

Action Plan for Heritage Conservation and Environment Improvement of Erangal Precinct

Stage 3 & 4 Evaluation of Significance and Identification of Issues

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Mumbai Metropolitan Region – Heritage Conservation Society (MMR-HCS)
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Prepared by



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ACRONYMS

MMRHCS	Mumbai Metropolitan Region Heritage Conservation Society
MLALADS	Member of Legislative Assembly Local Area Development Scheme
MPLADS	Member of Parliament Local Area Development Scheme
SKBS	Saishav Kshatriya Bhandari Samaj

1 Introduction

1.1 Background to the Project

Mumbai has about 189 gaothans today interspersed in its modern urban fabric. These gaothans are small enclaves engulfed or surrounded by a built fabric that is in 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 due development pressures. The issues facing these settlements are – insufficient infrastructure, inappropriate development guidelines & regulations, crowding, incongruent redevelopments, destruction of the historic structures, changes in the economic base, which affects the physical fabric and high real estate development pressures.

The Mumbai Metropolitan Region Heritage Conservation Society (MMRHCS) has been 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. 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 five precincts are being taken up as separate tasks:

Table 1: List of Precincts

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) <ul style="list-style-type: none"> • 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

Among the five precincts taken up as a part of the pilot project, Task I - Preparation of Action Plan for Heritage Conservation and Environmental Improvement of Erangal Precinct was assigned to HCP Design and Project Management (HCPDPM).

The work for each task is being carried out in the following stages:

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

Stages 1 and 2 have been completed. In stage 2, detailed condition assessment of the precinct was carried along with series of consultations with the residents of the precinct. This report deals with Stage 3: Evaluation of Significance & Stage 4: Identification of Issues.

1.2 Objectives of Stage 3 and 4

The objectives of this stage are:

1. To evaluate the significance of Erangal precinct with reference to its architectural heritage; public realm; built form, land use & growth; physical infrastructure; community structure, cultural practices and governance (institutional) structure.
2. To identify issues through consultations with the local community and from condition assessments.
3. To enlist the vision, objectives and development strategies for the precinct.
4. To prepare a preliminary list of proposals for the precinct.

1.3 Scope of Work

The scope of work in this stage includes four main activities. It includes undertaking SWOT with the local community, identification of the significance and issues, articulation of the vision, objectives and strategies and preliminary identification of proposals.

Activity 1 Summarizing Inferences

Inferences from condition assessment and interactions with the community are summarized and major areas of intervention are identified.

Activity 2 SWOT Analysis

A SWOT analysis of the major areas of intervention is undertaken.

Activity 3 Identifying the Significance and Issues

Significance and issues of the major areas of intervention are identified.

Activity 4 Articulating the Vision, Development Objectives and Strategies

An overall vision for sensitive development and conservation of the area, development objectives and strategies is proposed.

Activity 5 Identifying Preliminary List of Proposals

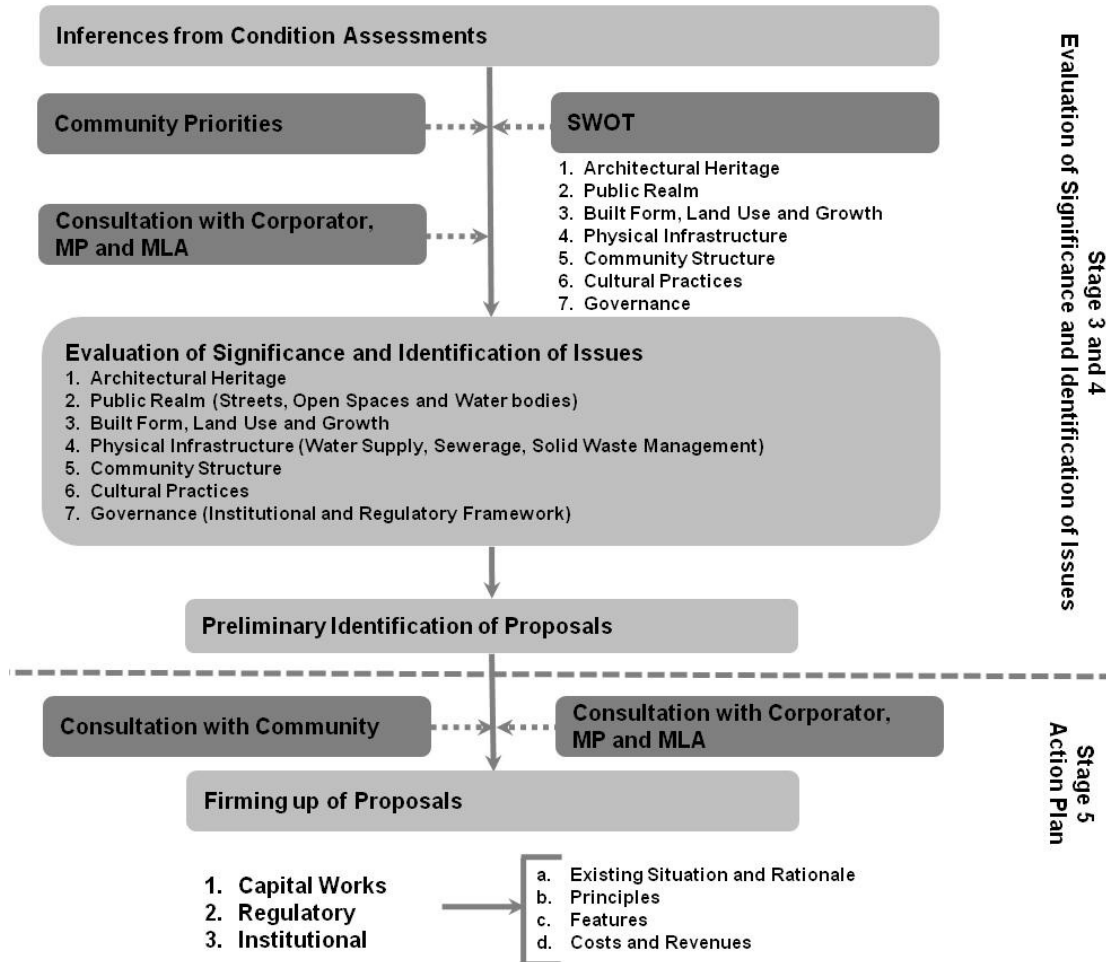
Based on the above, a preliminary set of proposals is identified.

