

MATHERAN:
A COMPREHENSIVE HERITAGE LISTING
PROPOSAL

SYNOPSIS OF FINAL REPORT

AN INTACH PROPOSAL

PROJECT CONSULTANT
K. UNWALLA ARCHITECTS

AR. KIRTIDA UNWALLA (CONSERVATION)
AR. SUNEETA SAMANT (PLANNER)

FOR
**M.M.R. HERITAGE CONSERVATION
SOCIETY**

MATHERAN HILL STATION

A COMPREHENSIVE HERITAGE LISTING PROPOSAL

K.Unwalla Architects

5/7 Oak Lane,
Mumbai 400 023

Tel. 91-22-2670302

E.mail: kunwalla@vsnl.com

**FINAL REPORT
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PREFACE

Matheran sits on a plateau, in an area of only 8 square miles and at an elevation of 2600 feet, surrounded by the Sahyadri Mountains, an extraordinary legacy that has endured despite the ravages of time and neglect. While most other hill stations in India have succumbed to waves of tourists and unplanned development, Matheran has survived because it has resisted the automobile. However its survival is being seriously threatened by reckless demolition and building and by plans to introduce the automobile.

Matheran is not only a cultural legacy which needs to be protected and developed thoughtfully but it is also a great natural resource with immense intrinsic value that can contribute significantly to the ecological survival of the larger Matheran - Malang Gad region. It is therefore vital to look at not just its fascinating history but also to apprehend its immense potential as a muse for future generations.

The INTACH Greater Mumbai chapter, responding to a call for help from the Matheran Bachao Samiti, an Organisation of local people who are trying valiantly to stop reckless development at the hill station, decided to take up this project as the first step towards ensuring thoughtful development for Matheran. This study 'The Comprehensive Heritage Listing for Matheran Hill Station.' identifies the value of the built environment, as well as the natural and ecological character of the entire hill resource. It is intended to inform planning decisions and help the authorities, landowners and developers to devise schemes, which will respect the hill's unique environment.

The selection criteria adopted for the identification of cultural significance of the built and natural heritage has a comprehensive methodology, borrowing from both national and international experiences of such processes. It has special reference to 'Guidelines for Completing the INTACH Inventory of Historic Buildings' published by the INTACH Cultural Heritage Series. A special format for the 'List Cards' based on the above has been devised.

The study approaches Conservation as a powerful mechanism for sustainable development. It establishes values for each of the hill resources significant characteristics based on objective criteria, and uses these as a guide to formulate decisions regarding conservation and planning. However, it is important to recognise that these values are not static and are a constantly evolving process and the recommendations pay attention to new needs and present imperatives.

Matheran is worthy of the best that design and planning policy can provide and it is hoped that the recommendations made will be adopted so as to ensure that Matheran becomes the showcase it deserves to be. This is a seminal study that will hopefully lead the way for meaningful development planning and conservation for not just other hill stations but other environmentally sensitive places as well.

Tasneem Mehta

Convenor INTACH Greater Mumbai Chapter

8th September 2000

CONTENTS OF THE SYNOPSIS

ACKNOWLEDGEMENTS

PART I : INTRODUCTION

PART II : SITUATION ANALYSIS

PART III A : IDENTIFICATION OF CULTURAL HERITAGE

PART III B : EVALUATION OF CULTURAL SIGNIFICANCE

PART IV : POLICY GUIDANCE (BRIEF)

NOTE: Only brief introductions and detailed indexes of part II, IIIA and IIIB are included in the synopsis.

SAMPLES OF LIST CARDS – BUILT AND NATURAL HERITAGE OF MATHERAN

SAMPLES OF ANNEXURES NOS. 5, 6, 7 AND 11 (OTHER INDEXES, DIRECTORIES AND LISTS)

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The project consultants gratefully acknowledge the assistance and co-operation of following bodies:

- M. M. R. Heritage Conservation Society, *C/o M. M. R. D. A., Bandra - Kurla complex, Bandra (E), Mumbai - 400051.*
- Ms. Tasneem Mehta, Convenor, INTACH (*Indian National Trust for Art and Cultural Heritage*), Greater Mumbai Chapter.
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Individuals - Matheran

Mr. Ardeshir B. K. Dubhash, *Barr House, Matheran.*
Mr. Jehangir Dubhash, *Gulestan Bungalow, Matheran.*
Mrs. Ayra Cama and Gulu Adenwalla, *Elphinstone Lodge, Matheran.*
Mr. Mahendra Thakkar, *Rugby Hotel, Matheran.*
Mr. Kali Modi, *Craigieburn, Matheran.*
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Architect Mrunal Deshpande (*M.Arch. Landscape & Environmental Design*).

Consultancy Team

Principal Consultants

Architect Kirtida Unwalla (Conservation), Architect Suneeta Samant (Planner)

Project team

Phase I Ar. Shaheen Shanaz, Conservation Architect,
Miss. Shamita Shetty, Ajay Tonpe, Piyush Shah, Jeet Shah, Bhavin Desai (Students, Rizvi College of Architecture, Mumbai)
Phase II Architect Anahita Mantri
Ms. Apeksha Desai, Ms. Priya Shetty, Ms. Kashmira Bhesania (Students, Rizvi College of Architecture)
Phase III Ar. Anahita Mantri, Ar. Apeksha Desai

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PART I INTRODUCTION

1.0 Project introduction

The project "Matheran: A comprehensive heritage listing proposal" is commissioned by the Mumbai Metropolitan (MMR) Heritage Conservation Society. The study was undertaken by the Indian National Trust for Art and Cultural Heritage (INTACH), Greater Mumbai Chapter (GMC), as project proponent, under the able guidance of Ms. Tasneem Mehta, Convenor, Mumbai Chapter. The study was done in association with Architect Kirtida Unwalla (Conservation) and Architect Suneeta Samant (Planner), appointed by INTACH as project consultants.

The motivation for the project was initiated by the Matheran Bachao Samiti (a local amenity group), who had felt the need for such a study since some time. The study has been compiled with an active participation of the President, Ms. Piloo Richardson and other members of the Samiti.

The project was initiated in May 1998 beginning with a series of physical field surveys on site. The three phases of the project consisting of Survey & Analysis, Detail analysis & Initial listing and Completion of listing and final Report have been undertaken with term wise progress reports and advice from the MMR Conservation Society.

2.0 Background

i) The MMR Final Regional Plan 1996 - 2011 (13.10.3, page 482) gives advice on the need to prepare or revise of Development Plans of Cities and Heritage Sites within the Region and assigning priority to Matheran Hill Station along with a few other places in the Region.

ii) The 'Draft Regulations (dated 15.6.1995) for conservation of heritage precincts and natural features within Municipal areas / other legally designated urban areas" (Government of India, Ministry of Environment & Forests) suggests the adoption of heritage regulations from an environmental angle by the respective municipal authority, providing subjective support for each specified area.

iii) The "Draft Notification for declaring Pachmarhi Region as 'Eco-Sensitive Zone' under the environment protection Act, Government of India,

Ministry of Environment & Forests", is a landmark Notification in the country for the protection of sensitive environments and natural resources of heritage value.

iv) While recognizing the minimal achievements in the adoption of Conservation Policy and Practice in the country, the Government of India and people at large should consider the historic environment as one of the most precious assets for economic regeneration. The natural environment of the country continues to be under threat from inappropriate development in the absence of sufficient legal base for control over drastic change. The vision for appropriate development should aim at a strong economy, a good quality of life, a sustainable future and opportunities for all.

v) Conservation of the historic environments is considered to be the most important tenet for sustainable development strategy for places such as the Matheran Hill Station.

3.0 Aims and Objectives

The **aim** of this study and Report is to define strategic policy options for the Matheran Hill Station, seeking to integrate Conservation, Enhancement and positive use of Matheran's historic environment with evolving patterns of regeneration.

The **objectives** are:

1) To identify the scope for Conservation and Sustainable Development of Matheran using a correct methodology.

2) To define the extent of the historic environment (and represent graphically on maps) of Matheran and provide initiatives for the management of change.

3) To define the extent of the wider region of the Matheran Hill plateau that has direct effects on the aspect of sustainability.

4) Identify the main land-use and other trends, which have led to change in Matheran's historic environment (either deterioration or enhancement). This will be done by assessing the existing Development Plan - 1987 and the proposed Draft Modifications to D.P. - 1998. To plot the trend graphically on the maps, sheets, charts and tables.

5) To assess the environmental, social and economic values of Matheran and use such values

as the key to identification of cultural significance of Matheran.

6) To identify main issues and propose recommendations for policy initiatives.

7) To propose policy guidance for control over drastic change to components of the historic environment.

4.0 Main tasks

This Report is made up of four parts.

4.1 Situation analysis of the physical and non-physical aspects of Matheran's historic environment.

The description of Matheran's historic environment consists of two aspects - the physical and non-physical. The analysis of the aspects is done with an attempt to provide a comprehensive base for the identification of cultural heritage of Matheran. The historic development of the Matheran being closely related to the physical structure and the use of the place as a tourist resort, the situation analysis of these aspects is justified.

The physical aspects deal with the geographical, topographical and geological composition, the climatic and the rich resource base. The discussion emphasizes on the assets of the Hill Station, its potentials and the constraints.

The non-physical aspects portray the demographic structure of the town, its socio-cultural background, its level of infrastructure, the economic base and the development potential.

4.2 Identification of cultural heritage

This part attempts to identify the values associated with the urban structure of Matheran. Comprising of a set of three sections, which deal with the historic growth, and development of Matheran, architecture & urban design and planning, townscape and landscape, this part deals with the description of the urban environment, together with the cultural practice of its use.

The section on historic growth and development examines the chronological phases of development of Matheran. The identification of such historic phases provides a justified background for the evaluation of cultural significance of a component of the historic environment.

The section on Architecture & Urban Design discusses the expertise involved in the historic culture of Matheran to fashion its built environment as per the demands of the natural elements of the hill. It discusses the architecture of the bungalows and other features with concepts of urban design. Such identification creates a database to understand the state of the elements of the urban structure, as they exist, their potential for continuity and change. The various stages of time frame in which typical built forms evolved also indicates the processes of transformations, not only in material and technical aspects, but also in the cultural settings of Matheran Hill Station.

The philosophy of the evolution of the town structure with reference to the contribution of the inherent nature (physiography) of the hill, the land-use allocations and above all the natural environment and ecology of the hill, etc. are discussed in the section on Planning, Townscape and Landscape. This section also discusses the administration/governance aspects of the land in Matheran. Policy guidance for Conservation and Sustainable development of Matheran has inferences from the discussions in this section.

This part on identification of cultural heritage of Matheran paves the way for the specific evaluation of the cultural significance of components of the historic environment of Matheran.

4.3 Evaluation of cultural significance of Matheran

This part evaluates the cultural significance of components of the historical environment of Matheran with a specific methodology. The methodology is processed in four sections.

'An approach to identification of cultural significance identifies four hierarchical levels (area extents) to provide a sound base for adopting policy guidance for the conservation and sustainable development of Matheran. The identification of 'Matheran - Malang Gad eco-sensitive zone at level one justifies the need for a radical change in the prevailing policies for controlling adverse change in the environment of Matheran. The other three levels identified have justifications for adopting the methodology of the approach.

To proceed from the above, a specific methodology has been adopted to assess the 'values' of components that constitute the urban structure of Matheran. The "selection criteria for cultural significance' of Matheran underlines three

(inter-related) key concepts to determine whether a component is worthy of heritage listing designation. The key concepts emphasize the inclusion of cultural or social values as well as the natural environment of Matheran. Such value-based designations provide the right context for the sustainable planning and management of the urban structure of Matheran in a holistic manner.

Character appraisals and assessments is provides in sufficient details at all four levels within this section.

The 'Grading (built and Natural heritage) and design control' forms the summation of this part of the Report. Designation allocation (grades of control I, II-A, II-B and III) to components of the historic environment (built and natural) is discussed in this section. A succinct statement for the scope of extent and design control (each grade) is also contained in this section.

The components of historic components are clearly outlined under the headings: built environment, built and natural (cohesive) environment and natural environment. Although this structure had been identified in the initial phase of the study, it is presented here, since it appropriately is a link between the identification & evaluation of cultural heritage of Matheran and the policy guidance proposal for the conservation and sustainable development of Matheran.

4.4 Policy guidance

This part provides the conclusions of the study and presents the aspects of continuity and change with an emphasis on emerging issues and broad based recommendations. The recommendations formulate the initiatives for policy guidance.

Policy guidance is proposed in this section in the context of the decision-making process concerning the planning and management of the built and natural environment. The policy guidance is offered for each component of the historic environment Matheran.

