



Aseer Escarpment

Architectural Design Guidelines



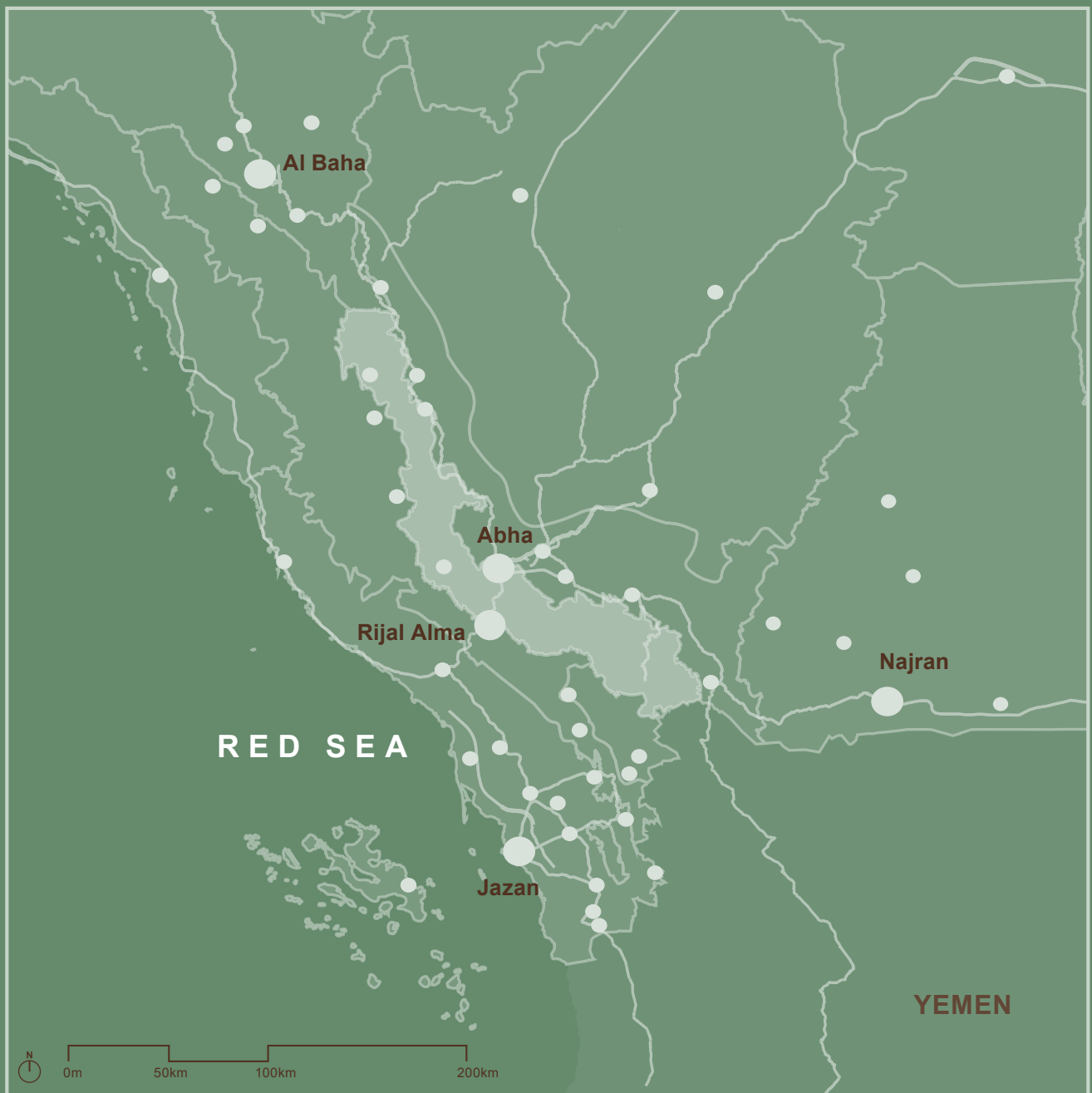


FIG.1 ASEER ESCARPMENT ARCHITECTURAL CHARACTER AREA

Contents

Introduction

I	Vision.....	3
II	Topography and landscape	6
III	Overview of Aseer Escarpment Architecture	8
IV	Analysis of Aseer Escarpment Architecture	10
V	Evolution.....	14
VI	How to use the guidelines.....	16

Guidelines

1	Key features	18
2	Composition	20
3	Elements	24
4	Colors and materials	30
5	Patterns	34
6	Applying the architectural character	36
7	Worked examples.....	40
8	Public realm.....	46



FIG.2 ARCHITECTURAL CHARACTERS MAP OF KSA

INTRODUCTION

Vision

Celebrate and preserve Saudi Arabia's rich architectural legacy inspired by culture, heritage and nature.

I.1 Guideline philosophy

The Architectural Design Guidelines (hence referred to as ADG) aim to foster progressive contemporary design that is rooted in the diverse geographic and cultural contexts of the Kingdom.

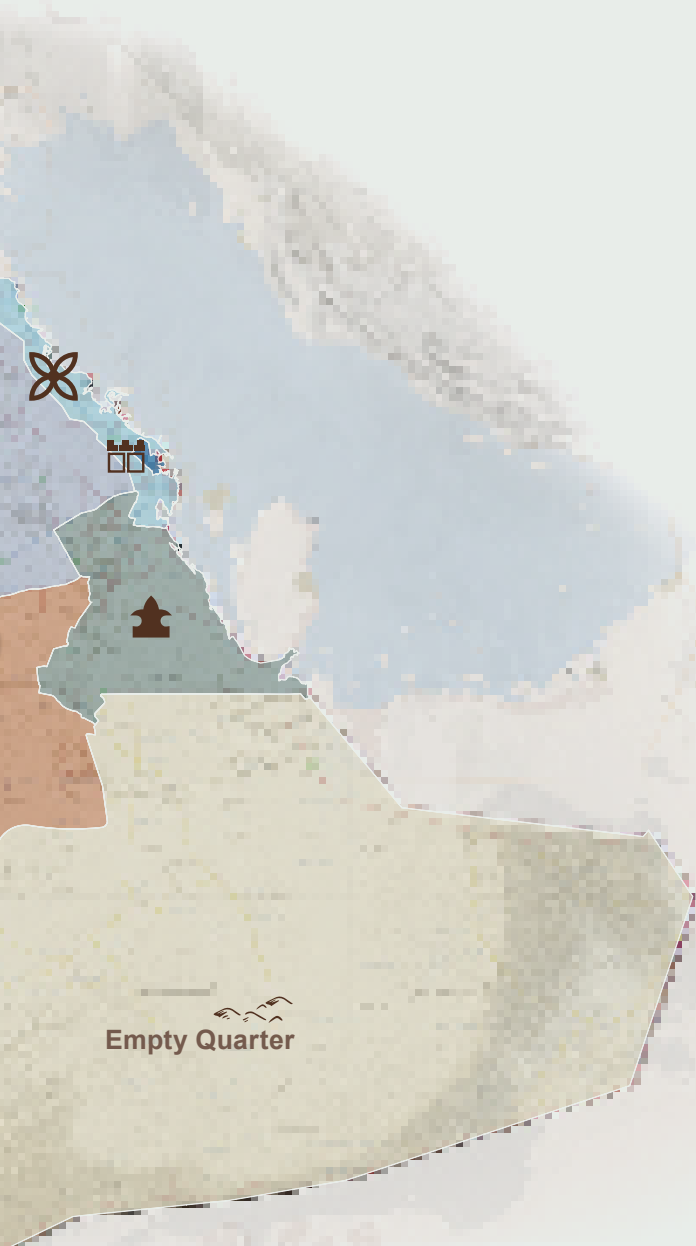
Its propositions are based on the study of historical precedent, taking inspiration from vernacular forms and the embedded knowledge shaped by generations of practice and experience.

The guidelines are forward-looking, intended for a wide range of contemporary development and suited for different levels of prescription. They aim to be succinct, well organized and useful: a positive resource for designers and easy to implement by planning authorities.

I.2 National context

This volume belongs to a suite of 19 documents, each exploring a different geographic context and describing a distinct architectural character within the Kingdom. Together they form a comprehensive portrait of the architectural heritage of the country.

Though application boundaries for the architectural character have been defined (fig. 2), influences may extend across boundaries. Designers are advised to consult adjacent architectural guidelines documents and confirm the status of their building context with facts on the ground.



1.3 **Aseer Escarpment**

Aseer Escarpment character area is located at the edge of Sarawat mountains in Aseer region. This area consists of lower escarpments, water courses and upper escarpments. A prominent feature of this area is the Ridah escarpment reserve, located about 20 kilometers north-west of the city of Abha. It is situated on the cliff of the Arabian shield, which mainly consists of igneous rock sediments. The area features a steep slope with a dense vegetation cover, dominated by juniper trees. A large number of tributaries descend from the top and pour into Shoaib Ridah. This area features the dominant sources of vernacular architecture in the escarpments.

The main purpose of Aseer Escarpment ADG is to help raise the overall architectural design quality of the built environment, especially in the expression of the regional character of the Aseer Escarpment. This is for the improvement of both architecture and public realm design. Based on a regional character study identifying key heritage sites, natural environments, as well as typical cultural landscapes, the guidelines are founded on an understanding of the traditions and heritage that form the character area's sense of style.

Most importantly, the guidelines seek to promote the creation of new and contextually inspired architecture for the Aseer Escarpment area respecting and fostering the character of the respective place.

They are also intended to promote a general excellence in landscape design and urban design, and intend to promote the development of an attractive, representative, and inviting public realm, with a generous and lush landscape environment.

The guidelines are developed with the following main goals:

- 1 **Celebrate Aseer Escarpment's natural and cultural landscapes, a foundation of unique architecture for the character of the area and its people.**
- 2 **Preserve open space and topography remarkable settings.**
- 3 **Safeguard the architectural heritage interrelated with the cultural landscape and enhance their relationship.**
- 4 **Create lasting connections between people and places with new development that respects and fosters the special character and heritage of the Aseer Escarpment.**
- 5 **Inspire the production of a more contextually rooted new architecture for the area.**

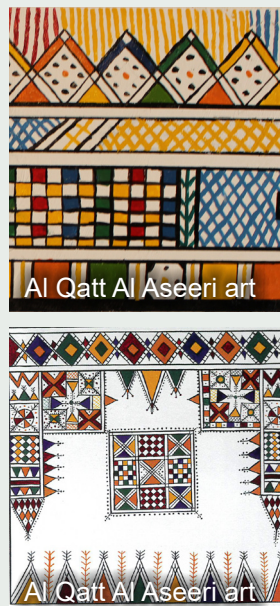
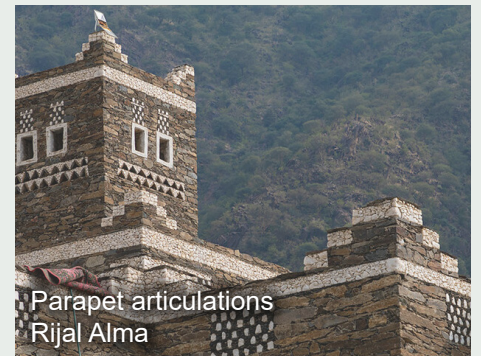


FIG.3 **ASEER ESCARPMENT**

II **Topography and landscape**

Observations on the links between landscape, climate, culture and the architectural character of Aseer Escarpment.

II.1 **Key information**

The Escarpments are characterized by lower escarpments (lower foothills), water courses, and upper escarpments (hillsides), which are generally steeper.

The vegetation is diverse and of greater density than the Tuhama Foothills and Coastal Areas. Three vegetation groups have been defined, which correlate to these landscape characters and are broadly defined as evergreen woodlands.

II.2 **Landscape**

The lower escarpment conditions create various micro-habitats which appear in the forms of rocky or sandy cliffs and crevices. The hillside slopes in the upper escarpments are generally steeper and appear in the forms of cliffs, ridges, sharp peaks, and consist of granite boulders, sandstone, and limestone rocks. Soil is commonly sandy stony. Disturbed ground is found near farms and villages, on roadsides, and on wastelands.

Soil is mainly of sandy-gravelly type. The resulting linear valleys are defined by wadi corridors that wind through the landscape resulting in a dramatic landscape that draws the eye down the valley. Dark olive-green Juniper forests found along the escarpment are in generally good condition, however fragmented by urbanization, roads, and disturbed areas. This is particularly evident in the south. Ephemeral watercourses are abundant, and in some

cases, further up the steep escarpments, where water may persist throughout the year.

Southern areas of the escarpments, feature dry south facing slopes, where the soil appears more diverse than other areas of the escarpments, consisting of sand dunes and bedrock that has been eroded by the watercourses. Vegetation is sporadic and of a lower density.

The eastern side, adjacent to Abha highlands, consists of higher-quality juniper forest and evergreen trees, watercourses, and terraced farming.

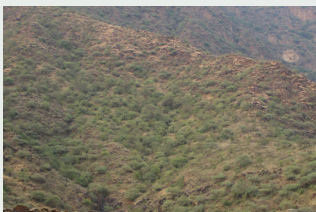
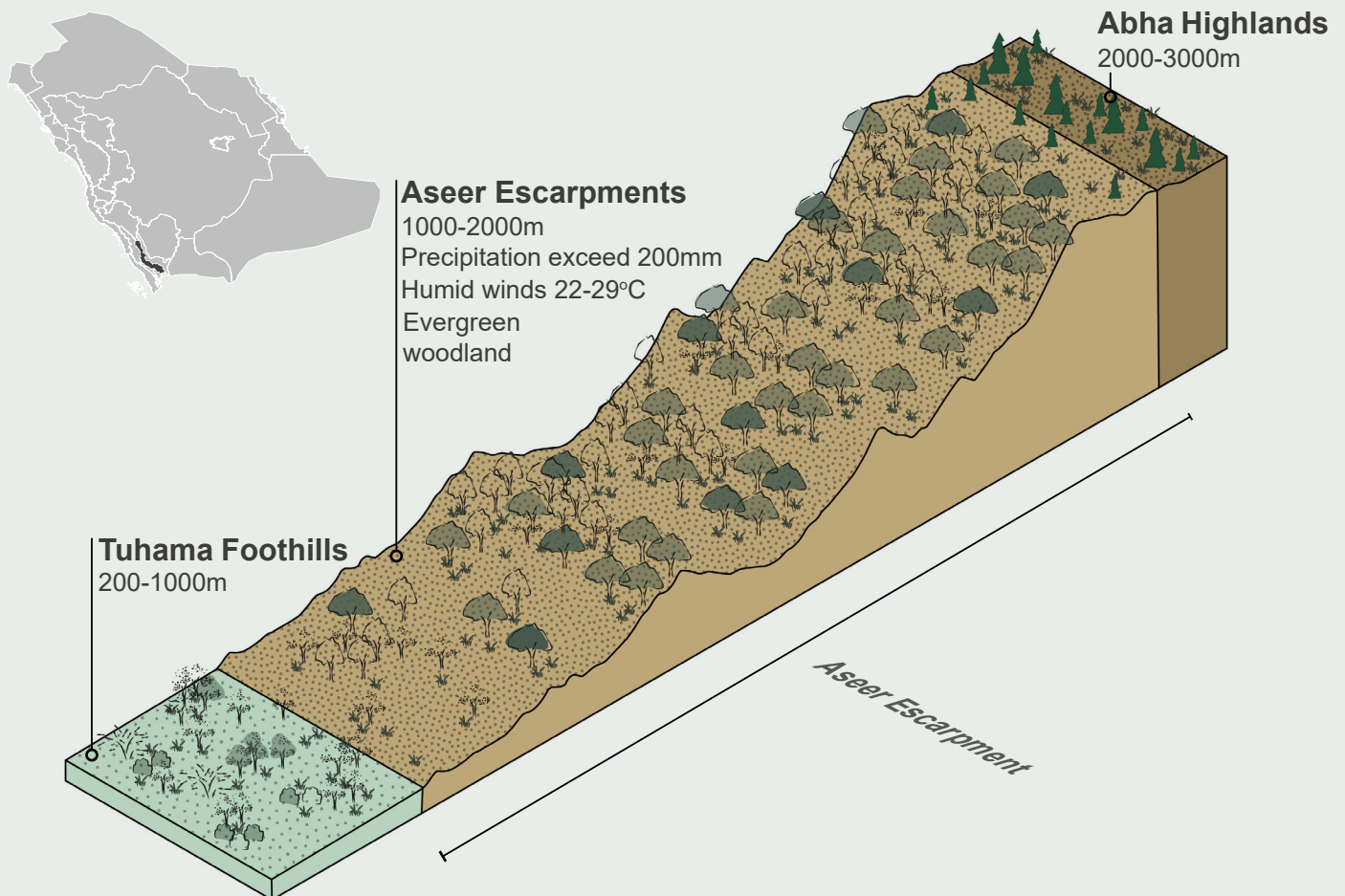
Wadi corridors are numerous within the Escarpments, consisting of several wadis, storm-water creeks and water bodies. Wadis are typically narrower with natural soft edges and flow patterns in rural and natural contexts.

Throughout the region, summers are long, arid, hot and can reach 32°Celsius, whilst winters are short and dry with a drop down to 9°Celsius. Half of the year is mostly cloudy from May to October with high precipitation reaching 40mm in April and relatively not humid staying within 1% humidity level.

II.3 **Architectural influence**

Low-density settlements established along the valley basins and flatter sections of the wadi corridors as well as urban modern dense settlements. A patchwork of buildings and farms are along wadi farms, wadi corridors and terraces.

As the latitude increases, landscape form and context influence traditional architecture in places like Rijal Alma in form and materiality including natural stone, clay, and wood.



Natural color palette

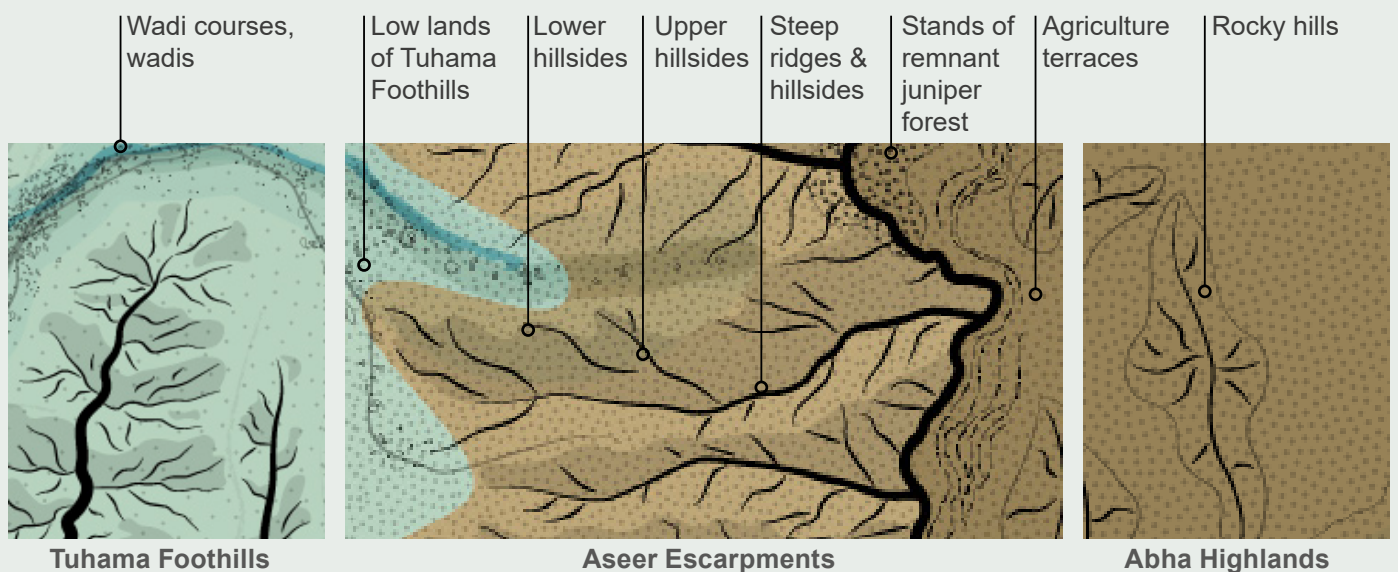


FIG.4 **ASEER ESCARPMENT LANDSCAPE FEATURES AND TOPOGRAPHY**

III Overview of Aseer Escarpment Architecture

A summary of the existing character of traditional architecture and settlements in the Aseer Escarpment character area.

III.1 Settlement character

In general, settlements are spread across valley areas and patterns differ based on the location within the topography. Villages are generally several neighborhoods clustered together in one single agglomeration for structural and defensive purposes.

Slopes are steep and terraced, dotted with fortified granaries and watchtowers.

Areas flanking the wadis are extensively terraced and cultivated, specially where

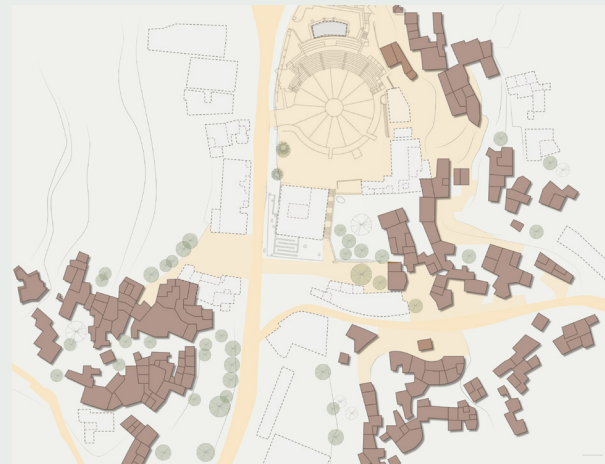


FIG.5 Historic settlement of Rijal Alma

valley opens into vast plains. Generally, villages sit on one side of the wadi while other side hosts pilgrims or visitors. The Market areas are generally located along the wadis.