1.4 Deliverables

The deliverable for this stage is a report on Evaluation of Significance and Identification of Issues.

2 Methodology

The methodology for carrying out the tasks in this stage is illustrated below:



This stage report ends with a list of preliminary proposals. These along with the assessments of the precinct will be discussed with the community and the other leaders such as the Ward Corporator, local MLA and MP.

3 Inferences from Condition Assessment and Community Priorities

This chapter summarizes key inferences from the condition assessment and consultations at various levels. The condition assessment covered several parameters dealing with the physical and socio economic aspects. The surveys were carried out at different levels – precinct, structure and household. These were complemented by consultations at various levels – individuals, groups and community.

Seven key areas or parameters emerged and the inferences and community's priorities are presented accordingly. The same are used to develop a framework for undertaking the SWOT analysis, evaluating the significance & identification of issues, developing a vision and development objectives and preparing a preliminary list of projects and interventions for the precinct. These are:

- 1 Architectural Heritage
- 2 Public Realm (Streets, Open Spaces and Water Bodies)
- 3 Built form & Land use and Growth
- 4 Physical Infrastructure (Water Supply, Sewerage & Storm Water Disposal and Solid Waste Management)
- 5 Community Structure
- 6 Cultural Practices
- 7 Governance (Institutional and Regulatory Framework)

1. Architectural Heritage

The precinct is relatively new – its origins can be traced to 1530s but the precinct was rebuilt completely in 1950s after World War 2. The built structures therefore do not have any particular or extraordinary architectural significance or merit in terms of articulation and stylistic importance. They were built in wood – robust construction systems comprised of wooden trusses, columns, rafters and S shaped brackets. A very distinctive roof type was used popularly referred to as the 'cowl' type by the community which has steep slopes, simple truss system created with heavy wooden members supported by columns. There was a mezzanine in between which was used to store grain. The doors and windows were in wood. Walls were in stone using random rubble masonry with high plinths in most houses. The houses also followed typical plan types – linear single bay, linear double bay, square and a combination of linear and square. There was a verandah in front facing the street with living areas in middle and service areas at the rear. The treatment and articulation of the elements was simple.

However the precinct has been continuously witnessing physical transformation. The survey of structures revealed that out of the total 119 structures only 2 have retained original characteristics in terms of architectural elements described above. They however are in poor condition. In addition, there are 7 structures, which are representative of the original type but are in varying degrees of transformation and maintenance. Most of this transformation is in terms of construction materials, finishes and fenestration types. In this process of transformation the original wooden elements, tiles etc have been replaced by modern materials such as steel, asbestos, tin, aluminum, tiles, cement concrete etc. In contrast to this it is interesting to note that the plan configuration has been retained in almost all residential structures except in 3, which are new.

Apart from the residential structures, St. Bonaventure Church, built in 1575-99 is historically very significant but it is also transformed significantly. Only the original walls survive, the roof and interiors have been completely altered. In summary, only 3

structures are important from an architectural heritage point of view – St. Bonaventure Church and 2 residential structures. Apart from St. Bonaventure Church, 6 residential structures, though transformed have a potential of being restored and representing the housing typology of the precinct. Hiradevi Temple, a new structure, is an important land mark as it is dedicated to the deity of the community.

The community values the historic character of the structures and feels it should be retained as earlier the precinct was used for film shootings because of this. However with changing times – expanding needs of the community and high costs of maintaining and repairing old structures is forcing them to undertake transformations which are incongruent, cheaper and are gradually changing the character of the precinct. More than preserving the architectural character, the need for environmental improvements is more important to the community. This includes – drainage system, water supply system, improving streets and common open spaces such as the chowks and the nearby water body.

2. Public Realm (Streets, Open Spaces and Water Bodies)

More than the individual structures being very distinctive, the collective public realm created by these and comprising of streets and open spaces is of significance. The structures were rebuilt over the same foot print after World War 2 and the organic built fabric / form has been retained resulting in a unique public realm. The streets are defined by the structures opening onto them. They are meandering and widen into open spaces which are actively used by the community. Critical elements of the public realm are the verandahs (transition spaces), tulsii planters, trees, seating and wells. The tulsii planters deserve a special mention – they are high, very typical to this community, built probably in the same locations and have undergone transformations in terms of materials.

The four major streets – Khale Gali, Electra Street, Holi Maidan Street and Hiradevi Temple Street and 3 chowks – Badamwadi, Holi Maidan and St. Bonaventure Church constitute a major part of the public realm. There is another water body / talav to the east of the precinct which is a significant feature valued by the community. There is a Ganesh Temple at its edge built by the community.

The community uses these spaces actively – the streets virtually become extensions of houses, the open squares are used during festivals and on special occasions of the community. Most importantly the community makes an effort to maintain them – streets and squares are cleaned by themselves.

3. Built-form & Land Use and Growth

There is a trend observed in the precinct, of redeveloping old structures in a new vocabulary, which is likely to intensify with more demand for space. Some of the new constructions appear to be violating building regulations (G+2 structures). The plots abutting the precinct i.e. part of the gaothan expansion areas are also witnessing development. Most of the lands which earlier belonged to the people residing in the precincts have changed ownership as agriculture is no longer the mainstay. Since most of the abutting area falls in CRZ III, the nature of development is restricted – mostly G and G+1 structures. The development is haphazard, DP roads have not been implemented and no detailed area planning has been undertaken. As the city survey plots are irregularly shaped, development seems unplanned, roads are extended in an arbitrary manner and there is no scope of providing infrastructure and amenities. Some of the new developments abutting the gaothan / precinct are in total contrast to the built form in the precinct.

The community has expressed concern over the unregulated growth in the precinct and the development in the gaathan / precinct and abutting areas – they are incongruent, seem to be haphazardly sprouting up & flouting development regulations.

