

# CONSERVING URBAN HERITAGE OF KALYAN

**STAGE III** (of III): Conservation guidelines, Recommendations and  
Final report.



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## 1.0 INTRODUCTION

### Summing up the Issues for Conservation

*The purpose of this final stage is to prepare the conservation guidelines and recommendations based on the analysis of Stage I & II. The main objective of this concluding report is to devise implementation measures for the citizens and city authorities to be undertaken urgently for conserving architectural heritage structures and natural sites in Kalyan. It covers **Stage III (Conservation Guidelines, Recommendations and Final report)** of project “Conserving urban heritage of Kalyan”.*

The entire project is of systematic identification, listing and documentation of all architectural, historical and cultural buildings, precincts and natural sites of Kalyan to draw conservation guidelines. It has three stages:

**Stage I:** Identification, Photo Documentation and Base drawings

**Stage II:** Listing, Delineation and Documentation

**Stage III:** Conservation Guidelines, Recommendations and Final report

In Stage I, we identified and extensively documented 85 heritage structures and sites. This was followed in Stage II by the detail survey of all the 85 structures, preparing their proforma charts and were listed, classified and graded. The grading was based on regulation# 67 of the Heritage Regulations of Greater Bombay, 1995 and incorporated accordingly in the proforma charts.

Further to Stage I and Stage II, the analysis of the pattern of the various heritage structures and sites spread in various parts of the Kalyan city has raised several issues to be addressed for the conservation of the heritage.

The 1<sup>st</sup> part of this final stage III report presents study and analysis of the heritage structures in the context of the city. The 2<sup>nd</sup> part deals with recommendations and conservation guidelines. It consists of two parts: Physical aspects and The Development control regulations. The 3<sup>rd</sup> part consists of study and steps for conservation of 3 precincts and finally the 4<sup>th</sup> chapter draws up action plan and urgent steps for implementation for the citizens and local authorities. It also suggests the financing mechanism, guidelines for maintenance and implementation strategy to be adopted for conservation.

The MMR-HCS committee's suggestion during Stage II presentation to delete the 4<sup>th</sup> precinct (Rambaug) due to its unimportance has been incorporated. The significance of heritage structures, natural sites & precincts of Kalyan is presented in brief in the form of a chart for quick reference and its inclusion in heritage regulations for Kalyan. It should be noted that presently the Kalyan Corporation is using 2 development plans and control regulations. These are sanctioned DP and the present draft DP 1996-2016. The stricter rules of the two are adhered and we too have followed similarly for the recommendations of regulations.

This stage completes the project by drawing up the guidelines for conserving the rich architectural and natural urban heritage of Kalyan City and looks forward for its urgent implementation by citizens and local authorities based on our recommendations.

*Sanjay Udamale*  
August, 2003

## 1.1 LISTING OF HERITAGE STRUCTURES AND SITES IN KALYAN

### **Card#      Name of Structure/Site**

#### **A1: Old Kalyan: Core**

- 1 Shriram Mandir
- 2 Kashi Vishveshwar Mandir
- 3 Pushkarni (Pokhran/Kund)
- 4 Trivikram Mandir
- 5 Ganpati Mandir
- 6 Subhedar Wada
- 7 Sathe Wada
- 8 Kale Wada
- 9 Shekhar Bhide Wada
- 10 Vasant Bhide Wada
- 11 Kasarhat Mandir
- 12 Laxmi Narayan Mandir
- 13 Kalyan Gayan Samaj
- 14 Rajabhau Bhide Wada
- 15 Laxmi Vyankatesh Press
- 16 Vaidya Wada
- 17 Dutt Paar
- 18 Sane Wada
- 19 Gokulpura
- 20 Siddheshwar Mandir
- 21 Murlidhar Mandir
- 22 Paar
- 23 Joshi Wada
- 24 Sarkar Wada
- 25 Phadke Wada
- 26 Apte Wada
- 27 Gupte Wada

#### **A2: Creek area**

- 28 Durgadi Fort
- 29 Bhatale Talao (lake)
- 30 Town Wall
- 31 Chaudhary House
- 32 Jama Masjid
- 33 Dolare House
- 34 Fangari House
- 35 Parsi Agiary
- 36 Dhuru Wada
- 37 Kumble Wada
- 38 Tanki Palace
- 39 Phalke Wada
- 40 Savarkar Mandir
- 41 Dave Rice Mill
- 42 Shahi Bavdi (well)
- 43 Kazi house
- 44 Majid Sheth Haveli



## *LISTING OF HERITAGE STRUCTURES AND SITES IN KALYAN (contd.)*

### **Card#      Name of Structure/Site**

- 45 Davji Talao (lake)
- 46 Koli wada
- 47 Green House
- 48 Yellow House
- 49 Kotabaheer Masjid
- 49a Fort Wall
- 49b Thakurdwar Mandir

### **A3: Outer area**

- 50 Shenale/Kala Talao (lake)
- 51 Ram Mandir I
- 52 Ram Mandir II
- 53 Shankar Mandir
- 54 Sahajanand Samadhi
- 55 Kali Masjid
- 56 Maqbara
- 57 Phadke Bungalow
- 58 Railway Quarters
- 59 Church
- 60 Dnyaneshwar Prasaad
- 61 Dak Bungalow
- 62 Chhaya Talkies
- 63 Rukhmini Hospital
- 64 Mamledar Kacheri
- 65 Police Station
- 66 Court
- 67 Post Office
- 68 Clock tower
- 69 Gagalsheeth School
- 70 New Vishnu Mandir
- 71 Ganz (well)
- 71a Rambag

### **A4: Periphery area**

- 72 Rahatale Talao (lake)
- 73 Parsi Vihir (well)
- 74 Glass Bungalow
- 75 Railway Housing
- 76 Brick Chimney
- 77 Brick Chimney
- 78 Brick Chimney
- 79 Brick Chimney
- 80 Brick Chimney
- 81 Anjurkar Wada
- 82 Lonad Temple

***1.2 Kalyan City plan with Heritage structures (A3 size drawing)***

***1.3 Heritage structures & natural sites of Kalyan: Significance in brief  
(5 - A3 size charts)***

## **2.0 THE PATTERN OF HERITAGE BUILDINGS IN THE CITY – ANALYSIS OF STAGE I & II**

## 2.1 USE

Kalyan is dotted with Temples, Mosques, Wadas, Manzils and Lakes, which form important traditional architectural and natural heritage of Kalyan. These significant heritage structures and sites are spread in different locations of the city and broadly demarcated in 4 zones or areas.

A1- Old Kalyan Core	(Predominantly Hindu residential area)
A2- Creek Area	(Predominantly Muslim residential area)
A3- Outer Area	(Rest of the city area with Government & Railway buildings)
A4- Periphery Area	(Outskirts of the city with brick chimneys)

The land user pattern of the listed 85 structures and sites can be broadly classified as follows:

- I. Public Use: It constitutes half of the listed land uses and could be further categorized as:
  - a) Religious: These buildings are an integral part of this city and its social fabric and constitute about 25 percent of the heritage structures. They comprise of temples, mosques, a Zoroastrian fire temple, a church interspersed throughout the residential areas. The higher percentage is also indicator of their important role of these heritage buildings in the cultural and architectural heritage of the Kalyan.
  - b) Commercial: Three of the listed structures have commercial use which includes a printing press called Laxmi Vyankatesh Press built in elegant timberwork. The other structures are the cinema hall called Chhaya Talkies and the only surviving rice mill of Kalyan – Dave Rice Mill.
  - c) Public Places: Public use constitutes three of the listed structures. One of the most landmark public place of old Kalyan is the Paar, which serves as a meeting and a market place. Durgadi Fort with a temple at its hilltop is another important public place overlooking the Parsik hills and the creek.
  - d) Educational: Three structures from the listed buildings are schools. The main cultural and architectural symbol of Kalyan – ‘Subhedar Wada’, was a primary school and it was recently demolished for a new school building.
  - e) Government structures: The government administration structures occupy almost 1/10<sup>th</sup> of the listed heritage structures which includes buildings like Court, Mamledar Kacheri and Post Office etc.
  - f) Towers: The clock tower is an important urban landmark. It is at the junction of five main roads with a traffic island around it. Kalyan has five brick chimneys near the port located on either sides of the creek. These circular towers give city skyline a distinct character.
- II. Residential: Residential use constitutes a major portion (about 1/3<sup>rd</sup>) of all the listed buildings. The individual residential structures mainly consist of Wada’s in the core area and Manzil’s in the creek area. The outer area has housing complexes like the 4 to 5 storied Rambaug society spread in an approximate area of 8 hectares, police line and the Railway housing quarters.
- III. Natural sites: Kalyan has four lakes. The significant feature of the old Kalyan core is the Pushkarni (water body/Kund) with Shriram Temple and two more temples around it. The Kala Talao lakefront precinct is the largest and historically significant lake of Kalyan with temple and mosque complexes on its periphery.

*2.1i*

*Drawing: Use*

## 2.2 OWNERSHIP PATTERN:

This study was essential to make it easy and clear to implement any guidelines. It showed that the listed structures have varied pattern of ownership, which can be broadly classified as Private, Trust and Government. Private ownership constitutes 50% of the listed structures while the ownership by trusts and government constitutes 25% each.

Most of the residential structures are privately owned and religious structures by the trusts. As ownership pattern of most of the structures is with the trusts or private owners, it will be relatively easy to implement heritage conservation guidelines across the city.



Private



Government



Kalyan Municipal Corporation



Trust

*2.2i*

*Drawing: Ownership*



## 2.3 GRADING:

The structures are graded and classified based on the DC regulation # 67 of the Heritage Regulations of Greater Bombay, 1995. This study is helpful in drawing and applying conservation regulations. The study reveals that the heritage structures in Kalyan stand in following proportion:

- **Grade I: 13**      15%
- **Grade II: 52**      61% (**Grade IIA: 34, Grade IIB: 18**)
- **Grade III: 20**      24%
- Total: 85**      100%

The analysis indicates that from the entire listed heritage structures of Kalyan - 15% are grade I buildings and more than 60% of the structures are grade II buildings. Only 25% are grade III structures. Most of the Grade-I structures are located in the old Kalyan core area. The Grade II buildings consist of 34 Grade II A and 18 grade IIB buildings.

<b>Detail break up of Graded structures</b>	Grade I	Grade IIA	Grade IIB	Grade III	Total
Residential	5	14	8	7	34
Public	4	11	10	9	34
Natural	2	3	-	2	7
Other (Brick chimney, etc.)	2	6	-	2	10
<b>Total</b>	<b>13</b>	<b>34</b>	<b>18</b>	<b>20</b>	<b>85</b>

Three areas are identified and demarcated as precincts and are as follows:

- |    |                              |                   |
|----|------------------------------|-------------------|
| a. | Shriram Temple Precinct      | Old Kalyan (Core) |
| b. | Jama Masjid Road Precinct    | Creek Area        |
| c. | Shenale (Kala) Lake Precinct | Outer Area        |



Grade I: Shriram Mandir



Grade IIA: Tanki Palace



Grade IIB: New Vishnu Mandir



Grade III: Railway Housing

*2.3i*

*Drawing: Grading*

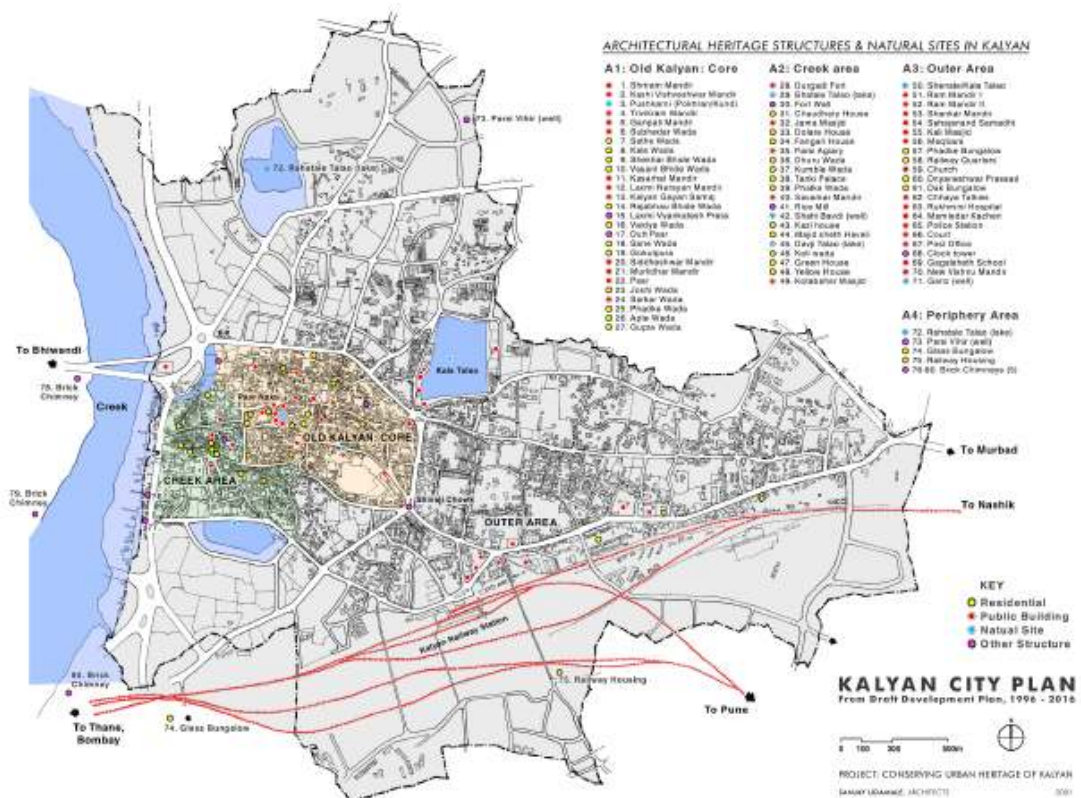
*2.3ii*

*Chart: Use, Ownership & Grading*

## 2.4 FIGURE GROUND:

This study helps in understanding the concentration and spread of listed heritage structures and natural sites across the city and the network of roads. It shows the area of lakes is quite large which is not apparent while moving through the city. It is amazing to know with the help of this map that only 85 structures representing the cultural heritage of the city exist today compared to the extent of growth of old Kalyan. Old Kalyan was a fortified town near creek in the western part of today's Kalyan.