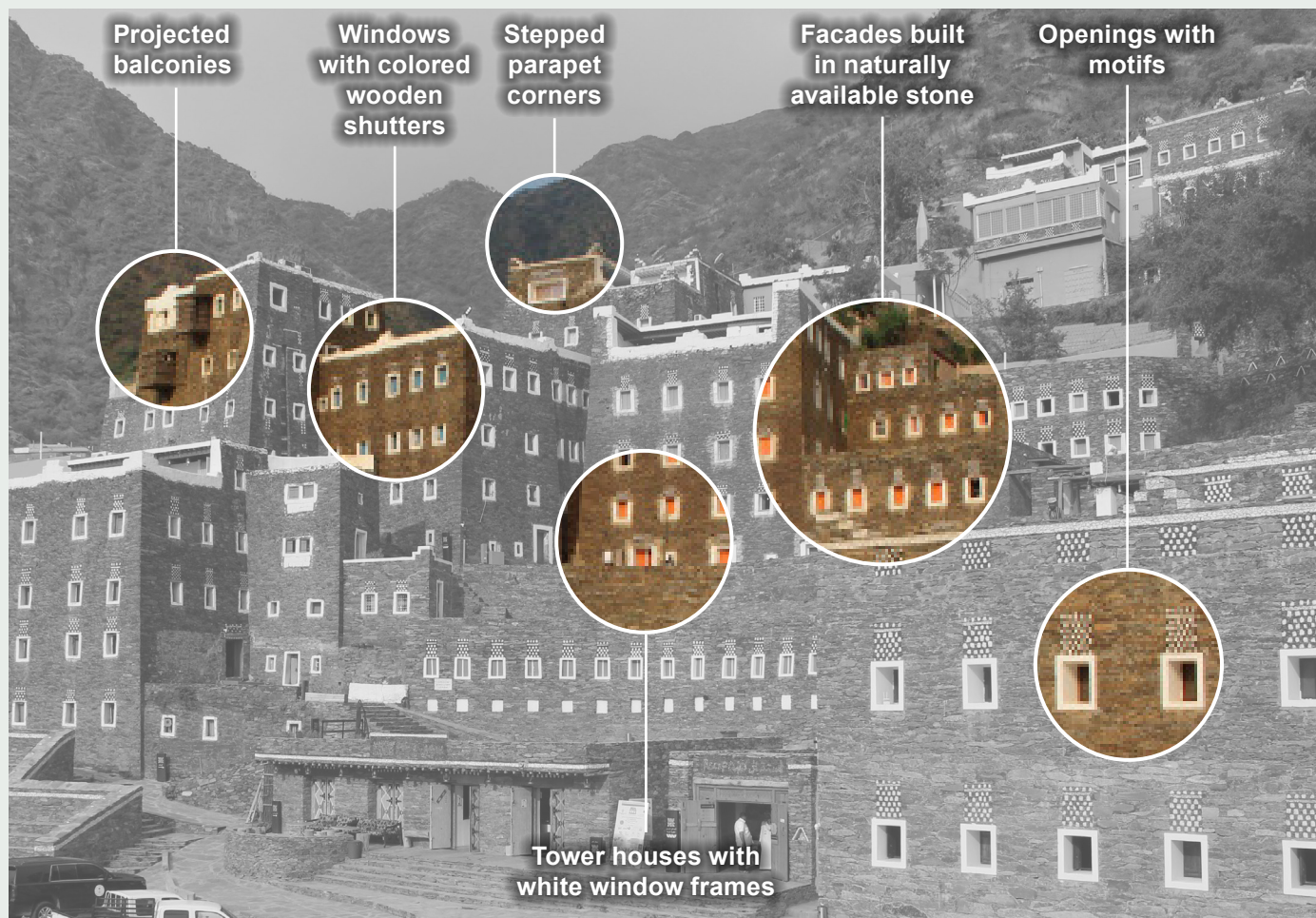


FIG.6 TRADITIONAL SETTLEMENT OF RIJAL ALMA

III.2 Architectural character

Dwellings are mostly medium sized hamlets and they can go up to 6 stories. Stone tower houses were built to have a defensive and fortress like form with limited openings and recessed doors. They were made of stone and clay and were often multi-floored (up to six stories high). They were recognized by their distinctive character particularly when it came to their white framed windows. In addition, walls were crowned with stone parapets.

A distinguishing feature of the openings are the elaborate decorative motifs created with inlaid quartz that surround the windows and gun slits and contribute to the character of the houses.

The whitewashed window surrounds may have been a decorative feature or used to reflect more light into the interior. Within the buildings, the central feature is a staircase core with two to three rooms arranged around it on each floor. Shelter for animals and grain stores are kept in the ground floor. Kitchen and household storage are located in the middle floors and living quarters on the top floors.

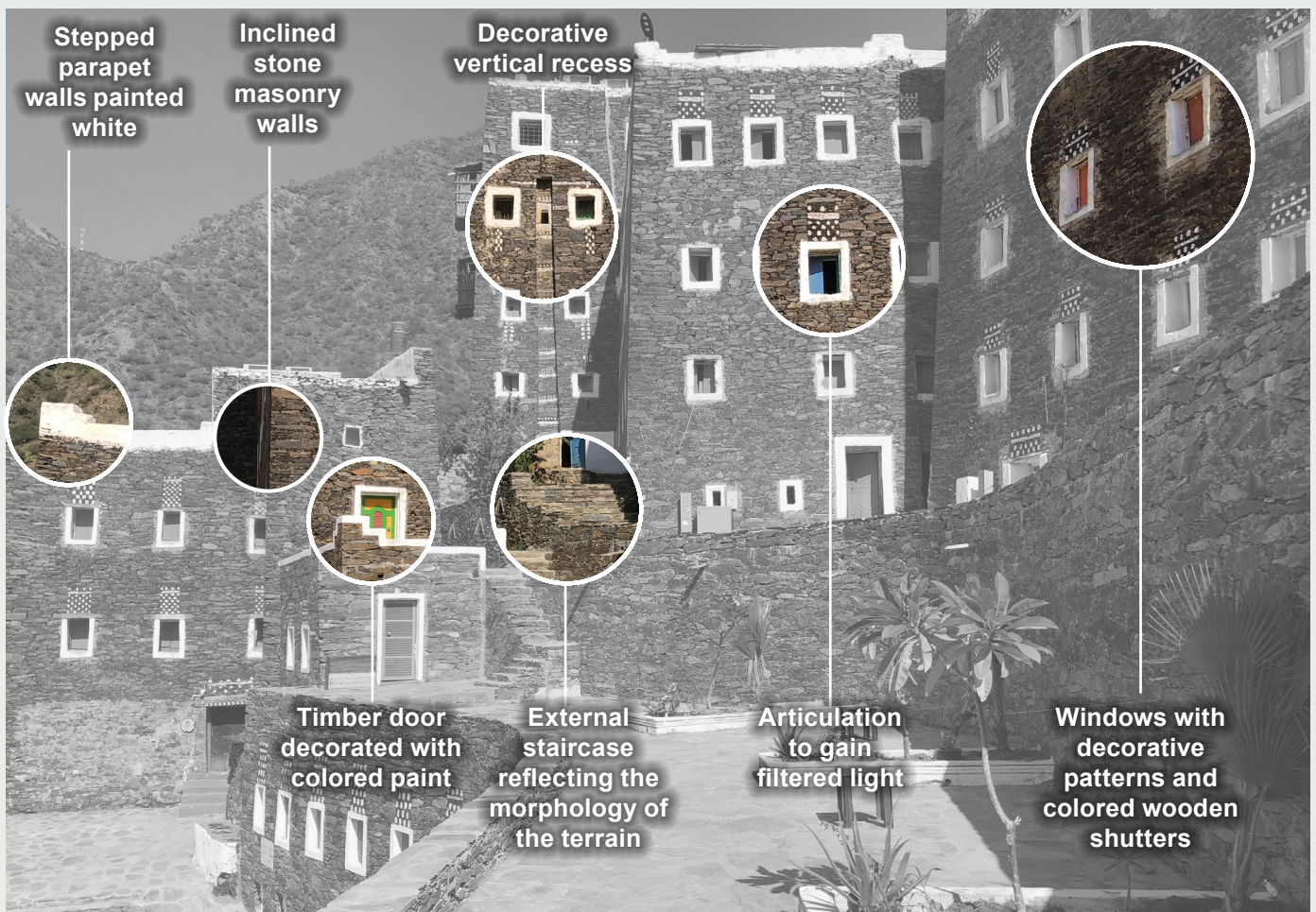


FIG.7 TRADITIONAL SETTLEMENT OF RIJAL ALMA

IV Analysis of Aseer Escarpment Architecture

The evidence and formal analysis upon which the guidelines are based.

To find objective characterizations of the vernacular architecture in Aseer Escarpments, elevation studies were conducted to assess overall building proportions and the solid-to-opening ratio of building facades. A sample of representative buildings, including a range of different use types were selected for each character to arrive at meaningful ranges for each statistic.

IV.1 General typologies

Vernacular buildings typically comprise simple, orthogonal forms, often three to four stories, with towers rising up to 6 stories. At a townscape scale, narrower tower buildings form conjoined groups with small buildings, creating a balance of skyline.

IV.2 Verticality

Generally, strong vertical proportions, indicated by a width-to-height ratio between 1:0.9 to 1:2.5, are characteristic of the vernacular architecture in the area.

IV.3 Solid to opening ratio

The facades are plain, sober with minimal openings, the general 10% opening percentage substantiate this observation.

Balanced massing,
Minimal facade openings

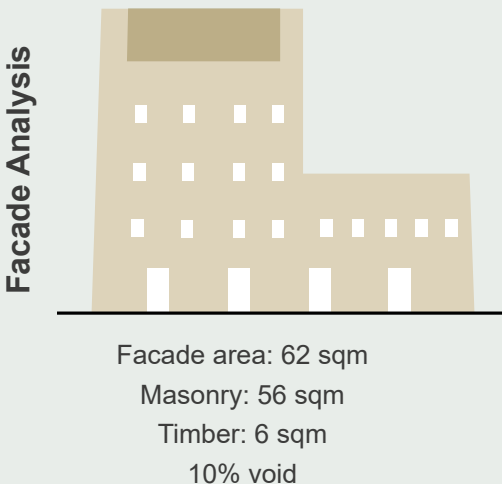
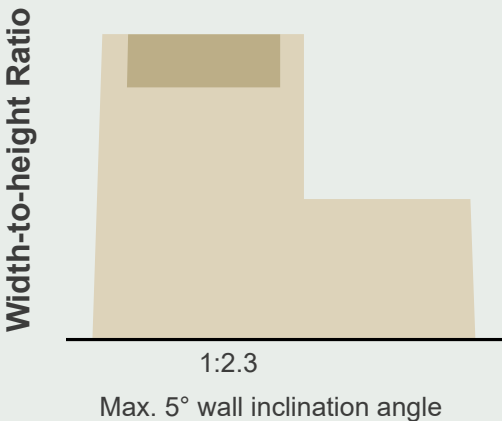
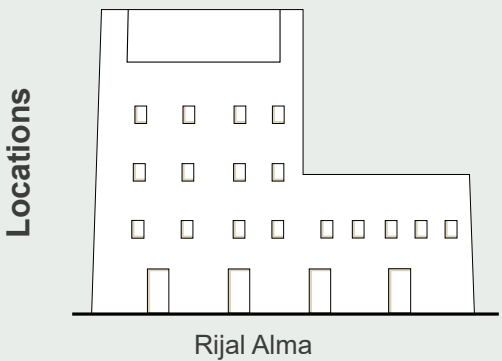
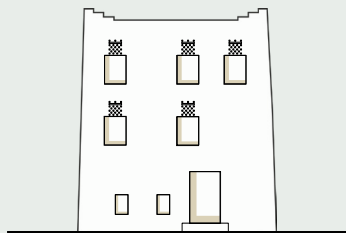
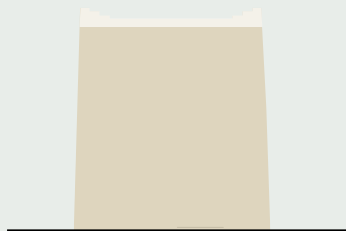


FIG.8 VERNACULAR FACADE STUDIES

**Low-story massing,
minimal facade openings**

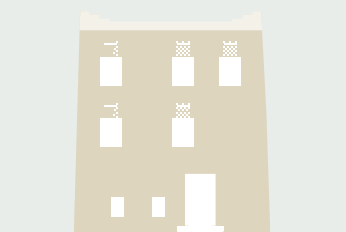


Rijal Alma



1:0.9

Max. 4° wall inclination angle



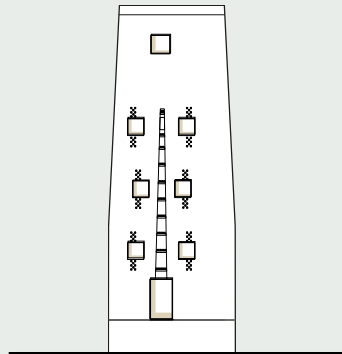
Facade area: 35 sqm

Masonry: 33 sqm

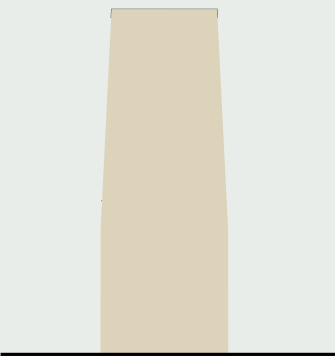
Timber: 2 sqm

8.9% void

**Vertical continuous massing,
minimal facade openings**

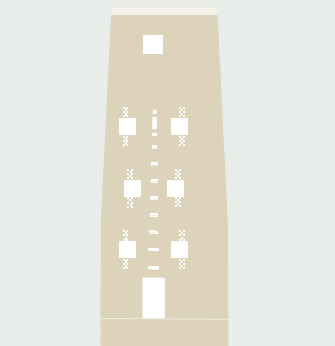


Rijal Alma



1:2.5

Max. 4° wall inclination angle



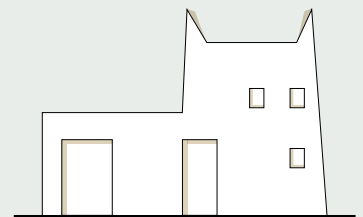
Facade area: 37 sqm

Masonry: 33.5 sqm

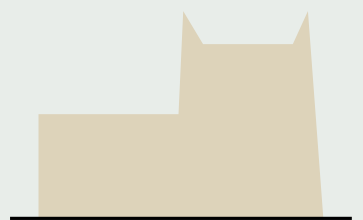
Timber: 3.5 sqm

11% void

**Low-story balanced
massing**



Al Majared



1:0.7

Max. 5° wall inclination angle



Facade area: 40 sqm

Masonry: 34 sqm

Timber: 6 sqm

15% void

IV.4 **Building grouping patterns**

Volumes built around courtyard(s) for micro-climate and privacy reasons.

Built form is defensive and fortress like. Buildings clustered together.

Massing is compact with flat roofs broken into vertical volumes.

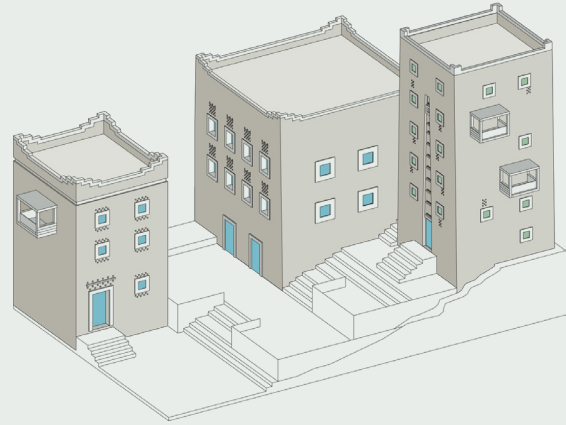


FIG.9 Building grouping patterns

IV.5 **Tripartite articulation**

Facades are articulated with a clear base, middle and top. This distinction between base and middle is expressed most clearly through the solid void ratios and top part is articulated parapets.

Use of local stone is dominant within the escarpments. Generally, stone is used as the only building material, with pieces of stone arranged in horizontal coordinated manner.

Facades breaks usually with massing and occasionally with material change.

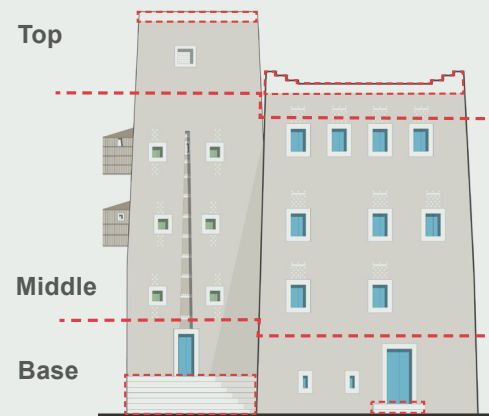


FIG.10 Tripartite articulation

Facades are typically split into 3 separate tiers with solid base, openings and articulations in the middle and articulated parapets at the top.

IV.6 **Vertical emphasis**

A general development of three to four stories high with gently tapered walls with a maximum inclination angle of 5°.

Stone tower houses may reach up to six stories high with thick stone walls to strengthen the base.

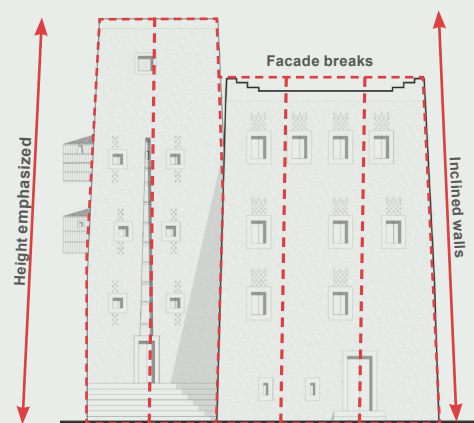


FIG.11 Prominent vertical massing

Volumes of 2-4 stories with up to 6-story tower houses.

IV.7 **Roof character**

Flat roofs with parapets articulated with pointed corners or stepped crenelations.

Articulation also in form white painted parapet walls.

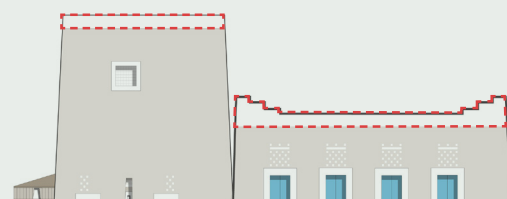


FIG.12 Roof character

IV.8

Special motifs

Decorative openings with motifs created with inlaid quartz surround the windows and openings.

The whitewashed window surrounds may have been a decorative feature or used to reflect more light into the interior. Along with the whitewashed parapets they accentuate the layering of the stone facades set against the hillside.

Local art of Al Qatt Al Aseeri is used for decorative patterns for highlighting elements.

Windows have wooden shutters painted with bright colors.

IV.9

Varied symmetries

Analysis indicates a varied palette of opening types. Common openings include rectangular and square shapes. Doors with small openings typically define the building base, with square and rectangular ventilation openings in the middle and upper levels. Towers usually feature small symmetrical opening placements.

IV.10

Recesses and projections

Doors and windows are set back, thus accentuating the austere appearance of the stone surfaces. External openings are small for defense and for air and light while maintaining privacy.

Lightweight projecting elements, seen on the upper levels of a number of the larger houses, are constructed from timber and filled in with lightweight reeds to form a semi-transparent screen with a small opening.

1. Articulated parapet walls

2. Bands highlighting windows

3. White painted stone work

4. Bright painted timber doors

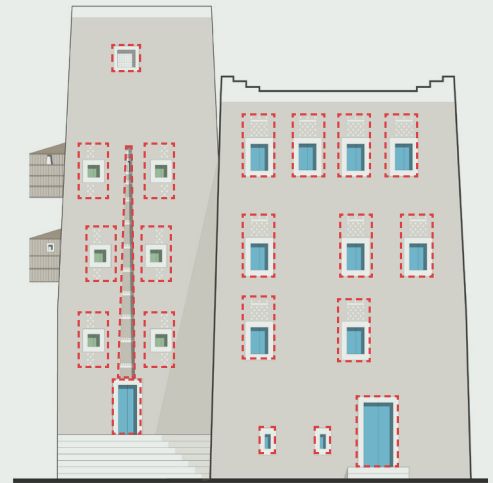


FIG.13 Openings: simple geometries with varied symmetries and articulated with patterns
Most facades have windows with colored shutters, highlight band and decorative motifs in the upper and lower part of the window.

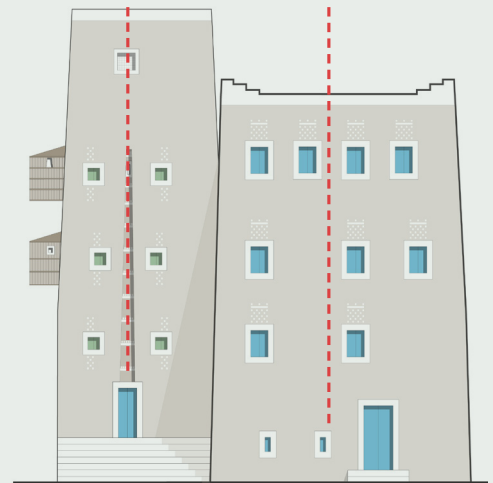


FIG.14 Varied symmetries

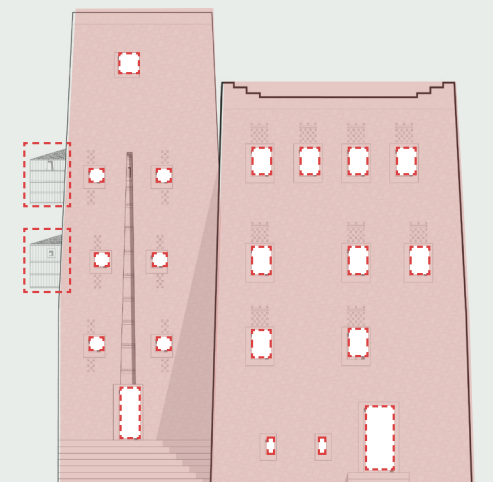


FIG.15 Projected timber balconies, recessed windows
Fenestration formed as punched hole openings within solid load-bearing masonry walls.