4. Physical Infrastructure – Water Supply, Sewerage & Storm Water Disposal and Solid Waste Management

Water Supply

The precinct has access to municipal water supply. It gets water from a 300mm diameter main municipal water line along Madh-Marve Road. From here there is a 4 inch main water line, which runs along Khale Gali. The network within the precinct is not planned as secondary pipelines of varying diameters are randomly pulled from the main line. This has resulted in low water pressure particularly towards the interior of the precinct. Moreover the pipeline currently follows the storm and waste water drain and is either above or below the drain creating conditions for contamination. The supply of water is said to be insufficient and most of the requirement for washing and cleaning is supplemented by the wells in the precinct.

Sewerage & Storm Water Disposal

There is no properly designed sewerage and storm water disposal system in the precinct. There was a network of surface storm water drains, which have been covered in patches over the years. Presently the precinct has a network of open and covered surface drains; and they are used to dispose both waste water and storm water. The covered parts of the drains have steel grated and cement concrete covers at regular intervals. The waste water and storm water is finally disposed in open fields creating unhygienic conditions and deteriorating land. Irregular maintenance and cleaning generally leads to water logging and backflow of waste water into the streets during the monsoons as the drain fills with sand.

Solid Waste Management

There is door to door solid waste collection by two MCGM employees on a daily basis. It is disposed in a garbage bin at the entrance of the precinct. Women in the precinct also sweep the streets two/three times a day and keep them clean. The MCGM has also commenced a scheme to clean Erangal beach, whereby two collectors clean the beach on a daily basis. This waste is collected by a MCGM vehicle once in 4 to 8 days. Due to the irregular pick up of garbage by the MCGM vehicle, the solid waste is strewn around the bins which is visually unappealing.

The community strongly feels that the infrastructure in the precinct is insufficient and inefficient. With the growth of the precinct the condition is likely to worsen. The community feels the water supply pipelines need to be re-laid with proper diameter to improve the pressure and supply of water. It feels the most urgent need is to lay a well planned sewage and storm water drainage network in the precinct and make proper arrangements for its final disposal. The community rates infrastructure improvement highest in priority and feels efforts should be focused on upgrading infrastructure and improving the environment conditions in the precinct.

5 Community Structure

The precinct is dominated by the Kshatriya Bhandari community, originally agriculturists who have now moved into other service jobs. The community considers itself and the residents of Akse village as direct descendents of Chimanji Appa (brother of Peshwa Bajirao), who was a warrior and was one of the first settlers on the island. The community is not very large and is limited to Erangal, Akse and Virar and maintains close social ties.

Within Erangal there are 13 sub-communities and amongst these 4 are predominant – Mhatres, Thakurs, Chaudharys and Patils. The temple of their main deity – Hiradevi is located in Erangal which brings members of the community from other locations to Erangal for special occasions and festivals.

The residents take pride in the fact that they have been successful in maintaining strong community bond/hold in the precinct and retaining the cultural practices, customs and festivals. They have consciously restricted the entry of people of other communities to reside in the gaathan. Even marriages are limited within the community.

In Erangal, the community has formed an association called Shaishav Kshatriya Bhandari Samaj. It has a committee of 8 representatives, which takes decisions on behalf of the community, represents their needs to political leaders for development works within the precinct, organizes community festivals and manages community assets such as Hiradevi Temple etc.

The homogeneous community pattern in the gaathan / precinct has enabled a continuity of existing social and cultural practices and use of spaces. The community feels ownership for the gaathan / precinct and takes pride in its “village” like character. Shaishav Kshatriya Bhandari Samaj is an outcome of this sense of responsibility towards the gaathan / precinct. It is quite a strong organization and has a say in the matters of development. However it is constrained to undertake any major developments as it does not have the mandate to raise financial resources. Currently, it makes representations to the Ward Corporator for improvements in the precinct.

6 Cultural Practices

The community has unique cultural practices. Every house has a tulsi planter in front referred to by the community as ‘tulsi vrindavan’. One sees many interesting design variations but typically there is a high column – 4 to 5 feet high – with a tulsi pot on the top or a planter built into the column. Every day in the morning the verandahs are washed, tulsi is watered, rangolis are made in traditional patterns like swastikas, padchinahs and flowers and tulsi puja is done in the morning & evening accompanied by lighting of lamps. Another interesting community tradition is to place a metal tortoise in water at the main entrance of house. The tortoise is considered as one of the avatars of Lord Vishnu. The residents believe that the tortoise protects the family and it also increases wealth. It is also frequently drawn in the rangolis.

The community also has interesting customs – a unique and interesting one is that whenever there is a wedding in a family a pair of holy coconuts which are regarded as god and goddesses are tied to a branch of a mango tree in-front of the house for a year. Usually an umbrella is fixed on top of this to protect the coconuts from sun and rain.

Every year there is a mass in St. Bonaventure Church from 31st December to the second Sunday of January. The second Sunday is a festive day and is celebrated by locals and a large number of visitors. As a part of the celebrations, a fair is organized on the beach and stalls are put up for selling food items, flowers etc. 15th July is celebrated as 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 Hiradevi Temple. During Navratri festival, there is Ghatasthapana in the Hiradevi Temple. The residents celebrate all Hindu festivals including Holi, Diwali, Vatapurnima, Ramnavami, Hanuman Jayanti etc. Every May, an event (which consists of performances, plays, etc.) is organized in the open space abutting St. Bonaventure Church after the school results are declared.

The community being closely knit has very consciously kept their cultural practices alive. It is interesting to see these being practiced with rigour and is indeed unique in a rapidly modernizing and changing society. These present an opportunity to create awareness of the cultural heritage of the precinct.

7 Governance (Institutional and Regulatory Framework)

The precinct lies in Greater Mumbai; and it is governed by the Municipal Corporation of Greater Mumbai under the provisions of the Mumbai Municipal Corporation Act 1888. The Act outlines the structure for governance & development works and the flow of funds for undertaking these. The chart below illustrates the prevalent governance structure and the flow of funds for capital works.