The major growth has taken place around the railway station area in the south and later in the east and north side. The government buildings are near the station area. The historic old town has high density between the creek and the Shivaji Chowk. Thus today's Kalyan is a triangular shaped city stretching its longer side towards the east, parallel to the railway line and shorter side in the north.



**2.4i**

***Drawing: Figure ground***

## 2.5 HEIGHTS:

The listed heritage structures are spread across various parts of the city and 3 areas are identified as precincts in the old Kalyan, Creek and Outer region. Kalyan has 4 large natural lakes and various wells in the entire city area. This study of topography or building heights shows that almost half of the listed structures are G+1 floor which includes Wadas and temples (with overlooking gallery).

The core and the creek areas have homogeneous pattern of low-rise high-density buildings. Temples like Kasarhat and Nava Vishnu Mandir and some of the Government structures like Mamledar Kacheri and Police Line are ground storeyed. Of the various listed structures Manzils on Jama Masjid Road are G+2/3 storey structures.

Few of the structures in the Rambaug society are 4-5 storied. The clock tower, which is about 14 meters high, is an important landmark of the intersection of four major roads is almost perceived centre of the city. Kalyan has 5 brick chimneys, which are about 20-25 meters high on the west edge of creek giving the skyline a distinct character. This interesting view is particularly visible while approaching towards Kalyan by railway or by road from bridge over the creek.



*2.5i*

*Drawing: Heights*



## 2.6 ARCHITECTURAL CHARACTER:

The structures in Kalyan show evolution of coastal vernacular architecture with elements like sloping roofs, courtyards and verandahs incorporated to respond to the climate, which can be distinctly seen in both the residential and public buildings.

**Residential:** The listed residential structures mainly consist of Wada's in the Core area and Manzil's in the Creek area. The planning of the Wada's show two typical types of plans viz.:

- i. Plan with rooms around a square courtyard and the main structure with the entrance of the house abutting the street (e.g.: Vaidya Wada)
- ii. Plan with main wada and other structures (store and cattle shed) in a spacious green compound (e.g.: Vasant Bhide Wada) similar to houses in Konkan area. Every house has an entrance door (*darwaaza*) called '*Dindi*' and a well and *tulsi vrindavan* in the rear yard.

One of the very interesting features of some of the Wada's (e.g.: Subhedar Wada) is central courtyard with verandahs on all its four sides called '*chausopi*'.

Both Wada's and Manzil's are usually wooden framed buildings with brick infill walls built on local black basalt stone plinth. Another important feature of the Wada's and Manzil's is the mangalore tiled sloping roof. The windows are typically patterned floor to lintel level high with two double shutters and low height railing.

**Public:** The public buildings comprise of religious, government and railway structures, and Urban landmarks.

**Religious:** The religious heritage buildings of Kalyan consist of temples, mosques, a church and an agiary. The temples represent the typology and wooden built forms responsive to the climate and building materials available in the coastal region. They are generally two storied mangalore tiled sloping roof structures with shrine and circumambulatory path. The prayer hall is colonnaded with an overlooking gallery. The temple complex usually has smaller shrines and deep stambh.

**Government and railway structures:** Government buildings typically have stone masonry walls with mangalore tiled sloping roof. Railway structures are single storied stone masonry row type structures with sloping roof. Each structure consists of pair of living units at both floors with common entrance staircase.

**Urban landmarks:** Brick chimneys, Clock tower, Paar are some of the important urban landmarks of the city located in vital places.

It is crucial to maintain character of architecture i.e. height, sloping roof, windows, court, *dindi*, gallery, etc. of all the *wadas*, *manzils* and temples. The architectural character of the heritage structures in Kalyan is of low rise G+1 height for almost all the buildings and for achieving coherence in the pattern the following planning and design elements should be conserved.





### 1. Sloping roof

The typical sloping Mangalore tiles roof with a timber-eaves fascia is one of the prime characteristics of the architectural form of heritage structures in Kalyan – in fact the entire coastal Konkan region of India. It is imperative that buildings, which have this roof-form, are made to retain it and thus purposely preserved.

Almost all the structures have sloping roof right from Wadas to temples to manzils to government buildings.

### 2. Windows

The most important architectural feature of the structures in Kalyan after sloping roof is the regular pattern of the elegant double shutter timber windows. Most of the windows are floor to lintel level with two sets of double shutters. Each building has a pattern of windows that characterizes its facade.

The window pattern is particularly prominent in Shriram Mandir, Subhedar Wada, Sathe Wada, Vaidya Wada, Dave Rice Mill, Kasarhat Mandir, etc.

### 3. Street edge or plot boundary

The street edge is an important feature in the planning of the some structures with houses directly abutting the street and without setback.

### 4. Front porch or verandah

The Front porch or verandah is an important feature in the planning of some structures directly abutting the street or sometimes with setback in the front yard of the house. This feature is observed in various structures like Rajabhau Bhide Wada, Dhuru Wada, Fangari House, Majid Shet haveli, etc.

### 5. Courtyard

The central square courtyard is one of the finest elements in some Wada's of Kalyan. The courtyard is one of the features indicating not only the planning but also the lifestyle of the habitants of the Wada. Hence it is crucial it should be retained at any costs.

The square courtyard is observed in Kale Wada, Subhedar Wada, Sathe Wada, Vaidya Wada, Dave Rice Mill, etc.

### 6. Dindi or Entrance gate

The main entrance gate traditionally called as "Dindi" defines the entrance to the houses. It is a common feature in Wadas or temples. In some cases, the houses are within the compoukkjind but the compound wall has entrance gate called "Dindi Darwaza" – an extension of the architectural character and detailing of the house. The *Dindi darwaza* is observed in Shriram Mandir, Sathe Wada, Rajabhau Bhide Wada, Joshi Wada, etc.

### 7. Facade and finishes

The individual structures in Kalyan as well as the cohesive streetscape determine the character and are representative of the coastal vernacular architecture with uniformity of features and scale like the stone plinth, timber windows and sloping tiled roof.

*2.6i*

*Chart: Heights & Architectural construction*

## 2.7 CONDITION:

This study shows the state of physical condition and maintenance pattern of buildings and natural bodies. It is rather alarming that almost 60% of all the structures are in need of attention and only 40% are in good condition.

From the entire list 26% are in fair condition while 30% of the structures are in poor condition. This means that all these buildings are in need of urgent restoration and repairs. 3 buildings about 4% are already demolished namely Subhedar Wada, Shekhar Bhide Wada and Kumble Wada.

Most of the structures are built of stone plinth, sloping roof, wooden floors and wooden frame construction – so their condition is deteriorating due to lack of maintenance and unavailability of skilled workman/craftsman. The inconvenience, high cost of repair and maintenance like that of sloping Mangalore tile roof with timber framework often leads to replacing roof with asbestos sheet roofs or rcc slabs and completely changing the character of buildings. Unless a restoration program is initiated at the earliest there



*2.7i*

*Drawing: Condition*

## 2.8 PHYSICAL TRANSFORMATION:

This study shows the kinds of transformations and changes (form, structural, articulation & finishes) that have taken place in the heritage structures. It was rather alarming to see that almost all the structures have undergone transformation in more than one ways.

Prominent among them is due to road widening of plots of structures like Trivikram Mandir, Apte Wada have lost their famous and important feature of 'Dindi Darwaaza' (entrance gate). All the new developments with their setbacks take away the character of the street.

Additions have been carried out quite insensitively destroying the original character of the building. Complete floors (as in Dynaneshwar Prasaad) for commercial use and wings (as in Sathe Wada) have been added to the original structure to accommodate the growing families.

Ganz (well) in old Kalyan is closed by a slab and a two storied R.C.C structure is built over it. Davji talao and Bhatale lakes have encroachments, vegetation grown all over and garbage dumped in it. Incongruent finishes like glazed ceramic tile cladding on the exterior wall and enclosing the prayer hall by metal grill fixed in between the wooden columns have been done in Shankar Mandir.

Subhedar Wada, Shekhar Bhide Wada and Kumble Wada have been completely demolished for reconstruction. The threat now lies in reconstruction, as often the inherent architectural value of these buildings is lost since there are no stipulated guidelines for such works.



*2.8i*

*Drawing: Physical Transformation*

## 2.9 DEVELOPMENT PLAN PROPOSALS AND THREATS:

The study shows that the present development plan proposals, road widening schemes and reservations pose great threat to the heritage structures and sites of Kalyan. This drawing shows various schemes and reservations affecting the heritage buildings in the draft development plan 1996-2001. And all these schemes will effect almost 60% of the heritage structures directly and therefore it is imperative to urgently delete them and revise the development plan. Fortunately, this development plan prepared by the local municipal corporation is yet to be sanctioned by the government of Maharashtra.

### 1. Road Widening Schemes:

The proposed road widening in the development plan will lead to the following damage to the 49 heritage sites and structures:

- |                        |  |
|------------------------|--|
| a. Complete demolition | 5 structures.  |
| b. Partial demolition  | 17 structures.   |
| c. Plot set back       | 24 structures (includes removing "Dindi" entrance gate). |
| d. Partial reclamation | 2 natural sites.   |
| e. Demolition          | 1 brick chimney due to a new proposed road.              |

Most of the heritage structures and sites are located in old Kalyan core and creek area. The traffic in old Kalyan core and creek areas consists of auto-rickshaws, two wheelers and cars catering to the daily transportation needs unto the station and for local movement. As there are no offices and few commercial users, the traffic infrastructure of roads and parking is not strained. Therefore all the proposed road widening schemes should be deleted. Refer chart or proforma of listing for each structure (stage II).

### 2. Incompatible Reservations:

As much as 7 heritage sites are marked as reservations in development plan which would damage or change their existing land use. In these four are natural sites of lakes while the other includes a temple complex, town wall and police housing each. Some of the sites earmarked with reservations in the development plan are very serious in nature like the reclamation of lakes of Bhatale Talao and Kala Talao.

### 3. Designated plots in development plan:

As many as 25 plots with heritage structures and sites are designated as public purpose/ public utility/commercial in development plan.

### 4. Demolition:

The three heritage structures (Subhedar Wada, Shekhar Bhide Wada and Kumble Wada) have already been completely demolished after this project started. Sarkar Wada is already in dilapidated condition and Kale Wada is vacated for demolition for replacing it with apartments.

Most of the heritage structures are located in the historic core which is termed as congested area in the development plan. As per the DC regulations the structures in congested area are liable for FSI of 33 % higher and 83 % higher (if provided with shopping) from the rest of the city. This is indeed an incentive for demolition. In fact over the years the Wadas in the historic core are getting demolished one by one to take advantage of this DC regulation.



*2.9i*

*Drawing: Development Plan Proposals and Threats*

***2.9ii***      ***Chart: Condition, Physical Transformation and  
Development Plan Proposals & Threats***

## **3.0 CONSERVATION GUIDELINES, REGULATIONS AND RECOMMENDATIONS**

### **3.1 PHYSICAL ASPECTS**

The following section outlines recommendations towards creating a comprehensive conservation strategy for the Kalyan city. The recommendations are structured in two parts, viz. The physical aspects concerned with the image and identity of the precinct followed by a section on the regulative measures that would need to be taken in order to ensure that the physical recommendations are implemented. The final chapter 5 discusses possible financial mechanism to support as well as encourage the conservation of the city's heritage structures and sites. This follows the steps necessary for the implementation of the above listed recommendations.

#### **3.11 Land Use**

Kalyan city's heritage structures and sites show a great variety of buildings types. They consist of residential, religious, educational, commercial, government offices, natural sites and other structures like urban landmarks and monuments. In the process of urbanization and development the original uses of some buildings are getting modified or changed and some are even being demolished and natural sites being encroached. This should be constantly evaluated and reexamined so that it is not counter to conservation.

The role of the heritage structures and sites in terms of their present and changing uses should be ascertained or structured with emerging urbanization patterns, the development pressures, socio-economical condition and regional scenario.

#### **3.12 Tourism**

The prime resources of the city should be carefully identified, examined and reinforced. For example, the Kalyan city is unarguably one of the historical city within the MMRDA region and has the potential for development of Heritage Tourism. The history and socio-cultural layers of Hindu and Muslim communities – is vivid by the architecture of Wada's and Manzils existing in Kalyan. Similarly the buildings of religious importance – Temples, Masjids, Church, Agiary etc. as well as the natural sites like Kala Talao are part of the city's vibrant character and manifold heritage.

