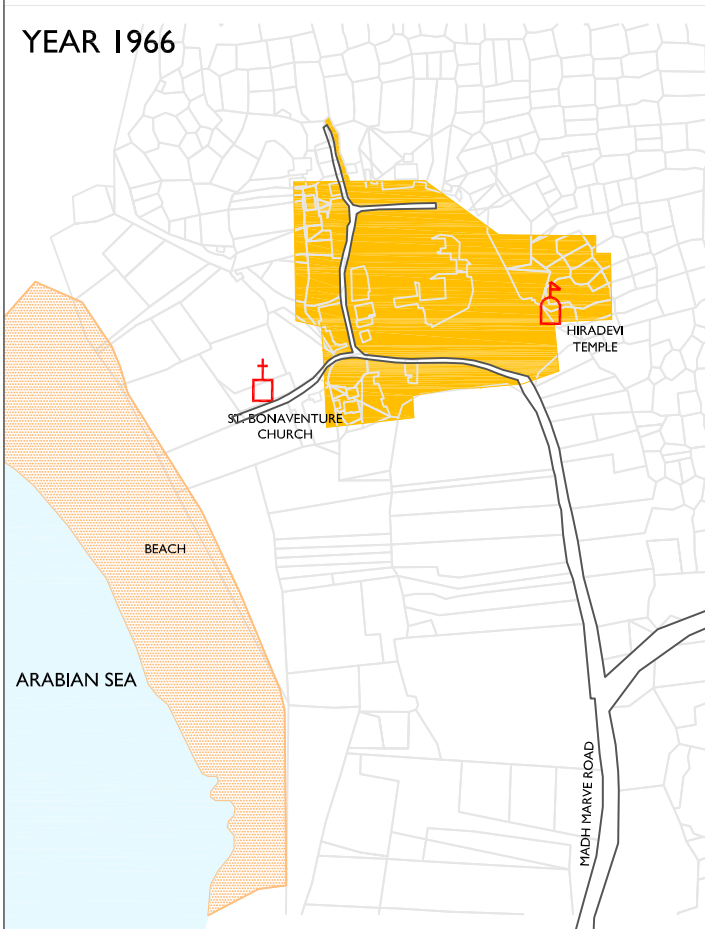
YEAR 1930



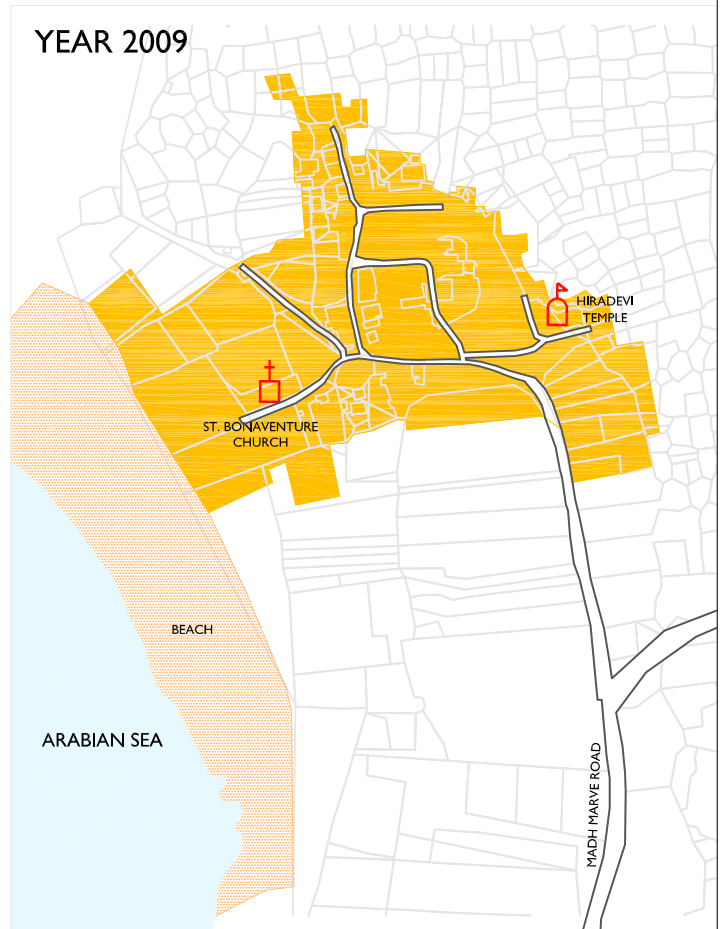
YEAR 1962



YEAR 1966



YEAR 2009



MUMBAI METROPOLITAN
REGION HERITAGE
CONSERVATION SOCIETY

GROWTH OF ERANGAL GAOTHAN

ACTION PLAN FOR HERITAGE CONSERVATION AND ENVIRONMENT
IMPROVEMENT OF ERANGAL PRECINCT

17.5m 0 17.5 35m
SCALE :- 1 : 17,500
SOURCE :-
Survey of India Toposheet 1930 & 1966
City Survey Map
Google Image 2009



MAP NO.
04

5 Preliminary Assessments

Erangal is one of the indigenous gaothans remaining in Mumbai. It is unique, given the fact that being located on the western coast of Madh Island, it is the only agrarian village (other than Aksa) among all the other fishing villages along the same coast.

In order to make preliminary assessments of Erangal, a limited preliminary interaction was conducted with the community in the form of interviews, and secondary sources were researched. A reconnaissance survey of the precinct was carried out on 25th, 26th and 27th February 2010 to establish contact with the community, identify local institutions and assess the existing condition, transformation and growth of the precinct. A survey form was prepared to assess the physical condition of the buildings in the precinct; while an extensive photo-documentation was done to assess the overall the condition of the precinct, its open spaces and its infrastructure.

A total of 4 qualitative interviews including two informal focus group discussions were conducted in the preliminary site visit. All the interviewees were women as the interviews/focus groups were conducted in the afternoon, and the most of the men were not present at home.

Table No. 01: List of people interviewed during preliminary site visit

| No | Name | Position in the community | Interviewed or not interviewed | Affiliation with organization |
|----|--|--|--------------------------------|-------------------------------|
| 1 | Ms. Nutan Thakur | Member | Interviewed | - |
| 2 | Ms. Annapurna Mhatre | Elder | Interviewed | - |
| 3 | Ms. Devyani Mhatre, two cousin sisters and neighbour | Members | Interviewed | - |
| 4 | Ms. Meenakshi Mhatre, her mother and sister | Members | Interviewed | |
| 5 | Mr. Dilip Mhatre | Leader | Not available | Chairman, Hiradevi Temple |
| 6 | Fr. Malcolm D'Souza | New to the Church and therefore can't provide information on the history of the church | | St. Bonaventure Church |

Table No. 02: List of acts, books and reports reviewed

| No | Name of Book | Author |
|----|---|----------------------------------|
| 1 | Maharashtra Regional and Town Planning Act 1966, amended in 1994 | |
| 2 | The Star of Erangal | Msgr. Francis Correa |
| 3 | Gazetteer of India, Maharashtra State, Greater Bombay District, Vol I (1986) | S.M. Edwardes |
| 4 | Listing and Grading of Heritage Buildings and Precincts in Greater Mumbai | EPC and HIC, Ahmedabad |
| 5 | Delineation and Listing of Madh, Erangal, Aksa, Marve, Manori, Culvem and Gorai Precincts in Mumbai, 2002 | Pankaj Joshi |
| 6 | Bandra Village Precinct, A Suburban Village Renewal and Revitalization Scheme | |
| 7 | Heritage Buildings and Precincts, Mumbai – A conservation manual for owners and occupiers | Nayana Kathpalia and Abha Lambah |
| 8 | Conservation Guidelines for Khotachiwadi, 2000 | Rizvi College of Architecture |
| 9 | Conservation Guidelines, 2006 | URA, Singapore |

| No | Name of Book | Author |
|----|--|--|
| 10 | Criteria for the Assessment of Local Heritage Places and Areas: A Practical Guide to Identifying, Grading and Documenting Places and Areas in Local Government Inventories, 2007 | Heritage Council, Govt. of Western Australia |
| 11 | Heritage Conservation District Plan, 2006 | City of Toronto |
| 12 | Ontario Heritage Tool Kit, 2006 | Ministry of Culture, Ontario |

The following sections illustrate our understanding about the settlements and its surroundings from the site surveys and interactions with the community /residents of the precinct. Information for the other sections will be assimilated once it is acquired for future surveys.

- 5.1 Development Plan Proposals
- 5.2 Built Fabric and Settlement Pattern
- 5.3 Access and Road Networks
- 5.4 Land Use
- 5.5 Intensity of Development/FSI Utilization
- 5.6 Land Ownership Pattern
- 5.7 Landmarks and Public Spaces
- 5.8 Community Pattern
- 5.9 Occupational Pattern
- 5.10 Typology of Structures
- 5.11 Cultural Practices
- 5.12 Sewerage
- 5.13 Solid Waste Management
- 5.14 Social Amenities

5.1 Development Plan Proposals

Zoning:

- The village precinct lies in CRZ II and III (Refer Map No. 05).