Spatial Jurisdiction and Governance Structure

Greater Mumbai is governed by the Mumbai Municipal Corporation which is divided into smaller spatial entities – wards to enable efficient and smooth governance. These are:

Administrative Wards

The entire MCGM area is divided into 24 administrative wards. The administrative wards are governed by a Ward Office and Ward Committee. The Ward Office is the administrative wing and is responsible for day to day administration / governance of the ward. The Ward Committee is the political wing and makes recommendations for the budgetary allocation and the civic works to be undertaken in the ward.

Erangal is in P/N administrative ward.

Electoral Wards

Each administrative ward is divided into 8/10 electoral wards. Mumbai has 227 electoral wards organized into 24 administrative wards. A Corporator is elected from each electoral ward and implements development works based on the priority of the electorate.

P/N has 16 electoral wards and Corporators. P/N has a Ward Committee currently comprising only of the 16 elected Corporators. There is also a Ward Office headed by the Assistant Commissioner who serves as the ward officer.

Erangal falls in the electoral ward that includes Manori – Marve – Erangal – Akse – Daravali – Madh, the present Corporator of the ward is Ms. Renuka Dive.

Polling Booths

Each electoral ward comprises of 8/10 polling booths. An Area Sabha is proposed for one or more (not exceeding five) contiguous polling booths within an electoral ward.

It is unclear whether Area Sabhas have been formed for the administrative wards in Mumbai.

Capital Works and Flow of Funds

The planning and major capital works at the city level are undertaken by departments of the Corporation through their general budget. Each Corporator has an annual budget of Rs. 20 lakhs through which he/she can propose development works within their electoral ward. The Ward Committee collectively receives Rs. 5 lakhs.

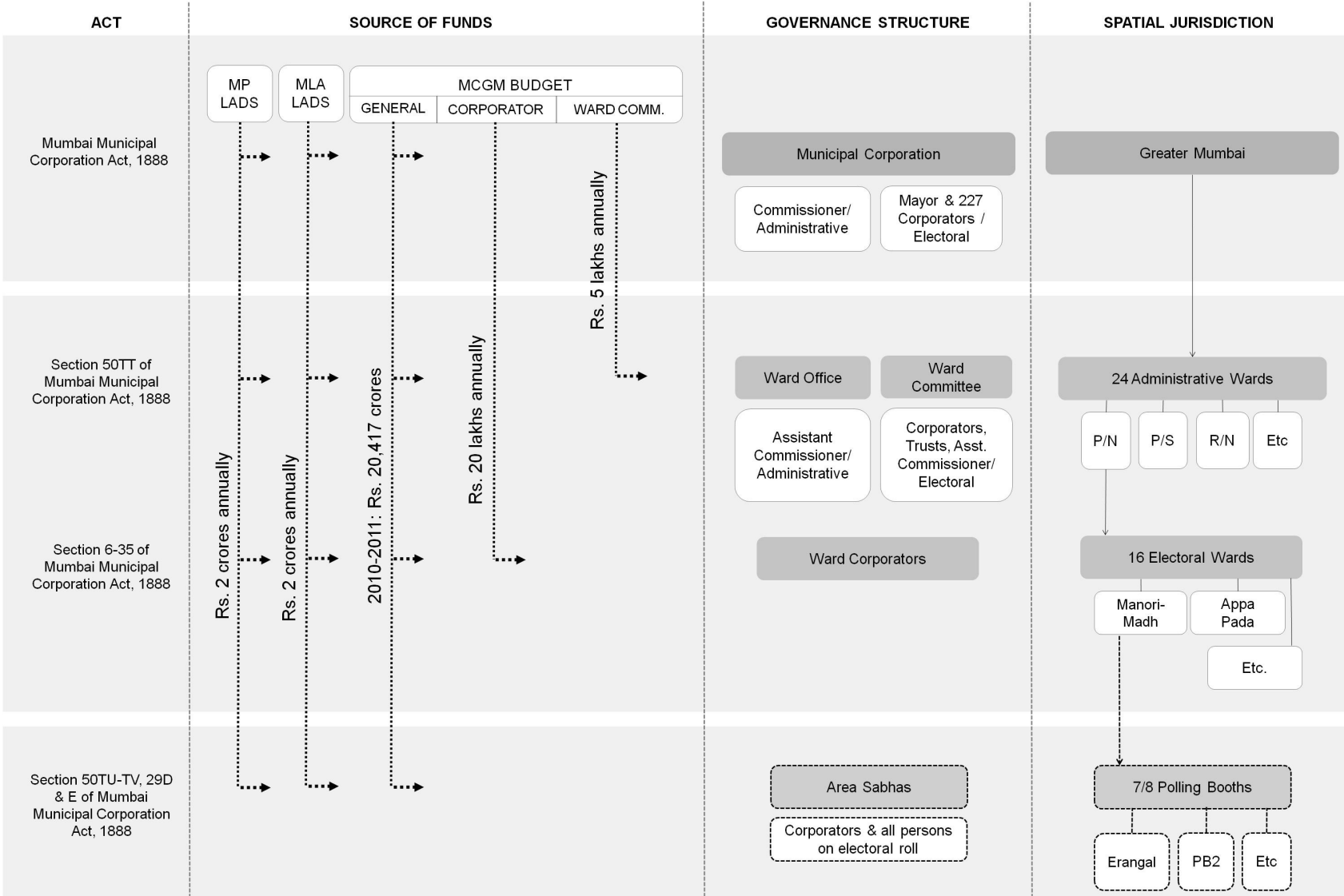
In addition, development works can also be undertaken through the centrally funded Member of Parliament Local Area Development Scheme (MPLADS) and state funded Member of Legislative Assembly Local Area Development Scheme (MLALADS).

Erangal is a very small area 3.89Ha and with a population of 668 persons. In the present governance structure it is represented by SKBS, i.e., SKBS presents the development needs of the area to the ward Corporator, MP and MLA. But being a very small area in a large ward, it has to compete with the needs of the other areas as well. Further being a part of P/N ward it is unlikely that that the needs of this area will receive priority.