#### **3.13 Recycling of Buildings /Change of use**

- a. The change in use of buildings or recycling the user pattern should be allowed provided that it is compatible and does not damage the building. Incompatible uses should not be allowed.
- b. Recycling of Buildings to Museums, cultural centers, libraries (land for public purpose in development plan to promote heritage) to maintain the health and conservation of structures should be seriously considered. For example: Since Subhedar Wada is demolished now, the vacant Kale Wada which is understood to be emptied for demolition for making away for a apartment can also be recycled as local heritage museum or alternatively the Sarkar Wada be converted to a school and the open space could be used for local crafts mela, etc. The dilapidated structure of Sarkar wada could be rebuilt and the open space in the plot can be used as primary school.
- c. Letting part areas or rooms the residential structures for commercial use should be allowed after scrutiny so that the revenue thus obtained is utilized for maintenance.

### 3.14 Natural sites and Open spaces

- d. The natural sites and surrounding open spaces should be exactly demarcated in Development Plan for public recreational use.
- e. The land use of natural sites should not be changed in any manner in Development Plan (e.g. Bhatale Talao).
- f. The reclamation, dumping of garbage, sewage outlets in the lakes should be completely stopped.
- g. Special measures should be made to stop encroachment of slums or any kind of permanent building activity within the lakes.
- h. An integrated program of cleaning, physical improvement, aesthetic development (commonly termed as beautification) and maintenance of natural sites like lakes should be undertaken by the city. Environmental measures like water quality improvement should be urgently implemented.
- i. No change of land use in the form of reservations in the development plan or reclamation for any purpose should be allowed to retain environmental characteristics of natural sites.

### 3.15 Architectural Character and Urban Form

The architectural character of the heritage structures in Kalyan is of low rise high density G+1 height for almost all the buildings and for achieving coherence in the pattern, the planning and design elements Like Footprint, Sloping Roof, Windows, Street Edge, Courtyard and Dindi Darwaza should be conserved.

- a. **Footprint:** Any new construction or reconstruction proposals should follow the exact shape and size of the original footprint of the building.
- b. **Sloping roof:** Any proposals for additions, alterations, restoration, reconstruction, etc. the characteristic roofscape with terracotta tiles, timber eaves board, etc. shall be maintained and buildings within the precincts shall maintain skyline of the precinct (without any high rise development) as may be existing, in the surrounding areas so as not to diminish or destroy the value and beauty of the structures or precincts.
- c. **Windows:** The timber windows of the structures with double shutter long windows (from floor to lintel level), decorative window railing and louvered shutters shall be retained. In case of any reconstruction proposals the design shall follow the exact shape and size of the existing or original windows.
- d. **Street edge or plot boundary:** The street edge of the buildings shall be retained. Structures abutting a street shall not enclose the verandahs using masonry or other partitions. The height of the compound wall should not exceed the existing height.
- e. **Front porch or verandah:** The semi-open Front porch or verandah shall be retained and not enclosed to create a room. Any provision of hall, partition, etc. that alters the external facade and architectural character of the structure shall not be allowed.
- f. **Courtyard:** The central courtyard shall be retained and not enclosed to create a room. Any provisions of hall, partition, roof covering (acrylic sheets, etc.) etc. that alters the internal facade and open to sky character of the courtyard shall not be allowed.
- g. **Dindi or Entrance gate:** The main entrance gate, traditionally called as “Dindi” which is an important architectural feature shall be retained. Any new construction or reconstruction proposals should follow the exact shape and size of the original design of the *Dindi*.
- h. **Facade and finishes:** No changes or removal of decorative features in the existing facade or elevations of buildings would be permitted. Changing of windows or

replacing windows, closing up of verandahs and infilling of railings with different material or design is not permitted. Adding AC boxes, chajjas, metal grills and signboards should be strictly prohibited.

- i. **New construction:** in the same plot should be coherent and harmonious with the existing structure in scale and character.

### **3.16 Skyline of the City:**

Special vigilant attention and sensitive care should be taken to conserve the skyline of the historic city. The brick chimneys and towers like Clock tower at Shivaji chowk and Rukhminibai hospital silhouette the skyline of Kalyan. All the chimneys and towers have been listed as heritage structures. No change of land use in the form of reservations in the development plan or demolition for any purpose should be allowed to retain these unique urban architectural elements of the city.

### **3.17 New construction/ reconstruction/ additions/ repairs:**

All 85 listed structures are covered under guidelines specified for heritage grades for Kalyan City based on the Heritage Regulation # 67 for Greater Bombay, 1995, Government Publications. These would automatically come under the jurisdiction of heritage laws and repairs. Additions and alterations to these structures would necessarily have to be referred to the Heritage Committee to be constituted for projects in Kalyan for approval.

### **3.18 Heritage walks and building plaques (refer drawing in chapter 5):**

Special heritage tours along the historic buildings should be conducted during weekends and at night, with important landmark buildings being duly illuminated at night. Promoting heritage walks through heritage buildings would not only help sensitise people to its elegant architecture, but also make the owners understanding the significance of the buildings. The tours could be complete city heritage tour, only residential architecture of Wadas and Manzils or only religious public places like Temples and Mosques, etc.

Plaques giving information of the architectural, cultural and historical importance on each of the listed buildings in the city and Signposts to the areas of the precincts should be installed. This would help inform and educate the visitors about the heritage significance of each of the heritage buildings.

## **3.2 REGULATIONS:**

### **3.21 Notification and Designation of heritage structures and sites:**

The MRTP (Amendment) act, 1994 stipulates that the Development Plan of a municipal area shall consider preservation of heritage buildings and precincts (section 22). Therefore the listed heritage structures, natural sites and precincts of Kalyan should be marked and designated as heritage of the city in the development plan.

The Government of Maharashtra's directive no. TPS 2400-367/P.N. 24/UD-9 dated 30<sup>th</sup> September 2000 clearly states that the municipal corporation should prepare list of architectural heritage buildings and heritage regulations as per the provisions of MRTP act 1966 section 37(1). This would have to be coordinated by the Urban Development Secretary together with the Municipal Commissioner and MMRDA. The town-planning scheme can be employed for such a designation.

It should be noted that

- a. In 2000, the Chief Minister of Maharashtra announced the Government's intention to expand the orbit to include several other municipalities including Kalyan. This came as a Government directive from Urban Development department as directive no. TPS 2400-367/P.N. 24/UD-9 dated 30<sup>th</sup> September 2000 to the Municipal corporations to prepare heritage regulations for the cities of Aurangabad, Amravati, Nanded, Solapur, Kalyan-Dombivli and Thane on the lines similar to heritage regulations of Mumbai (refer attached copy of the directive).
- b. The Minister of Environment, vide his letter dated August 21, 1998 addressed to all State Governments suggesting emulation of the Mumbai initiative in all the states. In 1995, the Government of Maharashtra gave directives to the Municipal Corporations of Kolhapur, Nashik, Pune and Nagpur to initiate heritage regulations on the lines of Mumbai.
- c. In 1989, the Ministry of Environment, Government of India, in a report entitled 'Guidelines for Environmental Impact Assessment of New Towns', mentioned in the context of Bhubaneshwar, the importance to draw up in advance guidelines for the promotion of development activities without detriment to the preservation of cultural heritage.

### **3.22 Road widening schemes in Development Plan affecting heritage structures:**

- a. Most of the plots with heritage structures apparently come under the demarcation for various roads widening and proposed new roads in the Draft Development Plan 1996-2001 (presently held up for revisions) envisioned for the city. These schemes by causing setbacks or complete demolition would lead to destruction of the listed heritage buildings, encroach upon natural sites and disturb the character of the precincts. Therefore all such schemes which affect the heritage buildings, natural sites and precincts should be officially deleted. Refer proforma charts for development plan remarks/perceived threats for the listed structures and sites.
- b. While framing the future development control rules it shall be mandatory that the road widening line should be defined so as to protect and not to detract from the said heritage structures, natural sites and demarcated precincts.
- c. If there is any new roads or road widening lines proposed in the revised development plan of the city they should clearly detract from the heritage structures.

### **3.23 Incompatible Reservations in Development Plan:**

As much as 7 heritage sites are marked as reservations in development plan which would damage or change their existing land use. All proposed plot reservations indicated in the Development plan are clear threats and should be deleted. They should be marked specifically as heritage reservation so that there is no possibility of demolishing the heritage structures or changing the reservation

The reservation shown on heritage buildings or natural sites in the development plan like in Bhatale Talao, New Vishnu Mandir should be deleted (refer the proforma charts for specific DP remarks / Perceived Threats for each structure).

### **3.23 Designated plots in development plan:**

As many as 25 plots with heritage structures and sites are designated as public purpose/ public utility/commercial in development plan. They should be revised and marked as heritage reservation so that there is no possibility of misinterpretation and demolishing the heritage structures for developing the public purpose/utility/commercial activity.

### **3.23 Declare the list of Heritage structures till final notification:**

Since the beginning of this project (October 2001) comprising of documentation and guidelines preparation three listed heritage structures (Subhedar, Shekhar Bhide and Kumble Wada) have been completely demolished. Therefore the list of heritage structures, sites and precincts should be declared urgently to stop demolition and no alterations should be permissible until the designation formalities are completed by the Municipal Corporation as per MRTP act 1966 section 37(1).

### **3.24 Conservation Plan:**

In the same way as land use plans are prepared as part of the Development plan, a Conservation plan should be prepared for the heritage structure, sites and precincts in Kalyan outlining use, designation, permissible building heights in precincts, natural sites, listed buildings etc. The exact demarcation of sites and precincts should be marked on such a plan.

### **3.25 Additional DC Rules**

#### **a. Setbacks:**

- I. The setback laws have to be amended to facilitate varying height restrictions.
- II. No road widening rules should be prescribed under the draft or revised development plan to set back the listed buildings or their plots from their existing situation.

#### **b. Recycling use:**

Change of use or activity in use of buildings or recycling the user pattern should be allowed provided that it is compatible and does not structurally damage the building. Incompatible uses should not be allowed. However any change of activity or use have to be approved by the heritage committee.

#### **c. TDR**

The listed sites, structures and precincts demarcated as heritage sites should be treated on par with development plan reservation at the city scale. Thus TDR should be obligatory in cases of the heritage sites which have unutilized FSI.



**d. F.S.I:**

I. The F.S.I for the listed heritage structures, sites and precincts should remain same as per the development control regulations for plots or buildings in the congested area and outside congested area of the city i.e.

i. Congested area (old Kalyan core)	1.33	Residential
	1.83	Residential with shops at ground
	1.33	All other buildings
ii. City area (outside congested area)	1.0	Residential
	1.0	All other buildings

- II. In case of buildings in congested area, the excess permissible FSI of 0.50 for shopping shall be allowed to be consumed in the form of TDR in any part of the city but not in the same plot nor within the congested area.
- III. In case of unsafe buildings, the excess permissible FSI of 2 shall be allowed to be consumed in the form of TDR in any part of city but not within the congested area.
- IV. In case where the F.S.I is unutilized the compensation should be only in the form of TDR as per the Development control regulations.

**e. New construction/ reconstruction/ additions/ repairs:**

Additions and alterations to the structures would have to be compulsorily referred to the Heritage Committee to be constituted for approval of projects. All 85 listed structures are graded and covered under guidelines specified for heritage grades for Kalyan City based on the Heritage Regulation # 67 for Greater Bombay, 1995, Government Publications. These would automatically come under the jurisdiction of heritage laws and repairs.

As per the DC regulations for reconstruction, existing FSI should be allowed, unconsummated FSI if any, shall be used as TDR. All other regulations to apply as per the prevalent development control regulations.

**f. Hoardings, signage, street furniture:**

Regulation should ban hoarding on heritage structures, natural sites and precincts. Signage on heritage buildings should be subject to approval. The approvals can be based on prescribed guidelines. Similarly approvals for street furniture sponsorship should be based on design review. And all street furniture should be as per the specification in the catalogue prepared by sensitive Industrial Designers (like Industrial Design Centre at IIT, Mumbai or National Institute of Design, Ahmedabad).

**g. Premiums:**

Regulations pertaining to premiums in DC regulations should be modified. No premium should be charged for condonation/ relaxations in DC regulations in preservation of existing buildings while reconstruction. If premium is worked out, than it should be valid only if approved by the special permission of the Municipal Commissioner.

**3.26**      ***Government Directive (#TPS 2400-367/P.N. 24/UD-9 of 30-9-2000)***

## **4.0 PRECINCTS: STUDY, ANALYSIS, GUIDELINES AND REGULATIONS**

The listed heritage structures and sites are spread across various parts of the city. However three areas are identified and demarcated as precincts, as they collectively represent the significant architectural value, religious character, unique streetscape and natural sites of Kalyan. The three Precincts are as follows:

- |                                 |                   |
|---------------------------------|-------------------|
| 1. Shriram Temple Precinct      | Old Kalyan (Core) |
| 2. Jama Masjid Road Precinct    | Creek Area        |
| 3. Shenale (Kala) Lake Precinct | Outer Area        |

**Heights:** Maintaining the height and footprints of the buildings is crucial to maintain the overall form of the precincts as well as its streetscape and fabric. Thus height restriction should be imposed in all three precincts in the Kalyan City.