Reservations:

- There are two DP reservations within the precinct, both of which are currently used for the reserved purposes (Refer Map No.06).

Table No. 03: List of DP Reservations

| No | Reservation | City Survey No | Area (sq m) |
|----|----------------|----------------|-------------|
| 1 | Primary School | 1372, 1375 | 3137 |
| 2 | Playground | 1376 | 2695 |

Other Proposals:

- The DP has proposed a 13.40m DP road around the precinct, with one leg turning to meet the access road to the precinct. This proposal has not yet been implemented (Refer Map No. 06).
- However, the alignment of the DP road should be reconsidered as it cuts through the buildings in plots with city survey numbers from 1221-1225, which are part of the revised precinct boundary and will detrimentally affect the village precinct. Since the width of the access road is only 5.5 m, the junction of both roads is likely to create a bottleneck and congest the narrow road. A viable alternative would be to directly connect the proposed DP road to Madh-Malad Road, thereby retaining existing buildings and preventing congestion on narrow streets.

5.2 Built Fabric and Settlement Pattern

The precinct is a small cluster, which has developed along the Malad – Madh Road and the sea. The built form exhibits a strong organic development which is homogenous and of low rise-high density. There are incidental open spaces within the settlement, which act as public interaction places. Few commercial activities happen at the edge of the Malad – Madh Road (Refer Map No. 07).

A very important feature in the settlement is the St. Bonaventure Church, a 16th century magnificent structure facing the sea.

Most of the structures in the precinct are residential belonging to the Kshatriya Bhandari community, which reflect their lifestyles. The community is less prosperous as compared to the Kolis & the East Indians and hence the houses are smaller & less articulate. The houses have a simple plan; most houses have a verandah in the front, followed by living and service areas. The verandahs are usually large & are used to store toddy fruits, coconuts or simply as workspace. The common spaces usually have Tulsi planters. The structures have a sense of scale and proportion which promotes interaction between the user and his built environment.

The precinct has approximately 163 structures, about half of which are intact and the old character of the spaces is retained. However majority of the structures have undergone transformation.

5.3 Access and Road Networks

The main access road breaks off from the Malad – Madh Road and then further branches to provide access to the small clusters of houses. It a tree – branch road network pattern. These paths offer a choice of access and shorter routes to various parts of the settlements (Refer Map No. 02).

5.4 Land Use

The settlement is predominantly residential with a few ground storey confectionary stores (Refer Map No. 08). There are three institutional buildings – two religious and one educational. Each of these is abutted by a public open space or a playground

These are:

- St. Bonaventure Church
- Hiradevi Temple
- Municipal Primary and Secondary school

There is another public space – Holi Maidan – which is actively used by the community.

5.5 Intensity of Development

The footprints of the buildings occupy the entire plot, with no front and rear setbacks or side margins. The heights of the buildings vary from G-G+1 storeys with a few G+2 storeys (Refer Map No. 09).

5.6 Land Ownership Pattern

Land and the houses within the gaothans are predominantly privately owned except for a few properties that are let out to tenants. Most of the small shops are privately owned (Refer Map No. 10).

The Tatas also own large parcels of land to the west of the settlement.

Table No. 04: List of types of owners

| No. | Type of Ownership | Area (in Ha) | % of total area |
|-----|-------------------|--------------|-----------------|
| 1 | Private Ownership | 3.80 | 78.68 |
| 2 | Government | 1.03 | 21.32 |
| | Total | 4.83 | 100 |

5.7 Landmarks and Public Spaces

There are two local institutions in the village that act as important landmarks: Hiradevi Temple and St. Bonaventure Church.

The Hiradevi Temple has a trust, which gets revenue from contributions from the residents and maybe political parties. It organizes village programmes, dramas or festival celebrations in the village. Currently, Mr. Dilip Mhatre is the Chairman of the Trust.

Despite the community asserting a strong Marathi identity, it venerates the church. The church by itself doesn't generate any revenue, but the fairs and festivals of the St. Bonaventure Church have become a means to earn additional income for the residents.

5.8 Community Pattern

The residents trace their identity to the Kshatriya Bhandari caste, who are predominantly found in Erangal and Akse, villages. Within this community, there are sub-castes of (Refer Map No. 11):

- Patils
- Mhatres
- Thakurs
- Chowdharis
- Sutaras

The Patil caste is considered highest amongst all the sub-castes; the previous sarpanch (head) of the village was from this caste. They only marry within their own caste and selected sub-castes. Hence the residents are in fact related to each other, making the community quite close-knit.

There is only one East Indian family (Niklav) in Erangal, which lives within the Church premise and is the caretaker of the Church.

It was observed that the community celebrates both Christian and Hindu festivals. As Annapurna Mhatre claimed: *"Though they (meaning the British, Portuguese or Christians) kept the God, the God watches us"*.

One of the residents claimed that since the village is isolated from Mumbai, the residents still have a rural mentality. The women are only educated up to high school and do not complete their undergraduate studies. They are not encouraged to take up jobs, and are perceived as home makers. However this trend is changing, as some girls have undertaken packaging jobs in Malad and Charkop.

5.9 Occupational Pattern

There are approximately 300 households in the gaathan and each household, on an average, consists of 4 to 7 persons. Originally, the main occupation of the Bhandari community was toddy tapping. Over the years there seems to be a transition in the occupations of the residents from self employment in agriculture to service jobs based on the level of education. This is due to two main reasons:

- A transition has occurred from joint families to nuclear families, resulting in subdivision of land, thereby making it unfeasible to cultivate.

- Agricultural lands have been sold for real estate development for bungalows and farm houses.

Educated local residents work as clerks in banks, while those who are not educated, work as BEST drivers or conductors, auto rickshaw drivers or as gardeners in the adjacent bungalows.

Some of the girls in the village have begun to work in packaging industries in Malad and Charkop. The economic position of the families is also reflected by the condition of the houses and from consultations with residents, though their income levels have yet to be verified.

5.10 Typology of Structures

The buildings are mostly linear and usually abut the streets (Refer Sketch No. 1). A few buildings have constructed twig fences around their properties. Most of the buildings have sloping roofs made of asbestos sheets.

The toilets in most houses are located outside the houses, as detached outhouses; while the bathrooms are located within the residences. However, this data is yet to be verified.

5.11 Cultural Practices

The Bhandaris believe in 3 goddesses:

- Mhatres believe in Vajreshwar Devi in Virar
- Thakurs believe in Kalbadevi
- Patils believe in Hiradevi

The following festivals are celebrated in the village:

- A mass is conducted from 31st December to the second Sunday of January every year. The second Sunday is a festive day and is celebrated by locals and a large number of visitors. As part of the celebrations, a fair is organized on the beach and villagers put up their stalls for selling food items, flowers etc. 15th July is celebrated as the Smriti Din and it is believed to be the day when St. Bonaventure was buried.
- Every year, sometime before Diwali, there is an Utsav / Urus (festival) in the Hiradevi Temple. During Navratri festival, there is Ghatasthapana in the Hiradevi Temple. All Hindu festivals such as Holi, Diwali, Vatapurnima, Ramnavami, Hanuman Jayanti etc. are celebrated by the locals.
- An event (which consists of performances, plays, etc.) is organized each May after the school results are declared.