The development works / capital investments such as basic infrastructure (water supply/ sewerage / storm water drainage) and solid waste management are taken care by the various departments of MCGM at the city level. In Erangal water supply has been provided by MCGM, the open drains have been provided in a piecemeal with the aid of Corporator funds and solid waste is managed by MCGM. There is no sewerage system in place as of now.

The Ward Committee and Corporator funds are insufficient to undertake adequate development works. Again as mentioned Erangal is a small area with only 668 persons; it is unlikely that environment improvement works for it will receive priority. Further, the roles of the Ward Committee and Area Sabha are restricted to making recommendations for budgetary allocations and development works.

Figure 1: Governance



4 SWOT Analysis

A strength, weakness, opportunity and threat analysis is carried out for the 7 key areas identified in the condition assessments to identify what is of significance in each area and what are the issues threatening them:

1. Architectural Heritage
2. Public Realm (Streets, Open Spaces and Water Bodies)
3. Builtform, Land use and Growth
4. Physical Infrastructure (Water Supply, Sewerage & Storm Water Disposal and Storm Water Management)
5. Community Structure
6. Cultural Practices
7. Governance (Institutional and Regulatory Framework)

Table 2: SWOT Analysis

1. Architectural Heritage			
Strength	Weakness	Opportunity	Threat
<ul style="list-style-type: none"> • One of the original / old gaothans' of Mumbai (16th Century). • The original precinct fabric is intact. • Most of the structures have retained the original form, plan typologies, roofscapes, scale and elements. • The community values the historic character of the structures and thinks it should be retained. • St. Bonaventure Church is a historic city level landmark. • 7 structures (including St. Bonaventure Church), though transformed have retained elements which are of significance. 	<ul style="list-style-type: none"> • The structures have low architectural significance. • The precinct has undergone significant transformation. • Expanding needs of community and high cost of maintenance & repairs is forcing incongruent transformations and redevelopments. <ul style="list-style-type: none"> • There are insensitive additions, use of modern materials etc. • Almost 1/3rd of the structures are not maintained. • Current regime of development controls are not place based and inadvertently facilitate the unsympathetic transformation of structures. • Not many people outside the precinct are aware of its historic importance. 	<ul style="list-style-type: none"> • The historical significance of the gaothan/precinct can be perceived as an asset and greater awareness of the precinct can be created. • Appropriate development guidelines / regulations can be framed in consensus with the community, to guide future development. • Proposals can be framed with the community to enhance the historic character of the precinct. • Pilot restoration projects for 7 structures can be undertaken to represent the precinct housing typology and highlight precinct landmarks. 	<ul style="list-style-type: none"> • In the absence of sensitive and cost-effective repairs mechanisms the remaining architectural heritage of the precinct will be lost. • If place-based, simple and easily enforceable development guidelines are not framed to address the growth needs of the community, then the character of the precinct may be adversely affected. • If timely awareness of the historic significance is not created, there will be no resolve or resources made available to conserve the precinct fabric.

2. Public Realm (Streets, Open Spaces and Water Bodies)			
Strength	Weakness	Opportunity	Threat
<ul style="list-style-type: none"> • Significant public realm comprising of streets and the incidental open spaces. • The distinction between the public and private realm is blurred. The streets are not perceived only as conduits of traffic and therefore used for multiple domestic and recreation activities. • There are 4 major streets and 3 significant open spaces. • The public realm is valued by the community. • It is well used and maintained by the community. • The talav, an environmental feature to the east of the precinct abuts a Ganesh Temple and is considered sacred by the community. 	<ul style="list-style-type: none"> • Slow encroachments/extensions on to streets and open spaces are reducing street widths and open spaces. • The streets and open spaces are paved with different materials which is visually unappealing and do not create a cohesive space. • Infrastructure planning is not integrated with street design. • Open drains and overflowing drains create an unpleasant and unhygienic environment. • The main street is used as thoroughfare for through traffic. • Current regime of development controls is 'structure centric' i.e. FSI, coverage and setbacks are prescribed without any consideration of how margins and setbacks are shaped. 	<ul style="list-style-type: none"> • The public realm can be appropriately designed and enhanced by making it cohesive, integrating it with infrastructure design etc. • Appropriate development guidelines/ regulations can be framed with the community to retain the character of the public realm. • A public realm oriented towards pedestrian use and activities can be created. • The talav can be sensitively developed to become an environmental and recreational resource. 	<ul style="list-style-type: none"> • If the public realm is not defined, designed and provided with infrastructure, its character will be lost with growth of the precinct, encroachments and through vehicular traffic. • If the development controls do not integrate the public realm, then its existing character will not be retained. It will be lost with future redevelopment, extensions etc.

3. Built Form, Land Use and Growth			
Strength	Weakness	Opportunity	Threat
<ul style="list-style-type: none"> • The precinct has a homogeneous land use – residential, with very little commercial. • The precinct is compact with an organic pattern. • The area around the precinct/gaiothan expansion area is largely undeveloped agricultural land. • The development restrictions imposed by CRZ provisions are largely responsible for the above. • The precinct has 1.56Ha of underutilized government land. 	<ul style="list-style-type: none"> • Growth pressures within the precinct along with CRZ restrictions on development are fuelling unauthorized expansions of structures. • The peripheral area is witnessing new growth and some of the new development is not consistent with the built form in the precinct. • The new growth is haphazard, unplanned and without sufficient infrastructure. • The DP proposals do not foresee the preparation of detailed plans for planned expansion of heritage precincts. • The DP proposals for access roads into the area do not take the precinct pattern into account. • The government land in the precinct is underutilized and encroached. 	<ul style="list-style-type: none"> • CRZ II regulations emphasize that the new growth be in conformity with the present development in the gaiothan areas. • Since the expansion area is largely undeveloped, a detailed area plan can be prepared to regulate new development. It can become a pilot exercise, which can be incorporated in the Development Plan. • The government land in the precinct can be utilized towards easing up development pressure in the precinct. 	<ul style="list-style-type: none"> • If detailed plans for the precinct/gaiothan expansion area are not prepared, there will be no framework to guide it resulting in haphazard development. • If development regulations for the precinct/gaiothan expansion area are not framed, they may not grow in harmony with the scale of the precinct. • If DP road proposals are not revised, they will demolish structures within the precinct and those important to the community like the Ganesh Temple. • If a strategy for government land in the precinct is not framed, its potential to leverage improvements etc. will not be utilized.