Existing heights for a particular street or precinct should form bench mark for any new permission. In the situation of the reconstruction of a public building, this issue should be dealt with on an individual basis where the Heritage Committee should sanction the skyline, urban form and architectural styles before permission is granted.

**Streets:** Similarly it is crucial that the street width in the precinct be maintained for it is the ratio between the street width and height of buildings that it is a critical determinant of the character of the streetscape. Thus all road widening schemes applicable to the area delineated as the Precincts must be urgently reexamined by the government and officially deleted from the Development plans. Obviously this would have ramification on the overall road widening and new artery networks planned.

## 4.1 SHRIRAM TEMPLE PRECINCT



## 4.11 INTRODUCTION:

### i. History:

The historical association of Shriram Mandir Temple Precinct goes back to the 17th century during Peshwa regime of Marathas when Subhedar Ramji Mahadev Biwalkar ruled Kalyan region during 1760-72. He carried out many improvements and built his administrative office “Subhedar Wada” in Kalyan. He also built a water tank “Pushkarni” (similar to Taj Bavdi) to supply water to the town from the Kala Talao Lake. The Shriram Mandir temple complex is built adjoining Pushkarni. The precinct evolved around the pushkarni with various temples in its vicinity.

### ii. Location and Extent (refer drawing):

The Shriram Mandir temple Precinct is located in the historic Kalyan City in the central core called Paar naka area. Below a Pipal tree a sitting platform was built called Paar at the intersection of streets at the corner of Shriram Mandir temple complex. The entire area is known as Paar naka. The precinct area is bound in north south direction within two parallel roads of Bapusaheb Phadke road and Maulana Azad Road. The pedestrian spine of Ram Mandir road connects these two roads. To the eastern side of the Pushkarni the precinct boundary is demarcated as 15-m strip to control the new development pattern.

### iii. Ambience:

The precinct is dotted with temples and shrines like Shriram, Kashi Vishweshwar, Trivikram and Ganpati temples within walking distance with a bazaar around the Paar. Infact three temples of Shriram, Trivikram and Ganpati temples are built on three sides of the sacred water body of Pushkarni which is hidden within. The Pushkarni can be accessed only from the Ram Mandir temple complex. The precinct also has community buildings like marriage halls and other ancillary structures and residential Wadas. It also has newly built rcc structures of tall (G+4) apartment buildings in absolute disharmony with temples and Wadas. Coexisting with these temple shrines is a valuable historic fabric of vernacular buildings that represent the local building traditions of Kalyan.

The area is buzzing place of activity by hawkers and fruit and flower sellers around the Paar and along the Ram Mandir road. There are also grocery shops, tea and snacks shops and auto-rikshaw stand. The entire precinct has a festive ambience due to temples and shrines but it is also a focal point for area with intense activity.

### iv. Present scenario:

Over the years, the historic core has shrunk around the Paar and narrow strip of the narrow temple lane and even these temples and Wada houses are being continuously threatened by sheer neglect or radical building transformations and urban pressures of development created by increasing land values in the area.

Inspite of this, many fine historic structures have survived the onslaught of time, retaining their original features with very few or no alterations. It is crucial that this remaining heritage be adequately protected and preserved for the future through comprehensive architectural controls and preservation guidelines. Though most of the structures of their precinct are listed and graded structures and would be protected individually by the regulations of graded structures – the composition of these structures as an area or precinct is of immense heritage significance reflecting the living patterns in the Kalyan. The following pages outline a strategy for the preservation and continued protection of this historic precinct, with a view to retaining its significance as a valuable architectural ensemble in the core of the city.

## 4.12 STUDY, ANALYSIS AND ISSUES

### 4.12.1 Architectural Character:

Shriram Temple Precinct is not only significant as a collection of valuable vernacular buildings, but also represents one of the origins of the city and interesting historic religious and residential urban neighborhood of Kalyan. The temple precinct comprises a fragile assembling of charming vernacular dwellings that have survived the onslaught of the modern construction. The neighborhood has an immense wealth of architectural heritage in the form of quaint traditional temples and houses with interesting architectural features both externally and internally like long wooden windows, fretwork, wooden colonnade and sloping terracotta tiled roofs.

#### i. Sloping roof:

The typical sloping Mangalore tiles roof with a timber-eaves fascia is one of the prime characteristics of the architectural and urban form of heritage structures in Shriram Temple precinct – in fact the entire coastal Konkan region of India. It is imperative that buildings, which have this roof-form, are made to retain it and thus purposely preserved.

#### ii. Street edge or plot boundary:

The street edge is a very strong feature in the planning of the some structures with houses directly abutting the street and without setback like Joshi Wada. Even when the house is setback from the street, the compound wall with entrance gate “Dindi Darwaza” becomes an extension of the architectural character and detailing of the house.

#### iii. Windows

The most important architectural feature of the structures in Kalyan after sloping roof is the regular pattern of the elegant double shutter timber windows. Most of the windows are floor to lintel level with two sets of double shutters. Each building has a pattern of windows that characterizes its facade. The window pattern is particularly prominent in Shriram Mandir, Subhedar Wada, Sathe Wada, Vaidya Wada, Dave Rice Mill, Kasarhat Mandir, etc.

#### iv. Dindi or Entrance gate

The main entrance gate traditionally called as “Dindi” defines the entrance to the houses. It is a common feature in Wadas or temples. In some cases, the houses are within the compound wall but the compound wall has entrance gate called “Dindi Darwaza” – an extension of the architectural character and detailing of the house. The Dindi darwaza is observed in Shriram Mandir, Sathe Wada, Rajabhau Bhide Wada, Joshi Wada, etc.

#### v. Facade and finishes

The individual structures in Kalyan as well as the cohesive streetscape determine the character and are representative of the coastal vernacular architecture with uniformity of features and scale like the stone plinth, timber windows and sloping tiled roof.



#### **4.12.2 Building Heights (refer drawing):**

This map shows the building heights in the Shriram Temple precinct area and makes it vivid the general topography of the area. Most of the buildings in the precinct range from ground and maximum ground and one upper storied buildings – except for a few aberrations caused by reconstructions and newer developments. Generally the Shriram Temple precinct comprises of a low-rise pattern. The new incongruent developments have been of Ground and 3 or 4 storied apartment buildings and the elevated water reservoir built by the municipal corporation.

Along the Ram Mandir road and around Pushkarni the sloping roof structures are ground and ground and one storied buildings lending a character to the precinct. All the listed structures in the precinct are ground and one storied except Sarkar Wada, which is a ground storey building. Even the height of the Pipal tree at the Paar (platform below tree) is in congruence with the surrounding low-rise structures.

This map is based on a visual survey on what appears externally as different floors. The intention is to represent the general topography of the Shriram Temple precinct. Also in some structures attics and lofts exist below the high pitched roof of the upper floors.

#### **4.12.3 Traffic Pattern (refer drawing):**

The Shriram Temple precinct is located in the core area of historic old Kalyan town on the western part of the city. The location being away from the city centre (roughly between railway station to Shivaji chowk) the traffic flow is not arterial but only serves the surrounding of old town.

Most of the traffic is mainly pedestrian and light vehicles like rikshas and private 2/3 wheelers. The city does not have local bus transportation system nor does it pass through Paar naka. The vehicular traffic flow on Ram mandir road is meager (in fact mostly pedestrian) since it just connects the Bapusaheb Phadke road and Maulana Azad Road.

The paar naka is important landmark and traffic intersection within the precinct. Paar naka has riksha stand and it attracts traffic due to the bazaar around it in the morning and evening.

#### **4.12.4 Usage of Public & Open Spaces:**

Within the Shriram Temple precinct there are three public and open spaces and there usage varies in response to its function, importance and location in the area.

##### **i. Paar:**

The Paar is physically only a platform below a pipal tree but is a landmark in the old Kalyan town. Infact the entire area around the Paar is identified from it as Paar naka area. So its usage is to sitting and relaxing as well as identity point. It is a hub of market and hawking activity serving the surrounding neighborhood being located close to the various temple complexes and community function buildings like marriage halls. It's a place for selling flowers and fruits and puja material along with vegetables. It also has riksha stand being a focal point of the neighborhood and located at intersection of almost four streets.

##### **ii. Pushkarni:**

The water tank (Kund) located near Paar Naka on east side of Ram Mandir is surrounded by temples on three sides and east side by new four storied residential apartments. It was built and used for the drinking water requirements of the old town. However today it is only used for religious activity, fishing and dumping construction debris. The water is stagnant and of poor quality and excessive vegetation is overgrown above all the walls of the water tank.



### iii. **Sarkar Wada:**

This Wada was an administrative building with open ground around it. The ground was used as maidan by the children prior to building of the elevated reservoir in the plot. However today it is just an unmaintained open space with overgrown vegetation.



#### **4.12.5 Encroachment on Public & Open Spaces:**

##### **i. Hawkers**

The open space around Paar naka is encroached on three sides by hawkers except the side facing the road. A Ganpati Mandir shrine is also constructed on the north west side on the stone platform below the Pipal tree. The hawking activity around the Paar extends upto the ram mandir road. Due to all this the entire open area around Paar has become chaotic and unorganised.

##### **ii. Reclamation**

The Pushkarni may get completely reclaimed due to continuous dumping of construction debris. Also the side walls are covered with excessive growth of vegetation. Overall this is a tremendous threat to its survival.

#### **4.12.6 Street Signage:**

Street furniture is another issue, as the design of street signage, garbage bins, pavements is completely out of character and does not confirm to any style or design.

Street signage, tree planters, benches, bollards and telephone booths are completely nonexistent in the precinct. Few lamp posts and garbage collection bins are located in the precinct at random places.

The precinct also has problems of incongruent and badly designed sign boards & shop fronts. The precinct is ill maintained and unhygienic due the open drains, cluttered garbage, wastage thrown by hawkers, etc.

#### **4.12.7 Condition and Non-congruent Buildings:**

The condition of buildings in Shriram Temple precinct is overall fair except the Sarkar wada which is in completely dilapidated and the Pushkarni is in poor condition. Almost half the number of buildings in the precinct are listed and graded heritage buildings.

The non-listed old sloping roof structures are in fair condition while the recently constructed r.c.c. apartment buildings in the precinct are in good condition.

Some of the listed buildings are need of urgent maintenance like The rear part of the Shriram Mandir is dilapidated and almost abandoned which should be urgently repaired. The Pushkarni has overgrown vegetation on its stepped retaining walls as well as its basalt stone kund steps leading to the water are in poor condition. Joshi Wada needs restoration of external plaster

and wooden windows.

The precinct predominantly consists of ground and upper storey sloping roof buildings. It also has newly built flat roof rcc buildings of marriage hall and G+4 apartment buildings. These recently constructed rcc apartment buildings in the precinct are completely non congruent in form, scale and character including the material, color and textures are different and disharmonious.

In Shriram Mandir, an incongruent extension of a shrine with asbestos sheet supported on two brick masonry columns is built facing the water tank.

The Pushkarni has few G+4 apartment buildings on its eastern side, therefore the precinct boundary is marked as a strip of 15 metres so that new development is not disharmonious in scale and form.

The Pushkarni has overgrown vegetation completely covering its stepped retaining walls, which distracts its architectural character of form and enclosure. In fact this uncontrolled vegetation growth shows the negligence provoking the surrounding buildings residents around to throw garbage and construction debris in it.

The hawkers with mobile stalls around the Paar are also incongruent temporary structures.



#### 4.12.8 Development Plan Proposals (refer drawing):

The proposed road-widening schemes within the Shriram Temple precinct in the development plan would lead to demolition of one of the important heritage structures (like Shriram Mandir-Grade I) and totally disturb the character of the precinct.

The widening of Ram Mandir road would disturb the scale of this quiet street and pull down Shriram Mandir, Kashi Vishweshwar Mandir and the Paar. The existing Ram Mandir road is a narrow street connecting Bapusaheb Phadke and Maulana Azad road with Joshi Wada and Shriram mandir on its two sides. In the context of Paarnaka area, the Bapusaheb Phadke and Maulana Azad road need not be connected by a wide road nor there is need of traffic island.

The proposed road-widening scheme will effect in demolishing the following listed heritage structures of Kalyan in the Shriram Mandir Temple precinct.

<b>Card #</b>	<b>Name</b>	<b>Grade</b>	<b>Threat</b>
I. 1	Shriram Mandir	I	Complete demolition of main structure with entrance, Hanuman Mandir and compound wall.
II. 2	Kashi Vishweshwar Mandir	IIA	Partial demolition of main structure with Nandi shrine and Deepstambh.
III. 4	Trivikram Mandir	IIA	Plot setback on the Bapusaheb Phadke road and partial demolition of structures adjoining the road.
IV. 22	Paar	I	Complete demolition of platform with the Pipal tree. Infact this would demolish the landmark of the Paar naka area and replace it with an out of scale traffic island.
V. 24	Sarkar Wada	III	Plot setback on the Bapusaheb Phadke road
VI. 23	Joshi Wada	I	Partial demolition of east facade of the Wada.