'List cards' for the components (built and natural) and 'Zone-wise (zones proposed for locational identification of the components) list of graded properties' are to be read in association with Maps (DRG 3, Heritage Listing Proposal) and referred along with the policy guidance.

5.0 The scope of urban conservation planning

Note: The philosophy for conservation of Matheran, adopted in this study has relied chiefly on the paper - "Value and Urban Conservation Planning: Some Reflections on Principles and Definitions" (a draft paper, 1996) by Silvio Mendes Zancheti and Jukka Jokilehto. While many other national and international approaches have been considered, this philosophy on account of its clarity and convincing logical discussions was mainly adopted.

A very conscious effort has been maintained in the process of this study to have a defined and settled scope of work in identifying the scope of conservation for a special place like the Matheran Hill Station. The traditional link of urban conservation with architectural restoration is recognised and an effort is made to continue the link while seeking to co-ordinate and regulate the process of continuity and change of an urban structure and its values.

At least two logical phases have been adopted in the study in relation to the process of urban conservation: the first phase is the identification of values (as social attributes of people at large) and the second is the decision to maintain such values. To complete the process, a third phase of action taken as a result of the first two is dealt with in part - by providing recommendations for policy initiatives and policy guidance (as design control). The policy guidance also provides recommendation for the management process.

The study thus formulates the decisions keeping 'Values' as central issue of conservation planning.

'Sustainable development is seen today as a powerful motivation for urban conservation planning. Basically it would consist of a process of urban development based on the constant reuse of existing built and natural resources, associated with a low input of energy for adaptation to new requirements conceived in the society. It is also viewed as a process founded in the local culture, in an equitable distribution of urban services, the use of democratic principles of management, and the maintenance and regeneration of traditional values and practices'

The above statement for sustainable development as defined in the above paper is also relevant to the eco-sensitive aspect of Matheran. The aspect of inter-dependency identified in the study, thus justifies conservation as a process that involves

the entire Matheran - Malang Gad eco-sensitive Zone. From the perspective of sustainability, the Eco-Zone and Matheran Hill contain several non-renewable resources (natural), which carry some of the most important cultural values of the society (identity, memory, self-consciousness and artistry) and resources capable of attributing values to new things through the creation of new processes based on established values.

As a product of humanity, Matheran and the Eco-Zone are composed of several historically recognisable parts or strata. Both the areas do not generally have a historic center as such, except the archaeologically significant hill forts of the Marathas (along the Matheran-Malang Gad hill chain), but possess a historic urban structure that regenerates itself through the use of characteristic elements and processes. The processes have been clearly identified for Matheran while the structure of the Zone is manifest in the integrity of its natural attributes, against all odds from the threat of being engulfed by the sprawl of Mumbai city.

It is important to understand that conservation should not aim to halt the process of change, or prohibit the introduction of novelties in an environment. On the contrary, it can well be a way to perpetuate a process of generation of novelty that can be appreciated on a more collective basis. This can be well achieved in the eco-zone and Matheran by managing the socio-economic structure vested in the potential of sustainable eco-tourism.

6.0 Limitations

The entire process of the study has been limited to field survey and identification of cultural heritage on the basis of available historic maps. The reference of the existing Development Plan (map) has had a serious shortcoming of insufficient legibility (for accuracy) to derive locational aspects of the features. Much time was thus spent on the identifying the authenticity of maps, records etc.

The policy guidance thus offered will be justified to titles of individual properties and feature identified for heritage conservation (allocated listing grades) in Matheran.

The aspect of finance mechanisms for the protection and enhancement of the heritage of Matheran and the eco-sensitive zone remain unidentified.

7.0 Scope for further study

This study proposes a set of recommendations and policy guidance at a holistic level. The action taken as a result will lead to conservation of the identified components. A supplementary set of guidance will have to be initiated, at specificity level, for each component of historic environment identified for policy guidance in this study. The requirement of such guidance has been recommended within each level of discussions in the Report (policy guidance and other sections).

The aspect of heritage economics should be undertaken within the context of eco-tourism and regeneration of the cultural heritage of Matheran. No attempt has been made in the past by the concerned authorities (Municipal Council and Maharashtra Tourism Development Department) to assess the effects of tourism on the fragile ecology of Matheran. There is an urgent need to undertake an Environment Impact Assessment (EIS) with regard to managing a sound eco-tourism plan.

More area/site specific assessments also need to be undertaken for the forestlands to ascertain the status of the resource. This will identify the need for interventions required on parcels of the forestlands and form a base for preparing protection and enhancement schemes for the same. Such study can begin with the natural viewpoints (headlands of the hill) visited regularly by tourists and has a larger threat of degradation. Enhancement schemes should have the focus of intent on protection and all conservation processes while avoiding mere beautification ideas should aim at visitor management aspects only.

PART II SITUATION ANALYSIS

1.1 INTRODUCTION

The chapter 'Situation Analysis' discusses various **Physical and Non - Physical aspects** associated to the hill station of Matheran. Since the historic development of the town and the cultural significance of its components are closely linked with these aspects, the discussion forms a valid basis for the process of identification and evaluation of cultural heritage.

1.2 PHYSICAL ASPECTS

- 1.2.1 Location
- 1.2.2 Area / Administrative Status / Designation
- 1.2.3 Accessibility
- 1.2.4 Physiography
- 1.2.5 Profile of the Hill
- 1.2.6 Natural Drainage
- 1.2.7 Geology
- 1.2.8 Soil
- 1.2.9 Hydrology
- 1.2.10 Natural Springs
- 1.2.11 Regional Context
- 1.2.12 Immediate Surroundings
- 1.2.13 Climate
- 1.2.14 Resources
- 1.2.15 Forest
- 1.2.16 Wildlife

1.3 NON - PHYSICAL ASPECTS

- 1.3.1 Population
- 1.3.2 Social Composition
- 1.3.3 Local Amenity Groups
- 1.3.4 Economy
- 1.3.5 Tourism
- 1.3.5a Peak Seasons and Tourists
- 1.3.5b Tourist Infrastructure
- 1.3.5c Contribution of Built Heritage
- 1.3.6 Transport and Communication
- 1.3.7 Trade and Commerce
- 1.3.8 Social Infrastructure
- 1.3.9 Public Utilities
- 1.3.9a Water Supply
- 1.3.9b Sanitation and Garbage Disposal
- 1.3.9c Cemeteries and Crematoriums
- 1.3.10 Administrative Set-up
- 1.3.11 Planning Authority

PART III A IDENTIFICATION OF CULTURAL HERITAGE

1.0 HISTORIC GROWTH AND DEVELOPMENT

1.1 INTRODUCTION

The chapter 'Historic Growth and Development' takes an overview of chronological developments in Matheran over a span of about 150 years, beginning with its discovery by Hugh Malet in 1853.

The detailed account of history focuses on the conscious, sensitive and planned development of the plateau by the Europeans into a fashionable resort followed by its subsequent growth and transformation with changing times and events. The present day transformations seen in the context of historic developments emphasize the need for heritage conservation.

1.2 Phases of Development History

1.3 Phase – I (1850 to 1853)

- 1.3.1 Discovery of Matheran by Hon. Hugh Malet
- 1.3.2 First Houses on Matheran Plateau
- 1.3.3 Initial Surveys and Planning
- 1.3.4 Allotment of First Batch of Plots to Public

1.4 Phase - II (1854 to 1900)

- 1.4.1 Matheran Emerging as a Popular Hill Resort
- 1.4.2 Administration of the Hill Station
- 1.4.3 Development of Infrastructure
- 1.4.4 Period of Setback
- 1.4.5 Early Hotels
- 1.4.6 Development of Public Amenities
- 1.4.7 Boom Period of Development
- 1.4.8 Development of Bazaar

1.5 Phase – III (1901 to 1945)

- 1.5.1 Development of Matheran Mountain Rail
- 1.5.2 Establishment of Municipality
- 1.5.3 Development of Small Plots (Contribution of Peerbhoy to New Developments)
- 1.5.4 Trends of Transformation
- 1.5.5 Infrastructure Development Initiated by Notable Indian Personalities
- 1.5.6 Crowding of Bazaar Spine

1.6 Phase IV (1946 to 1975)

- 1.6.1 Independence and Final Retreat of the British from Matheran
- 1.6.2 Period of Inertia
- 1.6.3 Increasing Influx of Middle Class Tourists

1.7 Phase V (1976 onwards)

- 1.7.1 Rapid Development of Tourism and Commercial Growth
- 1.7.2 New Developments
- 1.7.3 Changing Attitudes Leading to New Trends
- 1.7.4 Impact of Revised Development Regulations
- 1.7.5 Deteriorating Health of the Hill Station

1.8 Inference

2.0 ARCHITECTURE AND URBAN DESIGN

2.1 INTRODUCTION

i) The chapter analyses the architectural character and the urban design elements of Matheran, which emerged from the socio-cultural background of its founders and took a distinct shape while adapting to the local context.

ii) The chapter also discusses the trends of transformations and interventions and the extent to which these have affected the historic integrity of built heritage. The changing vocabulary of architecture seen in the context of traditional values emphasizes upon the need for appropriate design control and sensitive approach to conservation.

iii) Identification of architectural values is based upon various aspects associated with the design and character of the built form, its setting and relation to the natural environment as well

as its cultural contribution. The ‘bungalow’ being the most significant and representative built-form typology of Matheran is analyzed in greater detail.

- 2.2 Built form typologies
- 2.3 Early bungalows of the British
 - 2.3.1 Setting
 - 2.3.2 Layout
 - 2.3.3 Orientation
 - 2.3.4 The Design and Style of Built-form
 - 2.3.5 Scale
 - 2.3.6 Ground Coverage
 - 2.3.7 Internal Layouts
 - 2.3.8 Light and Ventilation
 - 2.3.9 Materials and Structural System
 - 2.3.10 Structural Organisation
 - 2.3.11 Skyline
 - 2.3.12 Fenestration and Façade Detailing
 - 2.3.13 Interiors – Décor, Finishes and Artifacts
 - 2.3.14 Ornamental Landscaping
 - 2.3.15 Services
 - 2.3.16 Maintenance
- 2.4 The bungalows of the Peerbhoy phase
- 2.5 Hotels and sanatoria
- 2.6 Institutional, commercial and mixed use Buildings
- 2.7 Village houses (bazaar)
- 2.8 Identity (names of structures)
- 2.9 Transformations
- 2.10 Present Scenario of Built Heritage in Matheran
- 2.11 Modern Trends
- 2.12 Inference

3.0 PLANNING, TOWNSCAPE AND LANDSCAPE

3.1 INTRODUCTION

The planning history of the hill station dates back to 1850s when the initial surveys were carried out and the plotting of large residential properties as well as essential infrastructure was completed. The entire town structure with all roads and plots was crystallised by the beginning of twentieth century. Over the years the basic historic framework of the town and its setting of plots have maintained integrity while changes have taken place in the land-use and built-form character.

The chapter analyses the evolution of the historic town structure, identifies its elements and emphasizes upon values of traditional townscape and landscape character. It also discusses the present status of the town and the impact of recent developments and new trends on the traditional coherent and harmonious character of the town and its natural environment.

- 3.2 Historic Town Structure
 - 3.2.1 Evolution of Historic Town Structure
 - 3.2.2 Planning in Response to Physiography
 - 3.2.3 Road Network and Hierarchy
 - 3.2.4 Pattern and Sizes of Plots
 - 3.2.5 Plot to Street Relationship
 - 3.2.6 Organized Surface Drainage
 - 3.2.7 Street Edges
 - 3.2.8 Street Floor
 - 3.2.9 Zoning
 - 3.2.10 Townscape Character

- 3.2.11 Landscape Character
 - 3.2.12 Ownership Pattern
 - 3.2.13 Identity (Names of Roads and Features)
 - 3.2.14 Concern for Environment Protection
 - 3.3 Present Situation
 - 3.3.1 Transformation of Historic Town Structure
 - 3.3.2 Background of Transformation (Role of Development Plans in Promoting Change)
 - 3.3.3 Existing Land-use Pattern
 - 3.3.4 Density Pattern
 - 3.3.5 Plot Distribution and Trends of Transformation
 - 3.3.6 Built up Areas and Ground Coverage (Change in Traditional Pattern)
 - 3.3.7 Changes in Townscape Character
 - 3.3.8 Changing Landscape Character
 - 3.3.9 Increasing Pressure on Urban Services
 - 3.3.10 Degrading Environment and Threat to Ecology
 - 3.4 Inference
-

PART IIIB EVALUATION OF CULTURAL SIGNIFICANCE

4.0 AN APPROACH (PROCESS) TO IDENTIFICATION OF CULTURAL HERITAGE

4.1 Introduction

The methodology adopted in this section forms a base for providing correct control and regulation mechanism for the conservation and sustainable development strategy for Matheran.

