

Tabuk Coast

Architectural Design Guidelines





FIG.1 **TABUK COAST ARCHITECTURAL CHARACTER AREA**

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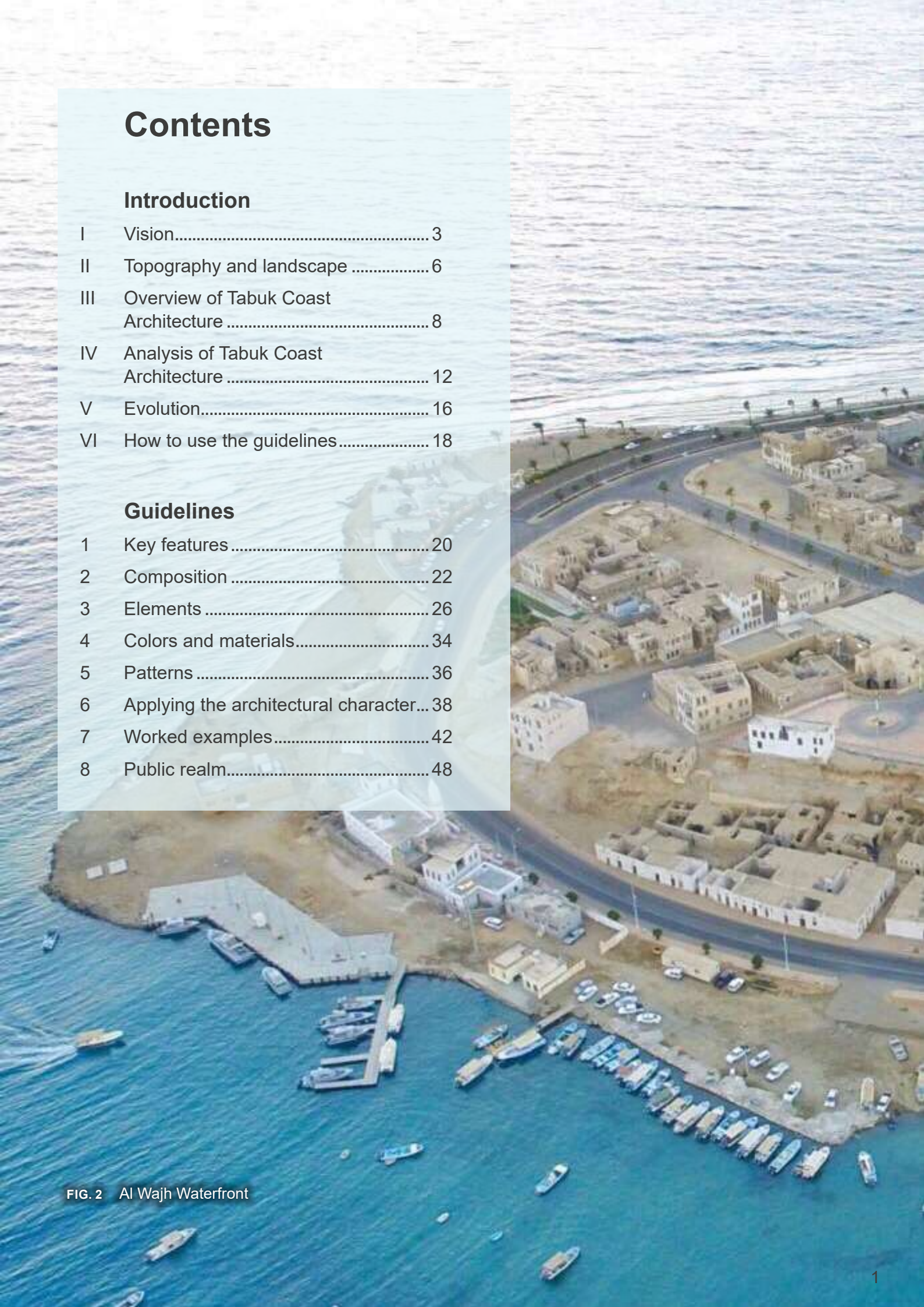
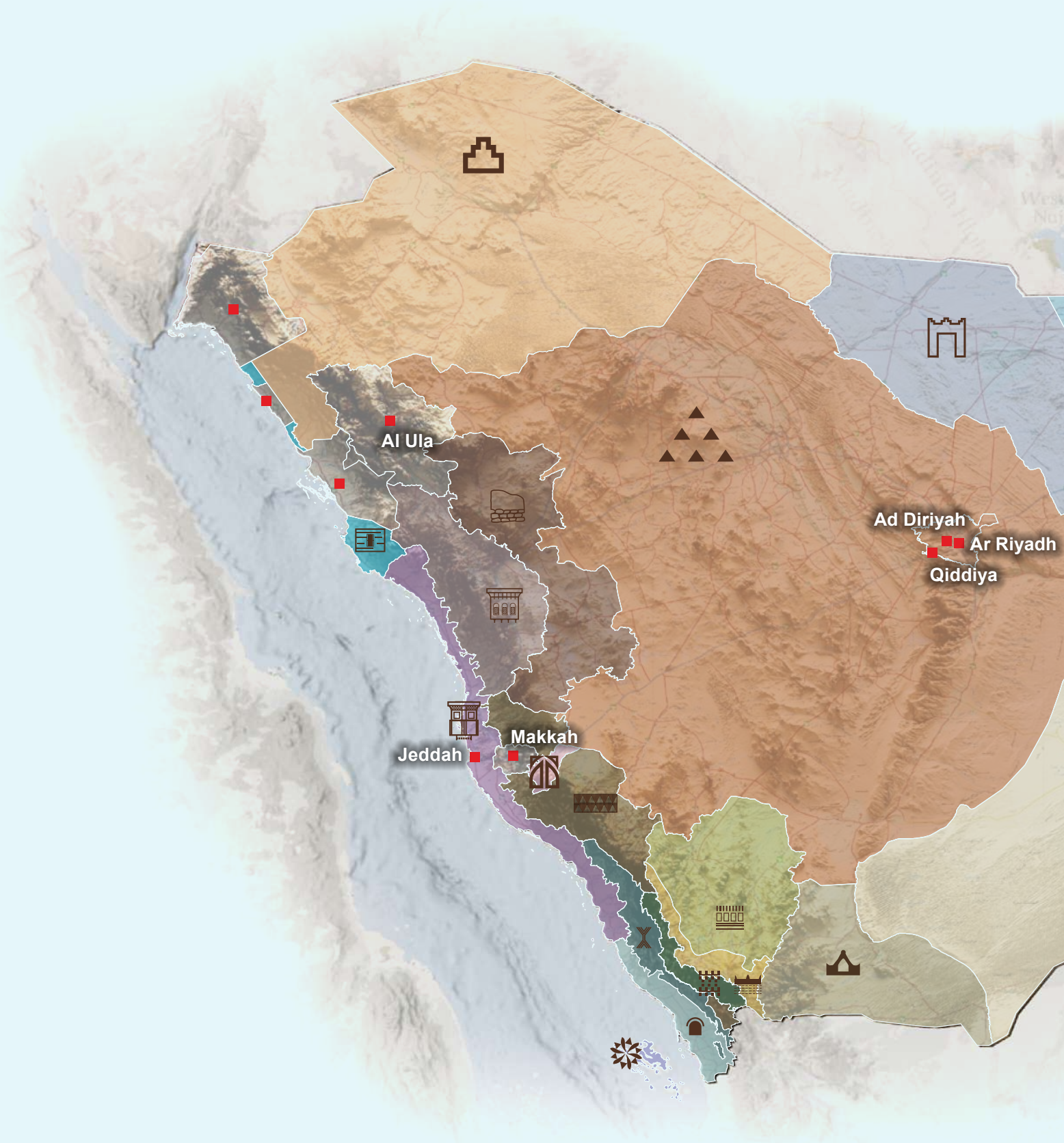