V Evolution

The connection of contemporary design with traditional forms to strengthen the architectural character of a place.

V.1 Connecting past to future

The guidelines aim to provide architectural roots for contemporary buildings so that they connect to their historical context, draw upon their local culture and reflect the spirit of a place.

At the same time, a balance between continuity and innovation is needed. Advances in construction technology, material science, patterns of development and specifications for new building uses require buildings that can accommodate these changes while preserving the essence of local architecture.

V.2 Connecting environment to form

The guidelines also aspire to connect buildings to their geography. Physical context has traditionally influenced the materials available, the patterns of development and the climate response required from architecture.

These environmental constraints have created a matrix of related, regional building typologies. The guidelines aim to provide a layer of stylistic influence to accentuate these regional building types into distinct characters that can be gathered into a diverse yet related national 'family portrait' of architectural character across the Kingdom.

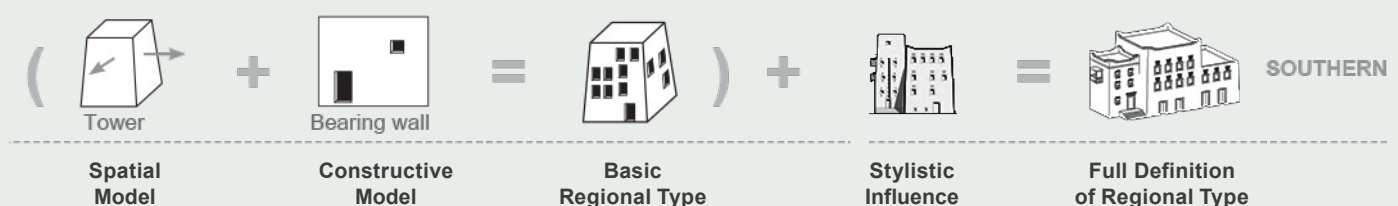


FIG. 16 Character equation for the Aseer Escarpments (after Ishteeaque & Al-Said 2008)



Traditional building

TRADITIONAL

The massing and design of the new building should foster the architectural character by adopting in a sensible way the traditional forms and patterns, elements and decorations, materials and colors.

Stone finish walls, inclined massing profile, small decorative openings, crenelated / articulated parapets, and projected balconies, buildings set within the natural topography.



Transitional building

TRANSITIONAL

The form and style to be adopted for transitional style should distill the most essential qualities and character giving architectural elements, such as the use of appropriate material and color palette and interpretation of dominant architecture features.

Smooth planes in earth tones, integral windows with proportions respecting vernacular form and interpretation of traditional volumes, patterns, and play of parapets to create skyline.



Contemporary building

CONTEMPORARY

The form and style of contemporary style should distill the essential qualities and values of vernacular architecture in a new and ever contemporary expression.

Abstraction of geometric planes and forms, adapting to a range of building types and increased daylighting. Balance of volumes, interpretive use of patterns, screens and setbacks for shade.

FIG. 17 Evolution of styles

VI How to use the guidelines

The guidelines have been organized to present the rules of architectural character in a clear, efficient and useful way.

VI.1 Chapter organization

The first chapters sort the guidelines into different dimensions that help define architectural character:

- 1 **Key features** - The most essential qualities for the architectural character.
- 2 **Composition** - The rules by which buildings are shaped and elements are related to one another.
- 3 **Elements** - The individual parts that are the building blocks of the architectural character.
- 4 **Material and color** - The prevalent materials used and color range found within the architectural character.
- 5 **Pattern** - Common motifs and patterns used in the traditional craftsmanship and material culture of the character.

These chapters are followed by two sections focused on guideline implementation:

- 6 **Applying the architectural character** - Guidance for the proper interpretation and use of architectural character in new buildings.
- 7 **Worked examples** - Design studies that illustrate the use of architectural character at different scales and strengths.

The document concludes with:

- 8 **Public realm** - An overview of public realm character in Aseer Escarpment.

VI.2 Guideline formatting

Individual guidelines are formatted graphically to make them more useful:

- 1 **Chapter number and heading** - Guidelines are gathered into major categories for ease of reference.
- 2 **Guideline number and heading** - Guidelines are given a unique 2-digit decimal number and heading for ease of reference and to provide precision in enforcement.
- 3 **General description** - Descriptive text to introduce the guideline topic.
- 4 **Guideline actions** - Instructions clearly identifying the actions to be taken by designers. Each action is numbered for ease of reference and to provide precision in enforcement.
- 5 **Rationale** - Set in colored text and highlighted by a side bar are the objectives and reasons for the guideline. This gives the applicant an opportunity to propose designs that meet the rationale through alternative ways. Alternatives require the approval of the relevant local authority.
- 6 **Illustrations** - Illustrations, photos and diagrams that help explain the guidelines. They are examples only: where contradictions arise between illustrations and guideline text, the text shall overrule the illustration.

The items above correspond to the figure on the facing page.

Link to the
Contents page

≡ Aseer Escarpment Architectural Design Guidelines

1 Chapter number
and heading

2 Composition

In contemporary parameters, the different compositional elements of layout, open space, massing, design, and facades described in chapter 1 should translate into the following provisions.

2 Guideline
number and
heading

2.1 Townscape groupings

Guidance for layout aims to achieve and contribute to factors like topography of site and its context, figure ground qualities, and public realm.

3 General
description

- 1 Human-scale, socio-cultural and family values, with different levels of privacy should be fostered in the design.
- 2 Spatial enclosures should be promoted to achieve a sense of place with a clear hierarchical variety of open spaces.
- 3 Walkable and non-car dominated environments with attractive public realm should be prioritized.
- 4 Land use should promote a mix of uses.
- 5 Large blocks (>100m in any direction) should in general be avoided, or provide mid-block passages for walkability.

A permeable block structure with mix of uses is essential to create a walkable and vibrant urban space.

4 Guideline
actions

2.2 Relationship to landscape

- 1 Conservation and enhancement of environmental and cultural resources on site should be prioritized.
- 2 Built form should respect the natural terrain of the escarpment. Flattening of slopes should be avoided.
- 3 In general, a usable open space should be provided within the plot oriented toward the public frontage.

To respect and respond to the natural landscape context, climate and environment.

5 Rationale

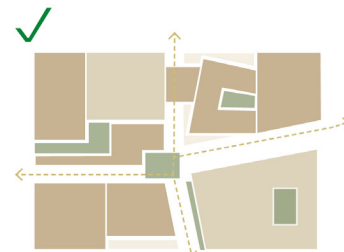


FIG. 21 Permeable fabric with hierarchy of open spaces, mixed uses, and continuous pedestrian network should be encouraged

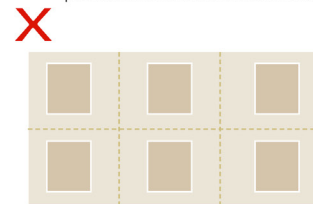


FIG. 22 Large blocks / consolidated blocks without pedestrian permeability should be discouraged



FIG. 23 Built form respecting the natural terrain to be encouraged; large flattening of sites should not be permitted

6 Illustrations

20 GUIDELINES

FIG. 18 Typical guideline structure

GUIDELINES

1 Key features

The form and style of contemporary architecture in Aseer Escarpments should distill the essential qualities, key features and the values of vernacular architecture.

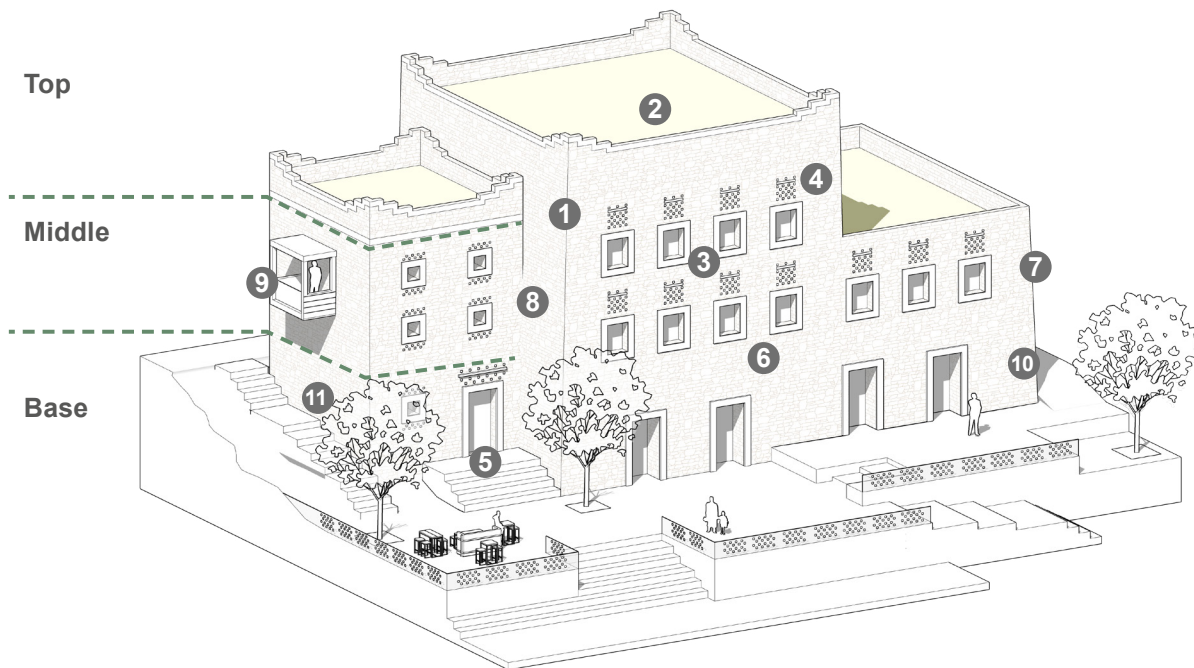


FIG. 19 Aseer Escarpment key features

Key features:

- 1 Facades formed with closely knit buildings with breaks through difference in massing.
- 2 Flat roofs with parapets articulated with pointed corners or stepped crenelations.
- 3 Small windows in repetitive pattern, highlighted with colored shutters, white plaster and decorative motifs.
- 4 Local art is used for decorative patterns and for highlighting elements. (i.e. parapets, opening frames, doors).
- 5 Clearly defined entrance accentuated by the choice of height and proportion.
- 6 Rhythmic and localized symmetries.
- 7 Gently tapered walls with a maximum inclination angle of 5°.
- 8 Massing broken into vertical volumes with top, middle and base division showcasing tripartite facade character.
- 9 Extruded, screened balconies to facilitate interaction between the building and the street while maintaining privacy and shade.
- 10 General color palette based on locally available natural stone, mainly shades of beige, brown and dark brown and complementary colors derived from the landscape.
- 11 Natural terrain of site respected through design and orientation of buildings.

1.1 Character summary

The vernacular architecture design, proportions, patterns and architectural features in the Aseer Escarpment were evolved based on primarily the local materials available, traditions and culture, and with a purpose of defense.

The design of vernacular architecture distinguishes itself from the neighboring styles with tower houses made of stone and clay and were often multi-floors (up to six stories high). They were recognized by their distinctive character particularly when it came to their white framed windows.

Stone tower houses were built to have a defensive and fortress like form with limited openings and recessed doors. In addition, walls were crowned with stone parapets.

Contemporary architecture in the Aseer Escarpment may be achieved by re-interpreting in an innovative way traditional forms and patterns, traditional architectural elements and decorations, traditional colors and materials.

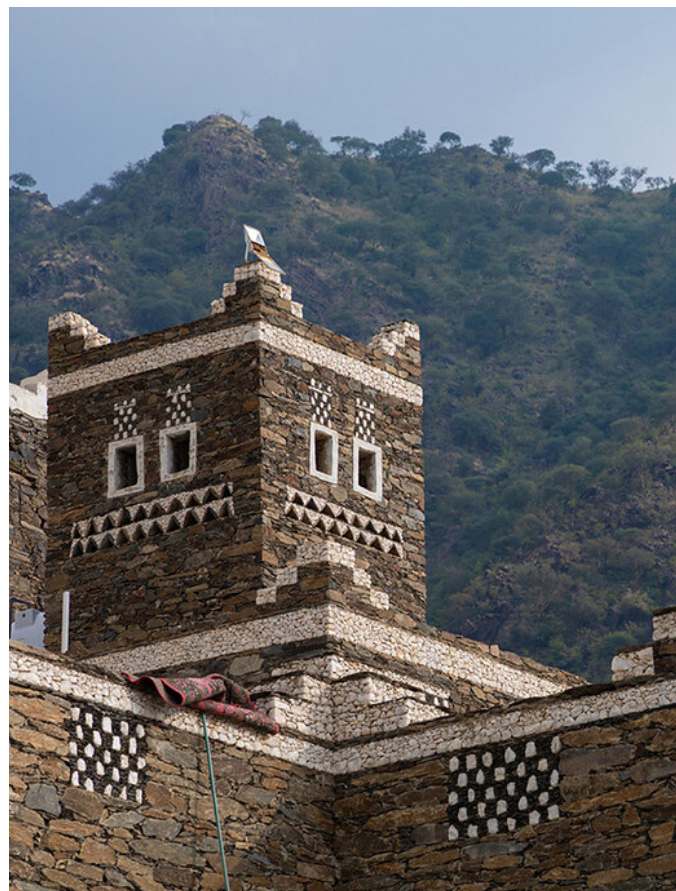


FIG. 20 Vernacular architecture in the Aseer Escarpment

2 Composition

In contemporary parameters, the different compositional elements of layout, open space, massing, design, and facades described in chapter 1 should translate into the following provisions.

2.1 Townscape groupings

Guidance for layout aims to achieve and contribute to factors like topography of site and its context, figure ground qualities, and public realm.

- 1 Human-scale, socio-cultural and family values, with different levels of privacy should be fostered in the design.
- 2 Spatial enclosures should be promoted to achieve a sense of place with a clear hierarchical variety of open spaces.
- 3 Walkable and non-car dominated environments with attractive public realm should be prioritized.
- 4 Land use should promote a mix of uses.
- 5 Large blocks (>100m in any direction) should in general be avoided, or provide mid-block passages for walkability.

A permeable block structure with mix of uses is essential to create a walkable and vibrant urban space.

2.2 Relationship to landscape

- 1 Conservation and enhancement of environmental and cultural resources on site should be prioritized.
- 2 Built form should respect the natural terrain of the escarpment. Flattening of slopes should be avoided.
- 3 In general, a usable open space should be provided within the plot oriented toward the public frontage.

To respect and respond to the natural landscape context, climate and environment.

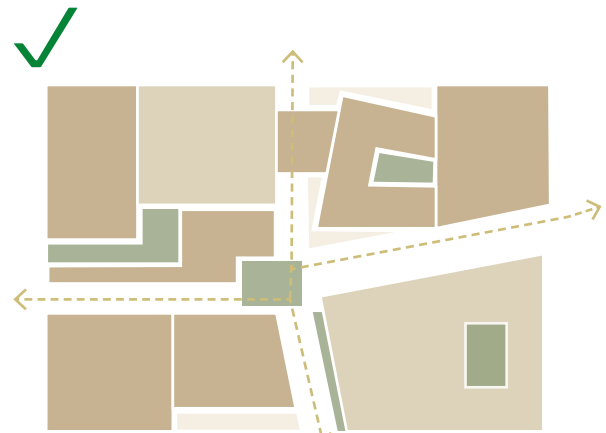


FIG. 21 Permeable fabric with hierarchy of open spaces, mixed uses, and continuous pedestrian network should be encouraged

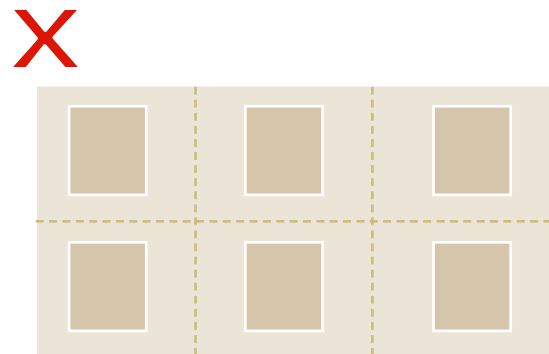


FIG. 22 Large blocks / consolidated blocks without pedestrian permeability should be discouraged

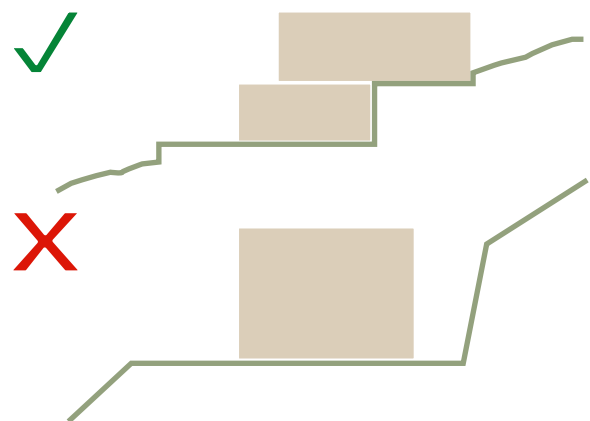


FIG. 23 Built form respecting the natural terrain to be encouraged; large flattening of sites should not be permitted

2.3 Vertical building forms

Building form guidelines aim to contribute to the contemporary interpretation of factors like scale of buildings, heights and proportions.

- 1 Generally, building massing should adopt vertical form, responding to the immediate context escarpments and valleys, while also fostering human scale.
- 2 Forms should be compact with strong geometric shapes with occasionally inclined massing (max. 5 degrees) and provide a well-balanced variety that adds to the skyline.
- 3 Large building massing should be avoided; typically, large floor plates should be broken by means of full breaks and/or recessed to introduce variation and foster human scale.

To retain the typical vertical form of traditional settlements.

2.4 Flat roofs

Roofscape guidelines significantly contribute to the character of the place through contemporary interpretation of roof line, views and skyline.

- 1 Building massing should be designed to have flat roofs. Varied roof line can be created with stepped co-joined units with varying heights, and change of levels with respect to terrain.
- 2 MEP equipment, utilities, delivery, refuse containers, and other types of utilities should always be screened by parapets or located underground / internalized.

To maintain the traditional flat roof forms.



FIG. 24 Masses broken into primarily vertical volumes with balance of horizontal volumes to achieve human scale and variation in skyline



FIG. 25 Large monolithic building blocks, non-contextual roof profiles should be avoided

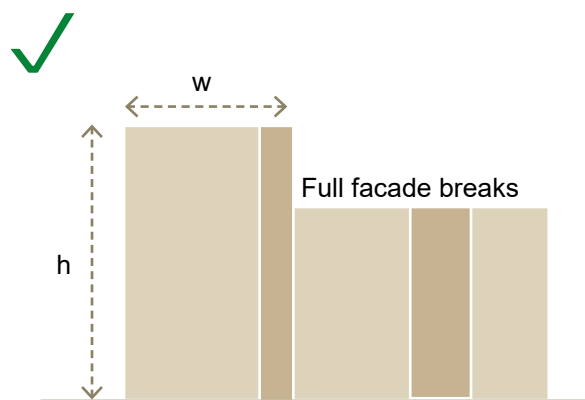


FIG. 26 Flat roofs, width-to-height ratio and facade breaks promoting verticality

2.5 Asymmetrical frontages

The guidance for elevations and frontages aims to achieve and contribute to the contemporary interpretation of factors like, use of traditional facade elements, ratio of solid and openings/voids, placement patterns, relationship to street, orientation for quality of light and shadow, and privacy requirements.

- 1 Frontages are generally asymmetrical in form and composition. Localized symmetry with occasional variation should be maintained in the placement, size, rhythm and patterns of the openings, interpreting the general asymmetry of houses from the vernacular architecture.
- 2 Facade design should be integral to all public sides (i.e. with the same level of design quality and a consistent treatment).
- 3 Facade design should always ensure privacy of neighboring residential buildings.
- 4 Large-scale symmetry should be reserved for only the most important of civic and religious buildings.
- 5 Materials should be generally uniform in use for all the facade surfaces.

To observe simple asymmetry defining the traditional architecture.

2.6 Simple Openings

- 1 Generally, openings should consist of medium sized windows of simple geometry. Small ventilation windows may be used to bring variation to the facade.
- 2 Windows should be relatively square / rectangle with relatively balanced proportions.
- 3 Windows and doorways should feature ornamentation, colors, use of patterns over walls / screenings to reflect the use of art in the vernacular architecture.