The following complexes are indicated as reservations in the development plan:

- |     |  |                |   |
|-----|--|----------------|---|
| i.  | Shriram Mandir complex, Kashi Vishweshwar Mandir & Pushkarni | Public Purpose | This means Corporation/ Owner can develop the plot for public purpose after demolishing the heritage structure. |
| ii. | Sarkar Wada  | Public Utility | This means Corporation/ Owner can develop the plot for public utility after demolishing heritage structure      |



### **4.13 GUIDELINES & REGULATIONS:**

The Shriram Temple precinct as delineated is proposed to define the boundary, architectural character and transformation within the precinct. The area is one of the most significant and sacred realms with architectural character reflecting the cultural heritage of the Kalyan city.

In the area defined for precinct many low-rise sloping roof traditional structures have been demolished and replaced by tall rcc apartments and buildings. The transformation caused due to urban pressures of development has posed threat to the existing buildings. However it is crucial that the structures which have survived should be conserved with utmost care and sensitivity. The following guidelines are over and above the guidelines for various listed architectural structures and natural sites in Kalyan.



#### **4.13.1 Development plan:**

1. The Shriram Mandir Temple precinct should be demarcated and designated as a heritage precinct in the development plan. This should be done along with the notification of listed and graded architectural heritage structures and sites of Kalyan. This would have to be coordinated by the Urban Development secretary along with the Municipal Commissioner/corporation and MMRDA.
2. All Development plan proposals of road widening schemes within the Shriram Mandir Temple precinct should be officially deleted.
3. All traffic related schemes and approvals should be in keeping with the conservation aspects of the precinct.
4. All proposed plots designations like public purpose/utility indicated in the development plan should be revised and marked as heritage reservation so that there is no possibility of misinterpretation and demolishing the heritage structures.
5. Height restriction as given below should be applicable for all development plan proposals within the boundary of the precinct to achieve a coherent skyline.

#### **4.13.2 Transferable Development Right (TDR):**

The Shriram Mandir Temple precinct earmarked, as a heritage precinct designation should be treated on par with D.P. reservation at the city scale. Thus TDR should be obligatory in cases where heritage sites within this zone have unutilized FSI.

#### 4.13.3 Amalgamation of Plots:

To avoid high rise construction, amalgamation of property shall not be permitted. This would also detract from the original footprint of the buildings.

#### 4.13.4 Demolition of buildings:

Mandatory Regulation (MR):

No building within the designated precinct shall be demolished without prior consent of the Heritage committee. No listed building would be allowed to be demolished either whole, or in part unless absolutely essential due to structural failure.

#### 4.13.5 Allowable FSI:

1. The FSI allowed to be consumed in the precinct shall not exceed the allowable FSI as per the development control regulations applicable to the congested area i.e. 1.33.
2. The precinct being in congested area, the excess permissible FSI of 0.50 for shopping shall be allowed to be consumed in the form of TDR in any part of the city but not in the same plot and precinct nor within the congested area.
3. The consumption of any unutilized or balance FSI is not permitted within the precinct. The excess FSI as TDR would not be allowed to be utilized within the precinct or in the congested area as demarcated in the development plan.
4. Under no circumstances should TDR be granted within the precinct.
5. Any extra FSI accruing due to reconstruction of unsafe buildings should be allowed to be consumed in the form of TDR but shall not be utilized within this precinct nor within the congested area of the city.



#### 4.13.6 Road Widening:

MR: No road widening would be permitted between the Ram Mandir road and Paar as this would involve cutting and demolishing Shriram Mandir, Kashi Vishweshwar Mandir and Paar.

#### 4.13.7 Heritage Structures and Precinct Guidelines:

All structures falling under the precinct should be covered under guidelines as specified for heritage grades in the Heritage Regulations for Kalyan to come into force based on this report (The regulations are based on the Heritage Regulations for Greater Bombay, 1995, Government Press Publications). These would automatically come under the jurisdiction of heritage laws and repairs. Additions and alterations to these structures would necessarily have to be referred to the Heritage Committee for approval.

#### 4.13.8 Open Spaces

All open spaces whether private or public shall be maintained without being built upon by the corporation or owners or residents. This is especially important in the case of extensions of shop fronts/ hawker lines other than the specified size approved by the Municipal Corporation. Any such encroachment of the open space or the street should be strictly monitored.

#### 4.13.9 Signs, Signage and Street Furniture:

The entrances to the precinct should be adequately highlighted by way of sensitively designed signage. The area, being predominantly pedestrian, needs an up gradation of the existing paving and road surfacing. Appropriate positioning and design of street furniture i.e. benches, streetlights, fire hydrants, litter bins, etc. is required. A strict regulation of sign boards and shop fronts is necessary to ensure that the intrinsic heritage character of the precinct is not diluted.



#### 4.13.10 Reconstruction/New Construction:

Any proposals for new construction or reconstruction or additions to existing structure should follow the norms of the planning elements, building height, architectural treatment and features, recommended finishes and materials, and street edge etc. as specified in the manual. Additional floors must follow the existing architectural features or the original structure as well as the sloping roof profile and street edge.

#### 4.13.11 Planning Elements:

Planning elements such as the footprint, roof profile, street edge and the window openings must be retained in any case of restoration, repair or rebuilding of any structure in the precinct.

##### i. Footprint:

MR: Any new construction or reconstruction proposals in the precinct should follow the exact shape and size of the existing or original footprint of the building.

##### ii. Roof profile:

MR: Any building with a sloping roof and Mangalore tiles with timber eaves board has to retain its roof form and consciously preserve its roofline. As also, the roof profile shall be a mandatory consideration in the design of any new building arising due to extension/reconstruction or new construction within the precinct.

#### 4.13.12 Facade and Architectural Features Modifications:

Modifications to the original facade or any distinctive architectural feature are strictly to be avoided in the entire precinct.

Any structural work undertaken in the precinct or alteration to any facade element require prior permission of the Heritage Committee. Replacement of existing materials should be strictly avoided and only should be allowed in case the original is completely in disrepair. However such details should be accurately duplicated in terms of the aesthetic quality to the original and should be sensitively treated. Obliteration of architectural details and planning elements, infilling or cladding of external wall is not permitted.

#### **4.23.13 Height Restriction** (refer drawing):

The Shriram temple precinct is characterized by a cluster of G+ 1 storied structures. In keeping with this, the height restriction is restricted to G+ 1 floor in the core. No floor additions to residential buildings and temple shrines shall be allowed as mandatory measure.

For all existing religious and residential G+1 structures such as Shriram Mandir or Joshi Wada, the building height should be restricted to a maximum height of 10 meters (from the nearest road level) or the existing height of the structure from the road level, whichever is lesser. This should be the benchmark for height in the precinct. No height of the building should exceed howsoever above the bench mark.

For taller modern rcc structures repairs may be allowed within the existing massing. It would be however recommended, that at any future date if these involved reconstruction, the additional FSI be utilized out of the precinct, restoring the heritage character of the Shriram Temple precinct.

#### **4.23.14 Special Architectural Features & Finishes:**

The Shriram Temple precinct has a valuable conglomeration old charming vernacular dwellings and temple shrines that are representatives of the local building traditions. Any proposed building additions, alterations, reconstruction, repair should be consistent in scale and design with the architectural legacy of the precinct and the original vocabulary of the adjoining buildings that have not been subsequently reconstructed.

##### **i. Special Architectural Features:**

No obliteration or removal of decorative features in the existing facades of heritage structures would be permitted. Original features such as sloping roofs, long wooden double shutter windows, wooden brackets, timber doors, balconies, balustrades, colonnades, fascia boards, etc. should be retained. Even in the case of structural repairs to any building, care should be taken such that the architectural detailing is not lost and all original construction should be carefully restored.

##### **ii. Materials and Finishes**

Lime based paints must be the only allowable paint finish for all external walls in buildings. Oil based finishes do not allow the masonry to “breathe” and should be discouraged. Stone masonry plinth such as seen in the Shriram Mandir should not be painted over or clad in any other finish. Under no circumstances would cladding of the facade with any material be permitted.

##### **iii. Facade Control:**

Accretions and additions such as wires, cables, television antennae, air conditioning units, etc. should not be located on the front facade in any building in any manner that distracts from the architectural character of the building. Obtrusions such as box grills for windows, galvanized iron and asbestos chajjas and such haphazard accretions damage the visual integrity of the facade and should be strictly discouraged. Closing up of verandahs, concealing decorative features and infilling of balconies and railing panels shall not be permitted.

**4.14**

***DRAWINGS***



**4.14.1**

***DRAWING***

**4.14.2**

***DRAWINGS***

**4.14.3**

***DRAWINGS***

**4.14.4**

***DRAWINGS***

**4.14.5**

***DRAWINGS***

## 4.2 JAMA MASJID ROAD PRECINCT



## **4.21 INTRODUCTION:**

### **i. History:**

The Jama Masjid Road Precinct is located near the Ulhas creek in the western part of the historic old Kalyan City. Historically the origins of Kalyan are linked from here since this street connects the creek to the town and therefore locally called Bandar (port / harbor) road.

### **ii. Location and Extent (refer drawing):**

It is a narrow curvilinear street in East west direction stretching entire length between the creek on the west and Dudh naka on the east. There is a Jama Masjid (Friday Mosque) almost in the centre of this narrow street. Therefore it is called Jama Masjid road (stretch between Dudh naka upto the Agiary Road) while the rest is called Laxmi Narayan Road. The precinct is demarcated on two sides of the road with rear boundary as the edge of the front road facing plots. Since only the houses built on these plots at the edge have distinct architectural character and create a streetscape. Any conservation measure would be effective only on the plots at the edge of this street.

### **iii. Ambience:**

The street is predominantly of residential narrow row houses on both sides. The houses vary from ground to maximum ground and three storied sloping roof structures. Most of the houses are built on high plinth and have an entrance verandah approached by few steps. The area is resided mainly by Muslim community and entire ambience is of a bustling residential street. The street on its north side has few shops at ground level near Dudh naka. It also has community and religious structures like the Jama Masjid, a school and clinic. At the western end of the road near the creek there are two community graveyards.

### **iv. Present scenario:**

Over the years the historic street has been transformed due to additions and alterations and even the narrow houses along the street are threatened by sheer neglect or radical building transformations and urban pressures of development created by increasing land values in the area.

In spite of this, many fine historic structures have survived the onslaught of time, retaining their original features with very few or no alterations. It is crucial that this remaining heritage be adequately protected and preserved for the future through comprehensive architectural controls and preservation guidelines. Though most of the structures of their precinct are listed structures and would be protected individually by the regulations of graded structures – the composition of these structures as an area or precinct is of immense heritage significance reflecting the living patterns in the Kalyan.

The following pages outline a strategy for the preservation and continued protection of this historic precinct, with a view to retaining its significance as a valuable architectural collection of the city.

## 4.22 STUDY, ANALYSIS AND ISSUES

### 4.22.1 Architectural Character:

Jama Masjid road precinct is not only significant as a collection of valuable vernacular buildings, but also represents one of the origins of the city and interesting historic residential urban neighborhood of the Kalyan. The residential precinct comprises a fragile assembling of charming vernacular dwellings that have survived the onslaught of the modern construction. The neighborhood has an immense wealth of architectural heritage in the form of quaint traditional houses and community structures like mosque with interesting architectural features both externally and internally like long wooden windows, fretwork, timber columns & decorative brackets and sloping terracotta tiled roofs.

#### i. Sloping roof:

The typical sloping Mangalore tiles roof with a timber fascia is one of the prime characteristics of the architectural and urban form of heritage structures in the precinct. It is imperative that buildings, which have this roof-form, are made to retain it and thus purposely preserved.

#### ii. Street edge or plot boundary:

The street edge is a very strong feature in the planning of the some structures with houses directly abutting the street like Fangari House. Even when the main entrance is setback from the street, the front verandah becomes an extension of the architectural character and detailing of the house.

#### iii. Windows

The most important architectural feature of the structures after sloping roof is the regular pattern of the elegant double shutter timber windows. Most of them are from floor to lintel level with two sets of double shutters. Each building has a pattern of windows that characterizes its facade. The window pattern is particularly prominent in Dolare House, Fangari House, etc.

#### iv. Front porch or verandah:

The Front porch/ verandah is important feature in the planning of structures directly abutting the street. This feature is observed in structures like Dolare House, Fangari House, etc.

#### v. Facade and finishes

The individual structures in JMRP as well as the cohesive streetscape determine the character and are representative of the coastal vernacular architecture with uniformity of features and scale like the stone plinth, timber windows and sloping tiled roof.





#### **4.22.2 Building Heights (refer drawing):**

This map shows the building heights in the JMR precinct area and makes it vivid the general topography of the area. Most of the buildings in the precinct range from ground to maximum ground and two upper floors – except for a few aberrations caused by reconstruction and newer developments. Generally the JMR precinct comprises of a low-rise high-density pattern. The new incongruent developments have been of G+ 3/4 floor apartment buildings.

Along the Jama Masjid road, most of the structures are ground with two upper floors (G+2) except few ground, G+1, G+3, G+4 buildings. Overall these tall narrow sloping roof houses on both sides give a strong character to this precinct. All the listed structures in the precinct are ground and two floors.

This map is based on a visual survey on what appears externally as different floors. The intention is to represent the general topography of the Jama Masjid road precinct. Also in some structures attics and lofts exist below the high pitched roof of the upper floors.