5.12 Sewerage

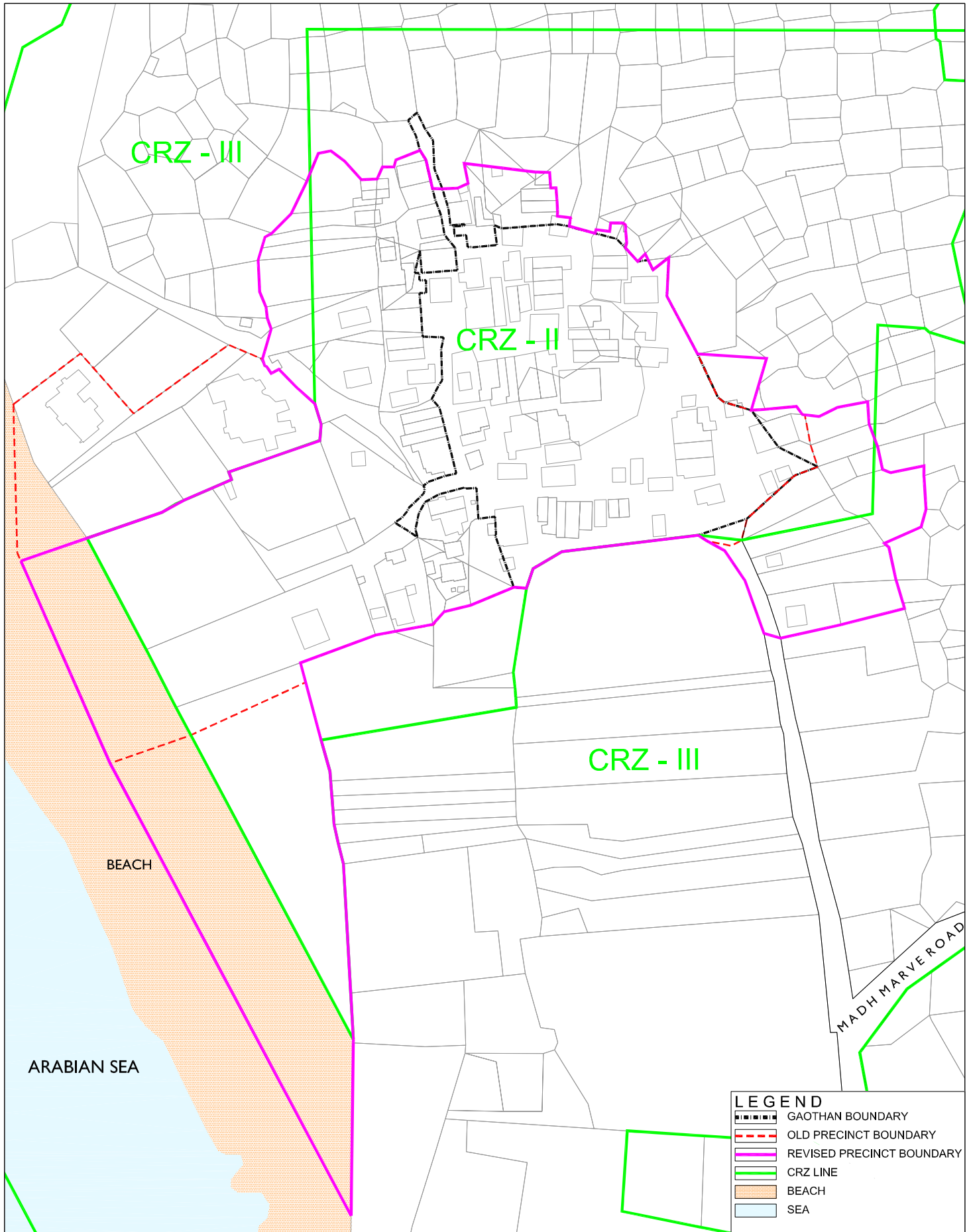
No sewerage system has been provided to the gaathan, and hence most structures in the residences have individual soak pits. There is also a lack of public toilets.

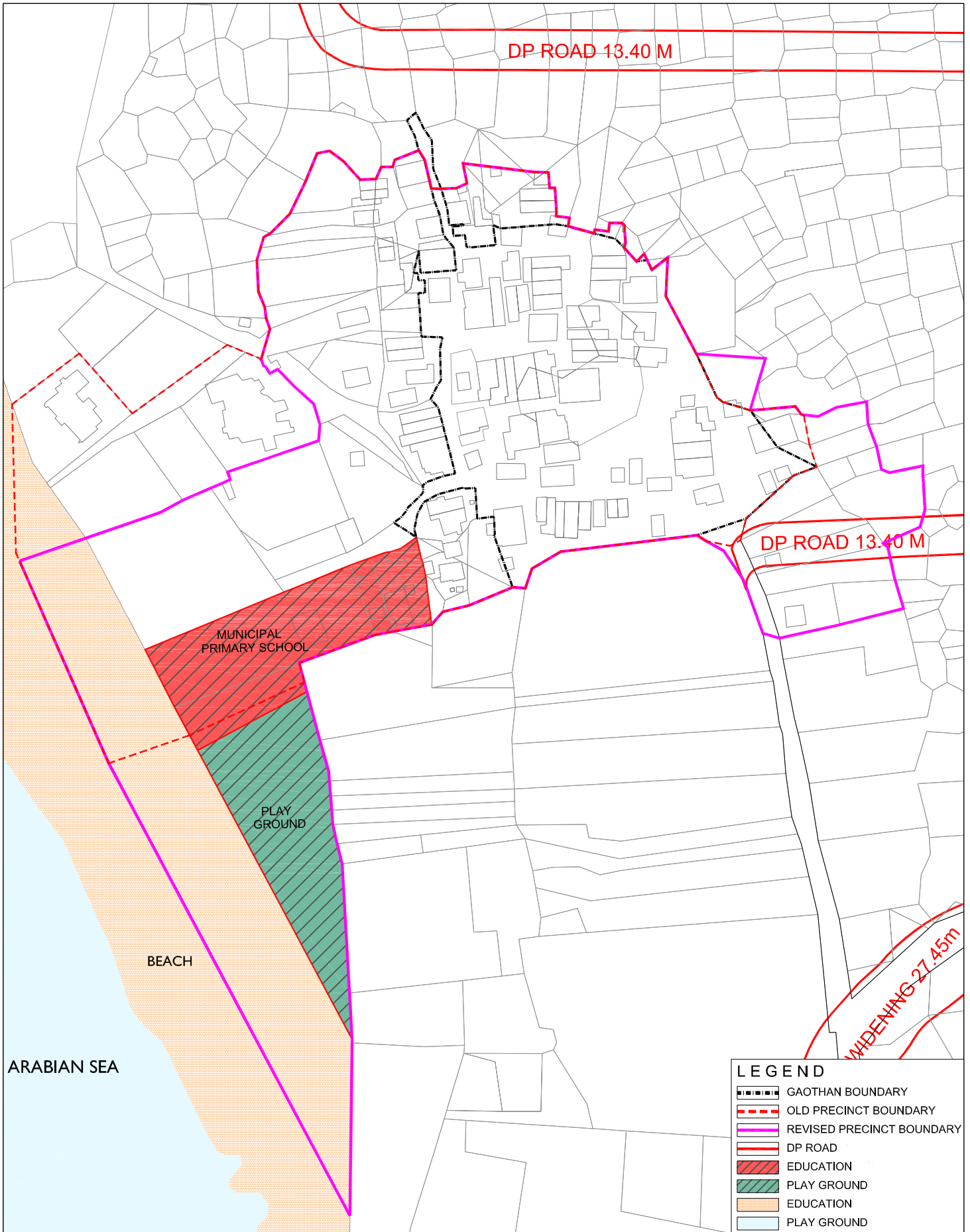
5.13 Solid Waste Management

A tendency to keep the residence as well as the access road clean, by the residents, was observed. Solid waste is piled at certain places, which is then cleared by the authorities once in a day. Two community bins are provided by the authorities – one near the beach, the other is near the entrance to the gaathan. At times the residents dispose the wastes themselves by burning or dumping it away from the gaathan.

5.14 Social Amenities

A Marathi medium secondary school is located near the church. For medical services, residents have to use the facilities in Madh village. Though this information was gathered through informal dialogues with the residents, it is yet to be verified.





LEGEND

- GAOTHAN BOUNDARY
- OLD PRECINCT BOUNDARY
- REVISED PRECINCT BOUNDARY
- DP ROAD
- EDUCATION
- PLAY GROUND
- EDUCATION
- PLAY GROUND



MUMBAI METROPOLITAN
REGION HERITAGE
CONSERVATION SOCIETY

DEVELOPMENT PLAN RESERVATIONS

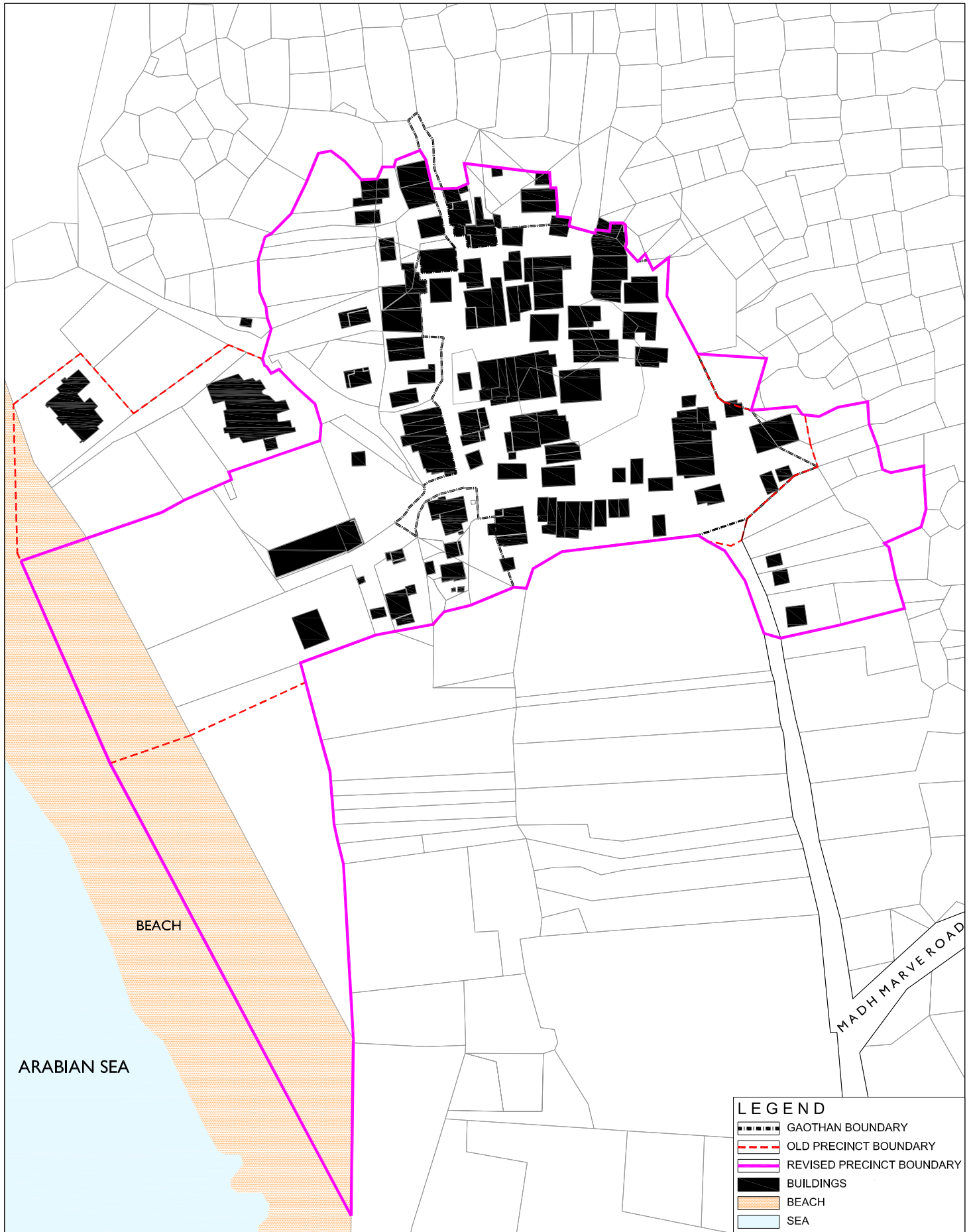
ACTION PLAN FOR HERITAGE CONSERVATION AND ENVIRONMENT
IMPROVEMENT OF ERANGAL PRECINCT