The scope and relevance for policy guidelines is identified here and has further reference to the detail policy guidance in Part IV.

The identification process is approached at four hierarchical levels:

- Level 1 Region – (Matheran - Malang Gad Eco-Sensitive Zone)
- Level 2 Matheran Municipal Council Area
- Level 3 Conservation Area
- Level 4 Individual plots

THE PRINCIPLE AIM of the multi-level approach is to provide a sound base for the Conservation and Sustainable Development Plan for the Matheran Hill station and it's surrounds.

The OBJECTIVES of the approach are:

- To assess the significance of the natural as well as the built heritage of Matheran.
- To appraise the environmental significance of the Hill and it's impact on the region.

4.2 An Approach to Identification

- 4.2.1 Level 1: Region
 - Matheran – Malang Gad Eco-sensitive Zone
 - a) Extent and Boundaries
 - b) Justification
 - c) Significance
 - d) Guidelines
- 4.2.2 Level 2: Matheran Municipal Council Area
 - a) Extent and Boundaries

- b) Justification
 - c) Significance
 - d) Guidelines
- 4.2.3 Level 3: Conservation Areas
 - a) Extent and Boundaries
 - b) Justification
 - c) Significance
 - d) Guidelines
- 4.2.4 Level 4: Individual Plots (Built and Natural Features)
 - a) Extent and Boundaries
 - b) Justification
 - c) Significance
 - d) Guidelines
- 4.2.5 Selection Criteria for Cultural Significance
 - Architectural Significance
 - Cultural Significance
 - Natural Features Significance
 - State of Preservation
 - Archaeological Significance

5.0 CHARACTER APPRAISALS AND ASSESSMENTS

5.1 INTRODUCTION

The approach identifies four hierarchical levels (as components) at which character appraisals and assessments are made, so as to form a sound base for providing policy guidance. The levels prescribed are,

Level 1 - Region (Matheran - Malang Gad eco-sensitive Zone)

Level 2 - Matheran Municipal Council Area

Level 3 - Conservation Area

Level 4 - Individual Plots (built and natural features)

5.2 Character Appraisal (Level 1 : Region - Matheran – Malang Gad Region)

- 5.2.1 Identification
- 5.2.2 Designation : Proposal Background
- 5.2.3 The Form of Appraisal
- 5.2.4 Limitations
- 5.2.5 Further studies
- 5.2.6 Statutory Policies

5.3 Character Appraisal (Level 2 : Matheran Municipal Council Area)

- 5.3.1 Identification
- 5.3.2 Designation : Proposal Background
- 5.3.3 The form of Appraisal
- 5.3.4 Limitations
- 5.3.5 Further Studies
- 5.3.6 Character Appraisal Statements and Statutory Policy

5.4 Character Appraisal (Level 3 : Conservation Area)

- 5.4.1 Identification
- 5.4.2 Designation : Proposal Background
- 5.4.3 The form of Appraisal
- 5.4.4 Limitations
- 5.4.5 Further Studies
- 5.4.6 Character Appraisal Statements and Statutory Policy
 - i) An Overarching Policy
 - ii) What is to be preserved and Enhanced -
 - A) Urban Form and Townscape
 - B) Architecture

- C) Landscape Ecology
- 5.5 Character Appraisal (Level 4 : Individual Plot – Built and Natural Features)
- 5.5.1 Identification
- 5.5.2 Designation : Proposal Background
- 5.5.3 The form of Appraisal
- 5.5.4 Limitations
- 5.5.5 Further Studies
- 5.5.6 Character Appraisal Statements and Statutory Policy

6.0 GRADING (BUILT AND NATURAL HERITAGE) AND DESIGN CONTROL

6.1 INTRODUCTION

The strategy for conservation and sustainable development of Matheran identifies the entire area (Municipal limits and the Matheran–Malang Gad eco-sensitive zone) to be of exceptional heritage value. The values identified are it's unique cultural significance, the forest cover, the immense recreational and scientific value etc. and these values holistically would need design control equivalent to that ideally provided for a grade I allocation. It is only to provide an effective mechanism of statutory control over change and development that special features are individually identified and considered subjectively for grading.

It is to be noted that the list has been identified with a careful scrutiny of the cultural significance and the state of preservation of the buildings. As such the scope for change and development does not recognize demolition or reconstruction of the listed buildings. Unlisted buildings excepting those which fall within the Conservation areas maybe considered for demolition / reconstruction within the purview of the Development Control Regulations (D.C.R) for Matheran.

This section formulates the specific design control under each designated grade of the component of historic environment. The 'List cards' for each component (built and natural) borrows the design control guidance from this section. This section thus has an essential application of Policy Guidance set out in Part IV of this Report. Both have an interrelated overlap.

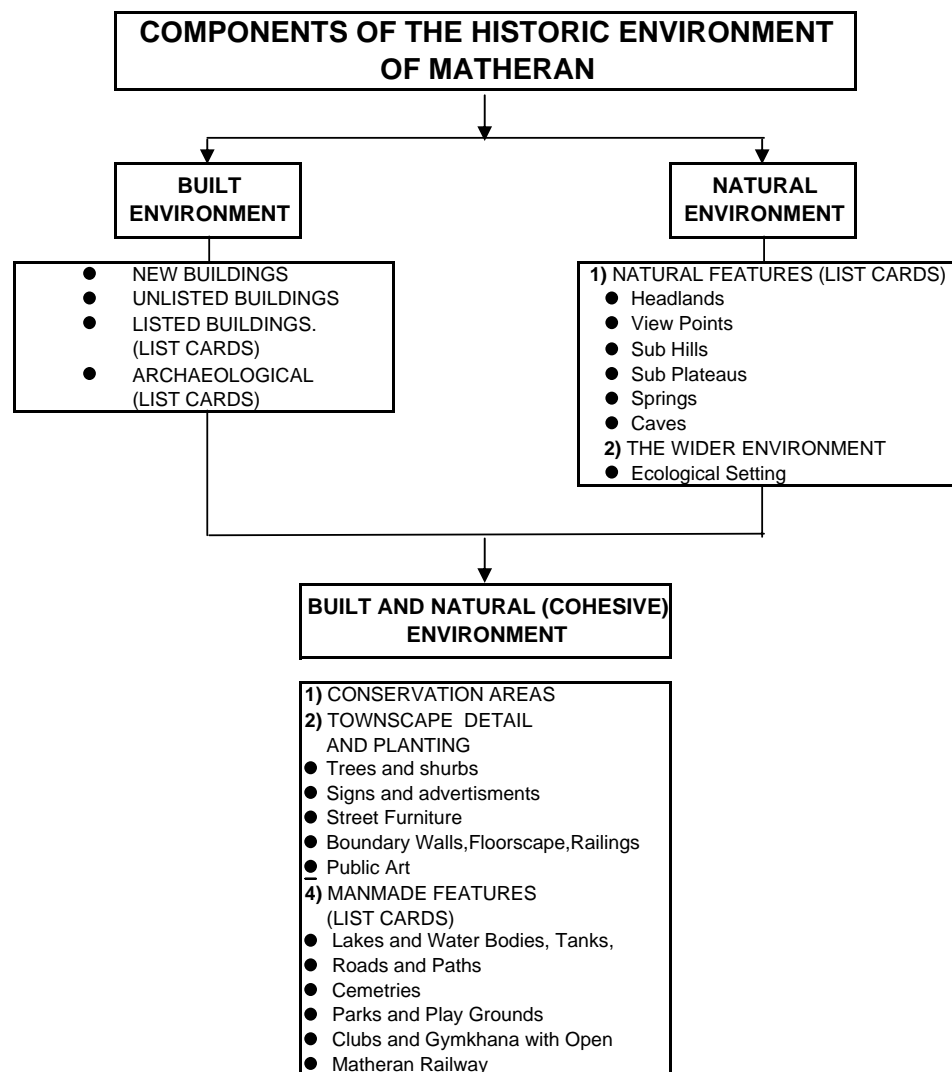
- 6.2 Grading and Design Control
 - 6.2.1 Grade I
 - a) Scope
 - b) Design Control
 - 6.2.2 Grade II – A
 - a) Scope
 - b) Design Control
 - 6.2.3 Grade II – B
 - a) Scope
 - b) Design Control
 - 6.2.4 Grade III
 - a) Scope
 - b) Design Control
 - 6.2.5 Conservation Area
 - a) Scope
 - b) Design Control
 - 6.2.6 Summary

7.0 Components of Historic Environment (ref. next page)

7.0 Summary

Components of historic environment:

This Part identifies and evaluates the historic structure of Matheran through discussions on the various components that make up such a structure. The discussions are aimed at clearly outlining a framework, based on which an appropriate policy guidance may be prescribed for the Conservation and Sustainable development of Matheran. The chart presented here outlines a framework of components, proving a link between this and the next part of this Report on Policy Guidance. The Part IV, Policy Guidance thus prescribes control and management of the historic environment of Matheran by prescribing control over change of each component.



PART IV POLICY GUIDANCE

CONSERVATION AND SUSTAINABLE DEVELOPMENT OF MATHERAN

1.0 Introduction

The study in this Report identifies strategic planning policy options for Matheran, seeking to integrate conservation, enhancement, and positive use of Matheran's environment with evolving patterns of development on the Hill Station. Such study is apt at this point of time because of the increasing concern that Matheran's environment continues to be under threat from inappropriate development and other adverse change.

The study undertakes the process of identification of the cultural significance of Matheran through assessing the elements of urban structure, its evolution pattern and the present trends.

The study defines Matheran's rich historic environment by combining a review of planning designations and definitions (DP 1987, Draft Modifications 1998 and the MMR final Regional Plan 1996-2011) with the identified cultural significance of the place.

2.0 Conclusions

a) What emerges is a picture of a rich historic environment, which should be keenly safeguarded. The study establishes that Matheran's historic environment is of value to the society and worthy of conservation. The MMR Final Regional Plan identifies the Zone for conservation (the green and Forest Zones) and includes Matheran on a priority list of places that need the inclusion heritage conservation processes in the Development Plans.

b) However what this study illustrates is that the value of conservation goes much beyond the aesthetic and spiritual importance of protecting historic buildings and spaces, critical though these are. Conservation provides one of the biggest opportunities to give practical expression to sustainability principles and is a key contributor to the economic well being of Matheran and the Matheran - Malang Gad eco-sensitive Zone. Conserving the historic environment also helps to retain a sense of place and identity and maintain balanced, harmonious communities and a diverse mix of uses.

c) Expenditure on the historic built and natural environment needs to be regarded as long term investment in the future economic and social well-being of Matheran and the eco-Zone.

d) The study proposes the adoption of a stringent 'Conservation and sustainable development strategy' for Matheran and the identified Eco-Zone. Several issues emerging from the study form a base for the policy guidance presented in this part of the Report.

2.1 Principal issues

a) Matheran is more than a sum of its parts.

The totality of Matheran's historic environment is more than the sum of its parts. There is a danger in only considering the historic environment as being these parts of Matheran, which have been identified as components of the historic environment (chart Part III, 4.0) The description of the evolution of Matheran illustrates a richness and diversity, the cumulative value of which is not apparent from designations and definitions (existing and proposed). The two chief components of the historic components - the built and natural environment, should have a cohesive strategy.

b) Insufficient existing policy guidance.

The evolution trends of Matheran (from a fashionable resort to a holiday resort of today) indicate that there has been a gradual evolution of the quality & character of the place. The conclusion drawn is that the system of control and maintenance specified within the existing Development Plan of 1987 as well as the Draft Modifications to DP1998, are not enough to replace the damaging changes, which are occurring. In particular relation are: the radically damaging proposals for vehicular roads within the council boundary limits, the proposal of a Helipad for commercial use, the rights over build able areas, permissible changes in the land use (residential to hotels), marked deficiency in the governance of informal sector growth affecting the local villages and the bazaar and most importantly the need to manage redundancy and disposal of major historical buildings & sites more effectively.

c) Matheran as a cultural landscape of immense conservation value.

The identification of Matheran Municipal council as a U-1 zone (urbanizable zone 1) by the MMR Regional plan –validates it for having a potential for “intensive urban development & economic activities”. Matheran hill plateau by the virtue of its richness in natural and built resources, qualifies to be defined a cultural landscape of immense conservation value .Its treatment for development control of intensive urban and economic nature needs to be handled with great care. The Forest zones, the special green zone (G-2) as environmental sensitive areas along with the G-1 zone (as a buffer around G-2 zone) has a high ecological interdependence on the Matheran Plateau. The conclusion is that Matheran as a special urban zone with immense conservation value and a high level of interdependency on the immediate region (the identified eco-sensitive zone) – its planning format should deviate from the normal processes of mere landuse based development strategy, to adopt an objective of conservation and development.

d) Matheran as a tourist resort.