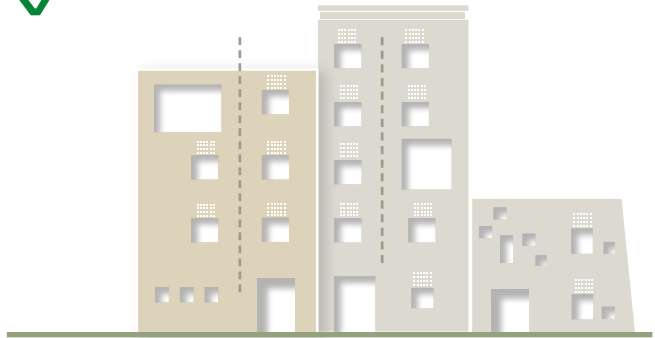


FIG. 27 Moderate sized openings with localized symmetry should be encouraged. Volumes adding variation to facade

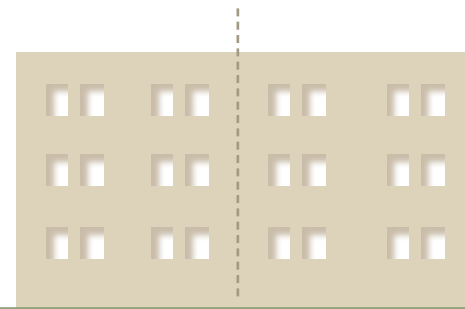


FIG. 28 Long monotonous facades, large scale symmetry without facade breaks should be avoided

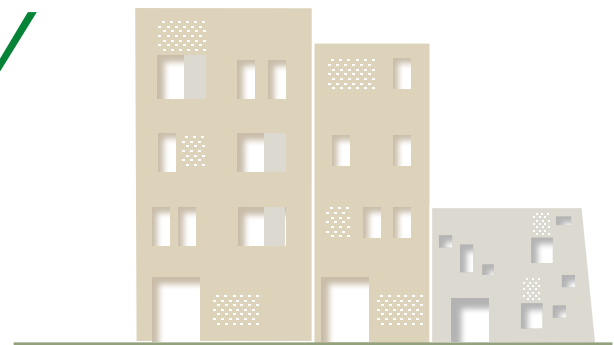


FIG. 29 Openings with simple geometries. Max. 30-50% openings. Loggias incorporated in facade design. Privacy for neighboring plots maintained

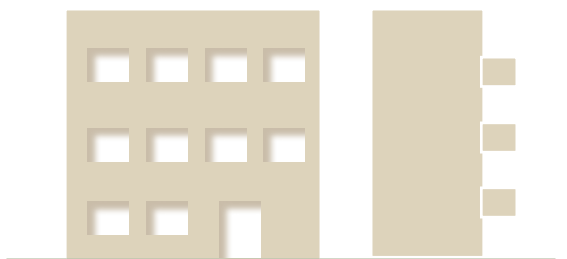


FIG. 30 Large openings, arranged in grid patterns, projected loggias should be discouraged

- 4 Generally, openings should have a maximum share of 30 to 50% of the overall facade surface, according to their solar and wind exposure.
- 5 Base, middle and top of the building should have looser definition instead of rigid tripartite banding with the use of openings.
- 6 Loggias may be incorporated in frontages and should be preferred over abutting balconies.

To observe the defensive yet aesthetic character and detail of the escarpments.

2.7 Grounded base

- 1 Generally, facades should express external solid walls that are grounded to the street level.
- 2 Ground floor facade treatment should foster a high-quality interface between the building and the street, with active frontages.
- 3 Facade materials should be hard-wearing and robust.

To express the architectural intent and character of the escarpments.

2.8 Articulated parapets and use of patterns

- 1 Parapets should be articulated using massing, opening variations, stepping, ornamentations to distinguish as a top part of the building.
- 2 Generally, primary frontages are articulated using patterns from Al Qatt Al Aseeri art form.
- 3 Patterns and art should be used in balanced proportions to highlight features.

To highlight the character of Aseer Escarpment and Al Qatt - Al Aseeri art form while creating attractive facades.



FIG. 31 Facades loosely defined in three parts with articulation of openings

Vertical facade breaks from top to bottom, Grounded base with active frontages.



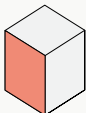
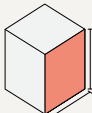
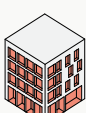
FIG. 32 Large openings at base, thin columns, blank, non-integral facades, facades not respecting privacy, should be avoided

3 Elements

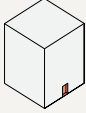
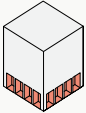
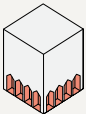
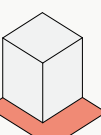
The individual parts that are the building blocks of the Aseer Escarpment architecture.

TAB. 1 Aseer Escarpment architectural elements

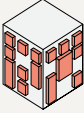
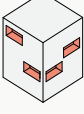
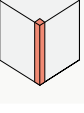
GENERAL ELEMENTS

	Key characteristics	Vertical volumes, windows in regular rhythm with patterns, articulated parapets, adaption to topography. Refer to source in section “1 Key features” on page 18 for detailed key characteristics.
	Facade proportion	The massing, design and height of the new building should foster human scale, respect and work with the existing proportions of the heritage built form.
	Window-to-wall %	Openings should generally not exceed 30-50% of the overall facade surface and propose a similar window-to-wall % to the heritage site. Openings should follow a pattern and rhythm contributing to the character of the place as well as designed for human comfort. Refer to section “3.3 Windows and openings” on page 29.
	Opening proportions	Opening proportions should interpret the traditional character of openings in the region / heritage site. The proportions differ in different character zones. Refer to section “3.3 Windows and openings” on page 29.
	Composition	Depending on overall building size, the base may be characterized by as much as the first 1 - 3 stories of the building above ground. For taller buildings, stepping the massing at lower floors may help establish a sense of horizontality at street level.

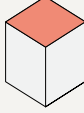
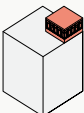
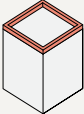
BASE ELEMENTS

	Entrances	Entries should be recessed from the building facade and well proportioned for a pedestrian scale. They should be well defined, clearly visible, and universally accessible from the sidewalk. Vehicular entrances should be placed at the back of the building. Refer to section “3.2 Doors and entrances” on page 28.
	Shop fronts	Active frontages between ground floor and main street should be emphasized. Colonnades are preferred only for active frontages with grounded base, based on the traditional architecture style of heritage asset.
	Arcades	Arches should not be permitted. Occasional colonnades maybe allowed for active frontages.
	Curtilage	Curtilage: small court or yard. Buildings’ exterior ground floors, should strive for material and design integration with the surrounding public realm. The transition from the public domain to the curtilage should be universally accessible, with no abrupt changes in level, single steps, or other trip hazards. By optimizing the micro climate around buildings, it is possible to ensure a favorable pedestrian experience.

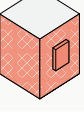
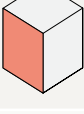
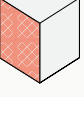
MIDDLE ELEMENTS

	Wall articulation	Facades should exhibit a smooth distinction between base and middle, expressed most clearly through the opening ratios and top part is articulated parapets. Regular breaks (generally at maximum 30 m intervals) along building facade creating a visual rhythm along the streets with offsets, recesses, use of patterns and projections is recommended. Wall breaks should be a minimum of 1.5 m deep and 3 m in length and extend to at least 70% of the facade vertically.
	Windows and Openings	Window and opening design are subject to a large number of compositional guidelines. Refer to section “3.3 Windows and openings” on page 29.
	Projecting elements	Entrance bays may project in front of the main facade. Projecting features should reference historic examples, if used, being appropriately sized for the rooms they serve. Occasional projected balconies should take care of privacy.
	Recessed elements	Recessed elements are set inwards from the building facade; they extend access or perception of the public realm inside the plot boundary. This may include: recessed entrances, arcades, overhangs and chamfered corners.
	Shutters and Shading	Should adapt to the vernacular language. Shading may be achieved by recessing openings from the facade, by providing perforated or latticed screens. Complementary color palette may be used to highlight shutters as special feature, based on the vernacular language.
	Corner features	Building corners should be well defined, positively contribute to the public realm and help pedestrian movement.

TOP ELEMENTS

	Roofscape	Active, accessible roof space is encouraged. Use as amenity space and to incorporate sustainability and green roof measures is encouraged. Roofscape can be punctuated by taller, exaggerated height above corners and main entrances.
	Rooftop Elements	Rooftop rooms derived from vernacular architecture are encouraged. Temporary fabric shading also permitted. Rooftop elements usually, should not extend more than 33% of the frontage.
	Parapets	Parapets should be horizontal, with balustrade ornamentation, cornices, or materially continuous with the wall below. Parapets are typically low in height. Parapets may be articulated, not necessarily duplicated based on the vernacular style, or feature as extension of external walls.

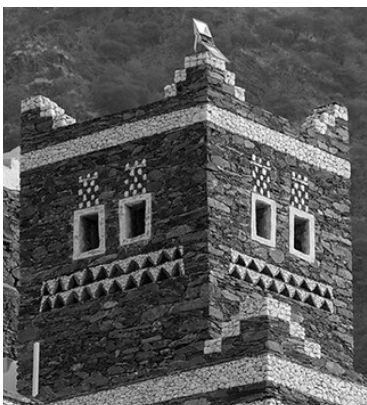
OTHER ELEMENTS AND ORNAMENTATION

	Materiality	Materials should match the local character area zone and reference the near-by heritage; be consistent in nature, minimum 50% of facade should feature one material. Excessive layering of multiple materials and generally, use of low quality materials is discouraged. See expanded guideline “4 Materials and Colors” on page 30.
	Colors	Generally, at least 50% of facade should be in one light earth tone color. Complementary colors, integrated in design composition may be used to highlight features, generally up to 30% of total facade surface. See expanded guideline “4 Materials and Colors” on page 30.
	Pattern	Local art and patterns should be integrated in design composition, generally up to 20% of total facade surface. See expanded guideline “5 Patterns” on page 34.

Top



Highlighted stepped parapet



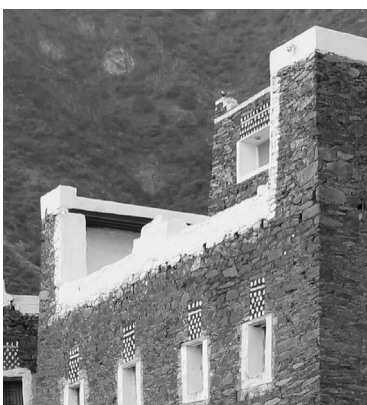
Stepped parapet with stone banding



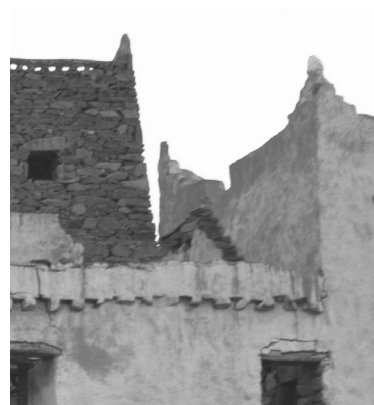
Stepped parapet



Highlighted parapet banding



Occupied terraces



Pointed parapets

Middle



Square openings with highlighted frame and pattern



Rectangular openings with pattern



Projections with shading



Simple window with highlights



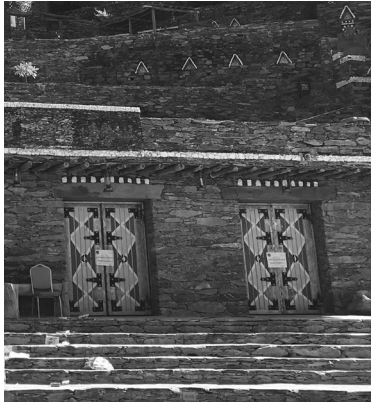
Punched / ventilation openings



Defense openings

FIG. 33 Examples for top, middle, base, ornamentation and other elements

Base



Active frontages with articulated doors



Doors highlighted with pattern



Doors highlighted with triangular pattern



Highlighted door with large door head

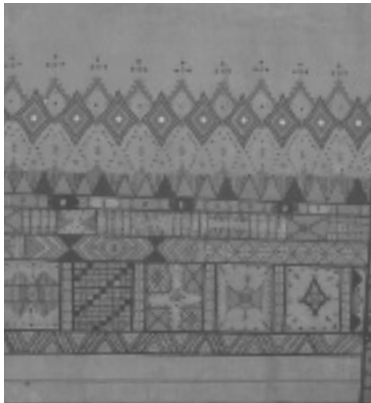


Simple door / entrance



Highlighted door with timber shutters

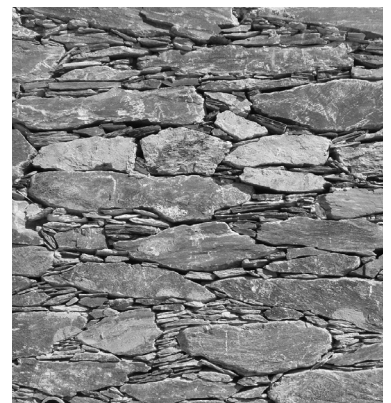
Ornaments and other elements



Al-Qatt Al-Aseeri traditional patterns use as ornamentation



Al-Qatt Al-Aseeri traditional patterns use as ornamentation



Stone pattern

3.1 General details and considerations

Details and construction techniques guidance provides standards and guidelines for use of traditional elements, provisions to translate these details to contemporary parameters, types and percentage of elements on the facade, protection and enhancement of traditional building features. Elements depicted should be used as starting points for interpretation rather than direct copying.

- 1 In general, architectural elements like the rooftop elements, openings, entrances, and construction techniques should express a plain, simple and elegant style.
- 2 A vocabulary of architectural details should celebrate or re-interpret the traditional architectural elements, as per identified in Section 1.
- 3 Traditional architectural elements should be combined with contemporary and new technologies in an innovative way.
- 4 Contemporary architectural elements and construction techniques should be appropriately selected to respond to climatic conditions as per identified in Section 1 (i.e. shading strategy and use of non-reflective surfaces, wind directions, rain harvesting, green roofs).
- 5 Contemporary adaptation of traditional building techniques and materials, should be proposed (i.e. limestone, mud colored plaster, beige metal/ high-pressure laminate HPL cladding).

Architectural elements are the unique details and component parts that working together with specific construction techniques form the architectural style of buildings.

3.2 Doors and entrances

- 1 Generally, doors and entrance openings should consist of simple geometry.
- 2 Doors should be of a width-to-height proportion width 1:1.5 - 1:2.3.
- 3 Door shutters and entrances may be highlighted using colors and local art patterns from Al Qatt Al Aseeri art form.

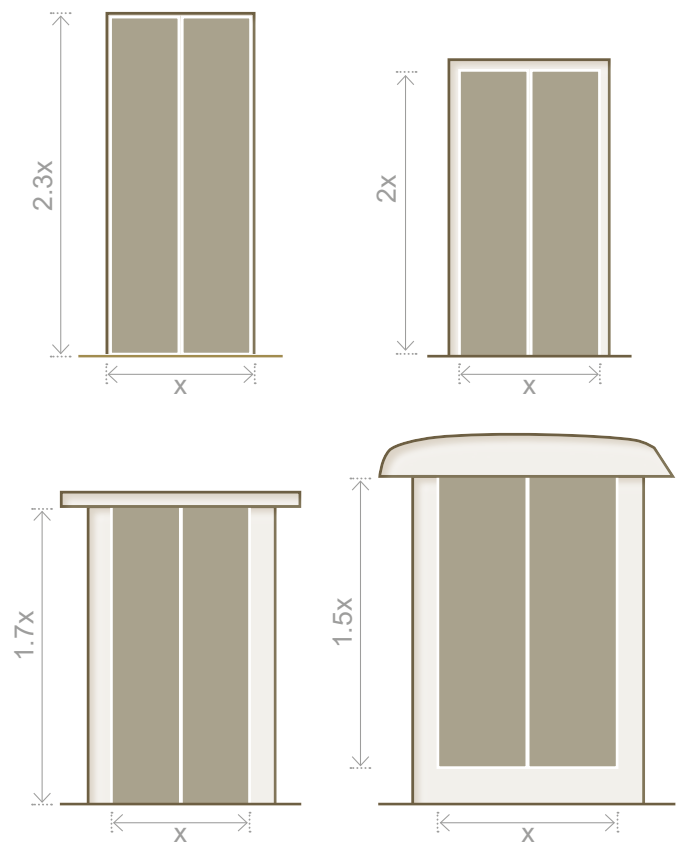


FIG. 34 Traditional door elements proportions

3.3 Windows and openings

- 1 Openings should be articulated with change in materiality and/or color, often as white or lighter colored surrounds and overhead decorative motifs / patterns that differ from the main facade.
- 2 Opening surrounds may be recessed or projected from the main facade to increase compositional layering and the play of light on the facade.
- 3 Generally vertical windows should be of proportions 1:1 - 1:1.5.
- 4 Generally, openings should consist of small windows of simple geometry.
- 5 Informal groupings; alignments related to interior room layouts rather than external facade composition.

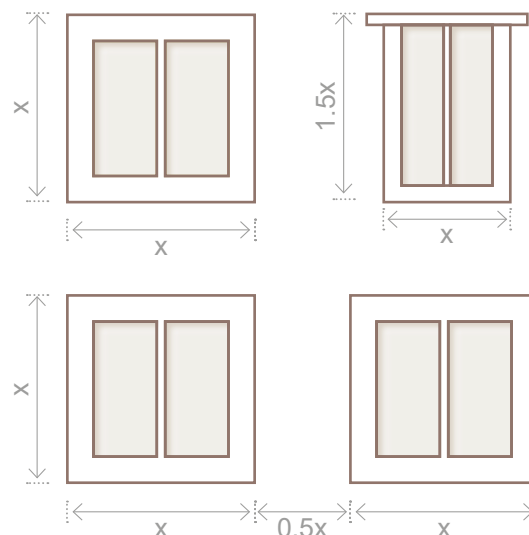


FIG. 35 Traditional window elements proportions

3.4 Roofscape

The traditional roofscape of the Aseer Escarpment is characterized by their simple strong geometric shapes and flat roofs with occasional ornamentation. Roofscape articulation includes:

- 1 Articulated skyline with heights and articulated parapets.
- 2 Articulation includes pointed parapet, stepped parapets with proportions as displayed in the figure. White coping / banding is also used for highlighting parapets.
- 3 Contemporary use of parapets should retain the values of vernacular architecture such as privacy, while interpret the purposes of defense to create screening for utilities and articulation creating interesting skyline.

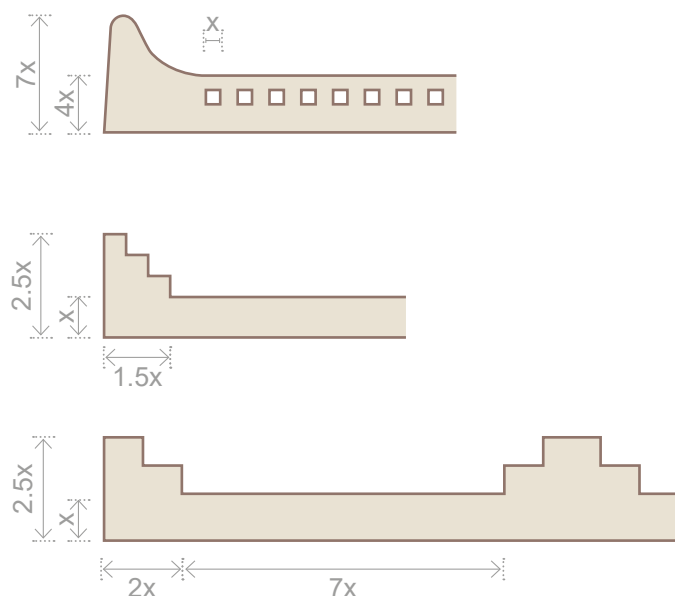


FIG. 36 Traditional parapet element proportions

Contemporary interpretation of architecture through factors like ratio of solid and openings / voids, proportion and size of openings maintain the traditional architectural source of the Aseer Escarpment.

4 Colors and materials

The skillful interpretation, application and interplay of light, shadows and colors, so characteristic of the Aseer Escarpment traditional architecture, can convey additional meaning and contribute to providing a rich and contextual experience of the space.

In contemporary parameters the use of colors for new buildings should focus on:

- 1 A limited spectrum of natural colors and materials to be preferred.
- 2 Limited use of complementary colors may also be used for public realm, hardscape and softscape elements.
- 3 For all public frontages, typically, 70% to 90% range of the project's colors palette to be composed of light gradations of earth tones, with a maximum of 10% to 30% of the total composition reserved for stronger gradations and complementary colors.
- 4 Intensified and/or contrasting colors to be reserved for accentuating important elements, such as entries, arcades, openings and others. The range for intensified and/or contrasting colors should be maximum 5% of the total composition.
- 5 Changes of exterior color, texture or material may be used to reinforce the architectural formal idea and are best accompanied by changes in plane or occur at an inside corner (i.e. at vertical recesses, or horizontal step-backs), or accommodated via architectural detailing, such as gaps, or other changes in plane.

Appropriate colors derived from the local landscape and heritage vernacular palette should be used to contribute to an esthetically pleasing, and distinctive while more uniform urban environment.

RAL Color codes

RAL codes are part of a universal color-matching system used to provide consistency in architectural finishes. It is recommended that teams verify colors with a physical fan deck. For more information visit www.ral-farben.de/en/



FIG. 37 Aseer Escarpment color palette



FIG. 38 Aseer Escarpment colors and materials mood board

In contemporary parameters the use of construction materials and finishes should focus on:

- 1 Generally, materials finishes and colors treatment should be integral to all sides of the building and particularly along public frontages.
- 2 Solid materials and clear shaped geometries should be preferred.
- 3 Use of locally available traditional materials should be preferred.
- 4 Materials should convey a sense of quality and durability and that are able to retain their appearance over time.
- 5 High-quality durable materials should be used particularly for public facades. Since the lower part of a building, typically the first 4 levels, has the greatest visibility at ground level and while driving, its materials should be of enhanced quality and durability.
- 6 Changes of exterior color, texture or material may be used to reinforce the architectural formal idea and are best accompanied by changes in plane or occur at an inside corner (i.e. at vertical recesses, or horizontal step-backs), or accommodated via architectural detailing, such as gaps, or other changes in plane.
- 7 Generally, the use of min. 50% of façade treatment with one consistent material should be required.
- 8 Generally, the use of metal cladding and curtain walls should be limited to max. 20% of the total facade area.