4. Physical Infrastructure (Water Supply, Sewerage & Storm Water Disposal and Solid Waste Management)			
Strength	Weakness	Opportunity	Threat
<p>Water Supply</p> <ul style="list-style-type: none"> • There is municipal water supply connection. • Majority of the households have individual metered tap connections. • 2 public wells augment the water supply. 	<ul style="list-style-type: none"> • The precinct does not have a planned water supply distribution network. <ul style="list-style-type: none"> • It has been laid in a piecemeal manner over time. The network is inefficient – lines have been extended, connections have been added resulting in pressure problems and insufficient water supply. • Not all households have individual connections. They purchase water from those with, further straining the system. • The network runs along storm / waste water drains. • The distribution lines are not integrated with street design. • Well water is presumed to be contaminated due to soak pits in the vicinity. • There is no provision at present to service the surrounding areas which are likely to face development. 	<ul style="list-style-type: none"> • The existing network can be refurbished to meet demands for water supply. 	<ul style="list-style-type: none"> • If the water supply network is not planned and built properly then it will be unable to meet future growth requirements. • If the water supply network is not planned for the expansion areas it will burden the existing system in the precinct. • If the water in the wells is not tested and / or cleaned, it can pose a health hazard for the residents.

<p>Sewerage Network</p> <ul style="list-style-type: none"> • Most of the households have a system for disposing sewerage – through individual soak pits. 	<ul style="list-style-type: none"> • The precinct does not have a planned system for treating and disposing sewerage. <ul style="list-style-type: none"> • Most of the households dispose sullage through soak pits. • The storm water drains are also used for disposing waste water. • The waste water is disposed into open fields. • There are no public toilets for residents without soak pits. As a result, they defecate in the open. • The drains are not maintained. 	<ul style="list-style-type: none"> • Design and lay an underground sewerage network with basic treatment and disposal arrangements to improve the environment. 	<ul style="list-style-type: none"> • The absence of a well planned sewerage system can result in contamination of ground water due to soak pits and disposal of untreated waste water into open fields. • If public toilets are not provided, 11% residents will continue to defecate in the open.
<p>Storm Water Network</p> <ul style="list-style-type: none"> • There is a network of open drains in certain parts of the precinct 	<ul style="list-style-type: none"> • The network of open drains is also used for disposal of waste water in the absence underground sewerage network. • The disposal of waste water into storm water drains and lack of maintenance results in choking of drains, back flow / spillage of waste water on to the street and create an unhygienic environment. 	<ul style="list-style-type: none"> • Appropriately refurbishing of the existing and adding to the network will improve the environment 	<ul style="list-style-type: none"> • Absence of sufficient storm water network system and lack of maintenance will create an unhygienic environment.

<p>Solid Waste Management</p> <ul style="list-style-type: none"> • There is an existing system of solid waste management in the precinct. <ul style="list-style-type: none"> • Door to door solid waste collection by MCGM • Streets and common spaces are cleaned by the community • There are two main solid waste collection points 	<ul style="list-style-type: none"> • The irregular disposal of solid waste results in littering of garbage around the bins making the area around them dirty. 		<ul style="list-style-type: none"> • Irregular and erratic removal of solid waste will result in an unhygienic environment.
<p>5. Community Structure</p>			
<p>Strength</p>	<p>Weakness</p>	<p>Opportunity</p>	<p>Threat</p>
<ul style="list-style-type: none"> • The community is homogenous & cohesive which has resulted in <ul style="list-style-type: none"> • The continuity of cultural practices and a strong sense of ownership for the gaothan / precinct • Creation of an organization the Shaishav Kshatriya Bhandari Samaj (SKBS) that exercises a control over the social / cultural practices and the built environment. 	<ul style="list-style-type: none"> • SKBS being a community or voluntary organization, is not sufficiently charged or empowered to be effective, that is raise resources to be able to effect improvements in the gaothan / precinct. 	<ul style="list-style-type: none"> • SKBS strengthens the community by organizing religious and cultural activities. • The SKBS can play a role in creating awareness of the importance of precinct, proactively champion for some of the projects that are required etc. 	
<p>6. Cultural Practices</p>			
<p>Strength</p>	<p>Weakness</p>	<p>Opportunity</p>	<p>Threat</p>
<ul style="list-style-type: none"> • There is a strong 'cultural heritage' – several of the traditional cultural practices and traditions continue to be practiced. 	<ul style="list-style-type: none"> • Though widely practiced within the community, nothing much is known about these unique practices. 	<ul style="list-style-type: none"> • Events can be organized to increase awareness of the cultural heritage of the precinct. 	<ul style="list-style-type: none"> • The cultural practices may die away with time and change of generation.

7. Governance (Institutional and Regulatory Framework)			
Strength	Weakness	Opportunity	Threat
<ul style="list-style-type: none"> A fairly decentralized governance structure in place. 	<ul style="list-style-type: none"> The roles of the decentralized institutions – Ward Committee and Area Sabha are recommendatory in nature. Not enough funds are at the disposal of the Ward Committee and the Corporator to undertake development works. The MPLAD and MLALAD Schemes have not been implemented in Erangal precinct. 	<ul style="list-style-type: none"> Alternative means of financing the environment improvement works and strengthening the local organization – SKBS. 	<ul style="list-style-type: none"> Since the Corporator grants are insufficient, environment improvement in precincts with a small population (668 persons) like Erangal are unlikely to get priority. If alternative funding mechanisms or options are not sought, then the infrastructure condition, architectural heritage and public realm of the precinct will deteriorate. If the precinct is not maintained, then it is likely to wear out and will make new improvements ineffectual.