Matheran Hill station as founded by the British for health reasons has proved to be a sound investment, valid till date. The 'specialness' of the place is dominated by one single factor; it's setting in the natural environment. The economy has always been the revenue collected from tourist inflow and the taxes from the building owners; hotels and private buildings. This tradition continues till date, but with a difference. Tourism, Matheran's sole economic resource, is increasing in leaps and bounds, without a check. Tourists have potential to destroy those very special qualities and attributes that attract them. Tourism as resource can be effectively used as a main support for conservation efforts. The existing framework of policies does not make an attempt to manage this most important resource and it's potential to make Conservation and Sustainable Development, a viable solution.

3.0 RECOMMENDATIONS

3.1 Introduction

Conserving Matheran's historic environment is of real value. It is a fundamental tenet in the move towards sustainable development and prosperity of Matheran special area and the identified Matheran-Malang Gad eco-sensitive zone four policy initiatives are recommended to realize this potential. These should be seen as part of a single process of strategic planning and environmental management with the aim of securing a high quality of built and natural environment, which protects and enhances the unique character of Matheran.

The recommendations for policy initiatives are viable for the whole eco-Zone. It deals with the four hierarchical levels identified in the 'Approach to identification of cultural significance' (Part III-B, 4.0)

3.2.1

Recommendation 1.

Promote the Matheran – Malang Gad eco-sensitive zone as a special feature of regional, state and national importance.

- a) The MMR final regional plan 1996 –2011 should integrate the concept of declaring the identified zone as an "Eco-Sensitive Zone" under the environment (Protection) Act 1996, with reference to the draft proposal Notification for Pachmarhi Region- dated 17th sept.1998 (Ministry of environment & forests, refer to annexure 2) The MMR final Regional Plan already identifies the forest zone, the G1 & G2 zone as conservation areas (pg. 464, paragraph 13.7.3). The eco-sensitive zone will have a core area consisting of Matheran Hill Municipal area with a Special Area Development Plan (SADP) proposal. The identified eco-sensitive Matheran Malang Gad eco-sensitive zone (eco-zone) can have a Zonal Development Plan (ZDP). Each of the above DP's while having an independent identity will adopt an integrated approach towards the common goal -'Conservation and sustainable development'.
- b) The MMR regional plan will need a co-coordinated approach from various departments (district levels municipal authorities and other special jurisdictions that have a territorial overlap), to clearly delineate the boundaries of the eco-zone and the scope of the various components that are contained within this zone. This process will pave the way for conducting detailed appraisals of each component of eco-zone and initiate policy guidance. The Regional Plan may prepare and incorporate a map of the historic and environmental framework of the eco-zone. Supplementary guidance and advice based on environment impact assessments of the zone may become a part of the management strategy of the eco-zone (for reference of each department). Such guidance would set out the requirements for policies to conserve the built, natural and environmental heritage of the zone.

Implementation of the recommendations would:

- Promote greater awareness of the extent of zone's historic environment.
- Provide a specific policy framework for the effective management at the zonal level, and inform development control and the review of planning proposals under individual D.P.'s.
- Encourage full use of all existing measures for the conservation and enhancement of the environment and explore the need for new measures.
- Emphasize the relationship between the components of environment and promote a multi- disciplinary approach to conservation and sustainable development.
- Expand the focus of conservation from individual buildings to areas and to the wider setting of the zone's historic environment.
- Provide a base for advice on implementation proposals.
- Promotes conservation as a focus for regeneration of areas of urban or environmental significance by securing a viable future for historic buildings by

providing a framework for priority expenditure and investments and coherent planning framework.

3.2.2

Recommendation 2.

Provide a sound strategy for the management of conservation and sustainable development of Matheran and the eco-zone.

- a) The landuse classification adopted in the MMR Regional Plan (1996-2011) forms the basis for the proposed actions for development in the identified eco-zone (the classified areas for conservation – Green and Forest zones). Matheran Hill (Municipal area) at the core of the Matheran – Malang Gad hill chain is recommendation to be classified as the ‘Matheran Hill Special Area’.
- b) The following activities are proposed to be undertaken for the eco-sensitive zone (reference to the Pachmarhi Notification) with approval of the Ministry of Environment and Forests.
 - i. A Development Plan for the entire eco-zone to be prepared by the State Government - a Zonal Development Plan (ZDP). The ZDP will identify the components of the historic environment of the Zone and formulate strategic policy guidelines for the components. (Refer to Part III, 5.0 and Part IV, 1.0)
 - ii. A Special Area Development Plan to be prepared by the State Government for the Matheran Hill municipal area - SADP. The SADP will be prepared as a component of the ZDP. The components of the historic environment of Matheran are identified and draft policy guidance is outlined in this Report (Part IV, Policy Guidance), trying to fully integrate conservation as a holistic approach to the management of change.
 - iii. Special Planning Authorities are proposed to be formulated by the State Government for the preparation for both the above plans.
 - iv. The formulation of Heritage Advisory Panel will be contemplated by a regulation of the SADP and ZDP. This panel will comprise of members with expertise in all aspects related to the conservation and sustainable development of the eco-zone.
 - v. A Tourism Development Plan (TDP) to be prepared by the Department of Tourism (MTDC) of the State Government. The TDP will be prepared as component of the SADP and ZDP. Previous time tested experiences in such issues at national and international level can be borrowed. This can assist in the preparation of effective tourist carrying capacity appraisals, from the point of view of the social, economic and social value of Matheran and the eco-zone.

3.2.3

Recommendation 3

Secure a viable future for historic buildings and areas (of the wider environment) at risk.

- a) Returning buildings and areas at risk to a viable and appropriate use should be a high priority as a catalyst for regeneration of the urban structure of Matheran. It should be seen as an investment in the long-term future of an area and an indication of confidence.
- b) This Report proposes conservation of built and natural environment. The 'list cards' prepared for each listed component not only provides sufficient data for conservation, but also gives options to promote conservation through recycling for productive reuse. The detailed assessments contained in the Report (refer the List cards and table 1) recommends the formulation of a stringent programme of action to tackle the problem of buildings and areas at risk. There is a need to devise a holistic strategy to address the problem as an integral part of economic development and regeneration.

Implementation of the recommendation would:

- Focus effort, attention and resources on finding new uses for dilapidated and neglected buildings.
- Provide a catalyst for area – wide regeneration.
- Develop a more effective strategy for the management of the disposal of redundant buildings and sites.
- Enhance the townscape of local areas currently blighted by buildings at risk.

3.2.4

Recommendation 4

Provide an integrated land use policy

Promote an integrated architectural control and land use planning policy with a joint initiative from the various agencies responsible to highlight conservation within the context of the Matheran special area.

Note: This recommendation is discussed in the context of a critical appraisal of the existing DP (1987) of Matheran and the Draft Modifications 1998. (Annexure 1).

- a) The reservation of land as no development zones (in the forest ownership) and green zones (proposed within individual plots), for a sensitive place like Matheran should be used as an important tool for conservation of the natural environment. It is recommended to allocate this reservation to form effective green zones (as continuous chains and not small fragments as proposed in the Draft Modifications) with definite criteria for control over such reservation areas. The adhoc allocations of reservations (like the reservation of plots for amusement parks, water parks etc.) under the pretext of tourist-based facilities will create an imbalance in achieving the goal of conservation and sustainable development. Such allocations should be reviewed and reversed for a beneficial regeneration schemes.
- b) For a place like Matheran, with a major tourist based economy, there should be a clear definition of commercial (hotels, restaurants, shops etc.), residential landuse, and its application for floor space indices and general architectural control. Defining hotels under residential use should not be permitted.
- c) Subdivision of land, into smaller parcels should not be permissible, as it will lead to scattered development into the forested lands, leading to fragmentation and an eventual ecological imbalance of the forest resource. Scattered development within a plot is not advisable for the same above reason. It would be ideal to have modest built forms as cohesive and closely linked layouts, so as to not affect the forest cover in the plots.
- d) It should be ascertained that no sort of ambiguities prevail in the allocation of land use and development control regulations (DCR), within the SADP (Maps and Report should have a cohesive legibility). Further reference from annexure 1 will apply.

4.00 POLICY - CONSERVATION AND DESIGN (BRIEF)

4.1 Context

The STRATEGIC PLANNING POLICY options are derived from the extensive processes of diagnosis of the various components of the historic environment of Matheran Hill Municipal Council area and the assessment of the impact of the hill on the identified (Matheran Malang Gad) Eco - Zone. **It is to be noted that detailed appraisals at the Zonal level are not within the scope of this Report and thus the impact assessment remain at mere identification level, with broad based recommendations.**(4.2, 4.3 below)

The ISSUES emerging out of an attempt to define such historic environment (detailed at Matheran level) have led to a set of RECOMMENDATIONS as policy initiatives for the Conservation of the Eco-zone in a holistic manner.

4.2 Strategic policy framework

As recommended for the proposed Zonal (ZDP) and Special Area Development Plan (SADP):

POL. 1

To improve and promote the environmental quality and ecology, public access to the designated Forest, Green zones and areas of Special Archaeological priority to promote the protection, conservation and the understanding of the Zone's archaeological and natural resource heritage.

POL. 2

To preserve the historic integrity of the built and natural features of Matheran (including the historic names of buildings, roads, features etc.

POL. 3

To improve the environmental quality of townscape, to improve the ecological conditions of the forestlands, natural resources and to guarantee a sustainable infrastructure for the viability and vitality of the Matheran core area.

POL. 4

To preserve listed buildings, their settings and features of special architectural, aesthetic, natural or historic interest: to preserve or enhance the character or appearance of conservation areas: and to promote the conservation, protection and understanding of Matheran's archaeological heritage.

POL. 5

To ensure the highest standards of design throughout the Zone and Mothering for new developments, and additions and alterations to existing buildings.

POL. 6

To ensure high standards of physical access to individual sites (roads and paths) to individual property and places of public interest/use.

POL. 7

To project a management strategy for the effective Conservation and sustainable development of Matheran and the Zone.

4.3 Objectives

A Zonal Development Plan prepared for the entire zone along with the Special Area Development Plan for the core area of Matheran town, by the State Government (in compliance of the Ministry of Environment & Forests - as per the Pachmarhi Notification, (annexure 2), will make full use of it's planning powers to:

- a) Emphasize on "landscape ecology" as an essential component of sustainable development of the entire Zone, to ensure that considerations of ecological value, visual quality and recreational potential of the land are properly utilised in allocating (change of use) and controlling development. New formations of plots in the forest lands are to be discouraged.
- b) Ensure that new development, whether alterations and extensions, small scale infill, or of a more extensive nature, employ the highest standards of design, are successfully integrated into the Zone or Matheran, and that these do not adversely affect the environmental quality, the historic skyline and important local views.
- c) Preserve or enhance the character or appearance of areas of architectural or townscape merit, and to protect forestlands, open spaces and their ecological value.
- d) Preserve and enhance the integrity and architectural and historic interest of listed buildings by resisting demolition, ensuring that necessary alterations and extensions are appropriately and sensitively carried out and protecting their settings.
- e) Improve the urban environment by the protection and planting of trees; by the sensitive design, siting and control of signs and advertisements; by careful attention to landscaping and paving; and by use of durable natural materials.
- f) Protect sites of archaeological interest and define/designate areas of Special Archaeological priority in Matheran and the Zone. (The Matheran Malang-Gad Hill chain has several spurs dotted with Maratha forts - the entire Zone at one time must have been teeming with defence activities).

4.3.1 Supplementary guidance

The Matheran Special Area Development Plan will need, besides the policy principles and Regulatory codes, Supplementary Guidance for specific areas (Conservation Areas, Forest Zones, Green Zones, U-1 & U-2 Zones etc.), for types of buildings (Listed & Unlisted etc.) and development (new and infill). The ZDP and SADP will advice on the preparation and publication of such guidance, which will be non-statutory, in the context of the policies set out in the Plans. A number of non-statutory design guidelines (as supplementary planning and design guides) are proposed for preparation and publication within this part and these are intended to illustrate the detailed implications of the Plan Policies.

4.3.2 Scope

The aesthetic and environmental policies set out here will be subject (as a base) to the existing policies in the MMRDA Final Report (1996-2011) for the Zone. While such policies do exist at the Matheran level in the DP 1987 and the Draft Modifications 1998, they are not specifically stringent for a sustainable development strategy. As such the policies framed within this part of the Report will formulate the necessary framework.