#### **4.22.3 Traffic Pattern (refer drawing):**

The Jama Masjid road precinct is located in the core area of historic old Kalyan town in the western end of the city near the creek. The location being away from the city centre no traffic traverses through this precinct and it only serves the vehicular and pedestrian movement of the residential population of the road and the adjoining houses.

The vehicular traffic flow through the precinct is two way, sparse and mostly pedestrian. Most of the traffic is pedestrian and of light vehicles like rikshas and private two or four wheelers. The Dudh naka is important landmark at the eastern end of the precinct. It has riksha stand and also attracts traffic due to the bazaar in the evening time.

#### **4.22.4 Encroachment on street spaces:**

##### **i. Hawkers**

The open space in front of houses is encroached by hawkers on the almost entire Jama Masjid road. The hawking activity extends upto the Laxmi Narayan road. Due to this the street has become chaotic and unorganised. The problem is compounded by vehicles parked on the two sides of the road.

##### **ii Parking**

The built form and planning of the precinct is such that there is no open space for parking of vehicles. Today most of the households have vehicles and the service traffic pose a critical problem in the precinct. The vehicles are parked directly in front of the houses on the two sides of the road. This hinders the pedestrian and vehicular movement. It also creates an ambience of an unorganised chaotic road which many times blocked by vehicles.

#### **4.22.5 Signs, Signage and Street Furniture:**

Street furniture is another issue, as the design of street signage, garbage bins, pavements is completely out of character and does not conform to any style or design. Street signage, tree planters, benches, bollards and telephone booths are completely nonexistent in the precinct.

Few lamp posts and garbage collection bins are located in the precinct at random places. The precinct also has problems of incongruent and badly designed signboards and shop fronts.

The precinct is ill maintained and unhygienic due to the open drains, cluttered garbage, wastage thrown by hawkers, etc.



#### 4.22.6 Condition and Non-congruent Buildings:

The condition of buildings in Jama Masjid road precinct is overall fair but many houses have been transformed by incongruent additions and alterations. Most of the buildings within the precinct are structurally sound but are poorly maintained. However in few places it is seen that the external plaster and paint on woodwork is poor and in need of repair.

Four buildings in the precinct are listed and graded heritage buildings. The precinct predominantly consists of ground and upper two floors and sloping roof buildings. It also has newly built flat roof rcc buildings of G+3/4 apartment buildings.

These r.c.c. apartment buildings in the precinct are completely non congruent in form, scale and character to the existing street. In fact even the material, color and textures are different and disharmonious. These few reconstructed buildings exhibit a contemporary character that is quite alien to the Jama Masjid road precinct.

The condition of buildings, the facade treatment, the alterations and transformations made to the built fabric over the years, affect the visual continuity and aesthetic ambience of the streetscape and influence the perception of the area.

Insensitive, incongruous additions of air conditioners, signage and change of fenestration pattern grossly damage the historic facades.

The following typical alterations of facades during repairs by incongruent replacements have resulted in jarringly different and inconsistent to the street elevation:

- a. The wooden balcony replaced by RCC parapets.
- b. The mangalore tiled roof by asbestos corrugated or polycarbonate sheets.
- c. The long timber windows with double shutters by smaller window size and glazed shutters.

There have also been arbitrary extensions to structures by adding floors or creating small shops in the front open space of entrance steps or verandah. These shops usually have metal rolling shutters or glazed openings, which is completely out of place.

The open crisscrossing of wire and cable routes within the street visually creates a complete chaos on this beautiful long and narrow street of vernacular traditional houses. Many of the buildings in the precinct are in need of upgradation of external electrical lines, old faulty wires and adhoc changes pose fire hazard due to electrical short-circuiting.

Most of the houses on Jama Masjid road are prone to commercial pressures resulting in additions of porches, shop fronts and sign boards. The hawkers with mobile stalls around the both sides are also incongruent temporary structures.

#### 4.22.7 Development Plan Proposals (refer drawing):

The proposed road-widening schemes within the Jama Masjid road precinct in the development plan would cut down the houses on both sides disturbing completely the character of the entire streetscape of this precinct. It would lead to partial demolition of the graded heritage structures (like Jama Masjid- Grade IIB, Fangari House- Grade IIA).

The widening of Jama Masjid road would not only disturb the scale of this quiet street but would also demolish the street front of some of the most beautiful vernacular houses. The Jama Masjid road precinct being at one end of the city with sparse traffic it is not unnecessary to carry out its widening at the cost of one of the beautiful streetscape of the city.

The proposed road-widening scheme will effect in demolishing the following listed heritage structures:

<b>Card #</b>	<b>Name</b>	<b>Grade</b>	<b>Threat</b>
1) 32	Jama Masjid	IIB	Demolition of front facade
2) 33	Dolare House	IIA	Demolition of front facade and verandah
3) 34	Fangari House	IIA	Demolition of beautiful front facade and verandah
4) 39	Phalke House	IIB	Demolition of front facade and railings on the roadside

The following reservations are indicated in the development plan:

- i. Jama Masjid, Public Purpose This means Corporation/ Owner can develop the plot for public purpose after demolishing heritage structure.
- ii. Reservation # 89 Municipal Market This means Corporation/ Owner can develop the plot for public purpose after demolishing the row houses and disturb the streetscape.



## **4.23 GUIDELINES & REGULATIONS:**

The Jama Masjid road precinct as delineated is proposed to define the boundary, architectural character and transformation within the precinct. The area is one of the significant residential realms with architectural character reflecting the cultural heritage and representing the origins of the Kalyan City. In the area defined for precinct of narrow row house type low-rise sloping roof traditional structures many have been undergone changes. Few are demolished and replaced by tall rcc apartments. The transformation caused due to urban pressures of development has posed threat to the existing buildings. However it is crucial that the structures which have survived should be conserved with utmost care and sensitivity. The following guidelines are over and above the guidelines for various listed architectural structures and natural sites.

### **4.23.1 Development plan:**

1. The Jama Masjid road precinct should be demarcated and designated as a heritage precinct in the development plan. This should be done along with the notification of listed and graded architectural heritage structures and sites of Kalyan City. This would have to be coordinated by the Urban Development secretary along with the Municipal Commissioner/corporation and MMRDA.
2. The development plan proposal of road widening scheme and reservations (like municipal market) within the Jama Masjid road precinct should be officially deleted.
3. The proposed plots designations like public purpose/utility indicated in the development plan should be revised and marked as heritage reservation so that there is no possibility of misinterpretation and demolishing the heritage structures.
4. Height restriction as given below should be applicable for all development plan proposals within the boundary of the precinct to achieve a coherent skyline.
5. All traffic related schemes and approvals should be in keeping with the conservation aspects of the precinct.

### **4.23.2 Transferable Development Right (TDR):**

The Jama Masjid road precinct earmarked, as a heritage precinct designation should be treated on par with development plan reservation at the city scale. Thus TDR should be obligatory in cases where heritage sites within this zone have unutilized FSI.

### **4.23.3 Amalgamation of Plots:**

To avoid high rise construction, amalgamation of property shall not be permitted. This would also detract from the original footprint of the buildings.

### **4.23.4 Demolition of buildings:**

Mandatory Regulation (MR):

No building within the designated precinct shall be demolished without prior consent of the Heritage committee. No listed building would be allowed to be demolished either whole, or in part unless absolutely essential due to structural failure.

#### 4.23.5 Allowable FSI:

1. The FSI allowed to be consumed in the precinct shall not exceed than the allowable FSI as per the D.C. regulations applicable to the area i.e. 1.33.
2. The precinct being in congested area, the excess permissible FSI of 0.50 for shopping shall be allowed to be consumed in the form of TDR in any part of the city but not in the same precinct nor within the congested area.
3. The consumption of any unutilized or balance FSI is not permitted within the precinct. The excess FSI as TDR would not be allowed to be utilized within the precinct or in the congested area as demarcated in the development plan.
4. Under no circumstances should TDR be granted within the precinct.
5. Any extra FSI accruing due to reconstruction of unsafe buildings should be allowed to be consumed in the form of TDR but shall not be utilized within this precinct nor within the congested area of the city.

#### 4.23.6 Road Widening:

MR: No road widening would be permitted within the Jama Masjid road and Laxmi Narayan road as this would involve cutting the entire streetscape and demolishing of front facade of listed heritage structures viz. Jama Masjid, Dolare House, Fangari House and Phalke House.



#### 4.23.7 Heritage Structures and Precinct Guidelines:

All structures falling under the precinct should be covered under guidelines as specified for heritage grades in the Heritage Regulations for Kalyan to come into force based on this report. The regulations are based on the Heritage Regulations for Greater Bombay, 1995, Government Press Publications. These would automatically come under the jurisdiction of heritage laws and repairs. Additions and alterations to these structures would necessarily have to be referred to the heritage Committee for approval.

#### 4.23.8 Open Spaces

All open spaces whether private or public shall be maintained without being built upon by the corporation or owners or the residents. This is especially important in the case of extensions of shop fronts or hawker lines other than the specified size approved by the Municipal Corporation. Any such encroachment of the open space or the street should be strictly monitored.

#### **4.23.9 Signs, Signage and Street Furniture:**

The entrances to the precinct should be adequately highlighted by way of sensitively designed signage. The area, being predominantly pedestrian, needs an up gradation of the existing paving and road surfacing. Appropriate positioning and design of street furniture i.e. benches, streetlights, fire hydrants, litter bins, etc. is required. A strict regulation of facade treatment, signboards and shop fronts is necessary to ensure that the intrinsic heritage character of the precinct is not diluted.

#### **4.23.10 Reconstruction/New Construction:**

Any proposals for new construction or reconstruction or additions to existing structure should follow the norms of the planning elements, building height, architectural treatment and features, recommended finishes and materials and street edge etc. as specified in the manual. Additional floors must follow the existing architectural features or the original structure as well as the sloping roof profile and street edge.

#### **4.23.11 Planning Elements:**

Planning elements such as the footprint, roof profile, street edge, front verandah and the window openings must be retained in any case of restoration, repair or rebuilding of any structure in the precinct.

##### **i. Footprint:**

MR: Any new construction or reconstruction proposals in the precinct should follow the exact shape and size of the existing or original footprint of the building.

##### **ii. Roof profile:**

MR: Any building with a sloping roof and Mangalore tiles with timber eaves board has to retain its roof form and consciously preserve its roofline. As also, the roof profile shall be a mandatory consideration in the design of any new building arising due to extension/reconstruction or new construction within the precinct.

##### **iii. Front Verandah and steps:**

MR: The front verandah with decorative timber columns, brackets, and timber or cast iron railings shall be retained and not enclosed to create a room. So also the entrance black basalt stone steps to the high stone plinths. Any provision of hall, partitions etc. that alters the external facade and architectural character of the precinct should not be allowed.

#### **4.23.12 Facade and Architectural Features Modifications:**

Modifications to the original facade or any distinctive architectural feature are strictly to be avoided in the entire precinct.

Any structural work undertaken in the precinct or alteration to any facade element requires prior permission of the Heritage Committee. Replacement of existing materials should be strictly avoided and only should be allowed in case the original is completely in disrepair. However such details should be accurately duplicated in terms of the aesthetic quality to the original and should be sensitively treated. Obliteration of architectural details and planning elements, in-filling or cladding of external wall is not permitted.

#### **4.23.13 Height Restriction (refer drawing):**

Mainly a cluster of religious and residential G+1 and G+2 storey structures characterizes the precinct. In keeping with this, the height is restricted to G+2 floors (maximum height of 12m i.e. unto roof top) in the entire precinct. No floor additions to existing structures shall be allowed as

mandatory measure.

For all existing G+3/4 structures, the building height should not be increased beyond maximum height of 12 metres (from the nearest road level) or restricted to their existing height, whichever is lesser. This should be the benchmark for height in the precinct. No height of the building should exceed howsoever above the bench mark.

For taller modern rcc structures repairs may be allowed within the existing massing. It would be however recommended, that at any future date if these involved reconstruction, the additional FSI be utilized out of the precinct, restoring the heritage character of the precinct.



#### **4.23.14 Special Architectural Features & Finishes:**

The Jama Masjid road precinct has valuable conglomeration old narrow and tall charming vernacular dwellings that are representatives of the local building traditions. Any proposed building additions, alterations, reconstruction and repair should be consistent in scale and design with the architectural legacy of the precinct and the original vocabulary of the adjoining buildings that have not been subsequently reconstructed.

##### **i. Special Architectural Features:**

No obliteration or removal of decorative features in the existing facades of heritage structures would be permitted. Original features such as sloping roofs, long wooden double shutter windows, wooden brackets, timber doors, balconies, balustrades, colonnades, fascia boards, etc. should be retained. Even in the case of structural repairs to any building, care should be taken such that the architectural detailing is not lost and all original construction should be carefully restored.

##### **ii. Materials and Finishes**

Lime based paints must be the only allowable paint finish for all external walls. Oil based finishes do not allow the masonry to “breathe” and should be discouraged. Stone masonry plinth such as seen in the Fangari House should not be painted over or clad in any other finish. Under no circumstances would cladding of the facade with any material be permitted.

##### **iii. Facade Control:**

Accretions and additions such as wires, cables, television antennae, air conditioning units, etc. should not be located on the front facade in any building in any manner that distracts from the architectural character of the building. Obtrusions such as box grills for windows, galvanized iron and asbestos chajjas and such haphazard accretions damage the visual integrity of the facade and should be strictly discouraged. Closing up of verandahs, concealing decorative features and infilling of balconies and railing panels shall not be permitted.