17.5m 0 17.5 35m
SCALE :- 1 : 1750

SOURCE :-
Development Plan 1981-2001



MAP NO.
06



| LEGEND | |
|--------|---------------------------|
| | GAOTHAN BOUNDARY |
| | OLD PRECINCT BOUNDARY |
| | REVISED PRECINCT BOUNDARY |
| | BUILDINGS |
| | BEACH |
| | SEA |



MUMBAI METROPOLITAN
REGION HERITAGE
CONSERVATION SOCIETY

BUILT FABRIC

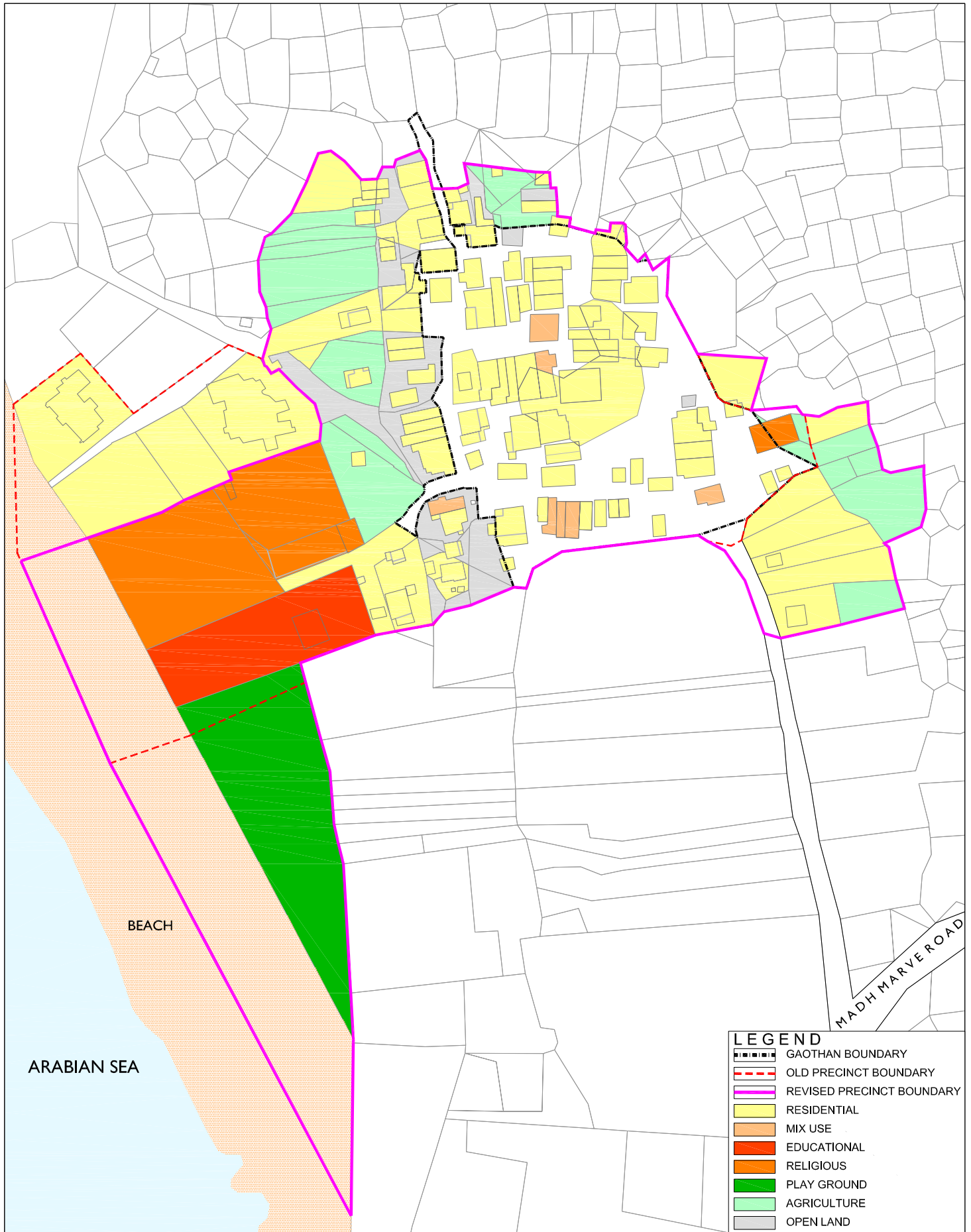
ACTION PLAN FOR HERITAGE CONSERVATION AND ENVIRONMENT
IMPROVEMENT OF ERANGAL PRECINCT

17.5m 0 17.5 35m
SCALE :- 1 : 1750

SOURCE :-
Field Survey



MAP NO.
07



| LEGEND | |
|--------|---------------------------|
| | GAOTHAN BOUNDARY |
| | OLD PRECINCT BOUNDARY |
| | REVISED PRECINCT BOUNDARY |
| | RESIDENTIAL |
| | MIX USE |
| | EDUCATIONAL |
| | RELIGIOUS |
| | PLAY GROUND |
| | AGRICULTURE |
| | OPEN LAND |



MUMBAI METROPOLITAN
REGION HERITAGE
CONSERVATION SOCIETY

LAND USE PLAN

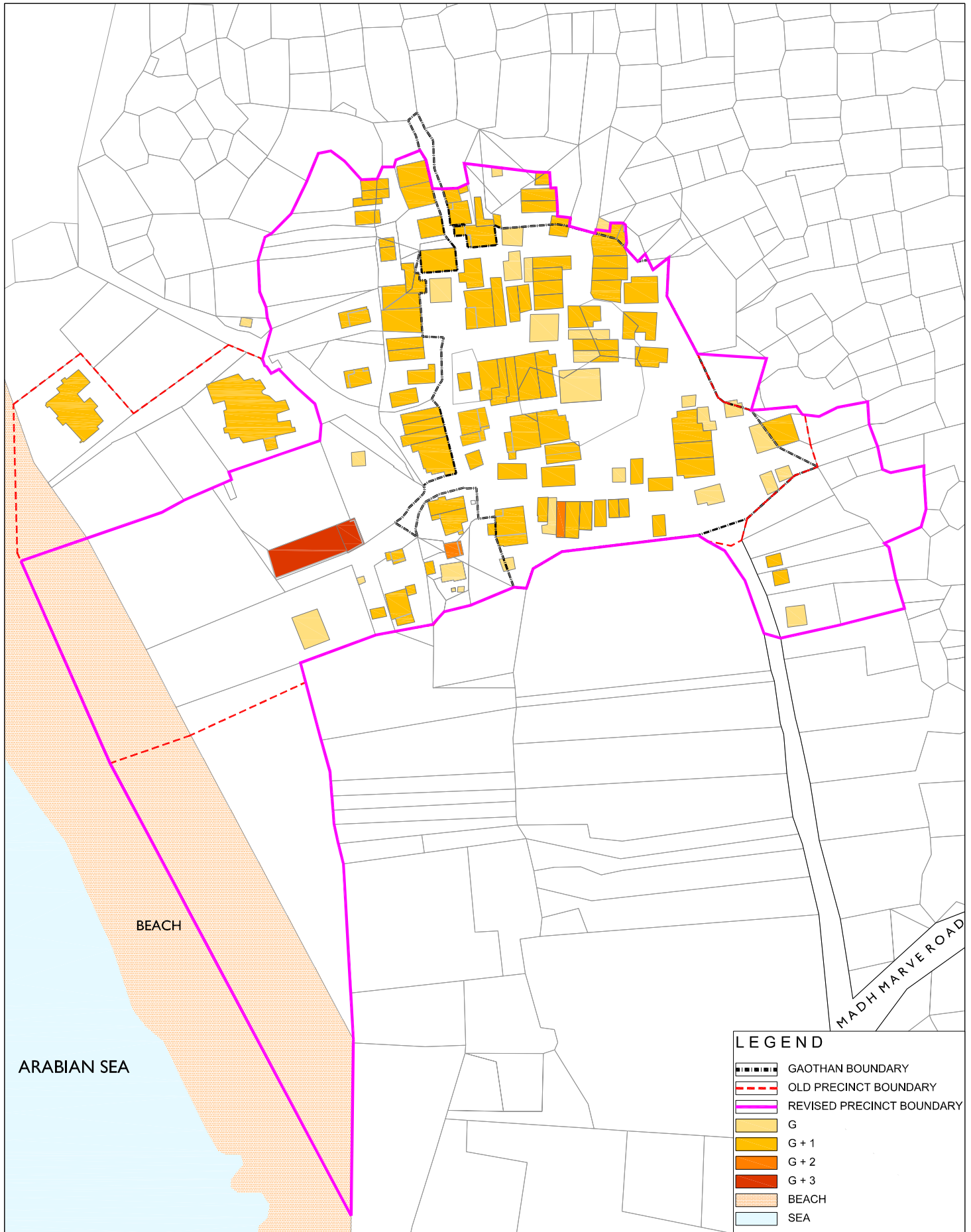
ACTION PLAN FOR HERITAGE CONSERVATION AND ENVIRONMENT
IMPROVEMENT OF ERANGAL PRECINCT