4.3.3 Applications

All cases of applications for development proposals will have to considered as having an overlap between development control regulations (DCR) within the proposed SADP and as proposed within this Part. (The DCR for Architectural control should be formulated as per the advice prescribed in annexure 1)

Both the DCR and the Design Control Policies, on the advice of the Special Area Heritage Advisory Panel (SAHAP), will govern all the proposals for the built and natural environment within Matheran.

The DCR and Policy Control, for development proposal at the Zonal level, will be formulated, subjectively for each component of the Zonal historic environment, and will have advice from the Zonal Heritage Advisory Panel (ZHAP) and the Monitoring Committee (not within the scope of this Report)

4.4 DESIGN CONTROL POLICIES

4.4.1 Introduction

- a) The control policies prescribed here are specific to the Matheran Special Area alone. The control policies are formulated for each component of the historic environment of Matheran (Part III, 7.0). CON identifies the need for the control with reasons while DES CON is the exact prescription of the design control.
- b) The control policy for the Matheran-Malang Gad Zone is not within the scope of this Report. Only an outline for framing such policies is prescribed in this part of the Report (Part IV, 4.1 to 4.3 and Part III, 5.0).
- c) These policies have a definite reference to Part III.B, 4.0 (An Approach to identification of Cultural Significance) and 6.0 (Grading and Design Control). This Part IV will thus be read with an overlap with Part III.

4.4.2 Built Environment

CON 1: CONTROLLING THE FORM OF NEW AND INFILL DEVELOPMENT

Aim:

Provide the necessary advice on the control of form and quality of new and infill development in order to preserve or enhance the Matheran townscape and the Zonal Landscape.

Standards of design:

DES CON 1

New and infill development

- 1. In all cases of development the highest standards of design will be expected.**
- 2. Developments should not lead to pollution of ground water or to an increase in levels of pollution in any surface water runoff. Provision for refuse storage and adequate means of disposal should spelt out clearly at the approval level.**
- 3. A careful landscape ecology appraisal of the site will be a central element of any development design brief. Details including an assessment of the impact of the proposed development and any appropriate measures to alleviate this shall be submitted for approval.**

Extensive development

- 4) Extensive development will only be permitted where large-scale change is desirable; it should:**
 - a) **Relate satisfactorily to the scale, character and use of the adjacent townscape;**
 - b) **Have regard to the pattern of historic layouts and preserve such patterns in any scheme;**

- c) Relate satisfactorily to any features of open spaces, buildings or structures of character on or adjoining the site;
- d) Have careful attention to the scale, use and landscaping of spaces on the site;
- e) Take account of existing and likely future patterns of traffic and pedestrian movement
- f) Ensure that servicing and parking areas are sited to provide both good visual and practical amenity.

Infill development

- 5) Within areas of varied townscape of little quality, infill developments should have an independence of form and design and should create, where appropriate, new compositions and points of interest. The form and design should normally, however:
 - a) Be disciplined by the existing building lines and overall scale of the area
 - b) Have regard to the form and materials of adjoining areas.
- 6) In areas of varied townscape of significant quality, including all conservation areas, infill developments could also create new compositions and points of interest. The form and design of the building should normally, however, be disciplined by:
 - a) Building lines, scale of the area, heights and massing of adjoining buildings and the characteristic building plot widths;
 - b) The architectural characteristics, profile and silhouette and the type and color of the materials of adjoining buildings;
 - c) The complexity and richness of materials, form and detailing of existing buildings where the character of the area is enhanced by such buildings; new developments should echo this richness; simple robustness in detail will not necessarily suffice.
- 7) Good modern design may be acceptable for infill developments, if successfully carried out within the disciplines laid out in (5) and (6) above. In this regard a 'supplementary planning guidance', with an overall brief to which the developer may pay due consideration, may be prepared.

Further reference to new & infill design in conservation areas should be referred to in CON 5 and DES CON 5.

CON 2: DEMOLITION AND DESIGN CONTROL FOR UNLISTED BUILDINGS.

Note: Unlisted buildings form the stock of buildings that do not form a part of the "List" of buildings (proposed in this Report) with statutory control for conservation in Matheran (as distinct from unlisted buildings in conservation areas).

The unlisted stock (base for identification of listed buildings) in Matheran is identified on the basis of two aspects - the cultural significance of the building and it's state of preservation (the same as used for identification of 'listed' buildings).

Reference to the process of evaluation may be referenced from Part III, section B, 4.0. Further reference must to be made from CON 1, CON 3.

DES CON 2**Unlisted buildings**

- 1) Demolition of unlisted buildings maybe considered on the advice of the Matheran special area Heritage Advisory Panel (SAHAP).
- 2) A scheme for reconstruction will be treated as 'infill development'.
- 3) High standards of design will be expected in alterations and extensions to unlisted buildings.

Policies CON 1, CON 3 and DCR will also apply.

CON 3: PRESERVING LISTED BUILDINGS**Aim:**

Endeavor to protect and enhance all listed buildings, their settings and those features of special architectural or historic interest that they possess. (within and outside conservation areas). Reference of the individual List Cards and Part III.B, 4.0 and 6.0 is to be made while considering conservation/development proposals for all listed properties. 'Supplementary guidance' for listed building, may be prepared to have an advice on planning applications. Listed buildings will have an overlap of advice from the DCR (SADP).

DES CON 3**Protection of Listed buildings**

- 1) To preserve buildings of special architectural or historic interest, their setting and features of architectural or historic interest by using all available powers.
- 2) Proposals for total demolition or partial demolition will not normally be acceptable. (Reference is to be made to the "Grading and Design Control, Part III, 6.0)

Uses of Listed buildings

- 3) Proposals for the change of use of listed buildings which were purpose-designed for uses no longer viable, may be considered for a change of use (adaptive re-use) as per Part III, 6.0. The new and adapted use must not adversely affect the special architectural or historic interest of the building or it's setting.

Works to Listed buildings

- 4) All proposed works should be shown in an application and any matter that might be the subject of control under other or by another authority legislation (Forests, PWD etc. in Matheran) should be resolved or be capable of resolution in a satisfactory manner. Where it is necessary to determine the manner in which the work should be carried out, sensitive opening up and limited investigation will be encouraged, providing it is carried out in the consultation with the SAHAP.
- 5) All aspects of the proposals necessary to properly indicate that the overall effect of the proposal is not detrimental to the architectural or historic integrity (original interiors layout and furniture) or detailing of the building should be well represented. An inventory of the list of such items which contribute to the architectural and historic integrity of the building and it's setting (interior and garden layout, artifacts etc.) should become a part of every application. Alterations should normally be in accordance to style and detailing of the original building or with later alterations of architectural or historic interest. Wherever possible existing detailing and the contemporary features of the building should be preserved,

- repaired or, if missing, replaced. All works, whether they are repairs or alterations, will be required to be carried out in a correct scholarly manner, under proper supervision, by specialist labour where appropriate.
- 6) Extensions to listed buildings will only be acceptable where they relate sensitively to the original building. Where the existing original roof structure is of specific architectural or historic interest, it should be preserved.
Reference to be made to Part III, 6.0.
- 7) The SAHAP will impose, as necessary conditions on consents, in order to govern any aspect of work to a listed building including any that is necessary for the protection of parts of the building not within the area of the permitted works. In order to be able to consider the grant of permission or consent, sufficient information will be required to be sure that any works that might be permitted can be carried out without danger to the fabric and structure of the building and adjoining historic properties or buildings of character which may be affected by such works. Should during the course of the approved works, part of a building be found to be insecure or unstable or otherwise affected by the works, such measures as may be necessary should be taken in order to ensure the preservation of the building.
- 8) In order to reduce the risk of theft of architectural features from the historic buildings, it may be required to insist (as a condition) additional security arrangements in order to safeguard those features while a building is empty or during building works.

Setting of Listed buildings

- 9) Developments, which adversely affect the setting of a listed building or important views of listed buildings, will normally be not allowed.
- 10) All applications for development of listed buildings will integrate the visual and functional dimensions of landscape and landscape assessment and landscape ecology, must be an essential part of the design proposal. The applications may be presented in prescribed format.

Reference to 'Grading and Design Control Part III-B, 6.0, for control advice will be necessary. Policy CON 1, CON 5 and CON 6-10 will also apply.

CON 4: SAFEGUARDING ARCHAEOLOGICAL REMAINS

Aim

To ensure that potentially significant archaeological remains and data are properly safeguarded when sites are redeveloped.

DES CON 4 Archaeology

- 1) Promote the conservation, protection and enhancement of the archaeological heritage of Matheran and its interpretation and presentation to the public. The entire area (clubbing of the properties merely as an area) of the St. Paul's, and the two cemeteries is identified for an 'Archaeology Park' (Ref. to the subjective list cards).
- 2) Where development may affect land of known or potential archaeological importance (development of adjoining sites as in the case of cemeteries at Rambagh), the applicants will be expected to properly assess and plan for the archaeological, visual etc. implications of their proposals.

- 3) **Seek to ensure that archaeological remains and their settings are permanently preserved in-situ and are given statutory protection. In all the above cases, preservation in-situ is both desirable and feasible (with a management and repair scheme).**
-

4.4.3 Built and natural (cohesive) environment

CON 5: PRESERVING AND ENHANCING CONSERVATION AREAS.

Further reference to be from Part III, 4.0, 6.0 and 5.0.

Aim

Seek to preserve and enhance the character and appearance of Matheran's conservation areas.

DES CON 5

Conservation Areas:

Preservation and enhancement

- 1) **Seek to secure the preservation or enhancement of the character and appearance of conservation areas. Provision for the formulation and publishing of special guidance for the preservation, protection or enhancement of conservation areas should be made.**

Conservation Area Review

- 2) **Review of conservation areas and boundaries periodically, while taking into account of any representations or applications for proposals will be undertaken.**

Applications

- 3) **Applications for planning permission in outline for development within conservation areas will not normally be acceptable. In all cases applications will be expected to provide sufficient information about the proposed development and its immediate setting to enable a proper and full assessment of the potential effect of the proposal on the character and appearance of the relevant part of the conservation area.**
- 4) **Applications involving change of use will be normally considered for the contribution of existing and proposed uses to the character or appearance of the conservation area, and proposals, which would fail to preserve or enhance the character or appearance of the conservation area, will be resisted.**

Conservation Areas: Demolition

- 5) **Seek the retention of buildings, which make a significant contribution to the character, or appearance of the conservation area. Proposals involving the total demolition of unlisted buildings will be considered against the following criteria:**
- a) **The contribution the existing building makes to the character or appearance of the area, in relation to the potential contribution of the proposed replacement development and its anticipated ability to preserve or enhance the character or appearance of the area.**
- b) **The condition of the existing building and its capacity for adaptation.**

- c) Formal consent for total demolition will not normally be granted in the absence of detailed and acceptable proposals for the replacement development. Consent will be so conditioned as to tie demolition to the implementation of the approved scheme.
- d) Where it is considered necessary to retain an unlisted building in part or in whole, structural alterations to the building which would materially affect the character or appearance of the conservation area, will only be acceptable where they will preserve or enhance the character or appearance of the conservation area and where it can be demonstrated that the alterations proposed can be carried out without unacceptable risk to the retained fabric.

Alterations and Extensions

- 6) Extensions to buildings in conservation areas should preserve or enhance the character or appearance of the area. They should in general be confined to the rear or least important facades and should not upset the scale or proportions of the building or adversely affect the character, appearance or setting of neighbouring buildings.
- 7) Roof extensions should always complement the appearance of the existing building. Telecommunications equipment, satellite dishes or other roof plant should be sensitively located and should not adversely affect the character or appearance of conservation areas.
- 8) In buildings, which contribute to the character and appearance of conservation areas, it may be necessary to retain existing features, such as doors or windows, or to replace them in facsimile. Windows constructed in aluminum, UPVC or other non-traditional materials, or of a design out of character with the building in question, will not normally be acceptable. The replacement of existing non-traditional features with traditional alternatives will be encouraged.
- 9) In buildings which have lost important original features such as shop fronts, traditional forecourts with original house facades (behind additions of new uses like restaurants), or any decorative work of the original facades, the presumption will be in favour of restoring the building to its original appearance or replacing the missing features with designs which complement the architecture of the building in question.

Materials

- 10) In most cases new development or alterations or extensions which materially affect the character or appearance of buildings in conservation areas will be expected to use traditional or other durable natural materials which preserve or enhance the character or appearance of the conservation area.