**4.24**

***DRAWINGS***



**4.24.1**

***DRAWING***

**4.24.2**

***DRAWING***

**4.24.3**

***DRAWING***

**4.24.4**

***DRAWING***

**4.24.5**

***DRAWING***

## 4.3 SHENALE (KALA) LAKE PRECINCT



## 4.31 INTRODUCTION

### i. History:

The historical association of Shenale (Kala) lake precinct goes back to the 17th century during Peshwa regime of Marathas when Subhedar Ramji Mahadev Biwalkar ruled Kalyan region during 1760-72. He carried out many improvements in Kalyan and built his administrative office "Subhedar Wada". In 1770 he brought the water from this lake to Old Kalyan area. He also built a water tank "Pushkarni" (similar to Taj Bavdi) to supply water to the town from the Shenale/Kala Talao Lake. The precinct evolved around the lake with various temples and mosques in its periphery. Its one of the oldest lakes of Kalyan and was restored in 1505. The lake has got its name from the migratory birds "Shenale", which come to this lake every year. The lakefront has religious places of Hindu & Muslim community. From ages the immersion of Ganpati idols take place in this lake.

### ii. Location and Extent (refer drawing):

The Shenale (Kala) lake Precinct is located in the historic Kalyan City in the northeastern part of the city. The entire area is locally known as known as Kala talao area. The precinct area is bound on four sides by two proper roads and two dirt roads almost parallel to the lake periphery. The Kali Masjid road and the north south road (it has no name) are the only two tar roads around the lake. All the sides of the lake as the precinct boundary is demarcated by 25 metres strip to control the new development pattern. Note that the city or village survey plan of the entire lake area was unavailable with the authorities. The precinct boundary is marked as a strip of 25m after the proposed roads in development plan so that new development is controlled on the lakefront and not disharmonious in scale and form.

### iii. Ambience:

The lake precinct has temples and mosques around its banks. The Shankar Mandir, Ram Mandir I and Ram Mandir II are located on its western stretch; the Kali Masjid (mosque) complex is to its southeast side while the Maqbara with masjid is on its eastern bank. It also has traditional steps (ghats) on its western side. The precinct also has public buildings like school, other ancillary structures, low-rise residential dwellings and even slums. It also has newly built rcc structures of tall (G+7) apartment buildings in absolute disharmony with temples and mosques. Coexistence of these temples & mosques around this lake represents the socio-cultural history of Kalyan as well as valuable vernacular buildings.

### iv. Present scenario:

Over the years, the lake has shrunk from all four sides due to the illegal encroachments and reclamation. Even the temples and mosques are being continuously threatened by sheer neglect or radical building transformations and urban pressures of development created by increasing land values in the area. Stagnant and polluted water has resulted due to dumping of garbage and the storm water of the area around the lake and the drainage of the slum are released in this lake.

In spite of this, some fine historic lake and the structures have survived the onslaught of time, retaining their original features. It is crucial that this natural heritage be adequately protected and preserved for the future through comprehensive architectural controls and preservation guidelines. Though some of the structures of the precinct are listed structures and would be protected individually by the regulations of graded structures – the composition of the lake with structures as an area or precinct is of immense natural heritage significance reflecting the cultural patterns in Kalyan. The following pages outline a strategy for the preservation and continued protection of this historic precinct, with a view to retaining its significance as a

valuable lakefront natural & architectural composition of the city.

## **4.32 STUDY, ANALYSIS AND ISSUES**

### **4.32.2 Physical Character:**

Shenale (Kala) lake precinct is not only significant as a collection of valuable religious buildings, but also represents the origins of the city and interesting historic, religious and natural water body in Kalyan. The lake precinct comprises a fragile assembling of charming vernacular dwellings that have survived the onslaught of the modern construction and the lake has sustained itself from reclamation in spite of the growth of the city.

This lake is spread over an area of approximately 1,00,000 m<sup>2</sup>. It is a natural site of historical, religious and environmental importance. It has Shankar Mandir complex on its western side, Kali Masjid complex on its south side and Maqbara on its east side.

The area has an immense wealth of natural and architectural heritage in the form of traditional temples and mosques with interesting architectural features both externally and internally like wooden colonnade, brackets, stone work and sloping terracotta tiled roofs. The mosque on the southeastern side of the lake is built entirely in local black basalt stone and hence called Kali (black) Masjid and even the lake derives its name as Kala (black) Talao.



### **4.32.2 Building Heights (refer drawing):**

This map shows the building heights in the Shenale (Kala) lake precinct area and makes it vivid the general topography of the area. Most of the buildings in the precinct range from ground and maximum ground and one upper storied building – except for a few aberrations caused by reconstruction and newer developments. Overall the Shenale (Kala) lake precinct comprises of a low-rise pattern structures.

The new incongruent developments have been of Ground+6 storied apartment buildings. Along the lakefront are ground or ground and one storied buildings lending a low-rise character. Even all the listed structures in the precinct are ground and ground plus one while Kali Masjid is about 15m high.

### **4.32.3 Traffic Pattern (refer drawing):**

The Shenale (Kala) lake precinct is located in the north-eastern part of the Kalyan. The location being away from the city centre, the traffic flow is to approach surrounding area. The precinct area is bound on four sides by 2 proper roads and 2 dirt roads parallel to the four sides of the lake. The Kali Masjid road and the north south road (it has no name) are the only two tar roads around the lake.

Most of the traffic is mainly pedestrian and light vehicles like rikshas and private 2/3 wheelers. The vehicular traffic flow on Kali Masjid road is meager (in fact mostly pedestrian) while the traffic on western side of the lake is considerable of both vehicular and pedestrian since it



connects the rest of the north part of the city.

The Sahajanand chowk is important landmark and traffic intersection point within the precinct. It has riksha stand and it also attracts traffic due to the road junction.

#### **4.32.4 Usage of Public & Open Spaces:**

Within the Shenale (Kala) lake precinct there are two public spaces and their usage varies in response to its function and location in the area.

##### **i. Ghats:**

The traditional steps (Ghats) on the edge of lake are located near the Shankar mandir on the western bank of the lake. The open space adjoining the Shankar mandir and ghats open towards the water from the public space. So its usage is for social functions as well as for recreation.

It is used for sacred activities by devotees for last rites & rituals. The people of the surrounding neighborhood also use it for bathing, washing of clothes and utensils. Being located close to the Shankar mandir temple complex, it's a place for community activities and festivals.

##### **ii. Municipal Garden:**

The public garden is located on the northeastern corner of the lake, adjoining the Maqbara complex. Various pavilions in rcc roof and stone masonry walls are built within the garden. The garden being in one corner near the sparse residential area is difficult to access and is in neglected condition. It is an unmaintained green space.



#### **4.32.6 Street Signage:**

Street furniture is another issue, as the design of street signage, garbage bins, pavements is completely missing in the entire precinct area. Street signage, tree planters, benches, bollards and telephone booths are completely nonexistent in the precinct.

Few lamp posts and garbage collection bins are located in the precinct at random places. The precinct is ill maintained and unhygienic due the open drains, cluttered garbage, wastage thrown by hawkers, etc.

#### **4.32.7 Condition and Non-congruent Buildings:**

In Shenale (Kala) lake precinct, the condition of lake is poor and of the buildings is overall fair except the Maqbara which is in poor condition. The lake itself and five buildings in the precinct are listed and graded heritage buildings.

The lake has overgrown vegetation on its north eastern side as well as its low parapet wall

along the southern edge is in poor condition. Water is polluted and stagnant due to dumping of garbage and construction debris. The storm water of the area around the lake and the drainage of the slum are released in this lake. A drainage gutter is inlet into the lake on its northwest side. The outlet is through a pipe on the southeast side of the lake. The plots and structures abutting the lake put their sewage and storm water drain into the lake. There are also several dwellings and apartment structures come up on the east side of the lake, which are not in harmony with the existing old structures. The temples and dwellings on the west side are fairly maintained. The ground storied structures and cattle shed on the north side are in poor state. The slums on the south side of the Kali Masjid dump garbage along the lakefront while the cattle dung from cattle sheds on west side is drained directly into the lake.

The non-listed old sloping roof structures are in fair condition while the recently constructed rcc apartment buildings in the precinct are in good condition. Some of the listed buildings are need of urgent maintenance like the Maqbara which is dilapidated and almost abandoned and should be urgently repaired.

The precinct predominantly consists of ground and upper storey sloping roof buildings. It also has newly built flat roof rcc G+6 apartment buildings. These recently constructed rcc apartment buildings in the precinct are completely non congruent in form, scale and character and entirely disharmonious.

In Kali Masjid, an incongruent extension on the front facade with asbestos sheet supported on rcc masonry columns is built facing the water pool pavilion.



#### 4.32.8 Development Plan Proposals (refer drawing):

The proposed road-widening schemes within in the Development plan would lead to plot setbacks of some of the important heritage structures (like Shankar Mandir, Ram Mandir-I, Kali Masjid, Maqbara) and the proposed reclamation would shrink the lake substantially on south and east side of the lake.

Specifically the proposed schemes in the Development plan will effect in the following listed heritage structures of Kalyan in the Shenale (Kala) lake precinct:

<b>Card #</b>	<b>Name</b>	<b>Grade</b>	<b>Threat</b>
1) 50	Kala Talao	I	Large-scale reclamation on South and East side.
2) 51	Ram Mandir I	IIB	Plot set back upto the edge of structure from the north-south road on west side.
3) 52	Ram Mandir II	IIB	Plot set back upto the edge of structure from the north-south road on west side.
4) 53	Shankar Mandir	IIB	Plot set back upto the edge of structure from the north-south road on west side.
5) 55	Kali Masjid	I	Plot set back from the Kali Masjid road & demolition of entrance gate.
6) 56	Maqbara	I	Plot set back from Kali Masjid road on east side.

The following sites/complexes are indicated as reservations in the development plan:

i.	Shankar Mandir, and Ram Mandir II	Public Purpose	This means Corporation/ Owner can develop the plot for public purpose after demolishing heritage structure.
ii.	Kali Masjid complex	Public Purpose	This means Corporation/ Owner can develop the plot for public purpose after demolishing heritage structure.
iii.	Kabarastan (behind Kali Masjid)	Public Utility	This means Corporation/ Owner can develop the plot for public purpose after demolishing heritage structure.
iv.	Maqbara	Public Purpose	This means Corporation/ Owner can develop the plot for public purpose after demolishing heritage structure.

In addition to above following reservations are indicated in the development plan:

a.	Reservation #70	Garden and Beautification of tank.
b.	Reservation #72 part	Garden.
c.	Reservation #76 part	Garden.
d.	Reservation #77	Garden.
e.	Reservation #78	Rehabilitation of persons affected by site
f.	Reservation #79 part	Secondary school.
g.	Reservation (without no.) (On south side along Kali Masjid Road)	Reclamation.

### **4.33 GUIDELINES & REGULATIONS:**

The Shenale (Kala) lake precinct as delineated is proposed to define the boundary, architectural character and transformation within the precinct. The lakefront is one of the significant public realms reflecting the cultural, architectural and natural heritage of the Kalyan.

In the area defined for precinct has low-rise sloping roof traditional structures that are getting demolished and new tall rcc apartments and buildings are coming on some parts of the waterfront. The transformation caused due to urban pressures of development has posed threat to the lake itself and some of the surrounding heritage buildings. However it is crucial that lake and the structures should be conserved with utmost care and sensitivity. The following guidelines are over and above the guidelines for various listed architectural structures and natural sites in Kalyan.

#### **4.33.1 Development plan:**

- 1) The Shenale (Kala) lake precinct should be demarcated and designated as a heritage precinct in the development plan. This should be done along with the notification of listed and graded architectural heritage structures and sites of Kalyan. This would have to be coordinated by the Urban Development secretary along with the Municipal Commissioner/corporation and MMRDA.
- 2) All proposed plots with heritage structures and designated as public purpose/utility in the development plan should be revised. They should be clearly marked as heritage reservation so that there is no misinterpretation and possibility of demolishing the heritage structures.
- 3) All proposed reservation for reclamation's within the Shenale (Kala) lake as indicated in the entire length of south and east side of the lake should be officially deleted.
- 4) Height restriction should be applicable for all development plan proposals within the boundary of the precinct to achieve a uniform skyline like Marine Drive in Mumbai.
- 5) All traffic related schemes and approvals should be in keeping with the conservation aspects of the precinct.
- 6) A detailed integrated lakefront development of the precinct should be prepared urgently for aesthetic physical design, environmental improvement and maintenance to create a usable public place for recreation for the city.



#### **4.33.2 Transferable Development Right (TDR):**

The Shenale (Kala) lake precinct earmarked, as a heritage precinct designation should be treated on par with development plan reservation at the city scale. Thus TDR should be obligatory in cases where heritage sites within this zone have unutilized FSI.

#### **4.23.2 Amalgamation of Plots:**

To avoid high rise construction, amalgamation of property shall not be permitted. This would also detract from the original footprint of the buildings.