Material and finishes should aim to achieve and contribute to the Aseer Escarpment architecture through factors like quality of new materials, hierarchy, proportion and palette of materials responding to the local context.

Recommended materials

Recommended materials are those durable and quality materials that give the building a sense of authenticity, weight, texture, and mass, such as:

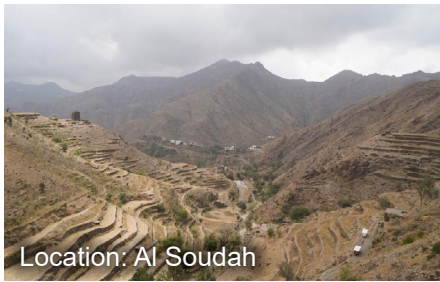
- Local stone / natural stone.
- Colored concrete.
- Terra cotta.
- Mud brick (full or face brick).
- Rammed earth.
- Cementitious panel siding.
- Green walls.
- Smooth plaster.
- Terrazzo.
- Robust stone veneer.
- Low reflectivity clear glass.
- Limited use of high-quality metal panels.
- Durable tensile fabric for shading structures.

Discouraged materials

Use of low-quality building materials and elements are discouraged, such as:

- Metal cladding.
- Colored and mirrored glass.
- Plywood siding, T-1-11 plywood siding.
- Vinyl siding.
- Thin layers of stone or unit masonry that appear veneer-like.
- Corrugated plastic sheets.

From the tradition



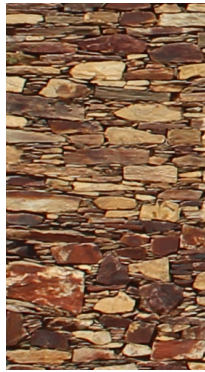
Location: Al Soudah



Location: Al Majared



Location: Rijal Alma



Local stone



Local stone

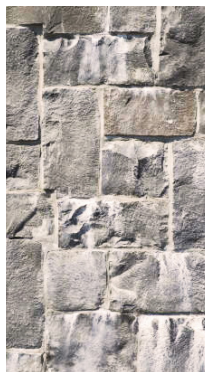


Local stone



Rammed earth

Contemporary interpretation



Diorite



Granite



Basalt



Sandstone

Earth base



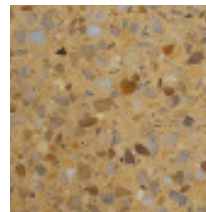
Plaster



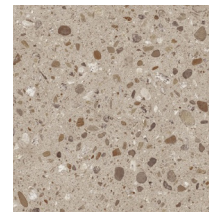
Adobe



Rammed earth



Terrazzo



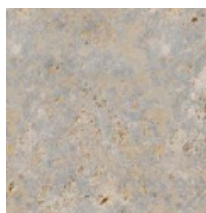
Terrazzo



Soapstone



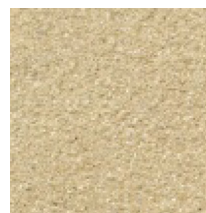
Shell limestone



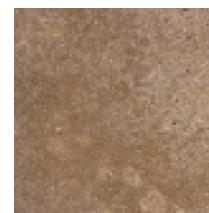
Shell limestone



Concrete



Pigmented
concrete



Pigmented
concrete

Other materials limited to 10% - 20%



Wood



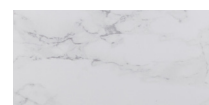
Metal cladding



Tensile fabric



Quartz



Marble



Travertine

FIG.39 ASEER ESCARPMENT - RECOMMENDED MATERIALS

5 Patterns

Common motifs and patterns used in the traditional craftsmanship and material culture of the Aseer Escarpment.

Traditional patterns help to express the architectural character and preserve its socio-cultural values, customs and traditions. Patterns and motifs are commonly used in Aseer Escarpment.

Use of different stones, triangular pattern, white paint in square pattern, colored window frames and shutters are a unique feature of this region.

Al Qatt Al Aseeri art form is frequently used in the escarpments.

Stripes, triangles, squares are commonly used.

The traditional art of weaving 'Al Sadu' featuring geometric designs is also practiced in the Aseer Escarpment region.

- 1 Al-Qatt Al-Aseeri using the traditional color palette and motifs may be represented through use in facade treatment, public realm and hardscape elements.
- 2 Art pattern should be used to reinforce the architectural formal idea, accentuate openings, entrance areas and for special architectural elements. Art patterns may also be used for enhancing a blank facade. In public plazas and open spaces, local art may be used to theme public realm elements.
- 3 In general, the range for decorative patterns should be between 10%-20% of the total facade area.

Patterns inspired from Aseer's Al-Qatt Al-Asiri traditional paintings are used along with square stone patterns in ornamentations in the Aseer Escarpment.

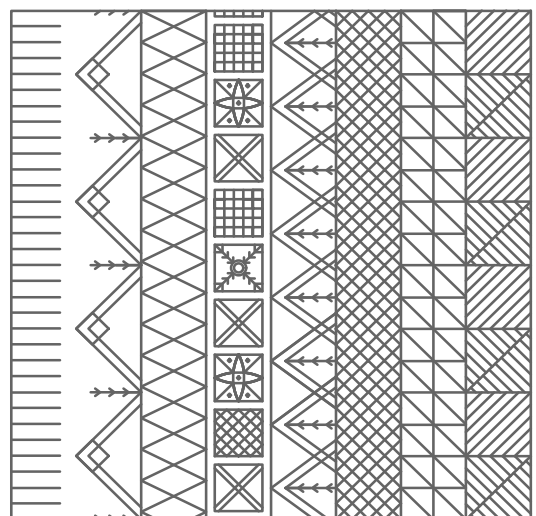
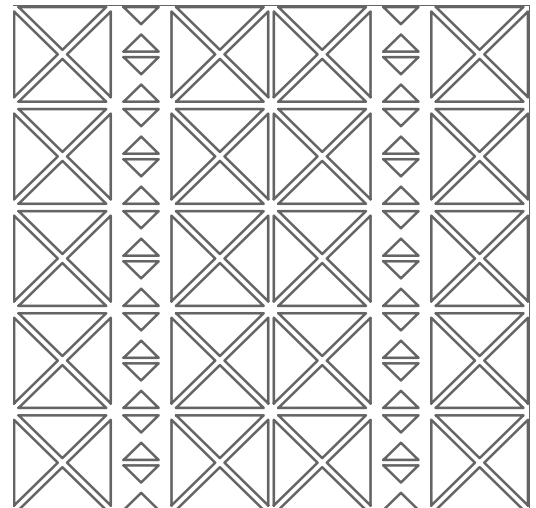
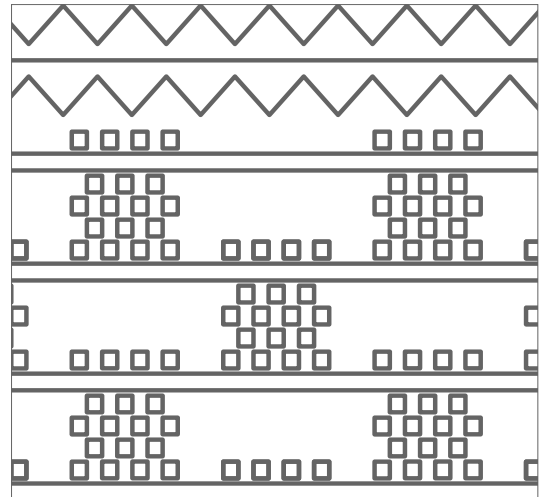


FIG. 40 Example of abstraction of decorative patterns and motifs

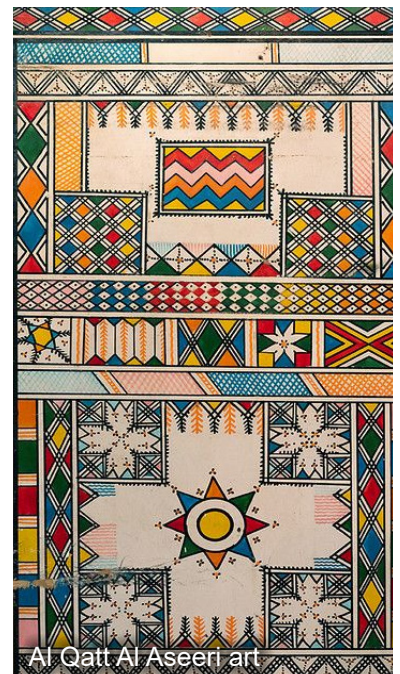


FIG. 41 Traditional patterns present in Aseer Escarpments

6 Applying the architectural character

Guidance for the careful interpretation and application of architectural character to contemporary developments.

6.1 Interpretation

Good application of architectural character does not mean direct copying of historical examples. Their contemporary use should involve interpretation: a selective emphasis of characteristics to create meaning and beauty in its new context. Designers can selectively use formal characteristics such as:

- Color (hue, tonality, tint).
- Shape (figure, outline, 2-D geometry).
- Form (volume, 3-D geometry).
- Texture (physical surface quality).
- Line (verticals, horizontals, diagonals, zigzags, curves, dashes, etc.).
- Value (lightness to darkness).

Interpreted elements can be further transformed in the way they relate to one another. Designers can play with compositional rules such as:

- Balance (equality or harmony of parts).
- Contrast (difference of parts).
- Emphasis (strengthening of parts).
- Movement (change, directionality).
- Pattern (repetition, symmetry).
- Rhythm (even and uneven spacing).
- Unity/variety (degrees of variation).

Designing with architectural characters is an interpretive art, an effort to express the spirit and essence of the original architecture in new yet familiar ways.

To encourage contextually sensitive contemporary design.

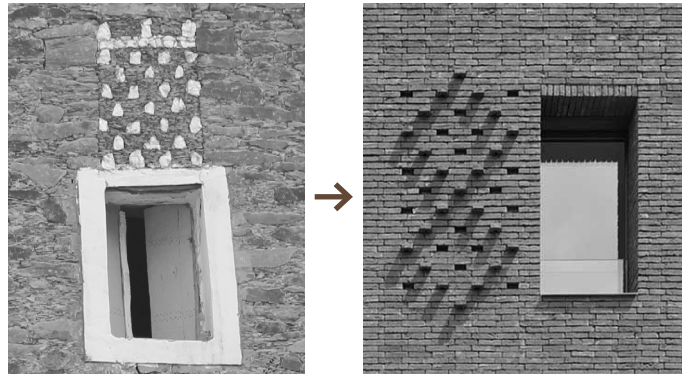


FIG. 42 Example of building material abstraction

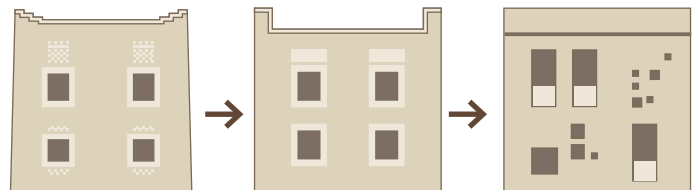


FIG. 43 Example of window shape abstraction

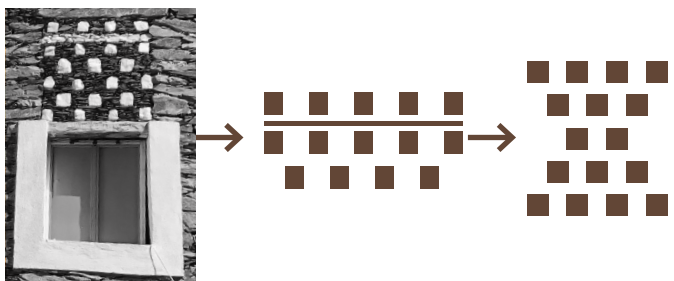


FIG. 44 Example of pattern abstraction

6.2

Scaling

Architectural characters often come from historical building types of a particular size. When applied to new developments of a dramatically different size, the original character can become distorted or repeated in a way where their quality and craftsmanship are reduced.

When applying architectural characters to new developments, designers should:

- 1 Be sensitive to the challenges of large project sizes. Break down building massing into smaller, more diverse and interesting massing that can better fit traditional elements of architectural character.
- 2 Observe the way elements are related to one another and to interior layouts in the source examples of architectural character.
- 3 Avoid mechanical repetition of elements without a clear design intention.
- 4 Respect the proportion, size and construction logic of the original architectural elements.
- 5 Do not scale and distort small elements into oversized graphic features that ignore the principles behind the use of the original element.
- 6 Pay special attention to building elements visible from the public realm, especially at the ground floor. The closer the element is to the public, the greater the fidelity and quality it should be. Conversely, elements farther away from public view may be more highly abstracted.

To successfully apply elements of traditional architectural character to large contemporary buildings.



FIG. 45 Break down building massing to better fit traditional architectural elements

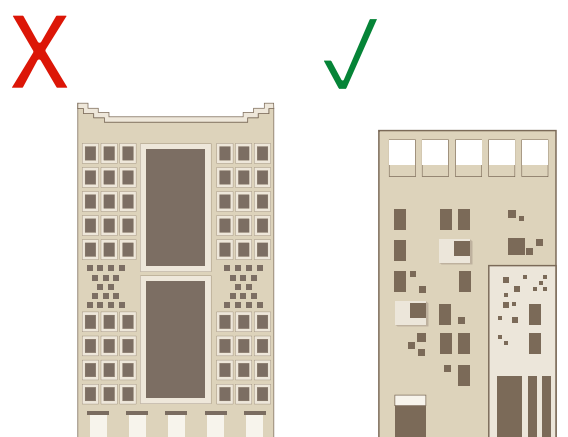


FIG. 46 Do not scale and distort smaller elements into oversized graphic features

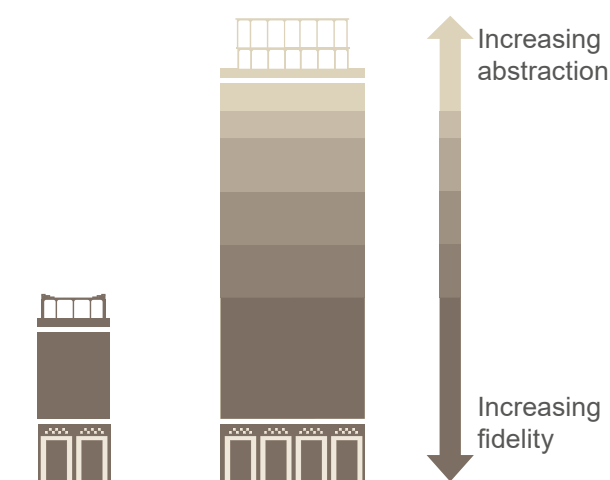


FIG. 47 Pay attention to building elements near the public realm, especially at the ground floor

6.3 **Functionality**

Architectural elements should perform functionally like their traditional counterparts, and not be applied superficially like graphic signage.

- 1 Architectural elements should be purposeful, contributing to the climatic or technical performance of a building for example: shutters should be operable, providing shading and privacy.
- 2 Architectural characters should not be applied in a superficially like wallpaper on an unrelated building form.
- 3 Architectural elements should not employ material fakery for example: the use of one material that pretends to be another.
- 4 Ornamental architectural elements are permitted where they strengthen the character and improve the quality of the building.

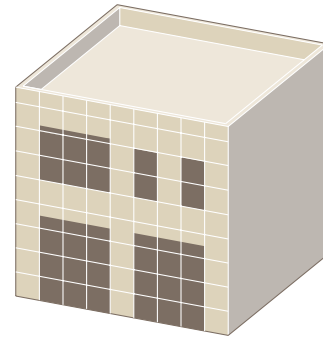
To maintain the functionality of architectural elements.

6.4 **Adaptation**

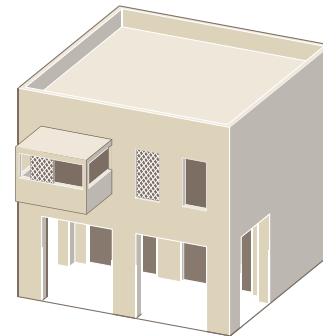
The application of traditional architectural characters to new building types requires sensitive adaptation.

- 1 Precious materials from the original may need to be substituted with suitable replacements.
- 2 Some architectural elements may need to be adapted for new building systems or methods of construction.
- 3 Some new building systems may clash with an architectural character, and should be avoided (for example: large space frames, spider-joint glazing, and large areas of curtain wall).

To apply architectural character through contemporary means.



Superficial elements



Functional recesses, projections and articulation

FIG. 48 Example of functional architectural elements

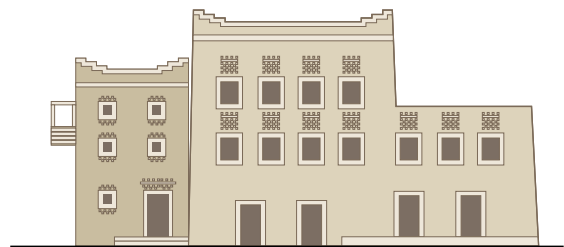


FIG. 49 Adaptation of traditional architectural elements to a contemporary building

6.5

Mixing

Architectural characters are part of living cultures that continually grow and change. The boundaries defining architectural character areas should be understood as provisional, open to influences from all around, rather than as fixed borders. This invites the possibility of styles and character strengths mixing together in large projects, and particularly in sites located on the edge of two or more character areas.

- 1 In large projects, when the project site is located at the edge of two or more character zones, the adjacent characters can influence the project by mixing the characters in different buildings, while prioritizing one above the other based on an analysis of the local context.
- 2 Avoid mixing more than one character within a single building; instead, the mixing should occur across different buildings depending on their location within the project and their functional use.
- 3 When mixing characters, the permitted style (traditional, transitional, or contemporary) should be taken into consideration based on the specified level.
- 4 Exercise informed creativity. Do not slavishly copy architectural characters.

To propose a clear method for the mixing and blending of architectural characters in large projects.

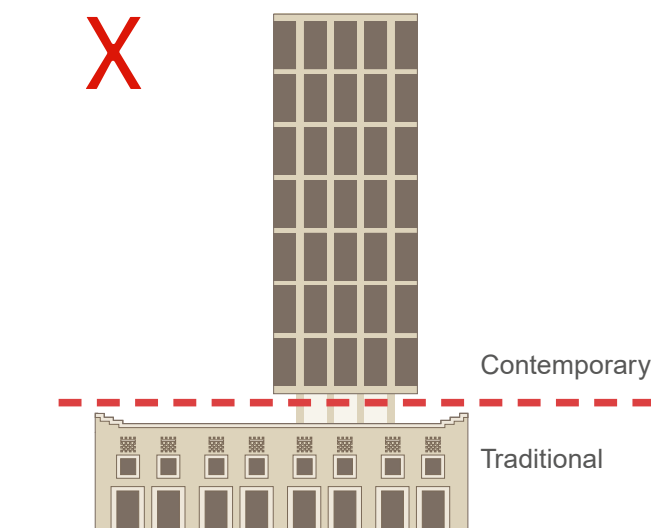


FIG. 50 Do not create hard breaks between mixed sources

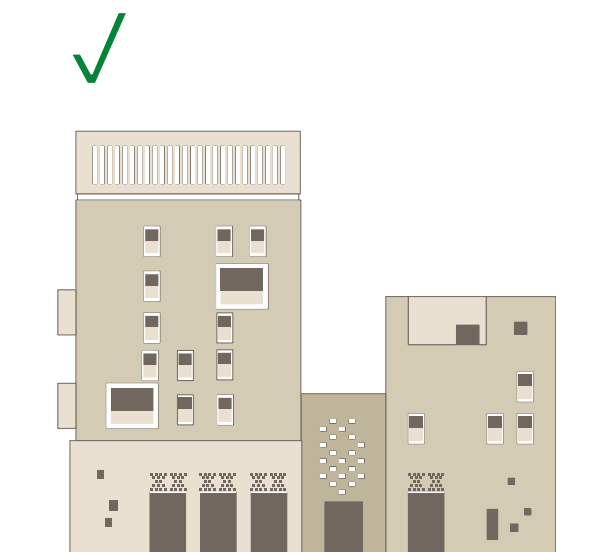


FIG. 51 Create gradual transitions between mixed sources and strengths of character application

7 Worked examples

This section provides examples for three styles, ranging from traditional, transitional to contemporary, for Aseer Escarpment character zone, showcasing application of key compositional elements as described in chapter 1

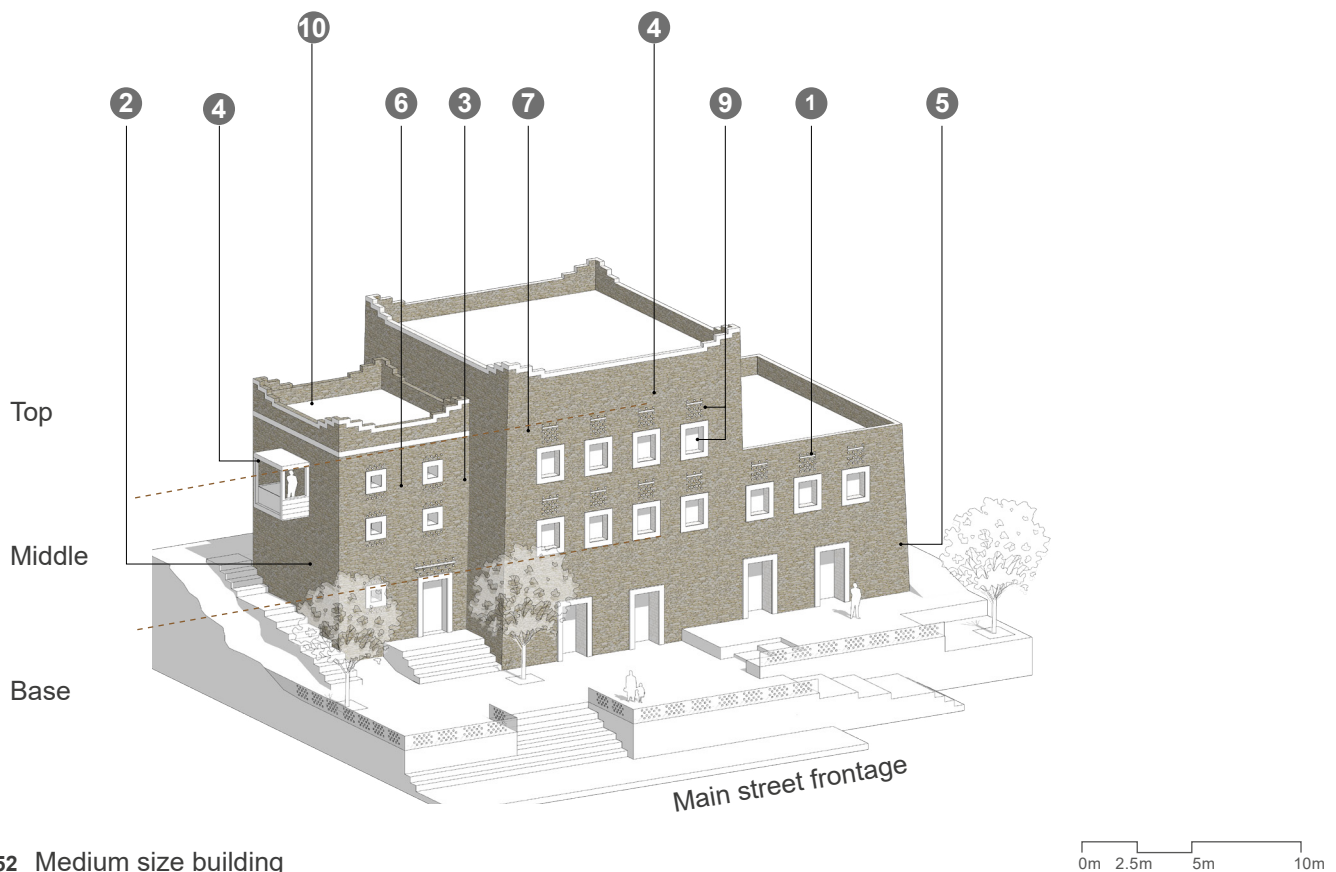


FIG. 52 Medium size building

7.1 Traditional

The massing and design of the new building should foster the traditional character, by adopting in a sensible way traditional forms and patterns, traditional architectural elements and decorations, traditional materials and colors.