All the policies (CON and DES CON) will apply to conservation areas. Further reference will also be made to Part. III, 4.1 and 6.1 and 5.0 verify.

CON 6-10: ENSURING HIGH STANDARDS OF TOWNSCAPE DETAIL AND PLANTING

Note: The scope of this policy covers the whole of Matheran – including conservation areas, listed and unlisted buildings.

Aim

To protect and enhance the 'green' environment of Matheran, protect sites or features of nature conservation importance and ensure high standards of design in all townscape detailing such as advertisements and street furniture.

CON 6: TREES AND SHRUBS (AS FORESTLANDS AND WITHIN INDIVIDUAL PROPERTIES)**Note:**

- 1) The reserved forests of Matheran are very important to the visual quality and amenity of built up areas. Matheran as Hill resort attracts tourists based only on its natural assets. Nature conservation and ecology are therefore a resource most worthy of care and protection. Special guidance on the preservation of trees and shrubs may be prepared and published.
- 2) The Regional Forest departments have to place tree preservation orders (refer to Forest Act 1927) which are considered most important to the visual and ecological quality of Matheran, in order to prevent their removal or mutilation. Environmental management of this aspect of Matheran should be planned within inter-departmental schemes. All development which requires the removal of trees, will be generally refused or seek replacements.
- 3) Protection, continual maintenance, pruning and replanting of trees and shrubs is needed in order to maintain the stock. Planting programmes can be initiated, and a requirement of planting in private developments as a condition on planning consent can be insisted upon. Proposed development that would result in the loss or damage to trees, especially those making an important contribution to the street scene or the character of a conservation area will be discouraged, and will normally require a proper replacement when a tree is felled. Trees should also be protected from street or road works and use of chemicals on road surfaces.

DES CON 6**Trees and shrubs**

- 1) To continue to make tree preservation orders wherever necessary and protect all trees that are the subject of tree preservation orders.
- 2) To continue to replace and plant new trees and shrubs. Such planting may be required as a condition of development permission.
- 3) To resist the loss of trees unless dangerous to the public or in rare circumstances when felling is required as part of a replanting programme.
- 4) To refuse permission for developments likely to result in the damage to or loss of a tree which makes a significant contribution to the character and appearance of the area.

Policy guidance from CON 1, CON 2, CON 3 and CON 5 will also apply.

CON 7: SIGNS AND ADVERTISEMENTS

DES CON 7**Signs and Advertisements**

- 1) Signs and advertisements must be well designed and sensitively located within the street scene. When considering outdoor advertisements due regard to the circumstances of each case and the interests of amenity and public safety.

- 2) Signs and advertisements will not normally be acceptable on street furniture in conservation areas, listed buildings or other sensitive locations (nodes and other open spaces like parks etc).
- 3) Signs and advertisements should be carefully related to the character, scale and architectural features of the building on which they are placed. Within conservation areas and residential areas, illuminated box signs and projecting signs will not be permitted unless they can be successfully related to the design and detailing of the building and do not detract from the special character of a group of buildings or a street.
- 4) Shop signs, including projecting signs, should normally be located at fascia level.
- 5) Moving digital displays and message boards and intermittent or flashing signs will not normally be acceptable.

Signs at High Level

- 6) High level signs will be unacceptable unless it can be demonstrated that they make a positive contribution to the character of an area. Hanging advertisements across the street in conservation areas and in Matheran will be inappropriate. Balloon advertising will normally also be inappropriate.
- 7) Advertisements and hoardings on the road from Neral to Matheran, at the public meeting places like the Charlotte Lake, all the view points etc. will generally be not accepted.
- 8) Random advertisements put up on tree trunks will be not are acceptable generally in the whole of Matheran.
- 9) In conservation areas portal gateways advertising shops and announcing shopping centers detracts from the natural setting of the street nodes and will be not acceptable. Strategies for the reversal of these should be formulated within enhancement schemes.

Hoardings

- 10) Permanent advertising hoardings will not normally be permitted and there will be a presumption against the display of advertisement hoardings in conservation areas and adjacent to listed buildings.

Temporary Advertisements

- 11) Permission for temporary promotional banners and other forms of temporary advertising will not normally be permitted, particularly where they would detract from the character or appearance of a conservation area.

Policy guidance CON 1, CON 2, CON 3, CON 5 will also apply.

CON 8: STREET FURNITURE

DES CON 8 Street Furniture

- 1) Seek to ensure that necessary street furniture is of good unobtrusive design, harmonises with the street scene, is sited so as to minimise visual clutter, and allows clear and safe passage for people.

- 2) In conservation areas seek to ensure that street furniture is of a design compatible with the character of the area.
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CON 9: BOUNDARY WALLS, FLOORSCAPE AND RAILINGS.

DES CON 9

Railings

- 1) In parts of conservation areas and at the specific locations of view points and parks, where railings form an important feature of the townscape it will be required to have appropriately designed railings such as to not detract from the character and appearance of subjective sites.
 - 2) In conservation areas where characteristic boundary walls form an important feature in the townscape, their demolition or unsuitable replacement will not normally be permitted and such decisions should be included to within the scope of planning control.
 - 3) Permission will not normally be granted for development, including the creation hard-standings, on front gardens, which are important to the character or appearance of a conservation area or to the setting of a listed building or group of buildings. In particular, the recent trend of creating large portal entrances reached up by a flight of steps with elaborate step guards (all in laterite stone from the old building), as encroachments on the original street edge (at Kumar Plaza and Richie Rich Hotels) will be discouraged. Enhancement schemes for removal of such features, which detract from the character, and appearance of conservation areas should be planned.
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CON 10: PUBLIC ART

DES CON 10

Public Art

- 1) Encourage proposals for public art, where appropriate, in the provision and enhancement of buildings and open spaces. All proposals must be of a high standard of design and quality.
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4.4.4 Natural Environment

Note: There will an overlap in the considerations of components between CON 11, CON 12, DES CON 11 and DES CON 12.

CON 11: PROTECTING THE WIDER ENVIRONMENT - ECOLOGICAL SETTING

Aim

To protect and enhance the wider environment and the ecological setting of Matheran.

DES CON 11

Ecology

Note: The recommendations and suggestions presented here have to be incorporated mainly as strategies within the SADP with a detailed background of specific locations and management outlines. Although this Report borrows from the very few available studies

carried out on the ecological concerns of Matheran and from the observations during the course of the survey, most aspects lack the required detailed assessment.

- 1) No de-reservation of any part of the forest land will be generally permissible. The use of the forest for non-forest purpose, excepting for any work relating to conservation, development and management of forests and wild life (reference to the Forest Act 1927). With reference to this the proposal for eco-tourism (annexure no. 8) as per the Forest Protection Department's plans, need a careful scrutiny before implementation - especially the inclusion of constructing several building for the purposes of facilitating tourists and education programmes. It is to be noted that while it is important to make Matheran more accessible to tourists, it will not be at the expense of losing more forest cover. A sustainable solution would be to have these facilities within existing buildings - as adaptive reuse proposals.**
- 2) Studies for identifying tracts of specific tracts of forest lands and their status need to be undertaken so as to have specific goals for protection, conservation and development of subjective parcels of lands. Undertaking intensive scientific character appraisals for the whole of Matheran and the valley slopes can do this.**
- 3) Vigilance of the forestlands on the plateau and along the slopes is a much-required aspect. The cutting of forests by local villagers has been increasing over the years. Forest fires and the system of 'shifting cultivation' also need a check.**
- 4) The proposals for water parks and children parks suggested within the above proposal and the Draft Modifications to DP 1998 will induce a change in the attitudinal concept of eco- tourism and will be abandoned. Enhancement programmes aimed at protection of the natural environment should be formulated involving the locals and the tourists.**
- 5) The level of human interference with the natural topography of Matheran accentuated by an overall neglect by people and administrative bodies (Forests and the Council) has led to loss of soil cover, exposing the roots of thousands of trees - especially at the road edges. Maintenance of retaining walls and laterite pitching along the roads should be undertaken urgently as enhancement schemes, with a priority over general beautification projects.**
- 6) Preserve the pedestrian status of Matheran. The sustenance of the pristine quality of Matheran is owing to solely to the pedestrian status of Matheran. Ecological imbalance due to even the slightest fragmentation of the cohesive forests will lead to an irreversible damage. The recommendation of making the Simpson Tank to Elphinstone Lodge property, a vehicular road as per the Draft Modifications to DP should be deleted. Enhancing the quality of the roads will improve the access for tourists and other commodities greatly.**
- 7) The environmental quality of the space for unloading of goods that arrive at Matheran, at the Simpson's Tank needs to be improved. This space though ideally located so as not to allow the entry of vehicles beyond this limit, has a tremendous tourist potential (the historic Simpson's Tank), which remains undermined. An enhancement scheme aimed at sound management needs to be formulated.**
- 8) Most of the slopes of the Hill are steep, above 30 degrees. Deccan Trap, which constitutes the body of the hill formation, is a bad aquifer so the area has a very less potential of ground water. Most of the rainwater washes down in the form of springs leading to severe soil erosion of the precious laterite topsoil. Water harvesting systems with subjective application to rejuvenate springs must be worked out. Bunding of streams and springs, as check dams along the natural drainage channels will reduce the speed of flow and check soil erosion.**
- 9) The existing water reservoirs - Charlotte Lake and its waste weirs (at Celia Point) need maintenance related management and augmentation schemes. The other**

- major sources of water storage at Simpson's Tank, the Malet and Harrison springs, the Walkers tank etc. need to be given priority for investigating their potential for local use.
- 10) The historic rainwater (surface run-off) drainage system as designed by the British was in good balance with the natural attributes of the Hill. The rampant soil erosion of the hill today is due to the fact that this existing system is in a highly neglected and unmaintained condition. The historic Maps of Matheran indicate such systems quite accurately and thus the revival of these has a sound recorded base for revival. This will not only check soil erosion, but also assist the rejuvenation of the springs and streams.
 - 11) Improvement of the road systems by regular maintenance of the floor paving (traditional cobbled paving), kerbs, aprons and laterite pitching (retaining walls), compounded with good drainage should also be commissioned as part of enhancement schemes.
 - 12) The disposal of wastes on the forest floor, especially plastic bags which are not biodegradable, will have serious effects on the soil conditions and thus on the entire eco-chain of the Hill. A complete ban, with stringent vigilance (involving education of the tourists and the locals) on the use of plastic bags and its litter should be imposed.
 - 13) There is no provision of garbage collection and disposal systems on the Hill. As a result it is dumped either in the immediate surrounds or thrown down the valleys. A severe aesthetic and environmental blight along the valley edges (at the view points) is noticed. Survey indicates this phenomenon to be growing rapidly with the increase of tourists each season. A proper method of collection and disposal of garbage and refuse needs to be worked out urgently.
 - 14) One of the main activities for sport and recreation is horse riding. Horses are also the chief vehicles for mobility on the hill, while along with mules and ponies are also used as amenity for carrying goods. Horse manure is major aspect for environmental concern. There area several tested methods for collecting and recycling of the manure which can be explored and used for the well being of the station.
 - 15) Solar power for general electrical needs like water heating and lighting is a non-polluting and easily available source of energy. It is recommended to use this facility under a designated regulation (annexure 3) at Matheran.
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CON12: PROTECTING AND ENHANCING THE NATURAL FEATURES AS RESOURCES AND FOR PUBLIC ACCESS.

Aim

To conserve and enhance the natural environment and facilitate the use of the Hill as a tourist resort.

DES CON 12

Natural features

- 1) The ownership of the components listed under these categories rests with the Forest department and the Matheran Municipal Council whose duty it is to protect these and enhance their quality as natural resources for direct or indirect human use. Strategic approach to research and policy guidance should be attempted in partnership between the various authorities.

- 2) Proposals for enhancement of the resources, especially the viewpoints should aim at conservation of the intrinsic nature of the component and not attempt any superfluous beautification attempts.**
- 3) The guardrails at the viewpoints should be applied only where it is of utmost importance and be of an appropriate design. No structures, permanent or temporary will be considered for permission at the viewpoints such that they mar the naturalness of the place. A detailed study for the viewpoints (depicting their boundary for design control) at Matheran should be undertaken for providing detailed design guidance.**
- 4) The quality of environment, public access, protection, conservation and enhancement of the water bodies will be studied in detail with assessment reports and design guidance for each. This can be achieved by a co-ordinated effort from the various authorities.**

Policy CON 6-10, CON 5 and CON 11 will also apply.

CRITICAL APPRAISAL OF DRAFT MODIFICATIONS IN THE DEVELOPMENT PLAN OF MATHERAN HILL STATION ISSUED BY THE MATHERAN HILL STATION MUNICIPAL COUNCIL AND TOWN PLANNING AND VALUATION DEPARTMENT, RAIGAD BRANCH UNDER SECTION 37 OF M.R. & T.P. ACT OF 1966.