#### **4.33.3 Demolition of buildings:**

Mandatory Regulation (MR):

No building within the designated precinct shall be demolished without prior consent of the Heritage committee. No listed building would be allowed to be demolished either whole, or in part unless absolutely essential due to structural failure. No building or demolition shall be allowed of parapet walls of the lake edge either whole or in part unless absolutely essential due to structural failure and demolished without prior consent of the Heritage committee.

#### **4.33.4 Allowable FSI:**

- a. The FSI allowed to be consumed in the precinct shall not exceed the permissible FSI as per the development control regulations applicable to the area i.e. 1.0.
- b. Any excess permissible FSI in the precinct shall be allowed only to be consumed in the form of TDR in any part of the city but not in the same plot and precinct nor in the congested area.
- c. The consumption of any unutilized or balance FSI is not permitted within the precinct. The excess FSI as TDR would not be allowed to be utilized within the precinct or in the congested area as demarcated in the development plan.
- d. Under no circumstances should TDR be granted within the precinct.
- e. Any extra FSI accruing due to reconstruction of unsafe buildings should be allowed to be consumed in the form of TDR but shall not be utilized within this precinct or in the congested area of the city.

#### **4.33.4 Road Widening:**

MR: No road widening would be permitted between the North-south road on both east and west side of the lake and Kali Masjid road as this would involve plot setback right upto Shankar Mandir, Ram Mandir I, Ram Mandir II, Kali Masjid and Maqbara.

#### **4.33.4 Heritage Structures and Precinct Guidelines:**

All structures falling under the precinct should be covered under guidelines as specified for heritage grades in the Heritage Regulations for Kalyan to come into force based on this report (The regulations are based on the Heritage Regulations for Greater Bombay, 1995, Government Press Publications). These would automatically come under the jurisdiction of heritage laws and repairs. Additions and alterations to these structures would necessarily have to be referred to the Heritage Committee for approval.



#### **4.13.8 Open Spaces**

All open spaces whether private or public shall be maintained without being built upon by the corporation or owners or the residents. This is especially important in the case of extensions of shop fronts or hawker lines other than the specified size approved by the Corporation. Any such encroachment of the open space or the street should be strictly monitored.

#### **4.33.4 Signs, Signage and Street Furniture:**

The entrances to the precinct should be adequately highlighted by way of sensitively designed signage. The area, being predominantly pedestrian, needs an up gradation of the existing paving and road surfacing. Appropriate positioning and design of street furniture i.e. benches, streetlights, fire hydrants, litter bins, etc. is required. A strict regulation of sign boards and shop fronts is necessary to ensure that the intrinsic heritage character of the precinct is not diluted.

#### **4.23.4 Reconstruction/New Construction:**

Any proposals for new construction or reconstruction or additions to existing structure should follow the norms of the planning elements, building height, architectural treatment and features, recommended finishes and materials, and street edge etc. as specified in the manual. Additional floors must follow the existing architectural features or the original structure as well as the sloping roof profile and street edge.

#### **4.33.4 Planning Elements:**

Planning elements such as the footprint, roof profile, stonework, stone carvings and the window openings must be retained in any case of restoration, repair or rebuilding of any structure in the precinct.

##### **i. Footprint:**

MR: Any new construction or reconstruction proposals in the precinct should follow the exact shape and size of the existing or original footprint of the building.

##### **ii. Roof profile:**

MR: Any building with a sloping roof and Mangalore tiles with timber eaves board has to retain its roof form and consciously preserve its roofline. As also, the roof profile shall be a mandatory consideration in the design of any new building arising due to extension/reconstruction or new construction in the precinct. The benchmark for height in the precinct should be the topmost point of the moon symbol fixed over the dome of the Kali Masjid. No height of the building should exceed howsoever above the bench mark height.

#### 4.33.4 Facade and Architectural Features Modifications:

Modifications to the original facade or any distinctive architectural feature are strictly to be avoided in the entire precinct.

Any structural work undertaken in the precinct or alteration to any facade element would require prior permission of the Heritage Committee. Replacement of existing materials should be strictly avoided and only should be allowed in case the original is completely in disrepair. However such details should be accurately duplicated in terms of the aesthetic quality to the original and should be sensitively treated. Obliteration of architectural details and planning elements, in-filling or cladding of external wall is not permitted.

#### 4.33.4 Height Restriction (refer drawing):

The Shenale (Kala) lake precinct is characterized by a cluster of G+ 1 storied structure. In keeping with this, the height restriction is restricted to G+ 1 floor in the core. No floor additions to residential buildings and temple shrines shall be allowed as mandatory measure.

For all existing religious and residential G+1 structures such as Shankar Mandir or Kali Masjid and for new construction/reconstruction/repair of the all other buildings in the precinct of any nature, the building height should be restricted to a maximum existing height of the symbol of the moon fixed over the dome of the Kali Masjid. This should be the benchmark for height in the precinct. No height of the building should exceed howsoever above the bench mark.

For taller rcc modern structures repairs may be allowed within the existing massing. It would be however recommended, that at any future date if these involved reconstruction, the additional FSI be utilized out of the precinct, restoring the heritage character of the precinct.



#### 4.33.4 Special Architectural Features & Finishes:

The Shenale (Kala) lake precinct has a valuable conglomeration old charming vernacular dwellings and temple shrines that are representatives of the local building traditions. Any proposed building additions, alterations, reconstruction and repair should be consistent in scale and design with the architectural legacy of the precinct and the original vocabulary of the adjoining buildings that have not been subsequently reconstructed.

##### i. Special Architectural Features:

No obliteration or removal of decorative features in the existing facades of heritage structures would be permitted. Original features such as sloping roofs, long wooden double shutter windows, wooden brackets, timber doors, balconies, balustrades, colonnades, fascia boards, etc. should be retained. Even in the case of structural repairs to any building, care should be taken such that the architectural detailing is not lost and all original construction should be carefully restored.

##### ii. Materials and Finishes

Lime based paints must be the only allowable paint finish for all external walls in buildings. Oil

based finishes do not allow the masonry to “breathe” and should be discouraged. Stone masonry plinth such as seen in the Shriram Mandir should not be painted over or clad in any other finish. Under no circumstances would cladding of the facade with any material be permitted.

**iii. Facade Control:**

Accretions and additions such as wires, cables, television antennae, air conditioning units, etc. should not be located on the front facade in any building in any manner that distracts from the architectural character of the building. Obtrusions such as box grills for windows, galvanized iron and asbestos chajjas and such haphazard accretions damage the visual integrity of the facade and should be strictly discouraged. Closing up of verandahs, concealing decorative features and infilling of balconies and railing panels shall not be permitted.





**4.34**

***DRAWINGS***

**4.34.1**

***DRAWING***

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**4.34.3**

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# **5.0 STEPS FOR IMPLEMENTATION**

## **5.1 FINANCING**

### **5.11 Maintenance and improvement plan:**

It will be advisable to draw up physical improvement and maintenance plan once the structures have been listed and precincts have been designated.

### **5.12 Conservation fund:**

The local Kalyan municipal corporation should earmark a conservation fund for restoration of heritage structures, sites and precincts in its annual financial budget.

### **5.13 Financial Incentives:**

Financial incentives should be encouraged and made available for the heritage building owners for conservation, which could be generated in the following ways:

#### **a. Loans:**

Funds can be raised by allocating certain percentage of the property tax to a Heritage Conservation Fund administered by local authorities and the grants from, which can be made available to the owners. If the user changes are allowed and/ or the rent control removed, the property tax base would increase and it would give a boost to the fund raising. Also the loans should be sanctioned only on the approval of the design proposals. Similarly financial institutions could formulate special schemes for providing loans for such heritage plots and conservation zones.

#### **b. D.C Modifications:**

Sensitive user changes be allowed to serve as an incentive in residential areas. Premium should not be charged for the re-construction of heritage buildings to facilitate its maintenance and improvement. The owners of the listed heritage structures could be exempted from various taxes and land rents.

#### **c. Sponsorship:**

Festivals/cultural events could be organized as a means of raising funds. Sponsorship for awareness programs related to the history as well as conservation of the heritage structures and sites. Organizations like the MTDC (Maharashtra Tourism Development Corporation) could also take up restoration activities of the heritage structures and sites like structural repairs, woodwork, painting or even lighting of the Grade-I buildings and sites. For street furniture and all major urban landmarks private sponsorship can be obtained.



## **5.2 GUIDELINES FOR MAINTENANCE AND REPAIRS**

### **5.21 Timber:**

The durability and life of timber is far superior to that of concrete. Studies done by the Fire Prevention Authority show that wood takes longer time to burn. Protection of timber against moisture is afforded by oil paint provided that the timber is perfectly dry when first painted otherwise the filling up of outer pores only confines the moisture and causes rot.

For exposed timber the remedy available is impregnation by substances poisonous to fungi, these substances being either of the oil or chemical types. All structural timber members (post, joist, staircase etc.) if disturbed, should be repaired and replaced in timber, as far as possible. In cases where it proves uneconomical, mild steel sections should be used.

### **5.22 Walls:**

More rapid penetration is through the mortar joints and an effective pointing on the exterior will greatly resist the passage of water. Before applying any remedial measures to a damp wall a very important fact should be borne in mind that there should be a free escape for any water that has already entered the wall. Scrape off moss and algae growth. A water proofing treatment (cement paint, bitumen and tar paints, oils, silica solution) can be applied externally or internally. Saplings of trees such as pipal or banyan tend to grow into the walls and widen the cracks causing dampness in walls. Hence they have to be regularly uprooted and a mixture of asafoetida (hing), jaggery (gur) and unslaked lime should be applied on the stem.

For stone cleaning it is recommended that harsh techniques such as stone – blasting and other acid washes should not be used. Milder techniques like using clay and ammoniacal poultices, gentle water wash and gentle non –ionic, mild surfactant solutions with soft nylon brushes are used for cleaning. For other more difficult situations the cleaning should be carried out under supervision of a qualified conservator or architect. Stonewalls should not be painted to allow these walls to breathe. Care should be taken to use lightweight materials for internal partitions to avoid overloading the structure.

### **5.23 Roof:**

The roofing material for the sloping roofs should be Mangalore tiles, and appropriate water – proofing should be carried out. Replace all broken roof tiles. Overhead tanks for water storage should be lightweight. (eg: Sintex)

### **5.24 Openings:**

While repairing or renewing the doors and windows its original design should be sustained.

### **5.25 Articulation and Finishes:**

Decorative features like Minton tiles, Jaffery (jalli), balustrades etc. should be restored sensitively using the same material. Wherever plaster is fallen off walls are recommended to be lime plastered. Painting should be carried out bi-annually. Lime wash is the best option as it allows these walls to breathe. It is considered that a thin layer of cinders and coaltar well rammed under a tiled floor prevents the rise of damp and “Kalar” or efflorescence.

### **5.3 IMPLEMENTATION STRATEGY:**

#### **5.31 Notification and Designation**

The first and the foremost task is to urgently notify the list of heritage structures and sites and formulate heritage regulations as complete detail documentation is ready. Here a system of TDR could be applied but any conservation strategy should carry the responsibility of ensuring that there is no displacement of population or economic hardship on the present users.

#### **5.32 Kalyan Conservation Committee**

The government should constitute a working committee for the implementation of the recommendations for Kalyan City.

The committee should constitute the following members and professionals:

- i. Municipal Commissioner
- ii. Chairman Heritage Committee
- iii. One Ward Officer
- iv. Two practicing Architects (of which atleast one has conservation experience)
- v. One structural consultant
- vi. One environmentalist
- vii. One representative from the Traffic Dept.

#### **5.33 Citizen's participation**

Every conservation program should focus on citizen's participation by generating awareness and keen interest among the users. It is essential that any public activity gets suggestions from the citizens. Formation of local welfare associations would ensure that no incongruous development is sanctioned.

#### **5.34 Awareness**

The installation of visitor information posts, heritage building plaques, illumination of structures at night should be undertaken as part of awareness campaigns. Also cultural exchange and research programs be formulated for students and professionals. Various media programs and walking tour maps for school children and architectural students.

#### **5.35 Finance**

The city administration should provide financial and other incentives to encourage the conservation of precincts and buildings. But the best option would be to be self-sufficient by harnessing the inherent potential that lies in these heritage structures to generate funds. This could be done by formation of maintenance committee, organizations of festivals, exhibitions, heritage walking tours etc.

#### **5.36 Proposed conservation aid activities:**

##### **I. Cultural festivals**

- a. Lakes Festival
- b. Dance and Music Festival

##### **II. Heritage walks**

- a. City heritage (refer attached suggested city heritage walk route map)
- b. Wadas
- c. Temples

##### **III. Design Competitions**

- a. The designs generated by competitions could be a source for inviting private sponsors to revive the public buildings, precincts and lakes.

### ***5.1.5 DRAWING***

**The Project team:**

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Urmi Papat

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This report is prepared for **MMR-Heritage Conservation Society, Mumbai** and **Kalyan Heritage Society** for the purpose of Stage III of project “**Conserving Urban Heritage of Kalyan**” by **Sanjay Udamale, Architects**. It is our understanding that it is to be used solely for this purpose and we do not intend that its contents be relied upon by anyone one for any other purpose. In any event and in accordance with normal practice we do not accept any liability to third party for the contents of this report. The entire report is Copyright. It should not be copied in any form whatsoever literally, conceptually or graphically by any manual, mechanical or electronic means without written permission.