The form and style of traditional architecture should be sensitive and sympathetic to the existing heritage asset and should help reinforce its local character.

- 1 All key compositional features of traditional architecture should be applied for the traditional style of architecture.
- 2 Compact massing with strong geometric shapes, towers tapering towards top and flat roofs.
- 3 Primarily vertical massing (prominent in large / clustered buildings) vertical facade breaks accentuating vertical massing.
- 4 Solid facades with multiple small windows in regular pattern. Projected balconies.

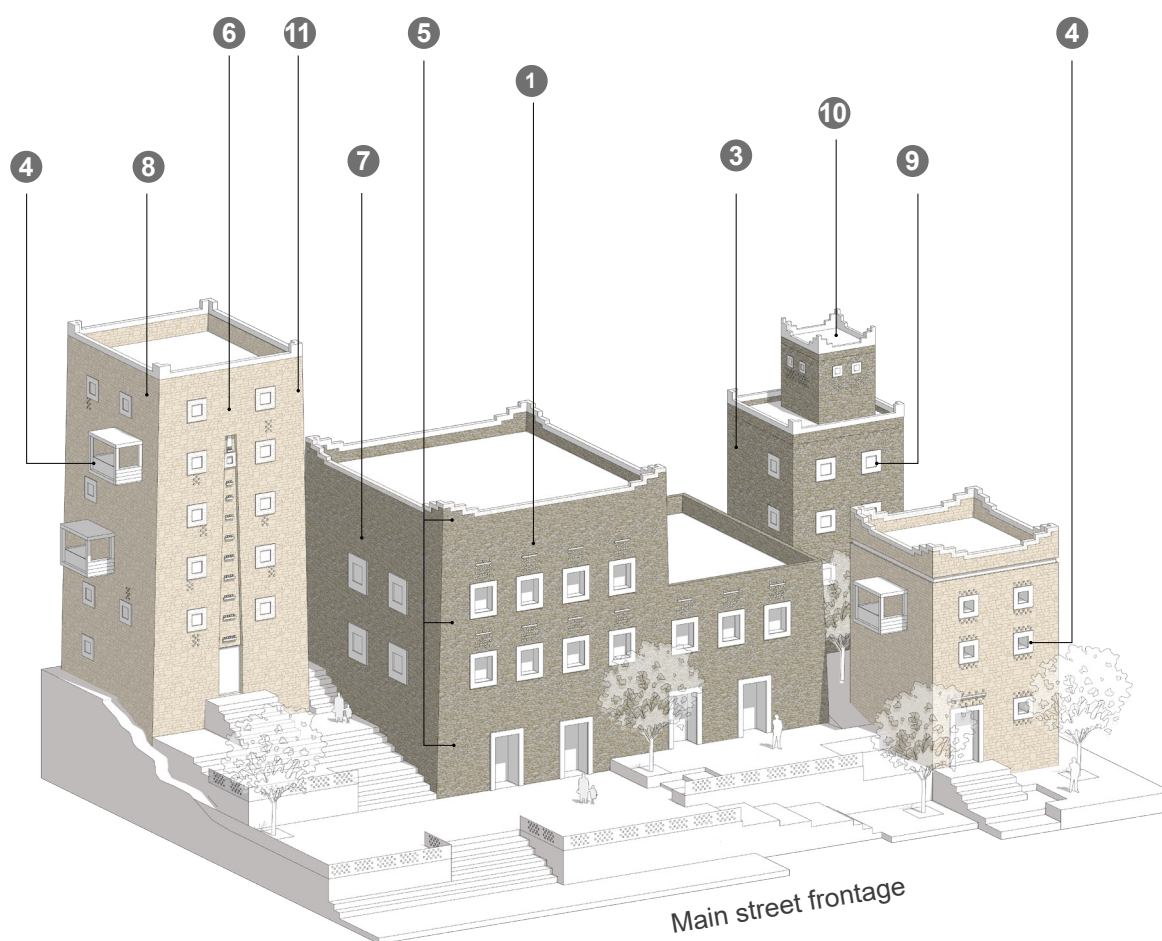


FIG. 53 Large size building

0m 2.5m 5m 10m

- 5 Well ordered, balanced, clear, yet evenly transitioned distinct base, middle and top part of the building.
- 6 Facades are generally with localized symmetrical composition, use of volumes bringing variation through vertical accentuation.
- 7 Generally consistent use of one material for the facade, use of stone is prominent.
- 8 General palette of light earth tone colors (beige, brown, and white) using recommended palette of materials, colors and finishes.
- 9 Typical colors and patterns used in Al Qatt al Aseeri art form used for decoration and highlights.
- 10 Flat roofs with articulated parapets, in stepped fashion, and horizontal banding. Articulation usually supporting privacy requirements.
- 11 Large buildings in traditional style should not exceed more than 6-7 stories, respecting the traditional typologies.

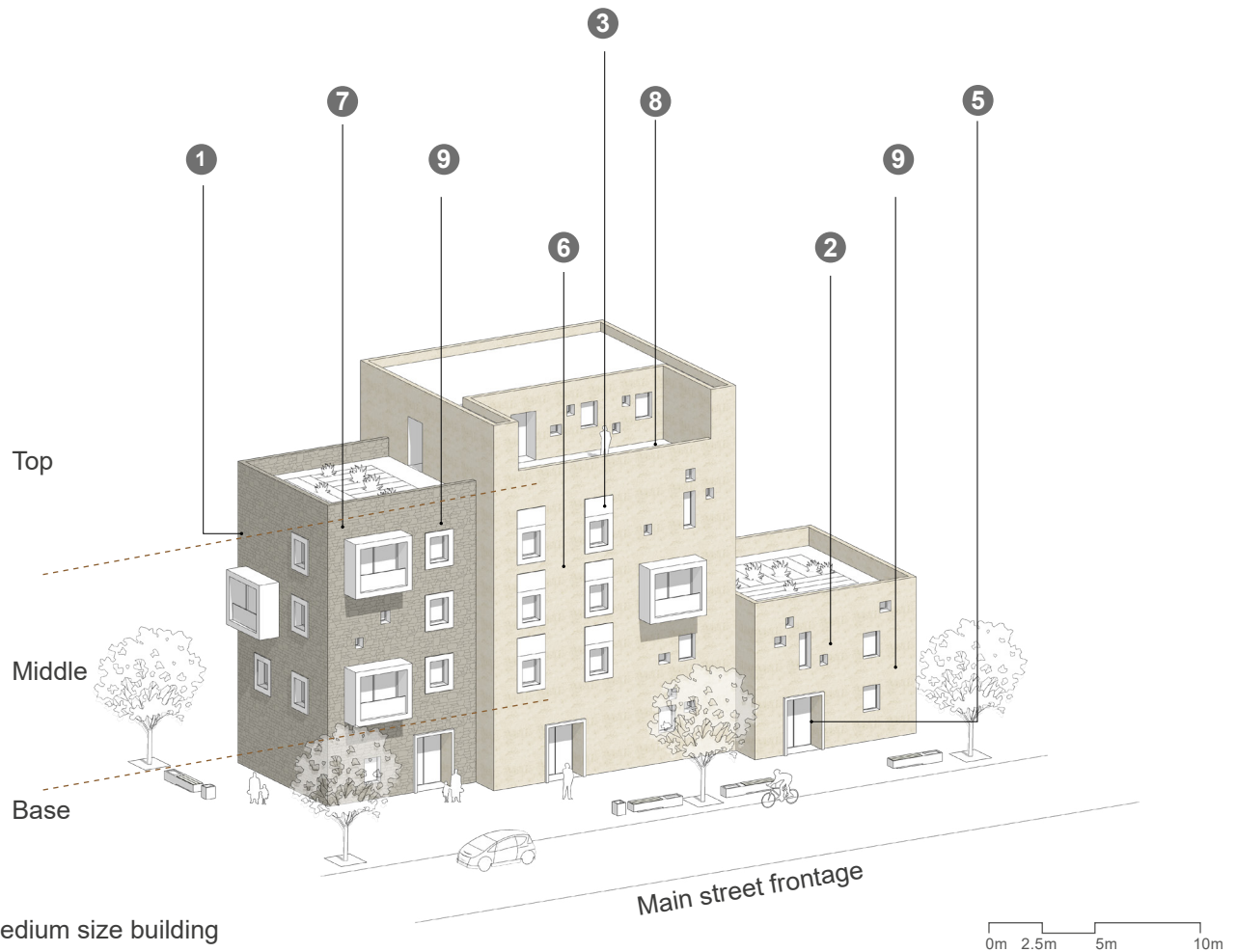


FIG. 54 Medium size building

7.2 Transitional

The form and style of transitional style should distill the essential qualities and values of vernacular architecture, addressing the need of new ways of living yet reflecting a strong character respecting and celebrating the local character and traditions, providing a sense of belonging.

The form and style to be adopted for transitional style should distill the most essential qualities and character giving architectural elements, such as the dominant features and use of appropriate material and color palette.

- 1 Compact massing with strong geometric shapes, and flat roofs adapted to the topography of the character zone.
- 2 Grounded facades with moderate sized openings. Max. 40% openings of the overall facade surface.
- 3 Interpretation of windows with articulated tops, projected balconies, patterns and rhythm.
- 4 Well ordered, balanced, clear, yet evenly transitioned distinct base, middle and top part of the building.
- 5 Solid base with integrated shopfronts, shutters and screens maintaining grounded facade

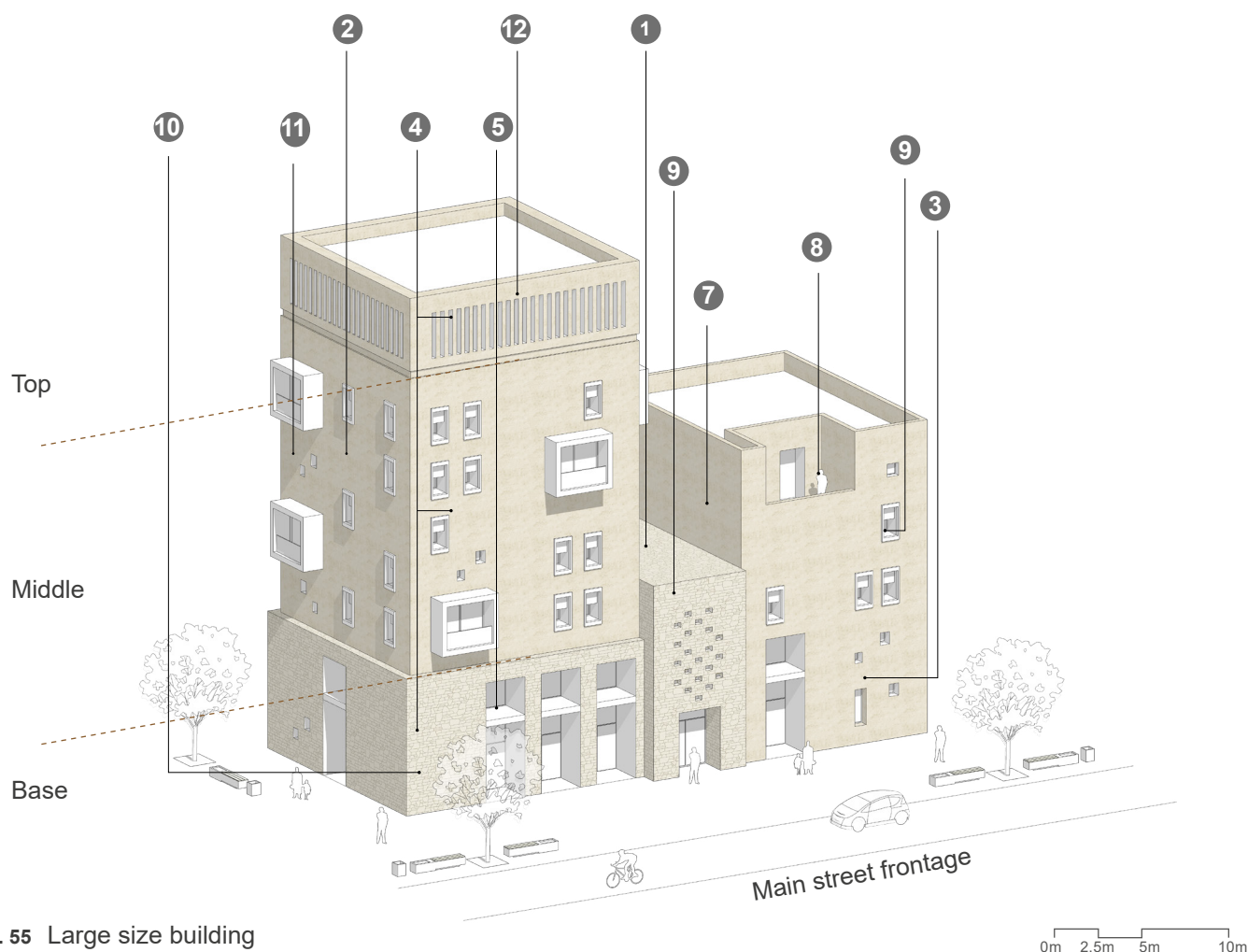


FIG. 55 Large size building

character.

- 6 Facades with general asymmetry, localized symmetrical composition of windows, use of volumes bringing variation through vertical accentuation.
- 7 Generally consistent use of one material for the facade, use of stone finish is encouraged. General palette of light earth tone colors (beige, brown, and white) using recommended palette of materials, colors and finishes.
- 8 Flat roofs with articulated parapets, supporting privacy requirements and hiding rooftop equipments.
- 9 Typical colors and interpretation of patterns used in Al Qatt al Aseeri art form used for decoration and highlights.
- 10 In tall buildings, height of podium should establish street wall and reinforce the human scale and character of the area.
- 11 Large buildings/ towers shall be tall, slender structures that enhance the skyline, large, elongated, boxy or slab like floor plates should be avoided.
- 12 Articulation of top zone should positively contribute to the skyline and design should be used to create landmarks.

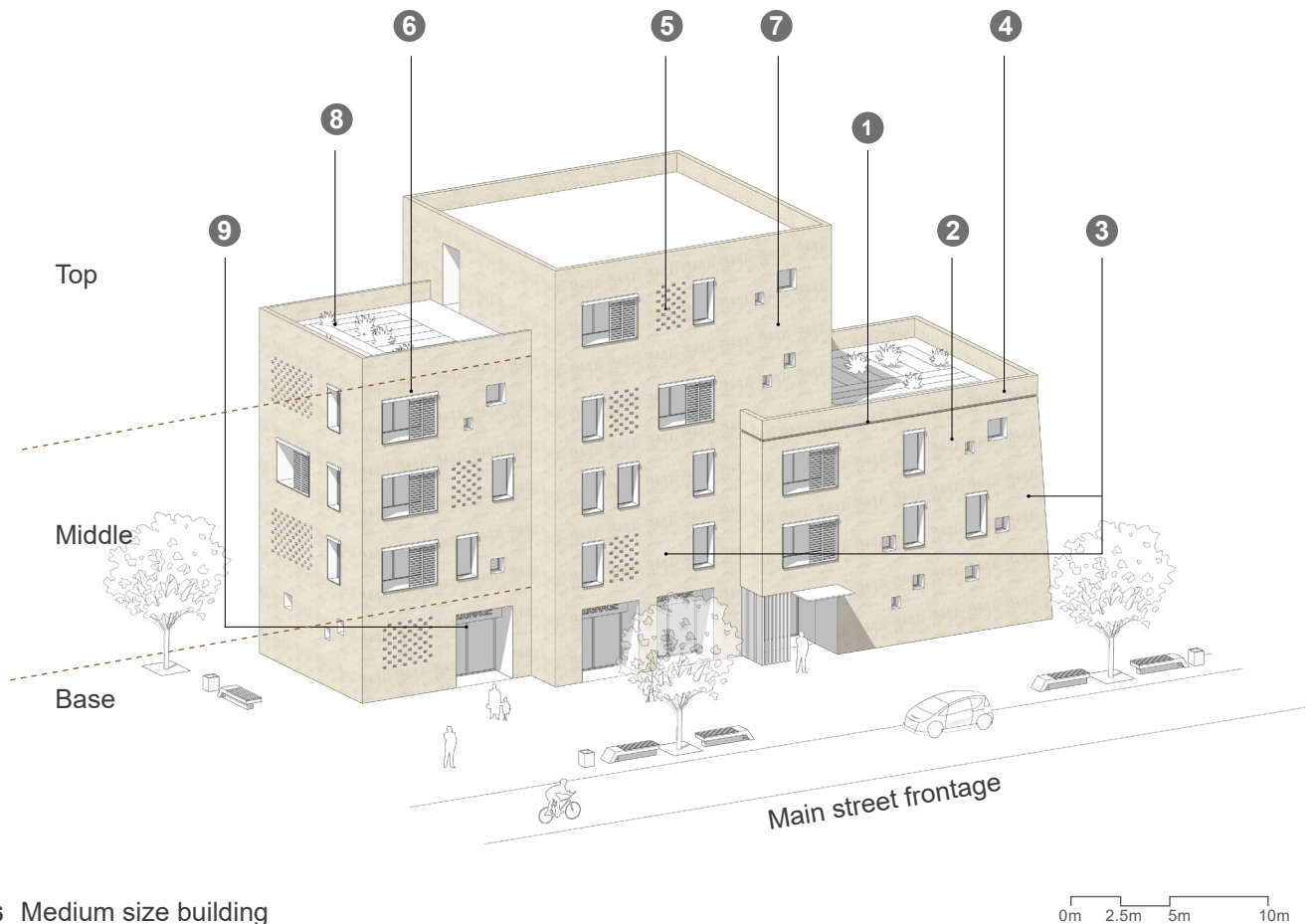


FIG. 56 Medium size building

7.3 Contemporary

The form and style of contemporary style should distill the essential qualities and values of vernacular architecture in a new and ever contemporary expression. It should address the need of contemporary living yet respect and celebrate the local natural character and traditions; providing a unique character to the built form and a sense of belonging.

Contemporary style should be achieved by re-interpreting in an innovative way traditional forms and patterns, traditional architectural elements and decorations, traditional materials and colors.

- 1 Compact massing with strong geometric shapes, and flat roofs.
- 2 Grounded facades with moderate sized openings. Max. 50% openings of the overall facade surface.
- 3 Generally, the use of maximum 2 architectural compositional motives for the design derived from the sources is recommended.
- 4 Simplified detailing and accents.
- 5 Interpretation of window patterns, projected screened balconies and patterns.