**Prepared by: Arch. Kirtida Unwalla (conservation)
Arch. Suneeta Samant (planner)**

INTRODUCTION

- The Development Plan (D.P.) of Matheran Municipal Council came in force on 01.03.1987. It was noticed that many reservations and public sites attracted acquisition of land belonging to the forest Department, hence the State Government directed the Municipal council to exclude all the lands belonging to the Forest Department. This involved shifting of certain reservations. (13.1 - pg.9). The Development control Regulations sanctioned by the State Government along with the development Plan were found unsuitable for Hill Station development and the Municipal Council was of the opinion that those should be replaced by a new set of appropriate regulations. (13.3 - pg.9)
- The Municipal Council, therefore decided to carry out modifications in the sanctioned Development Plan and to replace the Development Control Regulations by a new set of regulations by following the procedure laid down in Section 37(1) of the Maharashtra Regional & town Planning Act of 1966 by passing a resolution No. 474 dated 12.02.1996. (13.4 - pg.9)
- A notice for inviting objections and suggestions from the public was published on 05.09.1996 in part II of Maharashtra Government Gazette (13.4 - pg.9)
- The Public Notice for inviting suggestions and objections in respect of the modifications (with a schedule of proposed modifications) was given in the local newspapers dated 25.07.1998.
- A period of thirty days was stipulated for submitting suggestions and objections. Many concerned individuals, N.G.O.s as well as Government organizations like M.M.R.D.A. (Mumbai Metropolitan Region Development Authority) raised their objections against the proposed modifications.
- Public hearings for suggestions and objections were held between 21.11.1998 and 23.11.1998.
- The finalization of the Draft Modifications is pending till date.

TECHNICAL SHORTCOMINGS WITH REF. TO THE “NOTICE” VIDE SECTION 37 (1) OF THE M.R. & T.P. ACT 1966 OF THE MODIFICATION TO THE DEVELOPMENT PLAN

- The Report of Modifications does bear any date.
- The signatories on the Modified Development Plan attached to Report (Mr. Surve and Mr. Diwadkar) were not the true persons holding the respective offices of Assistant Director of Town Planning (A.D.T.P.) and the president, Matheran Hill Station Municipal Council, at the date of publication of Modifications. The signatures are not dated.

- The list of modifications enumerates shifting of reservations, proposals for additional reservations, replacement of prevailing D.C. regulations by a fresh set of regulations and significant changes in the zoning pattern of the Hill Station etc. Such modifications lead to **major change in the character of the Development Plan**. For the reasons of **major changes** the notice under section 37(1) of M.R.& T.P. Act is inappropriate. With reference to the above and the provisions of section 38 of M.R.& T.P. Act, the Development Plan of Matheran needs to be **revised** and **not modified**.

SUGGESTIONS / DISCUSSIONS FOR AN IDEAL APPROACH TO A SUSTAINABLE DEVELOPMENT PLAN FOR MATHERAN

- The Development Plan and Modifications seem to have been prepared without taking into account the unique character of Matheran especially in terms of its ecological setting and sustainability. The land use proposals like amusement parks and water parks are mostly based on wrong presumptions, hence inappropriate for the place, which is well known for its glorious natural environment. The Development control regulations seriously lack the sensitive approach that should regard the local built form character and the virtue of natural setting.
- Although a few statements in the report highlight Matheran as a Natural Hill Station, the proposals in the plan insist upon augmenting artificial means for the entertainment of the tourists (7.1 - pg.4) The Plan totally overlooks the need of basic infrastructure for the promotion of conducive tourism like- information centers, guided eco-tours, camping facilities for trekkers etc.
- Matheran is the only pedestrian hill station in India. Its sustainability and the ecological stability are very closely associated with its pedestrian status. Any drastic change in the status will totally destroy the charm of the hill station. Ignoring this fact, the plan suggests major changes in the land use and welcomes the entry of vehicles and helicopters in Matheran.
- The plan overlooks the urgent need for augmenting the water supply on the hill. The potential to harness the large amount of rainwater that runs off down the valleys depleting the topsoil, needs to be exploited. Scientific research needs to be undertaken on a priority basis for exploiting this resource and tapping its potential for rejuvenating the natural springs that would help in supplementing the local water reserves.
- Various glaring issues such as removal and disposal of garbage and plastic wastes, improvement of internal roads and rail infrastructure remain untouched in the Plan. Disposal of solid and liquid wastes produced by ever increasing tourist population is a matter of serious environmental concern for the Hill Station and a Management plan dealing with this issue should have been an essential part of the Development Plan.
- The rapid growth of the hill station and its degrading natural environment actually require a thorough **revision** (under an appropriate section of the M.R. &T.P. act) of the Development Plan that is based upon fresh data and thorough investigation of the problems and issues related to this unique place.

CRITICAL ANALYSIS AND SUGGESTIONS WITH REFERENCE TO THE DRAFT MODIFICATIONS TO THE D.P. (REF.: THE REPORT AND MAP)

A) General Planning requirements – Land uses and the Manner of Development (Part II / (14) – Pg. 46)

- The proposal of a vehicular road from Dasturi Naka to Matheran plot no.41 is redundant. In fact, no road in Matheran should be made vehicular for the reasons stated above (13.5(3) - pg.10)
- The modifications propose numerous reservations for tourist parks, amusement parks, water parks, swimming pool etc. Such facilities cannot form the priority list for the development of natural hill station like Matheran. Locations identified for these land uses are also inappropriate and unjustifiable. (13.5 no.5,8,11 - pg.11)
- The proposals for ropeways from Dodhani to Maldunga point and from Dasturi to Bazaar are highly objectionable being environmentally and aesthetically inappropriate for the hill station. These would also lead to a greater tourist influx beyond the carrying capacity of the hill. (12.7, 13.5(5) - pg.8,11)
- The reservation for Helipad in a part of Paymaster Park needs to be ruled out. For a natural hill station like Matheran, the helicopter service should be restricted only to emergency and or communication. Helicopter service for the urban elite at the cost of environment is an absurd idea. (12.8, 13.5(12) - pg. 8,11)
- Reservations like 'Re-housing of Slums' and 'Municipal Holiday Home & Tourist Park' are proposed on the sites holding immense heritage value for Matheran hence are strongly objected to. Promotion of organized slum type development in a natural hill station like Matheran should be discouraged as it may have disastrous implications for the place in future. The municipal council also needs to take immediate measures to control the sprawl of unauthorized slums in bazaar area. (13.5(7) - pg.11)
- It is proposed to renovate the Kapadia Market on 'modern lines'. The market built in 1917 is one and the only formal market established in Matheran. Having an excellent plan form, it is capable of sustaining the use it is designed for and does not require renovation on modern lines. The building qualifies for being a significant historic building contributing an essential character to the bazaar area. (9.3 - pg.6)
- The plot of Karsandas Mulji Library is proposed to be reserved for library and stalls. The library holds significant historic value and its setting at a strategic nodal location in the bazaar area contributes greatly to the townscape character hence must be free from non compatible land uses like commercial stalls and kiosks. (reservation no.32 - pg.13)
- Proposals for 'dhobighat' near Malet spring and 'Municipal Quarters' in the catchment area of Charlotte Lake are inappropriate owing to their hazardous environmental consequences. (reservations no. 15 & 35 - pg. 13,14)
- Proposals of 'Government Godown' and 'Amusement Park' are located in the areas that are presently thickly wooded. Similarly, a 'Tourist Park' is proposed at every View Point. The logic behind artificially 'developing' a naturally beautiful site is questionable. (reservations no. 21,26,1,14,28,29,42 etc.)

B) General observations pertaining to the overall Planning Proposals (Ref: Report & Map).

No Development Zone (13.5(3) – pg.10)

The report proposes inclusion of 'other Government lands which have thick forest' in No Development Zone, however the report of modifications does not indicate any allocation of such No Development Zone in the Land use Classification or in the Development Plan drawing. The report does not clarify provisions under the No Development Zone either.

Green Zone (modified D.P. drawing & part IV / (72) – pg.92)

The Land use classification proposes to identify 'Green Zone' within the private properties on ad-hoc basis. Such 'Green Zones' are indicated in a few Matheran plots. The report does not clarify

whether the induction of the 'Green Zone' implies a 'Reservation' on the part of a private property. The criteria for induction of such 'Green Zone' remains unexplained and leads to queries about the location and extent of the 'Green Zone' within a property and its implications for F.S.I. computation. (Modified D.P. drawing)

Sub-division of Land (part II / (20) – pg.56)

Ambiguity prevails in the regulations controlling the Sub division of land in Matheran. On one hand the regulation insists that 'No subdivision of bazaar plot or any Matheran Plot shall be permitted.' However, subdivision of Matheran plots "for public purposes and for conservation of forest or for afforestation is permitted by regulation". This clause needs to be evaluated in detail for subjective plots, to verify in the first place if any plots can sustain such proposals and also, to assess its impact holistically on Matheran. In fact, to retain the character of the forest, subdivision of plots in Matheran should be strictly banned.

Inclusion of Hotels in the Residential Zone (part II / (14) – pg.46)

As per the sanctioned Development Plan (1987), Hotels, Resorts and Holiday Homes were classified in the 'Commercial Zone'. The draft modifications have categorized these land uses into the 'Residential Zone'. The categorization deviates from the normal conventions in Urban Planning. The report does not provide any explanation for the drastic change. Such classification probably facilitates easier conversion of a residential property into a hotel or in some way facilitates concessions in either the lease rents or property taxes. Also as per the draft modifications the allowable F.S.I. for Hotels is higher than that of residential. If the hotels (commercial) are not classified as different from residential as a land use, then the discrimination in the F.S.I. is not justifiable. Matheran is presently witnessing rapid conversion of residential properties into hotels especially on Mahatma Gandhi road and Kasturba Gandhi road, may be as a preemption of the above regulation.

Extent of Bazaar zone (part IV / (67) – pg.86)

As per the jurisdiction of 'Bazaar plots', plots on the west side of Kasturba road are not included in the 'Bazaar plots' area (Residential Zone R-1) yet in the Land use Classification, these are included in the 'Residential zone'. This is either a mistake or a deliberate change for the benefit of the plot owners.

F.S.I. / Built-up Area (part II / (21) – pg.57)

(A Condensed Summary for reference)

Nature of Occupancy	Maximum F.S.I. Ground Coverage	
<u>Bazaar Plots</u>		
Purely Residential	1.33	2/3rd of plot area
Hotels, lodging Houses, Holiday Homes, Rest Houses, Lodging Houses (upto 2 star category)	1.33	2/3rd of plot area
Hotels etc. (3 star and above)	not indicated	not indicated
Educational & Medical facilities	not indicated	not indicated
Govt./Semi Govt. Buildings	not indicated	not indicated
Other Public Buildings	not indicated	not indicated
<u>Matheran Plots</u>		
Purely Residential	0.1	10% of plot area
Commercial & Comm. with residential	0.1	10% of plot area

Hotels, lodging Houses, Holiday Homes, Rest Houses, Lodging Houses (upto 2 star category)	0.15	10% of plot area
Hotels etc. (3 star and above)	0.20	15% of plot area
Educational & Medical facilities	0.15	10% of plot area
Govt./Semi Govt. Buildings	0.15	10% of plot area
Other Public Buildings	0.10	10% of plot area

Observations / Suggestions

- F.S.I. for Bazaar area is actually high for a place like Matheran. This F.S.I though, may be allowed since the existing character of the area is largely dominated by a dense built form texture. This is an acceptable character looking at the overall use of the place. (The new buildings which today are in violation of this character however is to be dealt with severely).
- Although proportionately lower F.S.I. is granted for Matheran plots, the allowable built up area that is permitted by the F.S.I. for large plots (over 10,000 sq. mts.) is considerably large. F.S.I. presently consumed by most of the large residential plots is as low as 0.02 to 0.05 allowance of higher F.S.I. gives incentive to build which may lead to denudation of forest cover (number of trees existing on the plot should be surveyed and should become a part of the land record).
- F.S.I. gradations (as slabs of various plot sizes) inversely proportional to the plot area maybe introduced to control the bulk of built forms.
- Matheran being a special place with a high significance, regulations like F.S.I. need to be treated with a lot of caution for sustainability of the place.

Heights of Buildings / Number of Storeys (part II / (22) – pg.58)

The DP specifies the total number of storeys for buildings (both Matheran and Bazaar plots) to be two floors (ground and one upper floor). This specification in general is sufficient. Further control reference as mentioned here below should be vigilantly applied.