5 Evaluation of Significance and Identification of Issues

The inferences from the condition assessments and community priorities (Chapter 3) and the SWOT analysis (Chapter 4) have been collated into statements of significance and issues for the precinct.

1. Architectural Significance

Significance

As the precinct is relatively new the built structures do not have any particular or extraordinary architectural significance. Further majority of the structures (98%) have undergone a significant extent of transformation. However the entire urban fabric as a whole, merits significance – there is a distinctive urban form, scale, roofscapes, elements and plan typology. This is retained to an extent even in the transformations that are taking place especially in the change of materials.

Issues

The growth pressures in the precinct and high cost of maintenance is resulting in incongruent transformations and encouraging redevelopment. This is compounded by the current regime of development controls, which are not place-based and prescribe uniform regulations for all of Mumbai.

2. Public Realm

Significance

The organic character of the public realm i.e. streets and open spaces, its use for multiple activities and the diffusion between the public and the private realm are of significance. The community values the public realm and makes an effort to maintain the public realm. The Talav and Ganesh Temple to the east of the precinct have religious significance for the community.

Issues

The growth pressures in the precinct are resulting in encroachment of the public realm. The public realm is deteriorating as the physical infrastructure is not planned and integrated with the design of the streets and open spaces; and is not maintained by the local government. In addition, there have been no initiatives to enhance the character of the streets and open spaces. Further current regulations are structure-centric without any consideration of the how margins or setbacks are shaped, thereby creating residual open spaces.

3. Built-form & Land Use and Growth

Significance

The urban fabric of the precinct – its scale, massing, plan typology, roofscapes – and its compact and organic character are of significance. The character has survived to date largely due the peculiar location of the gaothan / precinct, it is relatively difficult to access and the fact that it falls under CRZ II and III which imposes restrictions on development.

Issues

The gaothan / precinct is witnessing development and expansion due to growth pressures. CRZ regulations impose restrictions and obtaining permissions is time consuming which leads to construction / redevelopment without permissions. Further as none of the DP

roads have been implemented, the new developments in the abutting areas are unplanned and will make the laying of infrastructure at a later date very difficult.

The current planning framework addresses the macro city-level context and does not take local contexts into account. The development plans do not have provisions for micro level planning to enable planned expansion of heritage precincts. As a result the current development plan road proposals cut through the precinct and through structures that are important to the community. The development control regulations propose uniform guidelines for all gaothans in Greater Mumbai, which do not address the existing built fabric in the precinct.

4. Physical Infrastructure – Water Supply, Sewerage & Storm Water Disposal and Solid Waste Management

Significance

The precinct has a basic level of physical infrastructure. The adequacy and quality of physical infrastructure is important to retain the character and use of the public realm.

Issues

The present level of basic infrastructure services is inadequate and not of a good quality. The physical infrastructure has been planned in a piecemeal manner and is not maintained regularly or well managed. There is insufficient water supply and pressure; there is no sewerage network; the storm water drains are not maintained and the solid waste is disposed irregularly. This level of infrastructure is likely to be insufficient as the precinct grows. The precinct expansion areas are also growing without a planned road network and infrastructure, which is increasing the burden on the infrastructure in the precinct.

5. Community Structure

Significance

The precinct is dominated by the Kshatriya Bhandari community. It has consciously maintained this by restricting people from other communities from residing here and through internal marriages. The homogeneous community structure has resulted in preservation of cultural practices, celebrations of important festivals and social occasions and has inculcated a strong civic sense of maintaining the common open spaces. The residents have formed an organization called the Shaishav Kshatriya Bhandari Samaj (SKBS). It has a Committee which takes decisions on their behalf, represents the needs of the community to political leaders for development works within the precinct, manages festivals and community assets such as the temple etc.

Issues

The SKBS is a voluntary organization and is not sufficiently empowered to raise resources to be able to effect improvements in the gaathan / precinct.

6. Cultural Practices and Festivals

Significance

The community has a unique cultural heritage - cultural practices and customs - which have been consciously kept alive. It is helped by the fact that it is a closely knit community and the SKBS plays a proactive role in maintaining them.

Issues

People outside the precinct are not aware of its cultural heritage.

7. Governance

Significance / Issues

There is a fairly well defined decentralized governance structure in place; however the roles of the Ward Committee and the Area Sabha are recommendatory in nature. These institutions are not sufficiently charged with decision making powers or have funds to be able to effect significant improvements in their areas. Also at present the scope of organizations such as SKBS is limited – they can only represent their views to the Ward Committee as they too have no means to raise resources or capacities to implement any major work.

Clearly there is certainly a need to increase fund allocations for development works at these levels. Nonetheless given the present grossly insufficient quantum of funds it is unlikely that environmental improvement in Erangal will get a priority. It is therefore crucial to think about alternative means of finance from within the area itself. Further presence of an organization such as SKBS certainly presents an opportunity to prepare a plan in collaboration with the community which looks at the development of the precinct / gaothan and the surrounding area holistically and identify means of finance. Further the SKBS can play a crucial advocacy role in implementing this plan and later on play an important role in maintenance of the infrastructure and improvements affected.

5 Vision, Objectives, Strategies and Preliminary Proposals

Having identified the significance and issues of the precinct, the overall development vision, objectives and strategies for the precinct have been developed with the community.

5.1 Vision

- Erangal is an example of community driven conservation, improvement and management of coastal heritage precincts.
- Erangal has retained its significant architectural, historical and cultural heritage
- Erangal is a well-planned and managed precinct supported by adequate and efficient infrastructure, utilities and services.
- Erangal has grown in harmony with the existing character of its urban form and public realm.
- The area around Erangal is well planned and has developed in harmonious co-existence with its built form.

5.2 Objectives

- To conserve the significant architectural, historical and cultural heritage of Erangal.
- To improve/upgrade the physical infrastructure within the precinct.
- To regulate growth within the precinct in harmony with the existing scale, typology and roofscape.
- To retain and enhance the character of the public realm.
- To facilitate planned development around the precinct.
- To solicit the collaboration of the community in all of the above.