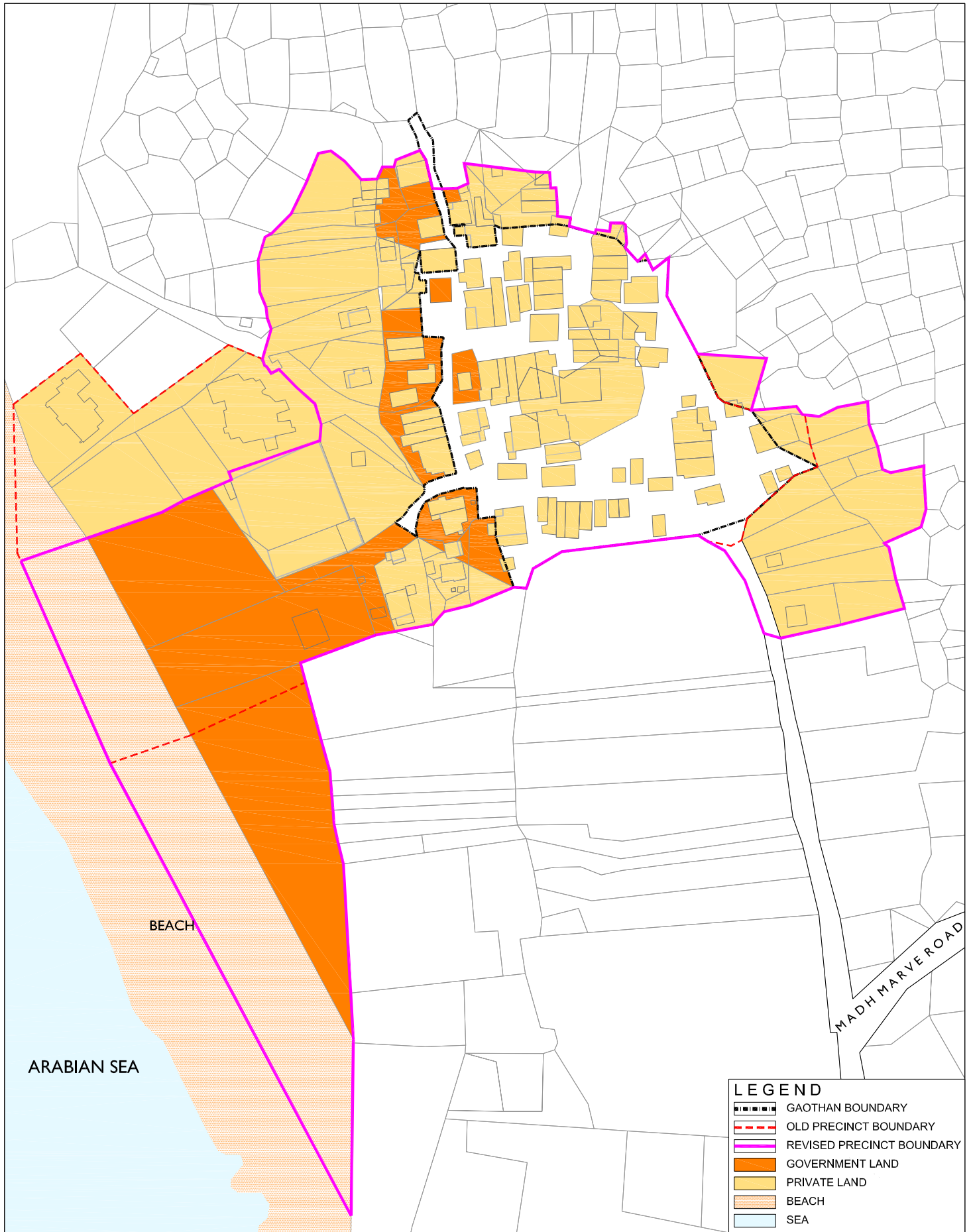
17.5m 0 17.5 35m
SCALE :- 1 : 1750

SOURCE :-
Field Survey



MAP NO.
08





LEGEND

- GAOTHAN BOUNDARY
- OLD PRECINCT BOUNDARY
- REVISED PRECINCT BOUNDARY
- GOVERNMENT LAND
- PRIVATE LAND
- BEACH
- SEA



MUMBAI METROPOLITAN
REGION HERITAGE
CONSERVATION SOCIETY

LAND OWNERSHIP

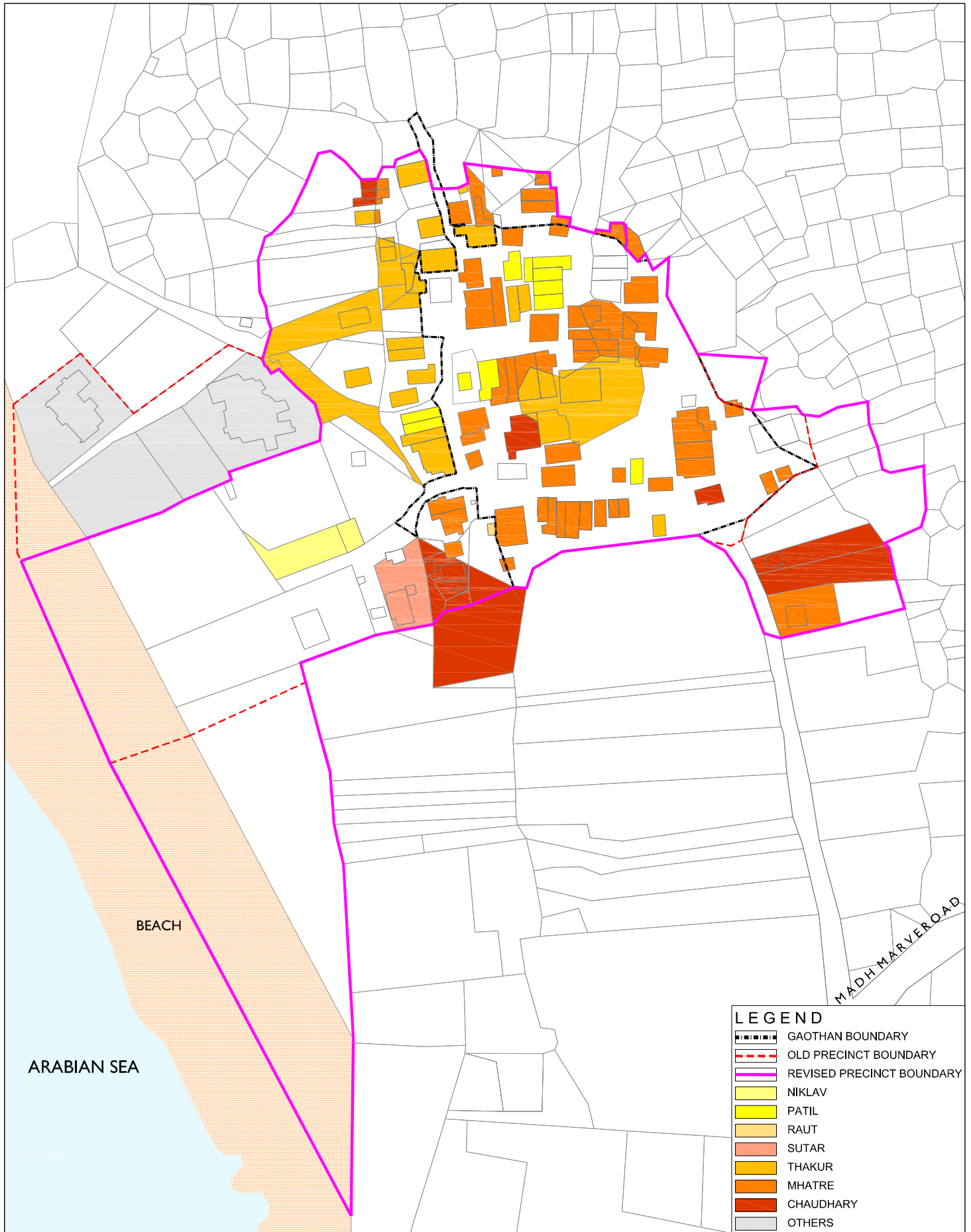
ACTION PLAN FOR HERITAGE CONSERVATION AND ENVIRONMENT
IMPROVEMENT OF ERANGAL PRECINCT