Due the nature of the highly undulating topography of the Hill the setting of the buildings is in conformity to subjective contours (sloping sites). In most cases (especially in the bazaar) the plots abut two roads, each set at differing levels.

The maximum heights to be allowed for the building thus needs to be very judiciously derived keeping in consideration the undulating terrain and the visual character which would be affected by such a major feature as the height of a built form. There is ambiguity in the regulation that specifies the allowable heights.

The regulation permits maximum storeys as ground and one upper with a maximum height of total 9.0 mts. The heights of each floor specified as ranging from 3.0 mts. to 4.2 mts., the plinth height as a minimum of 0.60 mts. and rules regarding the computation of heights of roofs based on its orientation to the road leaves a great margin for ambiguity.

This regulation most importantly should consider the reference points at the level of the road(s) in conjunction with a mean height within the plot (maybe the mean average of the plinth).

The other features that are to be allowed over and above the specified total height of 9.0 mts. also need to be carefully designed considering the fragile visual character of the hill, especially the heritage precincts.

Basements and Stilts (part III / (44) & (45) – pg. 69 & 70)

Features like basements and stilts are normally allowed for urban areas. The status of Matheran in spite of being characterized as “urban” needs to be evaluated from a special angle for allowing such features. The land use and total built area of Matheran are key features for its sustainability and fragile ecology.

Basements should be strictly not allowed in Matheran since it would alter the terrain and topography of the hill on a large scale and greatly affect the ecology of the place. It would have side effects on the surface run off which would in turn affect the soil structure, etc.

Stilts are features that are allowed mainly for car parks. Matheran has no cars and as such this feature requires to be nullified. Besides it also affects the height of structures and in turn the character of the place.

Both the above features as part of the buildings are (according to the draft DP) not to be used as habitable or kitchen rooms. Developers are misusing the features to create additional floors in the buildings below the ground floor and using these basement floors and stilts for additional hotel rooms.

A sensitive exercise is required for defining architectural control and regulations rather than just blindly following the normal D.C. regulations that are adopted for urban areas.

DEFICIENT PARTS OF THE DRAFT MODIFICATIONS

Architectural Control

Architectural control vide Development Control Regulations (D.C.R.) ideally forms a distinctive separate section of any DP. In this case this section is absent and is covered in parts and parcels under different sections. This makes the legibility of the control extremely poor and confusing.

A mention of sloping roofs comes in the definition of the term 'roof' – which only casually states that no flat roofs or terraces would be permitted. In the case of sloping roofs specifications for the gradient of the roof is essential.

Since a sloping roof is classified as a compulsory element of the built forms, the computation of the total building heights should consider the geometry of such roofs (as an average of the triangular gable end or that of the difference between the eaves and the ridge) irrespective of which side faces the road.

INCLUSION OF “HERITAGE REGULATIONS” IN PART V OF THE MODIFICATIONS.

While this inclusion comes as a lifesaver item for the conservation of Matheran, it is dealt with in an extremely fleeting and grossly inappropriate manner.

It is to be noted that it is prior to the issue of the Notice of the draft Modifications to the D.P. that the M.M.R. Heritage Society had initiated a study on the aspects of Heritage Conservation of the Hill Station. This study titled “A Comprehensive Heritage Listing Proposal for Matheran” is now complete and consists of a detailed List of Built and Natural features. The study also is indicative of a correct methodology for an approach to Sustainable development and Conservation of Matheran.

It is suggested that this above approach be adopted for the preparation of a Development Plan (as a fresh approach) along with a Management Strategy as suggested for the Conservation and Sustainable Development of Matheran.

SUGGESTIONS FOR DEVELOPMENT CONTROL REGULATIONS

NOTE:

It is to be noted that the suggestions as discussed here below have a reference to the 'Development Control Regulations' (DCR) in the proposed Draft Modifications (1998) to the Development Plan of Matheran Hill Station.

That the discussions below do not compile a complete set of DCR and should be considered only as a few important suggestions derived from the study 'Comprehensive Heritage Listing of Matheran'.

The other points with reference to Draft Modifications, 1998, which do not form a part of this discussion should not be considered as acceptable components of DCR for Matheran. To compile a correct set of DCR, for incorporation within the proposed Special Area Development Plan, a full-fledged revision of the DCR is essential.

The 'Policy Guidance' in the Final Report forms a base for the formulation of the appropriate DCR for Matheran.

Reference - Part I - D.C. Regulations for Matheran Hill Station

9. Procedure for obtaining Development permission / Commencement certificate) - 9(E) Key Plan or Location Plan, page no. 30

- i) The scale of the required Key Plan to be submitted along with the application needs to be modified to 1:4000 instead of 1:10000.
- ii) It must be made mandatory to show all physical features within a distance of at least 300 meters from the plot boundaries on the Key Plan - such as forest areas (with an inventory of the number of existing trees on site), water bodies, natural drainage channels, view points, springs and structures.

9(F) Site Plan, page no. 30 and 31

In addition to other requisites mentioned, the site plan must incorporate or attach,

- Original Contour Plan (separate document or part of Site Plan at an appropriate scale) showing alignments of natural drainage channels.
- Vegetation Plan indicating all types of plants and the details of pathways, terracing, retaining walls and other landscape features existing on the plot.
- At least two sections through the site indicating the land gradient, showing the structures existing on site and the implications of the new proposals and its affects to the topography and terrain of the site.

Reference - Part II - General Planning Requirements - Land-uses and Manner of Development

18. Requirements of sites

In addition to other parameters mentioned, the following need to be incorporated:

(No piece of land shall be used as a site for the construction of building...)

- If the gradient of land exceeds 15 degrees
- If the construction involves any tree cutting. (instead of 'major' tree cutting as mentioned in 18 i).

The term 'misfits in the environment' in the same sentence, though appropriate, needs elaborate explanation. Reference for such an elaboration may taken from the Policy Guidance in this Final

Report, as suggested under various components e.g. listed buildings, unlisted buildings, conservation areas etc. as per the subjective applicability of the proposal.

20. Sub-division or Layout of Land

Contradicting statements - paragraph 3 of point 'a', point 'b' and point 'c' should be removed from the regulation to clarify that no sub-division of Bazaar / Matheran plots or other lands shall be permitted.

Further to this amalgamation of plots should not be permitted.

21. F.S.I. / Built-up Area

Considering the large size of most land-holdings, FSI applied as a blanket of 1.33 for Bazaar plots and 0.1 for Matheran plots is undesirable.

The suggestions for consideration and incorporation are:

- i) FSI. gradations (as slabs of various plot sizes) inversely proportional to the plot area maybe introduced to control the bulk of built forms in Matheran plots as well as Bazaar plots. For an example - FSI 1.33 may be permissible for bazaar plots admeasuring 500 sq. mts or less.
- ii) The FSI should be prescribed as per the size of plots – as slab ranges. The slab ranges can be as under:

For Bazaar plots:

<u>Area in sq.mts.</u>	<u>Allowable F.S.I.</u>
upto 500	1.33
501 to 1000	1.00
1001 to 2500	0.75
2501 and more	0.50

For Matheran Plots:

upto 10000	0.10
10001 to 20000	0.09
20001 to 40000	0.075
40001 and more	0.05

Such a conclusion is drawn from the identification of built area ratios as existing in Matheran, as consequence of which the significant green character is maintained. Refer to Table no.2. (Annexure - Final Report)

- iii) FSI must be strictly determined on the basis of plot areas and uniform regulations should apply to all land- uses. (Residential / Commercial / Institutional etc.)

22. Heights of Buildings

- i) Maximum number of storeys in a structure must not exceed Gr. + 1 (ground and one upper floor) under any circumstances (for Matheran and Bazaar plots) for the entire Matheran plateau. The maximum number of floors for subsidiary buildings (the servants and guest block, ancillary buildings etc.) will be restricted to ground floor only.
- ii) For computation of height, the mean average of the plinth should be considered as the base point of reference (at the ground level). The total height of the building as measured from this base point (mean of the plinth) will not exceed 9.0 mts. For

- unusually long buildings this computation may be done with reference to more than one base points (mean of plinth established for parts of the length).
- iii) All buildings in Matheran will have pitched roofs with gradients not less than 22 degrees. The total height of 9.0 mts. for the building will be measured as the distance between the mean of the plinth (base point) and the average of the eaves level and the ridgeline of the roof.
 - iv) The reference of road datum will have no bearing on the computation of the total height of the building.
 - v) Specified plinth height of minimum 0.60 mts. and floor heights ranging between 3.0 mts to 4.2 mts. are generally acceptable. Provision of mezzanine floor will be not allowed.
 - vi) Basements, stilts to be absolutely not allowed, since these features are used as a means to exploit extra floor space in addition to the permissible FSI leading to inappropriate building heights.
 - vii) Attic floors constructed within the pitch of the roof may be allowed.
 - viii) The other features (staircase enclosures for headroom, T.V. antennas and discs, other building services related equipments, hoardings etc.) that are likely to be installed on the roofs, over and above the specified total height of 9.0 mts. also need to be carefully designed in due consideration of a compatible skyline and silhouette of the Hill.

23. Open Spaces

- i) The external open spaces in the identified Conservation Areas (Area 'A', 'B' and 'C') will be guided by the detail policy guidelines in the Report (refer to New and Infill buildings). The open spaces will be restricted by the footprints of existing buildings (with no deviations). Open spaces for new and infill buildings will have a reference of alignment from immediately adjoining properties.
- ii) New and infill buildings in the rest of Matheran will have a uniform guideline for external open spaces irrespective of the land-use (residential, public-semi public, hotels etc.) The margins of open spaces may be decided as per the slab range of plot sizes proposed above (21 – FSI / Built-up area).

Reference Part III, Requirements of parts of Buildings

41, 44 & 45: Mezzanine, Basements and Stilts – pg. 69 & 70)

The DCR for this part will be as discussed above (22 – Heights of buildings).

Reference Part IV, Land use Classification and uses permitted

This has a reference to 'General Observations' presented in the Critical Appraisal of Draft Modifications, 1998 above.

ARCHITECTURAL CONTROL (brief suggestions):

Note: The Draft modifications 1998, are deficient in providing advice on 'Architectural Control'. The suggestions below provide such advice in part and are derived from the Final Report, Character Appraisal, Part III, 5.0.

- i) The form of all buildings in Matheran should be in conformity with the prevailing architectural style and character.
- ii) Within existing groups new facades (within plots or infill) should respond to the rhythm, scale and proportions of neighboring properties. Such new groups should also respect the layout patterns of green open forecourts (with/without terracing), backcourts and inner courts.
- iii) Windows and doors in new buildings / additions and alterations / extensions should generally reflect the structural format (load bearing - arched openings) and proportions found in the traditional buildings and be a balance with the design as a whole. The material, color and the glass of the openings should respect the traditional ambience. Tinted and mirror glass will be considered obtrusive, Metal sections should be of appropriate design, form and finishes (painted, epoxy coated). The window shutters should generally be of openable type (not sliding).
- iv) The traditional material used for buildings has been the local laterite (red) stone (exposed / plastered and painted) using the load bearing type of structural system. Local laterite mining being banned, the new constructions may import the material from other regions. The load bearing system should generally be considered (using bricks or laterite stone).
- v) The heights of buildings in the area 'A' are mostly single storied while in the other areas it is a maximum of two floors. A maximum of two floors can generally be permitted within the areas, taking into consideration the aspect of intensification in the case of smaller plots and the setting of adjoining buildings.
- vi) The traditional form of most buildings in the areas is the bungalow format - with projected verandahs with cast iron decorative railings, sloping roofs (more than 22 deg. gradient and intercepting gables and dormers) covered in tiles/sheets with decorative fascia boards and occasional double height living rooms with clear storey lights. New buildings, infill, extensions, additions or alteration should all follow a pattern that is congruous to the existing. The aspect of horizontality of the facade may be emphasized by receding the upper floor (facade external wall) behind by as much as the balcony width, from the main wall (behind the projecting verandah) of the lower floor. This would emphasize the projection of the verandah on the lower floor. Other alternative of continuing the upper floor balcony flush with the verandah of the lower floor would emphasize verticality of the facade.
- vii) The traditional characteristic roofscape consists of sloping roofs with varying heights over building not more than two floors. This aspect of roofscape and skyline should be respected. Roof forms and materials should reflect the tradition of the locality. The use of roofing material of similar profile, color and texture will be required to relate to the historic surroundings. The materials may be asbestos sheets (plain or painted in an appropriate color), Mangalore tiles or corrugated/ plain metal sheets. R.C.C. roofs should generally be discouraged.