5.3 Strategies

- Identify the architectural, historical and cultural assets of Erangal with the community.
- Identify an area around the precinct for planning and regulating development.
- Review and discuss proposals with the community.
- Propose physical improvements of the public realm and build / refurbish the physical infrastructure in the precinct in an integrated manner.
- Propose place based regulations & guidelines to regulate & guide development within the precinct and in the area surrounding it
- Delineate a role for organizations such as SKBS in the implementation of improvements in the precinct and the area around.
- Identify resources for effecting the improvements from within the precinct and its surroundings.

5.4 Preliminary Proposals

Erangal represents a unique precinct / gaathan in the midst of a rapidly transforming and modernizing Mumbai in a sense that the physical fabric & the public realm have survived more or less intact in an intact manner. It gives a glimpse of the original coastal settlements of Mumbai wherein its community structure and cultural practices are retained.

However the precinct / gaathan is on the throes of seeing a transformation owing to internal and external growth pressures. There has been addition of new structures, incongruent transformation of structures and deterioration of existing structures, public realm and the physical environment over a period of time.

The transformation can be guided and managed such that the physical fabric and public realm are preserved & enhanced and the physical environment is upgraded & improved. This has the potential to not only improve the quality of life of its residents but showcasing Erangal as an example of a living heritage precinct in a modern city.

The process of transformation will have to be guided and managed both within the precinct / gaothan as well as in the immediate area surrounding it as developments in the immediate surroundings will certainly impact the precinct / gaothan:

- The land parcels in the vicinity are being converted to non agricultural uses and it is important to ensure that the new developments atleast immediately abutting the precinct are in harmony and in scale with the precinct / gaothan character and there is gradual transformation to the new modern developments seen in the western suburbs.
- It is also critical to ensure that the nature of linkages that emanate from the precinct get connected with the DP network in an appropriate / sensitive manner that is the DP network does not cut across the precinct / gaothan as it does in the presently proposed alignments.
- It is critical to ensure that the infrastructure is provided in an integrated manner within the precinct / gaothan and the surrounding areas, i.e., no separate or piecemeal networks are put in place which are in conflict with each other.
- There are important features in the vicinity of the precinct / gaothan which are linked with it viz., talav and the beaches of Erangal & Danapani, which are used by the residents and are perceived as part of it.

The action plan for heritage conservation and environment improvement is thus conceived as a set of projects, proposals and interventions for the '**precinct**' as well as some portion of the area immediately surrounding it which is defined as the '**planning area**'.

The immediate area or the 'planning area' is defined on the basis of the following two considerations:

- Some area around the precinct / gaothan is designated as CRZ II in the DP Map and area outside is designated as CRZ III. In addition the Coastal Zone Management Plan (1997) delineates an area of 250 m around the gaothan as 'gaothan expansion area' which is regulated as per CRZ II.
- The DP road network proposals in the vicinity are reviewed and a network is proposed that connects the precinct / gaothan & the important features and responds to the natural and physical features in the area.

Map No. 1 shows clearly shows the 'precinct area' and planning area' for which the proposals and interventions are articulated.

About 18 proposals are identified at this stage and across 5 areas: are proposed.

1. Built-form, Land use and Growth
2. Physical Infrastructure
3. Public Realm
4. Architectural Heritage and Cultural Practices
5. Community Structure and Governance

1. Built-form, Land use and Growth

- 1 Prepare a Detailed Area Plan for the Planning Area

An Area Plan is proposed to plan and guide the development around the precinct in order to ensure that it grows in continuity with the existing road network and pattern of the precinct.

- 2 **Frame Development Controls / Guidelines to Conserve Heritage & Public Realm and Regulate Growth for the Precinct**
Place-based development controls are proposed to regulate the redevelopment, repairs and new additions in the precinct.
- 3 **Frame Development Controls / Guidelines to Regulate Growth in the Planning Area**
Development Controls are proposed for the area around the precinct to ensure that the new development is in harmony with the scale of the precinct.
- 4 **Incorporate Area Plan in the Development Plan**
Proposals for the road network in the Area Plan are proposed to be incorporated in the Development Plan.
- 5 **Devise Strategy for Government Land and the Assets created by the Area Plan and in the Precinct**
A strategy is evolved to efficiently utilize the government land and community assets in the precinct and the Area Plan.

2. Physical Infrastructure

- 6 **Design Schematic Water Supply Network in the Precinct**
A schematic water supply network is proposed for the precinct.
- 7 **Design Schematic Sewage Network and Disposal System in the Precinct**
A schematic sewerage network and disposal system is proposed for the precinct.
- 8 **Suggest Improvements to Solid Waste Collection and Disposal in the Precinct**
Improvements are suggested for efficient solid waste management in the precinct.
- 9 **Design Water Supply Network for the Planning Area**
A schematic water supply network is proposed for the Planning Area.
- 10 **Design Sewage Network and Disposal System for the Planning Area**
A schematic sewerage network and disposal system is proposed for the Planning Area.
- 11 **Locate Solid Waste Collection Points in the Planning Area**
Solid waste collection points are schematically located in the Planning Area.

3. Public Realm

- 12 **Develop Streets and Five Chowks/Open Spaces in the Precinct**
Physical improvements are proposed to enhance the streets and important chowks of the precinct
- 13 **Design Schematic Street Sections for the Planning Area**
Schematic street sections are designed to integrate infrastructure networks, pedestrian experience and street furniture with street design.
- 14 **Develop the Talav in the Planning Area**
The Talav to the east of the precinct is proposed to be developed as a neighbourhood public space.

- 15 Develop three Public Spaces along Danapani Beach
An opportunity for developing the community assets created from the Area Plan is presented.

4. Heritage and Cultural Practices

- 16 Undertake Special Restoration Projects for Seven Structures
Seven structures within the precinct are proposed to be restored to serve as examples of the prototypes of the housing typology and landmarks of the precinct.
- 17 Design and Conduct Precinct Heritage Walk
A heritage walk is proposed to create awareness on the historical, architectural and cultural heritage of the precinct.

5. Community Structure and Governance

- 18 Devise an Implementation Strategy for Proposed Projects
A phasing and financing strategy is proposed based on community priorities.