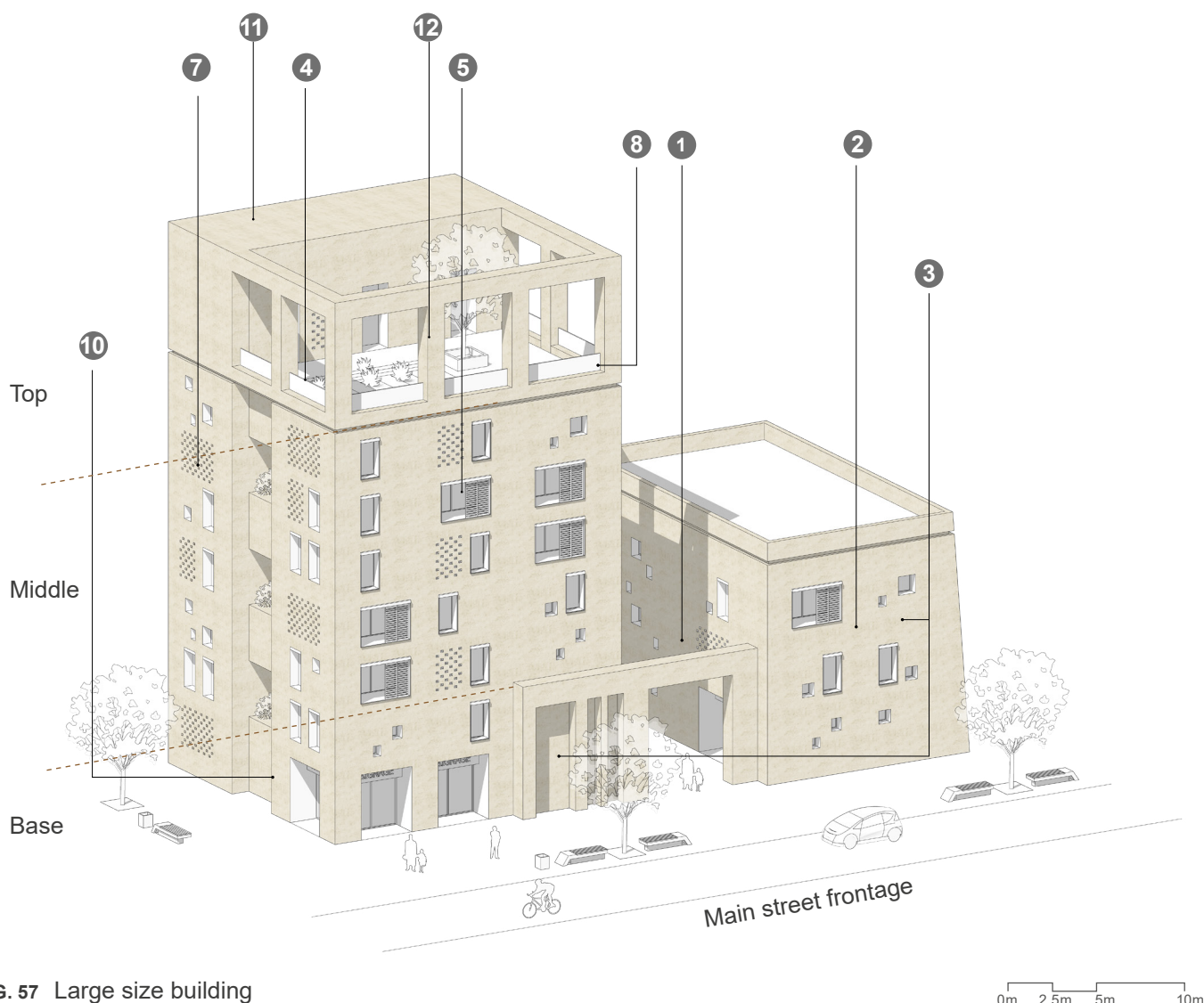


FIG. 57 Large size building

- 6 Facades with general asymmetrical composition, use of volumes bringing variation through vertical accentuation.
- 7 Generally consistent use of one material for the facade, use of stone finish is encouraged. General palette of beige, brown, and white using recommended palette of materials, colors and finishes.
- 8 Flat roofs with simple / articulated parapets, supporting privacy requirements and hiding rooftop equipments.
- 9 Typical colors and interpretation of patterns used in Al Qatt al Aseeri art form used for decoration and highlights.
- 10 In tall buildings, height of podium should establish street wall and reinforce the human scale and character of the area.
- 11 Tall buildings/ towers shall be tall, slender structures that enhance the skyline, large, elongated, boxy or slab like floor plates should be avoided.
- 12 Articulation of top zone should positively contribute to the skyline and design should be used to create landmarks. Loosely held tripartite facade character for small buildings.

8 Public realm

An overview of public realm character in Aseer Escarpment.

8.1 Overview

The focus of the public realm guidelines within this document is to strengthen local character by identifying and enhancing distinct characteristics of public realm in Aseer Escarpment. It is meant to provide high-level principles and recommendations to be further developed in masterplans and public realm strategies within the Character Area.

These guidelines are not intended to be a comprehensive technical resource. For this the designer should consult the National Public Realm Design Manual prepared by the Ministry of Municipalities and Housing, and support the five key principles identified in it.



- 1 Human scale
- 2 Pedestrian mobility
- 3 Sustainability
- 4 Culture and heritage
- 5 Visual appeal

FIG. 58 National Public Realm Design Manual and its five key principles

This chapter is organized as follows:

- **General character** - a narrative summary and photographic overview of the qualities of public realm found in the character area.
- **Types of public space** - a selection of spatial types that provide the built environment of the area its distinctive character.

- **Materials** - a summary of hardscape character for the area.
- **Planting** - a summary of softscape character for the area.
- **Street furniture** - suggestions and precedents for suitable street furniture.
- **Lighting** - high-level lighting principles for the enhancement of the public realm.
- **Signage** - high-level signage principles for the enhancement of the public realm.
- **Parking** - high-level parking design principles for enhancement of the public realm.
- **Worked examples** - visualizations that illustrate the combined intentions of the public realm guidelines.

Together the sections above aim to give a broad overview of public realm that will reinforce the character of Aseer Escarpment.

8.2 General character

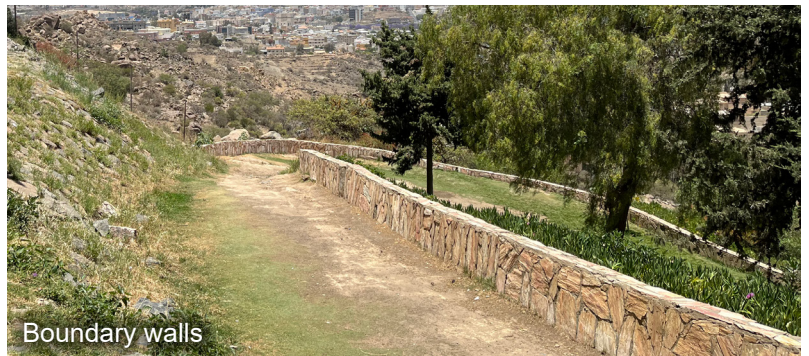
The adjacent photographs summarize the typical characteristics of public realm and local landscape in Aseer Escarpment. As set out in the introduction, the area is characterized by the being situated between the Tuhama Foothills and the Abha Highlands on the edge of the Arabian Shield.



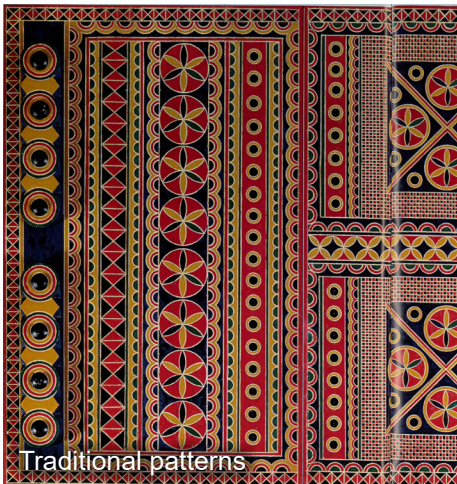
Sloped terrain



Highlands



Boundary walls



Traditional patterns



Narrow covered zuqaq



Saha



Unique escarpments



Narrow zuqaq shaded by tall walls



Agriculture lands

FIG.59 PUBLIC REALM ELEMENTS

8.3 Types of public space

Aseer Escarpment's public realm is characterized by clusters of villages with small internal courtyards and community spaces (Baraha). Wadi valleys are extensively terraced for cultivation or for villages, often with larger public spaces (Saha), for local markets and gatherings.

The general character and hierarchy of the public realm are distinguished by their scale, character, and relationship with the surrounding topography and predominant land uses.

Collectively these spaces create a diverse public realm which contributes to the community for both residents and visitors alike and reinforces the distinct character of the area.

The following plan illustrates a typical hierarchy of urban spaces and streets in the Aseer Escarpment.

The following categorizations are considered the principal typologies:

- Street- primary routes which define the edges of smaller settlements, mediating between green oasis areas, and buildings.
- Zuqaq- local alleys, generally narrow and of varying width and footfall which connect spaces and streets across settlements.
- Baraha- local public open space, usually found in a residential neighborhood. Often appear as a widening of streets and the confluence of several streets.
- Saha- larger local open space with a public function, such as public gatherings or markets.

Specific areas might include additional variations in these typologies, reflecting local scale, character and use. Parks and recreation areas should also be provided.



FIG. 60 Typical settlement pattern

 Street	 Saha	 Cultural landscape
 Zuqaq	 Private courtyards	 Trees
 Baraha	 Buildings	 Terraces

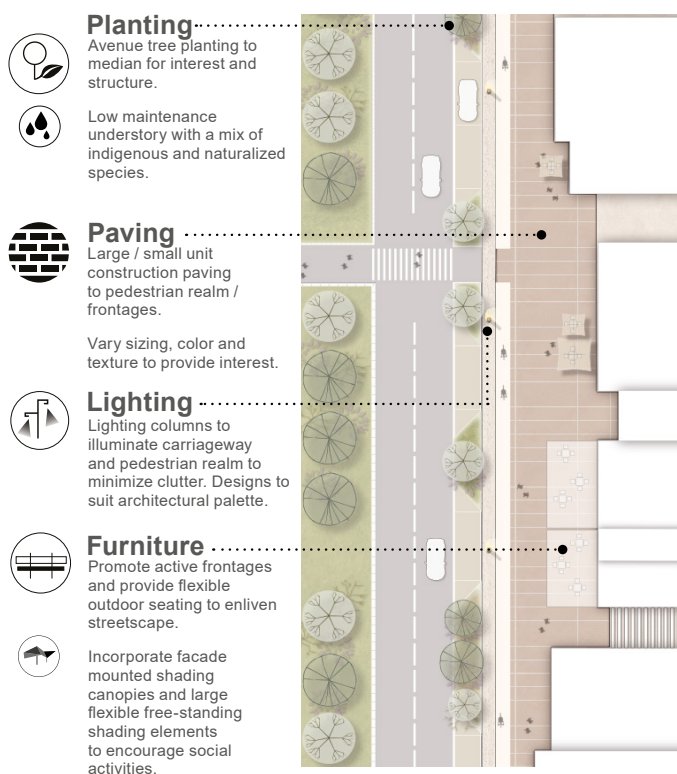


FIG. 61 Street
Vehicle corridor with adjacent pedestrian realm

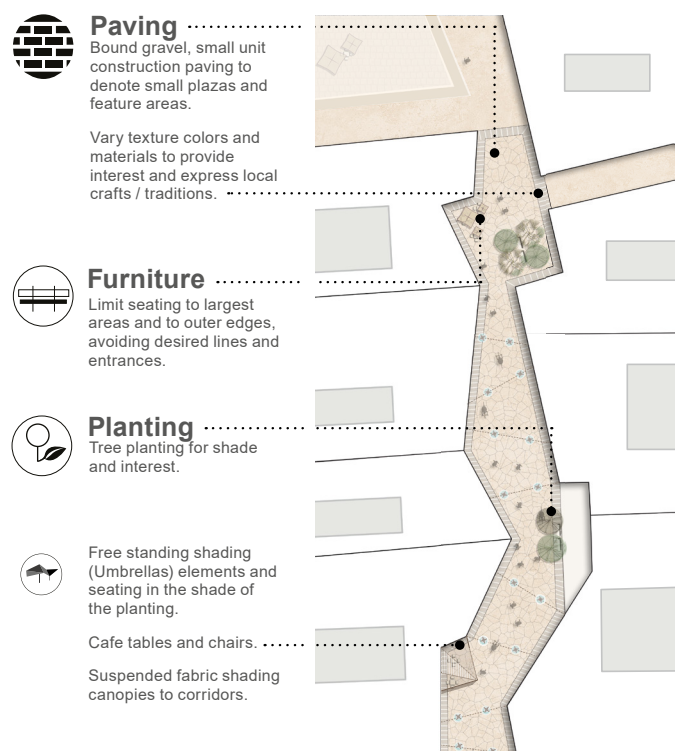


FIG. 62 Zuqaq
Pedestrian realm, no vehicular access or shared access

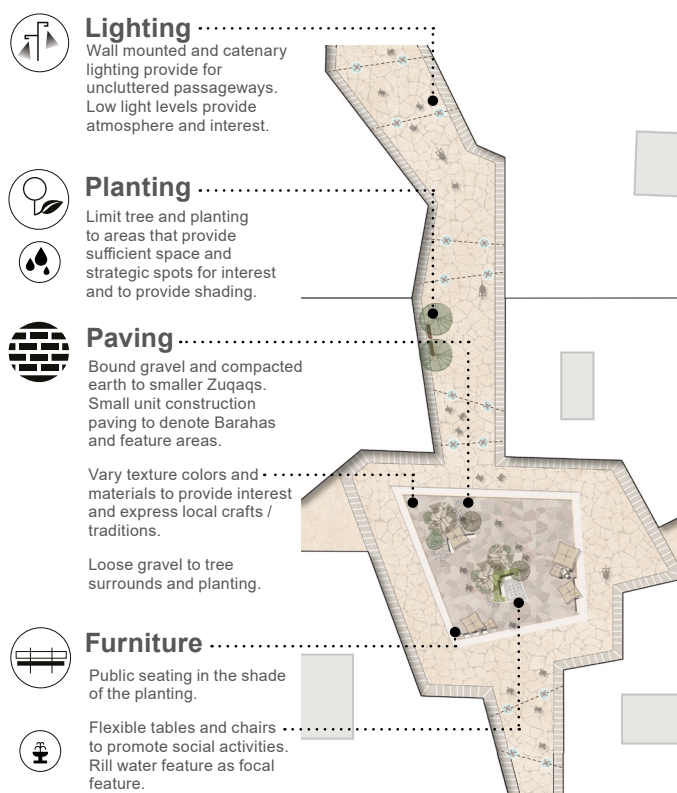


FIG. 63 Baraha
Pedestrian realm, no vehicular access or shared access

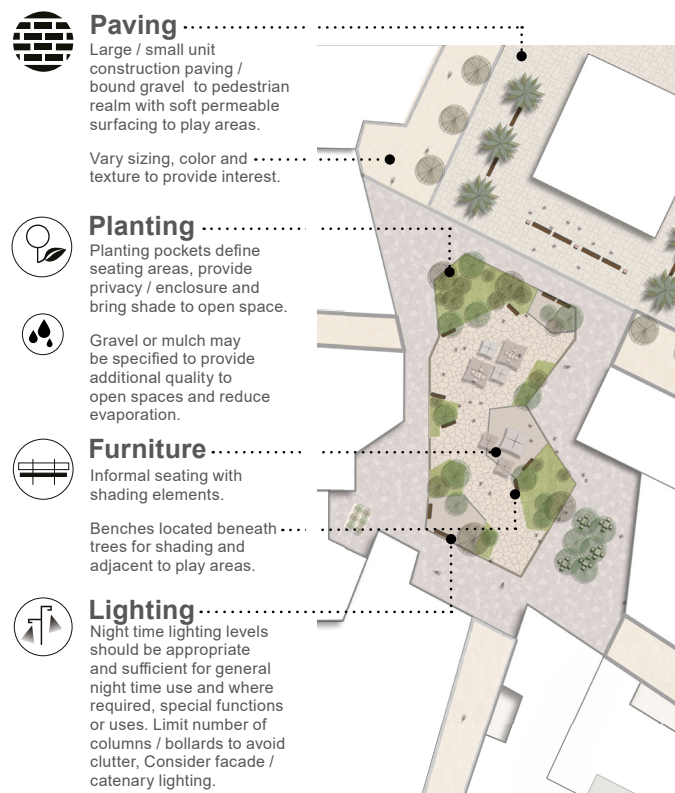


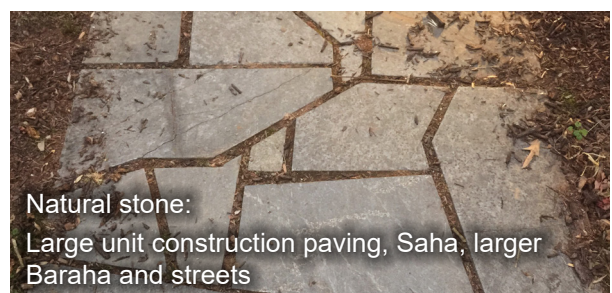
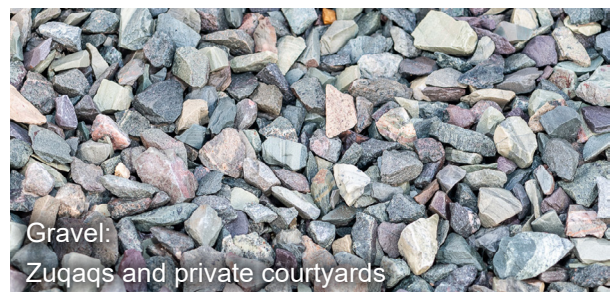
FIG. 64 Saha
Pedestrian realm, no vehicular access or shared access

8.4 Materials

The materials palette for Aseer Escarpment has been designed to be simple and sensitive to the existing character of the area.

Key considerations

- 1 Select locally sourced KSA materials with low embodied carbon and high content of reused or recycled aggregates (for non-natural materials).
- 2 Areas with higher footfall demand paving should have a higher specification and durable materials, fit for purpose, minimizing the need for regular repair and replacement.
- 3 Re-use materials where possible formed from waste material.
- 4 Deliver materials to site using sustainable means of transport, where possible.
- 5 Select materials that are robust and have longevity and that can be easily cleaned, repaired, and sourced – so high-quality materials can be replaced like for like. Maintain a nominal extra supply of materials to enable quick replacement of damaged or missing units.
- 6 De-pave where possible to improve the micro-climate and use suitable sands / aggregates or suitable hydro zones in place of non-permeable paving.
- 7 Materials should provide varying textures within a simple color palette to compliment the area's architectural character.
- 8 Employ subtle changes to paving to highlight difference between typologies.
- 9 Make good and renovate existing streetscapes, ensuring materials are replaced only when necessary to minimize carbon footprint.
- 10 Using a larger paving format to emphasize more prominent routes.
- 11 Consider incorporating special patterns or textures to emphasize important places or spaces.



8.5

Planting

Tree and shrub planting should complement the overall character of the Aseer Escarpment area, helping to define places and enable planting habitats through sustainable methods.

Key considerations

1 Water must:

- Be considered carefully, responding to the local micro-climate and water availability.
- Use drought tolerant species and consider Xeriscapes principles to minimize water consumption.

2 Trees should:

- Adopt, informal arrangements, avoiding overly linear (unless forming street avenues), or formal / block type compositions. Varied natural groups of evergreen species (Juniperus) reflect the natural tree habitat.
- Only be planted where shade can be best utilized for pedestrian comfort and interest.
- Make a characterful contribution to the quality of routes and spaces. Consideration should be given to how a tree is seen and how trees can be used as wayfinding markers and frame important views and routes.

3 Planting should:

- Be limited to Xeriscape solutions within urban areas, mainly in gathering spaces (Saha / Baraha). Contribute to maintaining and enhancing wadi corridors, using multi-layered, informal planting where appropriate, comprising a variety of indigenous species.
- Minimize ornamental planting outside urban areas.
- Consider additional habitat value such as fruits for birds, etc.
- A varied mix of indigenous and naturalized species will help create an appropriate response to rural or urban applications.

Trees



Acacia asak
(Senegalia asak)



Juniperus procera
(African juniper)



Ficus salicifolia
(Wonderboom)



Ziziphus spina christi
(Sidr tree)

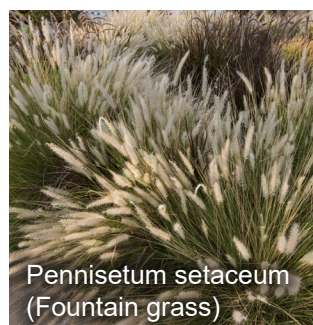
Shrubs



Andropogon distachyus
(Broomsedge)



Buddleja polystachya
(Butterfly bush)



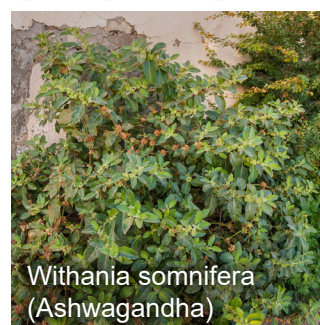
Pennisetum setaceum
(Fountain grass)



Plectranthus marrubioides
(Little spurflower)



Plumbago zeylanica
(Wild leadwort)



Withania somnifera
(Ashwagandha)

8.6 Street furniture

Street furniture should be carefully selected to provide continuity and co-ordination, limiting clutter. Colors and style of furniture should blend into the context rather than stand out as features. In general, the design of street furniture should explore opportunities to utilize local materials, respond to the local landscape and cultural heritage and celebrate local crafts, traditions, and skills.