17.5m 0 17.5 35m
SCALE :- 1 : 1750

SOURCE :-
Mahabhulekh



MAP NO.
10





FRONT ELEVATION



AXONOMETRIC VIEW

6 Review of Precinct Boundary

6.1 Rational for Revising the Precinct Boundary

While undertaking the reconnaissance survey it was observed that the development has spread out of the original gaothan boundary. The area just around the gaothan boundary is developed and has similar intensity of development and typology / built form. The spread of this development just outside the gaothan boundary is seen more towards the west side of the gaothan along the approach road. The development beyond this is sparse at present with agricultural land. This development generally consists of bungalows and farmhouses.

It is a fact that in future many new structures /development will occur around the gaothan which may be in contrast to the current development (height and scale). Based on this understanding of the existing development gradation and the future development it is felt necessary to create two zones with the aim of managing the development not only inside the precinct boundary but also around it. The two zones are:

1. Core Zone (Precinct Boundary)

This zone demarcates structures and open spaces in the gaothan and those around it which show similar characteristics and typology. The new precinct boundary mostly follows the old precinct boundary identified during the Heritage listing undertaken by MMRHCS in 2005, except at 3 specific locations (Refer Map No. 12).

- To the north where the old precinct boundary had included the two bungalows in close proximity of the village is now excluded from the new precincts boundary.
- To the south east along the approach road where the development has spread and is very similar to the built form in gaothan is now included in the new precincts boundary.
- To the south west abutting the primary school is the play ground used by the school is now included in the new precinct boundary.

2. Buffer Zone

This zone is the transitional zone and includes plots around the core zone/new precinct boundary. Most of the land around the core zone is agricultural land with few developments such as bungalow and farm houses etc. The rationale of creating a buffer zone is to regulate new developments so that they are not incongruent with the core zone. At the same time it also includes those structures, which though not typical of the precinct, are compatible in height and scale.

The rationale for adopting these zones as a basis for defining the precinct boundary is that it aids in prioritizing the nature and kind of intervention within each zone and also enables framing of different development regulations.

6.2 Details of the Revised Precinct Boundary and the Buffer Zone

The revised precinct / core zone includes all the city survey nos./ buildings in the precinct boundary defined during the listing and grading of heritage structures and precincts in 2005 except for city survey number 732/3 as it is a large G+2 building completely out of character with the existing settlement.

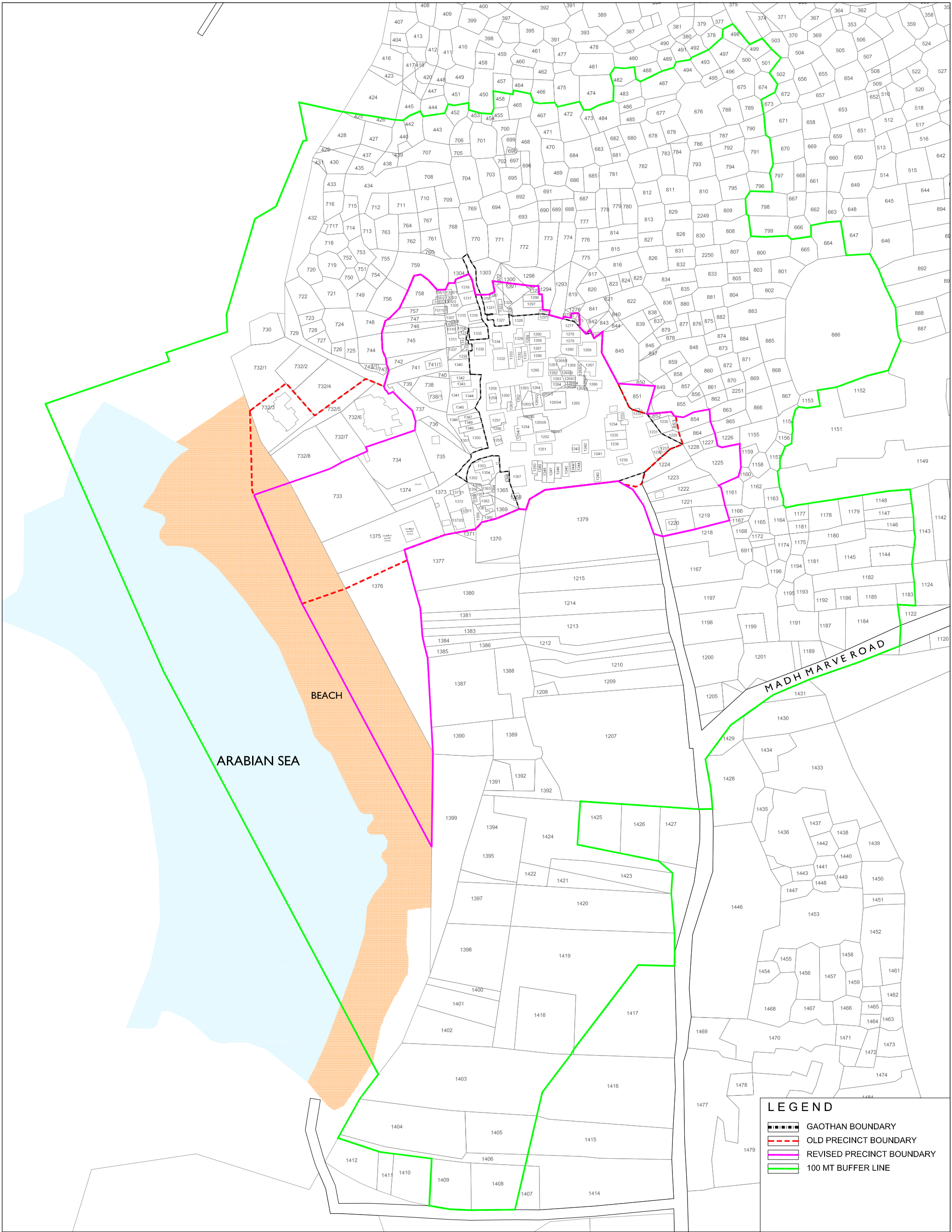
The playground is included as it is attached to the Municipal Primary School used by the children in and around the Erangal precinct. The table below gives details of the old precincts boundary, core zone (new precinct boundary) and the buffer zone:

Table No. 05: List of CTS Numbers:

| No | Boundary | City Survey Numbers | Deletions |
|----|---|--|-------------------------------|
| 1 | Old Precinct Boundary (CTS Nos. identified during the project of 'Listing & Grading of Heritage Buildings & Precincts in Greater Mumbai' in 2005) | 732/3,732/5,732/6,732/7,732/8,733,734,735,736,737,738,738/1,739,740,741,741/1,742,745,746,747,757,757/1,758,758/1,758/2,758/3,852,853,1229,1230,1231,1232(Partial),1233,1234,1235,1236,1237,1238,1239,1240,1241,1242,1243,1244,1244/1,1245,1246,1247,1248,1249,1250,1251,1252,1254,1254/1,1255,1256,1257,1258,1259,1260,1261,1262,1263,1264,1265,1265/1,1265/2,1265/3,1265/4,1265/5,1265/6,1265/7,1265/8,1265/9,1266,1267,1268,1268/1,1268/2,1268/3,1268/4,1268/5,1268/6,1269,1271,1273,1274,1277,1278,1279,1280,1281,1282,1283,1284,1285,1286,1287,1288,1289,1290,1291,1292,1294(Partial),1295,1296,1297,1299,1300(Partial),1301,1302(Partial),1305,1305/1,1305/2,1305/3,1307,1308,1309,1310,1311,1312,1313,1314,1315,1316,1317,1318,1319,1320,1321,1322,1323,1325,1327,1328,1329,1330,1331,1332,1333,1334,1335,1336,1337,1338,1339,1340,1341,1342,1343,1345,1346,1347,1348,1349,1350,1351,1352,1353,1354,1355,1356,1357,1358,1359,1360,1361,1362,1363,1364,1365,1366,1367,1368,1369,1372,1372/1,1372/2,1373,1373/1,1374,1375,1376(Partial) | |
| 2 | New Precinct Boundary / Core Zone (CTS Nos. identified according to the revised precinct boundary) | 733,734,735,736,737,738,738/1,739,740,741,741/1,742,745,746,747,757,757/1,758,758/1,758/2,758/3, 851 ,852,853, 854,864,1219,1220,1221,1222,1223,1224,1225,1227,1228 ,1229,1230,1231, 1232 ,1233,1234,1235,1236,1237,1238,1239,1240,1241,1242,1243,1244,1244/1,1245,1246,1247,1248,1249,1250,1251,1252,1254,1254/1,1255,1256,1257,1258,1259,1260,1261,1262,1263,1264,1265,1265/1,1265/2,1265/3,1265/4,1265/5,1265/6,1265/7,1265/8,1265/9,1266,1267,1268,1268/1,1268/2,1268/3,1268/4,1268/5,1268/6,1269,1271,1273,1274,1277,1278,1279,1280,1281,1282,1283,1284,1285,1286,1287,1288,1289,1290,1291,1292,1294(Partial),1295,1296,1297,1299,1300(Partial),1301,1302(Partial),1305,1305/1,1305/2,1305/3,1307,1308,1309,1310,1311,1312,1313,1314,1315,1316,1317,1318,1319,1320,1321,1322,1323,1325,1327,1328,1329,1330,1331,1332,1333,1334,1335,1336,1337,1338,1339,1340,1341,1342,1343,1345,1346,1347,1348,1349,1350,1351,1352,1353,1354,1355,1356,1357,1358,1359,1360,1361,1362,1363,1364,1365,1366,1367,1368,1369,1372,1372/1,1372/2,1373,1373/1,1374,1375, 1376 | 732/3,732/5,732/6,732/7,732/8 |
| 3 | Buffer Zone (CTS Nos. identified according to the 100m buffer outside the revised precinct boundary) | 425,426,427,428,429,430,431,432,433,434,435,437,438,439,440,442,443,452,453,454,455,458,465,467,468,469,470,471,472,473,482,483,484,485,486,487,493,494,495,496,497,498,499,500,501,664,665,674,675,676,677,678,680,681,682,683,684,685,686,687,688,689,690,691,692,693,694,695,696,697,698,699,700,701,702,703,704,705,706,707,708,709,710,711,712,713,714,715,716,717,718,719,720,721,722,723,724,725,726,727,728,729,730,732/1,732/2, 732/3,732/4,732/5,732/6,732/7,732/8 ,743,743/1,748,749,750,751,752,753,754,755,756,759,760,761,762,763,764,767,768,769,770,771,772,773,774,775,776,777,778,779,780,781,782,783,784,786,787,788,789,790,791,792,793,794,795,796,800,801,802,803,804,805,807,808,809,810,811,812,813,814,815,816,817,819,820,821,822,823,824,825,826,827,828,829,830,831,832,833,834,835,836,837,838,839,840,841,842,843,844,845,846,847,848,849,850,855,856,857,858,859,860,861,862,863,865,866,867,868,869,870,871,872,873,874,875,876,877,878,879,880,881,882,883,884,885,886,1144,1145,1146,1147,1148,1153,1154,1155,1156,1157,1158,1159,1160,1161,1162,1163,1164,1165,1166,1167,1168,1172,1174,1175,1177,1178,1179,1180,1181,1182,1183,1184,1185,1186,1187,1189,1191,1192,1193,1194,1195,1196,1197,1198,1199,1200,1201,1205,1207,1208,1209,1210,1212,1213,1214,1215,1218,1226,1 | |

| No | Boundary | City Survey Numbers | Deletions |
|----|----------|---|-----------|
| | | 275,1276,1293,1294,1298,1300,1302(Partial),1303,1304,1370,1371,1377,1379,1380,1381,1383,1384,1385,1386,1387,1388,1389,1390,1391,1392,1394,1395,1397,1398,1399,1400,1401,1402,1403,1404,1405,1406,1408,1409,1418,1419,1420,1421,1422,1423,1424,2249,2250,2251,6911 | |

Note: With a revision of the precinct boundary, some CTS numbers were added into the core zone (new precinct boundary). These are indicated in bold. Also, some numbers were removed from the core zone (new precinct boundary) and included in the buffer zone. These also are indicated in bold.



LEGEND

- GAOTHAN BOUNDARY
- OLD PRECINCT BOUNDARY
- REVISED PRECINCT BOUNDARY
- 100 MT BUFFER LINE



MUMBAI METROPOLITAN
REGION HERITAGE
CONSERVATION SOCIETY

REVISED PRECINCT BOUNDARY

ACTION PLAN FOR HERITAGE CONSERVATION AND ENVIRONMENT
IMPROVEMENT OF ERANGAL PRECINCT

15m 0 15 45m

SCALE :- 1 : 2250

SOURCE :-
City Survey Map
Google Image 2009



MAP NO.
12

APPENDIX 1

Review of some of the Material

1. Criteria for the Assessment of Local Heritage Places and Areas: A Practical Guide to Identifying, Grading and Documenting Places and Areas in Local Government Inventories, 2007

The guide provides a framework for assessing the heritage significance of place or an area so that they can be incorporated into local government heritage inventories or lists. The variables of the proforma or “place record form” are particularly relevant for this stage.

The place record form includes the following variables:

- Name of Place: Current name.
- Other names: Former or other names.
- Land description: City Survey Number.
- Construction date(s): Original construction year; or if constructed in stages, specify additional relevant year(s).
- Place type: (eg. Individual Bldg, Precinct, Urban Park, Tree etc).
- Use (original/current): State both Original and Current Uses if possible.
- Physical description: Provide a brief description of the place, its component elements, and any important features of its context or setting.
- Historical notes: Provide a brief history of the place relevant to its significance. Detail the historical evolution of the place, including dates of importance, past and current uses, and associated persons or events.
- Construction materials
- Statement of significance: Provide a concise statement of the place’s significance with reference to the Assessment Criteria published by the Heritage Council.
- Level of significance: State whether the place is considered of Exceptional, Considerable or Some significance.
- Management category (desired outcome): State the Management Category associated with the Level of Significance assigned to the place.
- Main sources: List any written records, maps, plans, photographs or other sources used in the assessment of the place.
- Date of survey/assessment
- Photograph Include one photograph that clearly depicts the place.

Optional Information

- Architect
- Architectural style: Select from standard styles.
- Condition (and condition date): State whether the place is in Good, Fair or Poor condition, and if available, a summary of major works required to conserve or restore the place.

2. Heritage Conservation District Plan, 2006, City of Toronto

The built register inventory of the HCDP consists of the following parameters:

- Photograph
- Era
- Style: Architectural Style.
- Heritage Status: Designation.
- Connection to PATH: Implies connection to public transportation system.

- Contributing: Whether it contributes to the heritage
- Heritage Character Statement

3. Criteria for the Assessment of Local Heritage Places and Areas: A Practical Guide to Identifying, Grading and Documenting Places and Areas in Local Government Inventories, 2007

The guide provides a framework for assessing the heritage significance of place or an area so that they can be incorporated into local government heritage inventories or lists. The criteria or frameworks for assessing and grading significance are particularly relevant for this stage. There are different criteria for heritage places (buildings) and heritage areas (precincts).

The assessment criteria for heritage places are based on the nature of significance and the degree/level of significance. The assessment criteria for heritage areas also require a “unified or cohesive physical form with an identifiable aesthetic, historic or social theme associated with a particular period or periods of development”.

The Heritage Places are further graded into levels of significance based on their contribution to the Heritage Area and the outcome desired from the grading of the place. For example, if a place was categorized as “No Contribution”, it would imply that it “does not contribute to the significance of the Heritage Area” and therefore its “existing fabric need not be retained and any new development on site should reinforce the significance of the area, in accordance with the design guidelines (or regulations)”.

4. Ontario Heritage Tool Kit, 2006, Ministry of Culture, Ontario

The Ontario Heritage Tool Kit consists of four booklets which provide a practical guide to designating heritage properties and districts and listing, researching and evaluating cultural heritage property in Ontario communities under the modified Ontario Heritage Act 2005; and incorporating built heritage resources in the land use planning process.

5. Conservation After Legislation: Issues for Mumbai, 2004, UDRI

The book is based on a seminar titled ‘Conservation after Legislation’ held in April 2000. It is a comprehensive evaluation of successes, failures, strengths, weaknesses and opportunities of heritage conservation legislation, role of organizations and technologies of conservation.

6. Heritage Buildings and Precincts, Mumbai: A Conservation Manual for Owners and Occupiers, 2002, UDRI

It is a manual that provides general answers to queries regarding heritage buildings and precincts, and is geared towards owners and occupiers of heritage buildings and for agencies responsible for their upkeep and maintenance. It is a useful educational reference when interacting with communities and lay persons.

7. Ballarat Heritage Precincts Study, 2006, City of Ballarat

The report is a broad proposal for reviewing and documenting, evaluating significance and proposing heritage management recommendations for six precincts in the City of Ballarat. It provides a detailed and clear methodology for the entire study and recommendations and will be referred to at different stages during the project.

8. Review of Acts / Regulations

1. MR & TP Act, 1966, amended in 1994
2. Heritage Regulations for Greater Mumbai, 1995
3. Coastal Regulation Zone Act, 1992

9. Conservation Guidelines, 2006, Urban Redevelopment Authority

There are development control regulations proposed by the Urban Redevelopment Authority, Singapore. It is a comprehensive document which outlines the conservation principles, planning parameters and restoration guidelines, envelope control guidelines and signage guidelines. Further illustrations are used extensively to explain the guidelines.

10. Delineation and Listing of Madh, Erangal, Aksa, Marve, Manori, Culvem and Gorai Precincts in Mumbai, 2002, Rizvi College of Architecture

11. Bandra Village Precinct, A Suburban Village Renewal and Revitalization Scheme

12. Conservation Guidelines for Khotachiwadi, 2000, MMRHCS

The four reports mentioned above (numbers 9-12) propose conservation guidelines for village precincts in the Western Suburbs and in the Island City, namely Madh, Erangal, Aksa, Marve, Manori, Culvem, Gorai, Bandra and Khotachiwadi. These have been shortlisted from myriad reports proposing conservation guidelines for the Fort Precinct, Banking District, Kala Ghoda District etc. because these have indigenous architectural styles, and are similar in scale and bulk to the Erangal village precinct.

A comparative analysis of the above reports will be done to compare the similarities and differences in the surrounding context, approaches to each precinct and the implications for Erangal village precinct.

13. The Star of Erangal, Msgr. Francis Correa

The book published by Father Malcolm D'souza outlines a history of Erangal village through the lens of the Christian community. It also describes the history of the establishment of St. Bonaventure Church in Erangal village and the annual fair/ feast celebrated by the coastal Christian community in Erangal. It is one of the very few resources that describe the regional importance of local buildings such as the St. Bonaventure Church within the precinct.

14. Gazetteer of Bombay City and Island, Vol I, 1909

The gazetteer gives a detailed account of the physical, social and cultural history of the Island City of Bombay. Though the project area is outside the Island City, the gazetteer provides detailed historical information on the daily life, occupations, houses and social customs of the Bhandaris which is a dominant community in Erangal.

The name is derived from Sanskrit manaharak (a distiller) and/ or from bhandar (a treasury). The community is sub-divided into five classes (Sinde, Gaud, More, Kirpal, Kitte or Kitre), which do not dine together or intermarry. The Kitte Bhandaris – “somewhat superior” – seem to have originally come from the southern Konkan and Goa. They formed a part of the military and naval forces of the Portuguese, Angria and the British

They have two hereditary occupations – fighting and palm-tapping. These occupations differentiated the Kitte from the other four castes. The other four castes seem to be chiefly engaged in agriculture and palm tapping. The principal occupation of the poorer Bhandaris is still the extraction of liquor from the palm-trees while the richer Bhandaris compete with the Parsis for liquor shop and distillery contracts; while others may serve as seamen on country vessels or as members of the police force. The Palm Tree cess in 1877 led many Bhandaris to change their occupations to become labourers, carpenters, snuff-sellers, printers, and decorators. Several obtained clerical posts in government and municipal bodies.

The residences of the Bhandaris vary with occupation and status. The toddy drawer occupies a thatched or tiled hut, which comprises of a sitting room, kitchen, and god's room or deoghar, with a small thatched hut attached for the storage of utensils and tools used in the extraction of liquor. They worship Shiva and observe most of the Hindu festivals eg. Gokul Ashtami, Dussehra.

Appendix 2

Questionnaire

| | | |
|----------|---|--|
| 1 | DETAILS OF INTERVIEW | |
| 1.1 | Reference no. of building | |
| 1.2 | Name of person interviewed | |
| 1.3 | Name of interviewer | |
| 1.4 | Date of interview | |
| 2 | DETAILS OF PRECINCT | |
| 2.1 | Are there any public institutions? | |
| 2.2 | Are there any used open spaces? | |
| 2.3 | Which are the major landmarks? | |
| 3 | DETAILS OF BUILDING | |
| 3.1 | Name of structure | |
| 3.2 | Ward | |
| 3.3 | CS No. | |
| 3.4 | Location | |
| 3.5 | Address | |
| 3.6 | Is the building occupied or vacant? | |
| 3.7 | Who owns the building? | Self Lease/Rent Public/Government Community |
| 3.8 | When was the building built? | |
| 3.9 | Who built the building? | Ancestors/ Self Builder Community |
| 3.10 | What is the type of usage? | Residential Mixed Use Commercial Religious Community |
| 3.11 | How is the building accessed? | Main Road: Subsidiary Road: |
| 3.12 | How many floors does the building have? | G G+1 G+2 |
| 3.13 | Does the building have any margins? | Yes / No |
| 3.14 | If yes, how much? | Front: |

| | | |
|----------|---|---|
| | | Rear: Side: |
| 3.15 | Does the building have a boundary demarcation? | Compound wall Fence Gate |
| 3.16 | Does the building have any heritage value? | Yes / No |
| 3.17 | Does the building have exterior elements/ articulations with heritage value? | Yes / No If yes, mention which: |
| 3.18 | Are the exteriors of the building consistent with other buildings in the neighbourhood? | Yes / No |
| 3.19 | What are the basic construction materials? | RCC Bricks Wood Plaster |
| 3.20 | Does the building have any outhouses within the premise? | Yes / No If yes, mention usage: |
| 3.21 | Are there any extensions to the original structure? | |
| 3.22 | What is the current condition of the building? | Dilapidated Needs maintenance Well maintained |
| 3.23 | Does the building face any external threat? | DP Proposal Development pressure Change of use |
| | | |
| 4 | DETAILS OF BUILDING – INTERIORS | |
| 4.1 | Description of plan | Total no. of rooms: No. and types of rooms of ground floor: No. and types of rooms of first floor: No. and types of rooms of second floor: |
| 4.2 | Does the building have interior elements with heritage value? | Yes / No If yes, mention which: |
| 4.3 | Where are the toilets located? | Inside Outside, attached Outside, detached |
| 4.4 | What type of roof? | Flat Pitched |
| 4.5 | Does it get adequate lighting and ventilation? | Yes / No |
| 4.6 | What are the types of fenestrations? | |
| 4.7 | What are the types of finishes? | |

| | | |
|--------------------------------------|--|---|
| 4.8 | What are the types of transformations seen? | Changes in articulation: Changes in finishes: |
| 5 OWNERS' DETAILS | | |
| 5.1 | How many occupants? What are their genders and age groups? | Adults: Children: Total: |
| 5.2 | Which community do they belong to? | Bhandaris East Indians Others _____ |
| 5.3 | How many persons in the household are educated? | Illiterate: Primary Education: Secondary Education: Higher Sec Education: Graduate: |
| 5.4 | How many persons in the household are employed? | |
| 5.5 | How are they employed? | Unemployed Self-Employed Employed under some person/org. |
| 5.6 | If employed, what is their job profile | Farmers Shop owners Drivers Others _____ |
| 5.7 | What is their combined monthly income? | 0-7,500 7,501-15,000 15,001-30,000 30,001-50,000 |
| 5.8 | What festivals do they celebrate? | Hindu: Christian: |
| 6 SERVICES AND INFRASTRUCTURE | | |
| 6.1 | Who provides water to the precinct? | Gram Panchayat MCGM |
| 6.2 | How many times/ at what time of the day is the water provided? | |
| 6.3 | Is the water supply provided enough? | Yes / No |
| 6.4 | If No, how is the supply supplemented? | Bore wells Tankers Others _____ |
| 6.5 | How much do the residents pay per month for water facilities? | |
| 6.6 | Has a sewerage system been provided by MCGM? | Yes / No |
| 6.7 | If No, how have the residents dealt with sewerage? | Soak pits Open defecation Others _____ |
| 6.8 | Have any public toilets | Yes / No |

| | | |
|------|--|--|
| | been provided? | |
| 6.9 | Who collects solid wastes from the buildings? | Gram Panchayat MCGM |
| 6.10 | How many times in a day is it collected? | |
| 6.11 | Have community bins been provided? | Yes / No |
| 6.12 | At what point is it collected? | Building level Neighbourhood level Community Bins |
| 6.13 | Do residents dispose waste themselves? | Yes / No |
| 6.14 | If yes, how do they dispose it? | Burning Depositing it elsewhere Composting Others _____ |
| 6.15 | How many schools have been provided? | Primary: Secondary: Higher Secondary: |
| 6.16 | How many students are enrolled in the school? | |
| 6.17 | How many healthcare facilities have been provided? | Dispensaries: Private Clinics: |
| 6.18 | Who provides electricity? | Reliance TPCL Others _____ |
| 6.19 | Do the residents have to access other goathans/ city for services? | Schools: Medical aid: Others _____ |



HCP Design and Project Management Pvt. Ltd.
Paritosh, Usmanpura, Ahmedabad - 380013.
Telephone: (079) 27550875, Fax: (079) 27552924
www.hcp.co.in