Key considerations

- 1 Be distributed evenly across all areas with reference to space types above.
- 2 Not obstruct pedestrian movement, cycle paths, nor clutter public open spaces.
- 3 Consider color and material consistency.
- 4 Be integrated into the public realm, flexible, and movable where required.
- 5 Feel ephemeral and informal, acknowledging the historic condition of street furniture in the region.
- 6 Consider accessibility with seating distributed at suitable intervals and have suitable heights and backs or armrests.
- 7 Be of high quality, coherent, and rationalized to minimize street clutter.
- 8 Have a co-ordinated appearance, with a consistent materials and color palette to complement the character of the public realm.
- 9 Avoid duplication by rationalizing and combining elements.
- 10 Be easily maintained and repaired with easily available/replaceable components.
- 11 Be retained and renovated/improved where existing furniture has heritage value.
- 12 Boundary walls should contribute to the landscape character and scale and contribute to the character and setting of the space.



FIG. 65 Mixture of different materials in furniture elements in harmony with the context. Riyadh, KSA

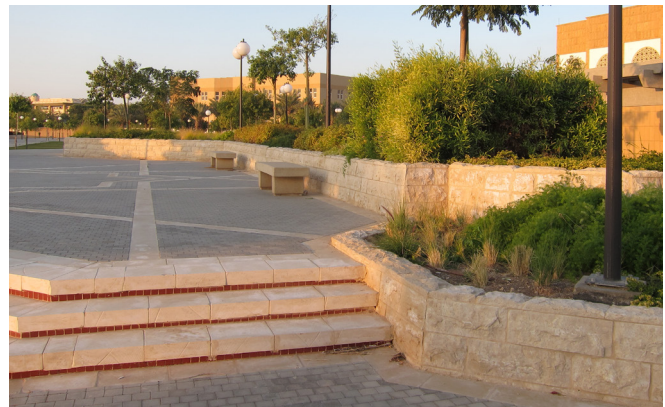


FIG. 66 Boundary walls, planters and seating elements utilizing natural and local materials. The diplomatic quarter, Riyadh, KSA



FIG. 67 Shading structure utilizing available natural and local materials. Rijal Almaa, KSA

8.7 Lighting

A coordinated lighting strategy should create an appropriate and distinctive atmosphere for different areas to reinforce Aseer Escarpment's architecture. Lighting should not be distracting, the focus should always be on the setting, mood or character and quality of the space and buildings.

Key considerations

- 1 Light levels should be kept as low as possible to minimize light pollution and adverse effects on ecology and habitats.
- 2 Utilize lighting to increase overall safety and enjoyment at night.
- 3 Provide lighting and light levels that are appropriate to patterns of use, character, and context.
- 4 Utilize lighting temperature to reinforce difference between routes and to define contrast between character areas.
- 5 Sensitively highlight historic buildings, mosques and public buildings / spaces after dark, subtly revealing their architecture without over-use of light.
- 6 Utilize lighting that is appropriate to scale and context of routes and spaces - e.g. lower mounted lights on smaller lanes and in historic conditions to highlight textures.
- 7 Utilize contemporary lighting elements which are low energy, low heat, and dust resistant with a long life expectancy.
- 8 Manage private light spill, light pollution, or trespass - particularly over-lighting of shopfronts on souqs and streets - producing diffuse, soft and warm light.
- 9 Design of lighting fixtures should be authentic to the area - simple, sensitive to the setting, not historically pastiche or using imported historic forms.
- 10 Introduce a lighting control system that allows variable light levels.



FIG. 68 Low ambient lighting to minimize light pollution. Matera, Italy



FIG. 69 Contextual lighting elements. Rijal Almaa, KSA



FIG. 70 Luminaries and spotlights casting warm ambient light highlighting facades and landscape features. Al Ula, KSA

8.8 Signage

Signage and public information system design, including materials, should respond to the character and environmental elements within the Aseer Escarpment area.

Signage elements should be seen as part of a wider strategy that seamlessly integrates with the furniture, lighting elements and landscape, reflecting and complimenting the hardscape materials palette.

Key considerations

- 1 Should include a combination of unified and integrated elements that are simple, concise, legible, and consistent that help and orient people to find their way, educate, entertain or to provide relevant information.
- 2 These can include, landmarks, points of interest, sculptural designs integrated with architecture, materials, landscape, lighting, furniture, and digital information.
- 3 Robust, flexible, and hard wearing with high quality durable finishes which adopt sustainable processes.
- 4 Allow for upgrading / updating and possible customization (e.g. special events).
- 5 Consider minimizing the amount of visual clutter by keeping fittings and support elements to a minimum by utilizing lighting columns, buildings and other structures in lieu of standalone columns and supports.

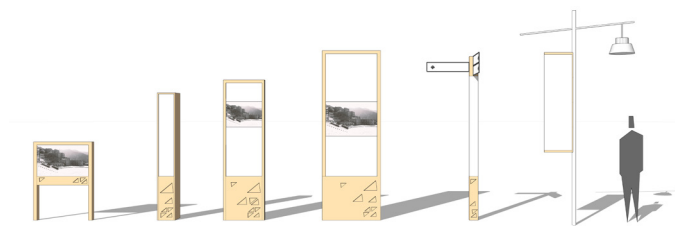


FIG. 71 Example of a signage family illustrating how contextual elements of traditional patterns and colors could be expressed within the lighting and signage elements



FIG. 72 Recycled materials / Signage complementing the context. London, UK



FIG. 73 Paving as a wayfinding / information strategy (Riyadh). @Space Agency Masterplanners

8.9 Parking

Parking areas are divided into two distinct groups, off-street parking which is predominantly private and on-street parking which is dedicated to public parking.

Consideration of parking layouts within the public realm can be designated into three types:

- Perpendicular parking.
- Parallel parking.
- Angled Parking.

The design of parking areas should be integrated into the overall design of the public realm, considering, requirements of the user, pedestrians, urban mobility, landscape, and hardscape elements.

Key considerations

- 1 Consideration shall be given to the needs of all users, with design solutions for ease of accessibility to parking for the physically impaired.
- 2 Clear legible, defined, and safe pedestrian links between parking areas and adjacent destinations should be planned.
- 3 The screening of large areas of parked cars shall be considered, with trees, hedging and landscape berms helping to minimize views of parked cars.
- 4 Consider introducing planting in regular parking spaces, to break up the expanse of cars and introduce shading.
- 5 Large canopy trees should be considered for the shading of vehicles.
- 6 Consider adopting sustainable urban drainage solutions for surface storm water runoff. The use of permeable surfacing materials and bioswales to parking medians with suitable planting should be encouraged.



FIG. 74 Example of parking & pedestrian route improvement with private development setback area



FIG. 75 Example of an attractive pedestrian realm, incorporating parking, pedestrians and planting



FIG. 76 A lively well designed attractive shared space, where people can, walk, relax, shop. Ciudad Real, Spain

8.10 Public realm worked examples

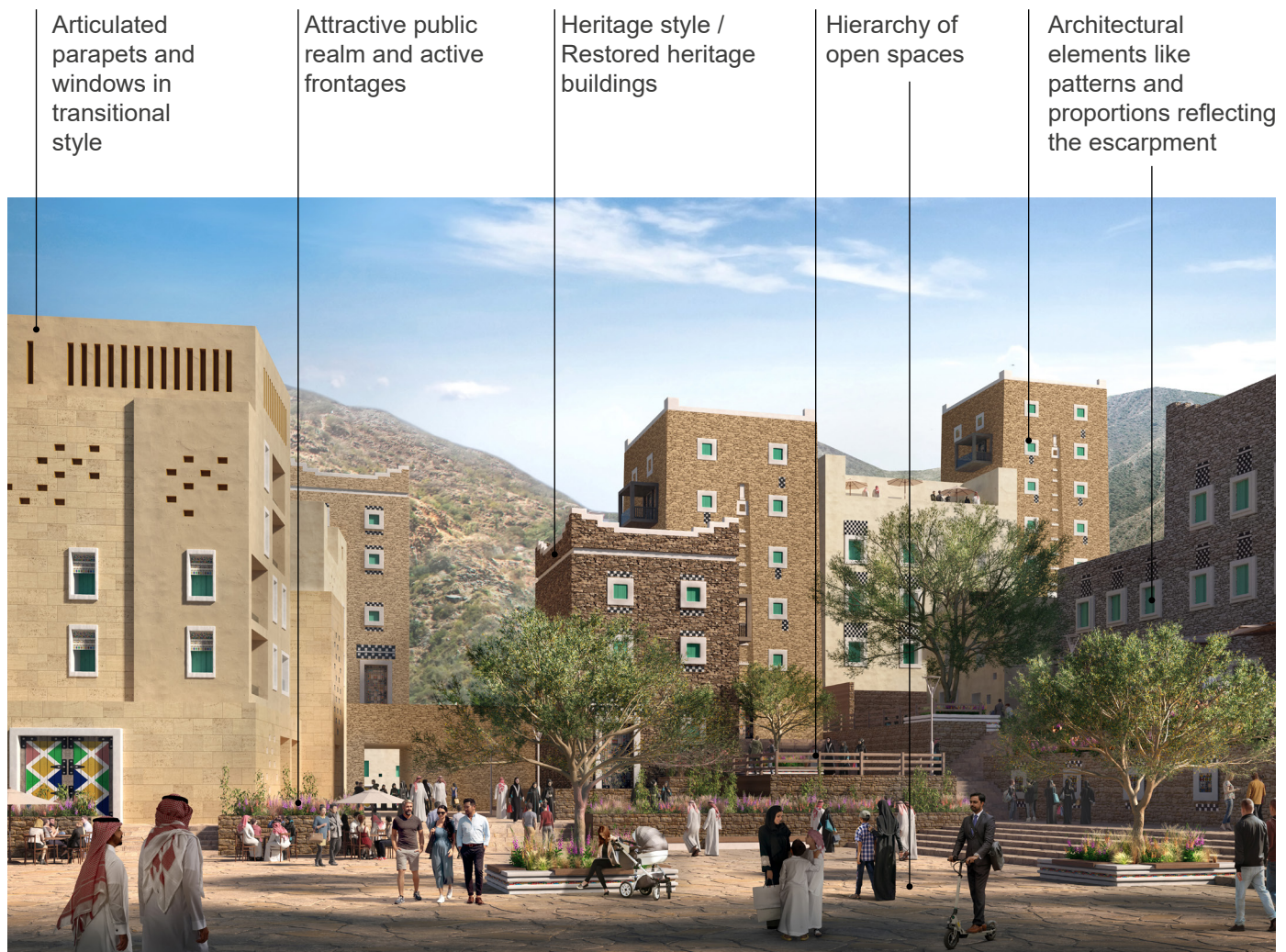


FIG. 77 Proposed view of heritage plaza in Aseer Escarpment

The above illustrations are an example of a holistic vision for a heritage plaza and a main street in the urban center in the Aseer Escarpments, with displays a of attractive public realm, active frontages, restoration of heritage buildings, contemporary interpretation of contextual architecture elements, high standard architectural materials and finishes, a color palette reflecting the local context, use of local art and patterns, and the enhancement of natural features.

- 1 Whilst the materials and colors should be limited within the spectrum of the natural context of the Aseer Escarpments, complimentary colors and contemporary patterns may be used to highlight destinations, routes and help reflect adjacent architectural elements.
- 2 Contemporary building massing should respond to the immediate context and to the history of the place fostering human scale.
- 3 Progression of privacy, from private to public in open space design, and the relationship between spaces should be dependent on the local culture of the place.

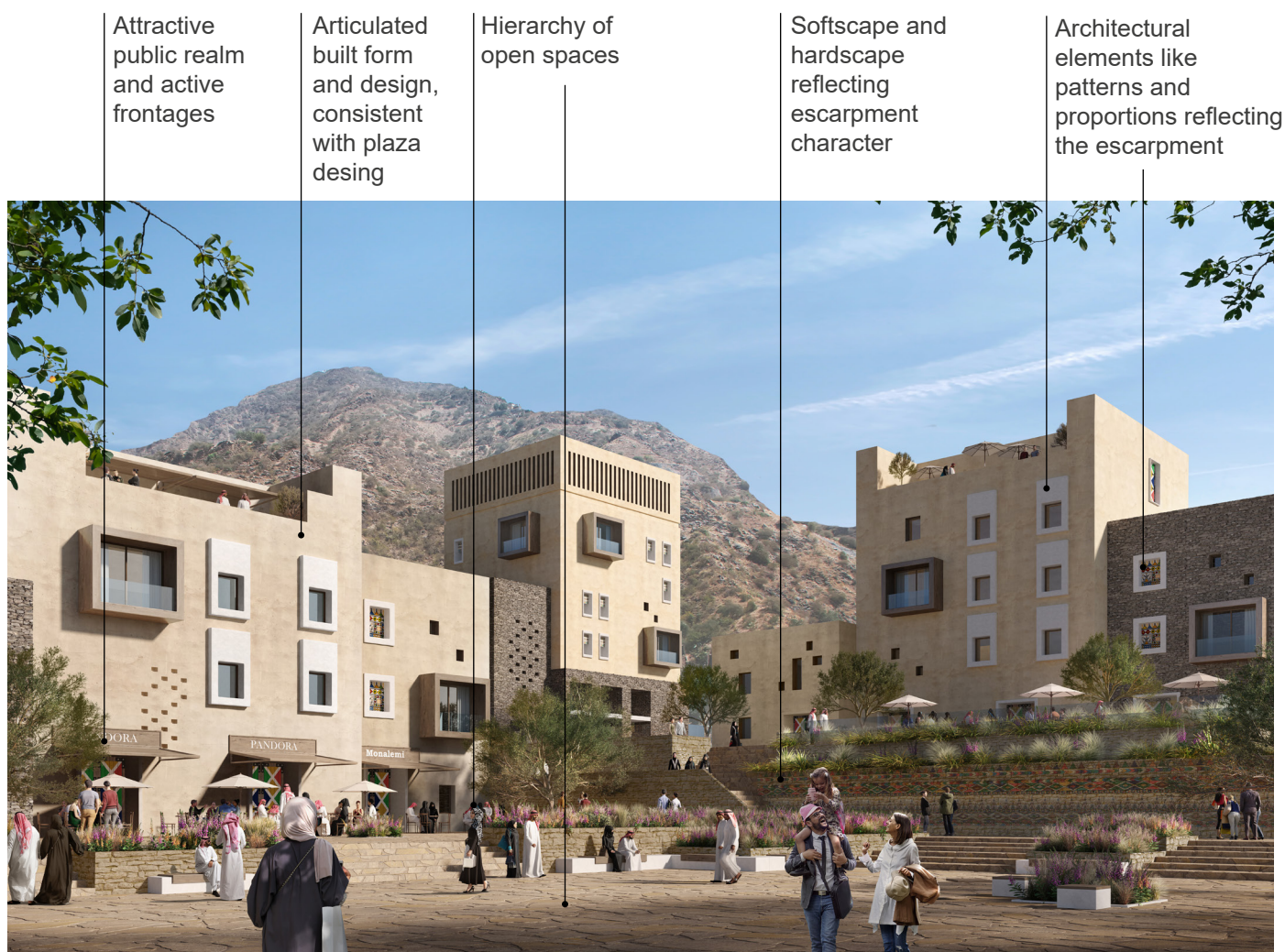


FIG. 78 Proposed view of modern plaza in Aseer Escarpment

- 4 Vegetation palettes in traditional zones to primarily reflect the local agriculture, including diversity, naturalistic arrangements, and coverage.
- 5 Hard paved areas should contribute to character and ensure functionality as well reflecting the material and color palette of the adjacent architecture and built form. Paving materials, unit size, textures and laying bond can express a contemporary or traditional design rationale and provide additional interest through variety and inclusion of art.
- 6 Primary paths may be accented with planting and trees, to highlight specific destinations or points of interest and importance. Softscape design in contemporary urban areas shall be predominantly indigenous species with a percentage of ornamental planting to provide variety and interest.

The main aspiration in promoting a more contextual driven architectural character is to produce building form and spaces reflecting the learnings from tradition, enhancing the proper character of the place, and thus creating a sense of belonging.

Figure List

Fig.1	Aseer Escarpment Architectural Character Area	ii	Fig. 29	Openings with simple geometries. Max. 30-50% openings. Loggias incorporated in facade design. Privacy for neighboring plots maintained	22
Fig.2	Architectural Characters Map of KSA	2	Fig. 30	Large openings, arranged in grid patterns, projected loggias should be discouraged	22
Fig.3	Aseer Escarpment	5	Fig. 31	Facades loosely defined in three parts with articulation of openings	23
Fig.4	Aseer escarpment landscape features and topography	7	Fig. 32	Large openings at base, thin columns, blank, non-integral facades, facades not respecting privacy, should be avoided	23
Fig.6	Traditional settlement of Rijal Alma.....	8	Fig. 33	Examples for top, middle, base, ornamentation and other elements	26
Fig.5	Historic settlement of Rijal Alma	8	Fig. 34	Traditional door elements proportions	28
Fig.7	Traditional settlement of Rijal Alma.....	9	Fig. 35	Traditional window elements proportions.....	29
Fig.8	Vernacular Facade Studies.....	10	Fig. 36	Traditional parapet element proportions	29
Fig.9	Building grouping patterns	12	Fig. 37	Aseer Escarpment color palette.....	30
Fig.10	Tripartite articulation	12	Fig. 38	Aseer Escarpment colors and materials mood board	31
Fig.11	Prominent vertical massing.....	12	Fig.39	Aseer escarpment - recommended materials	33
Fig.12	Roof character	12	Fig. 40	Example of abstraction of decorative patterns and motifs	34
Fig.13	Openings: simple geometries with varied symmetries and articulated with patterns.....	13	Fig. 41	Traditional patterns present in Aseer Escarpments ...	35
Fig.14	Varied symmetries	13	Fig. 42	Example of building material abstraction	36
Fig.15	Projected timber balconies, recessed windows	13	Fig. 43	Example of window shape abstraction.....	36
Fig. 16	Character equation for the Aseer Escarpments (after Ishteeaque & Al-Said 2008)	14	Fig. 44	Example of pattern abstraction	36
Fig. 17	Evolution of styles	15	Fig. 45	Break down building massing to better fit traditional architectural elements.....	37
Fig. 18	Typical guideline structure	17	Fig. 46	Do not scale and distort smaller elements into oversized graphic features.....	37
Fig. 19	Aseer Escarpment key features.....	18	Fig. 47	Pay attention to building elements near the public realm, especially at the ground floor	37
Fig. 20	Vernacular architecture in the Aseer Escarpment.....	19	Fig. 48	Example of functional architectural elements	38
Fig. 21	Permeable fabric with hierarchy of open spaces, mixed uses, and continuous pedestrian network should be encouraged	20	Fig. 49	Adaptation of traditional architectural elements to a contemporary building.....	38
Fig. 22	Large blocks / consolidated blocks without pedestrian permeability should be discouraged.....	20	Fig. 50	Do not create hard breaks between mixed sources...	39
Fig. 23	Built form respecting the natural terrain to be encouraged; large flattening of sites should not be permitted	20	Fig. 51	Create gradual transitions between mixed sources and strengths of character application	39
Fig. 24	Masses broken into primarily vertical volumes with balance of horizontal volumes to achieve human scale and variation in skyline	21	Fig. 52	Medium size building	40
Fig. 25	Large monolithic building blocks, non-contextual roof profiles should be avoided	21	Fig. 53	Large size building.....	41
Fig. 26	Flat roofs, width-to-height ratio and facade breaks promoting verticality	21	Fig. 54	Medium size building	42
Fig. 27	Moderate sized openings with localized symmetry should be encouraged. Volumes adding variation to facade	22	Fig. 55	Large size building.....	43
Fig. 28	Long monotonous facades, large scale symmetry without facade breaks should be avoided.....	22	Fig. 56	Medium size building	44
			Fig. 57	Large size building.....	45

Fig. 58	National Public Realm Design Manual and its five key principles	46
Fig. 59	Public realm elements.....	47
Fig. 60	Typical settlement pattern	48
Fig. 61	Street Vehicle corridor with adjacent pedestrian realm	49
Fig. 63	Baraha	49
Fig. 62	Zuqaq.....	49
Fig. 64	Saha.....	49
Fig. 65	Mixture of different materials in furniture elements in harmony with the context. Riyadh, KSA.....	52
Fig. 66	Boundary walls, planters and seating elements utilizing natural and local materials. The diplomatic quarter, Riyadh, KSA.....	52
Fig. 67	Shading structure utilizing available natural and local materials. Rijal Almaa, KSA	52
Fig. 68	Low ambient lighting to minimize light pollution. Matera, Italy	53
Fig. 69	Contextual lighting elements. Rijal Almaa, KSA.....	53
Fig. 70	Luminaries and spotlights casting warm ambient light highlighting facades and landscape features. Al Ula, KSA.....	53
Fig. 71	Example of a signage family illustrating how contextual elements of traditional patterns and colors could be expressed within the lighting and signage elements.....	54
Fig. 72	Recycled materials / Signage complementing the context. London, UK	54
Fig. 73	Paving as a wayfinding / information strategy (Riyadh). @Space Agency Masterplanners.....	54
Fig. 74	Example of parking & pedestrian route improvement with private development setback area	55
Fig. 75	Example of an attractive pedestrian realm, incorporating parking, pedestrians and planting	55
Fig. 76	A lively well designed attractive shared space, where people can, walk, relax, shop. Ciudad Real, Spain....	55
Fig. 77	Proposed view of heritage plaza in Aseer Escarpment.....	56
Fig. 78	Proposed view of modern plaza in Aseer Escarpment.....	57

Image Sources

Fig. 68	https://www.flickr.com/photos/azwegers/46475918622	53
Fig. 73	bit.ly/45Niudh	54
Fig. 76	https://www.escofet.com/en/blog/future-public-spaces	55