FIG. 2 Al Wajh Waterfront



- 
 Northern Najdi
- 
 Central Najdi
- 
 Tabuk Coast
- 
 Madinah Rural
- 
 Inner Madinah
- 
 Hejazi Coast
- 
 Taif Highlands
- 
 Sarawat Mountain
- 
 Aseer Escarpment
- 
 Tahuma Foothills
- 
 Tahuma Coast
- 
 Farasan Island
- 
 Abha Highlands
- 
 Bisha Desert

FIG.3 ARCHITECTURAL CHARACTERS MAP OF KSA

INTRODUCTION

Vision

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

1.1 Guidelines philosophy

The Architectural Design Guidelines aim to foster contemporary design that is rooted in the diverse geographic and cultural contexts of the Kingdom.

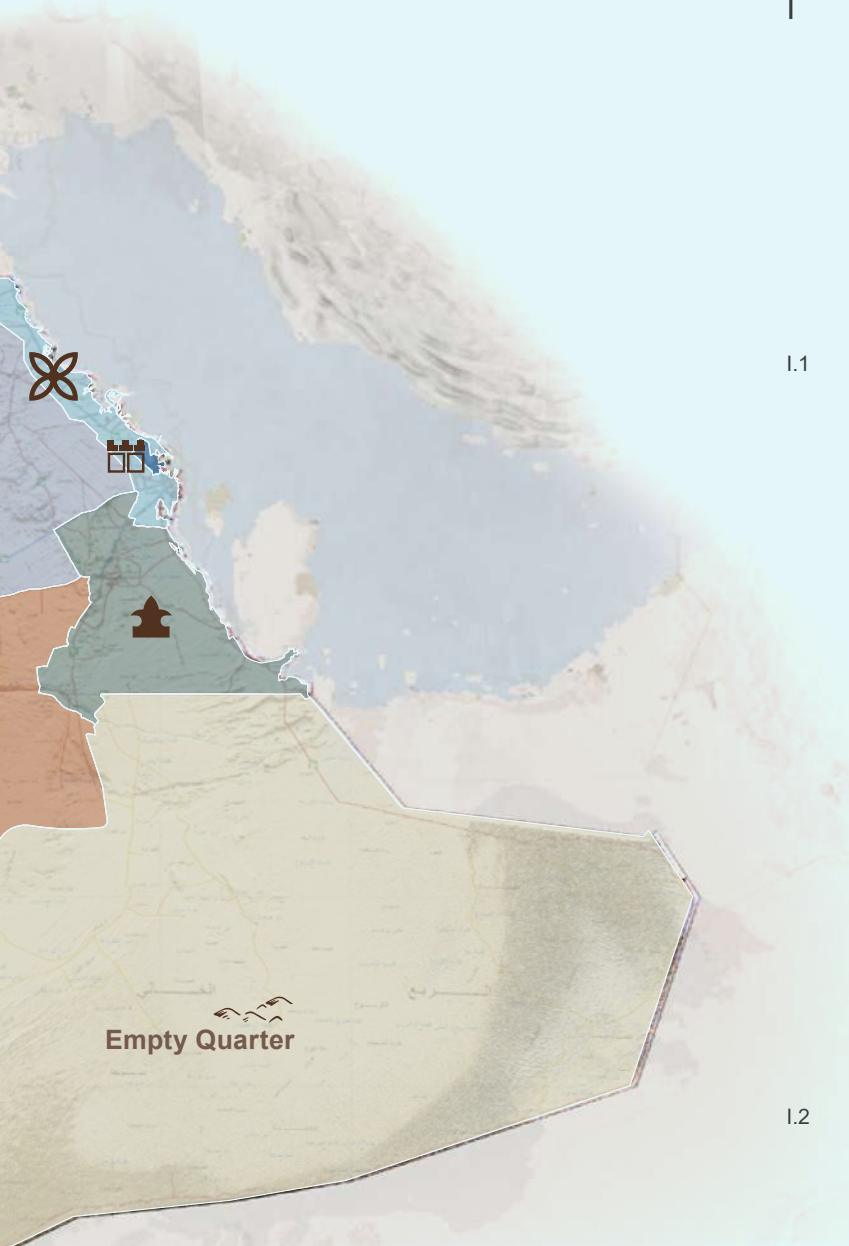
Its propositions are based on the study of historical precedent, taking inspiration from vernacular forms and the embedded knowledge shaped by generations of practice and experience.

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.

1.2 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. 3), influences may extend across boundaries. Designers are advised to consult adjacent areas architectural guidelines documents and confirm the status of their building context with facts on the ground.



Najran

Al Ahsa
OasisAl Qatif
OasisEast
CoastEastern
NajdiSpecial
Zones

1.3 **Tabuk Coast**

The Tabuk coastal area comprises three key historic towns: Duba, Al Wajh and Umluj. The subtle differences between them are driven by the variations of landscape and historic built form. The relative importance and wealth of historic towns on the coast is also evident.

The terrain of the Tabuk coastline results in a layered townscape with topographical features in the background. Due to its location and relative remoteness from Makkah and Madinah, the archetypal architecture presents simpler, more basic forms which are relatively unembellished in their decoration.

The climatic conditions also have a strong influence on the architecture. For example, small windows respond to the region's intense heat and projecting gutters deal with high rainfall that is present year round.

The port settlements along the Red Sea coast share much in common: the combined influences of trade and pilgrimage have resulted in a rich architectural inheritance, intermingling ideas, materials, and craftsmanship from places near and far into a distinct character. As a result of its coastal location and the influence of trade, coral stone and timber are deployed as building materials.

Each settlement brings its own local flavor, presenting unique inflections of the character area. The interaction of towns with the contours of its coastline and its surrounding topography, the character and extent of the historic cores, and their gateway functions to different destinations all combine to produce nuanced architectural variations.

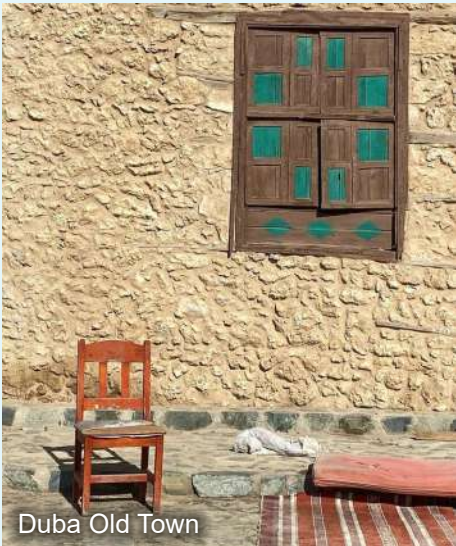


FIG.4 TABUK COAST SOURCES OF ARCHITECTURAL CHARACTER

II **Topography and landscape**

Observations on the links between landscape, climate, culture and the architectural character of Tabuk Coast.

II.1 **Landscape**

Stretching along the western side of the Red Sea coastal plain (also known as Tihama). An extensive sandy coastal plain, the area is mostly devoid of trees, except for some areas with dominant native species of flora. The Hejaz Mountain Range runs north-south, flanking the coastal plain. Abrupt drops in elevation occurring on the mountains' west-facing side leaves a narrow coastal plain. In places, the escarpment consists of two parallel ranges, with lower elevations nearer the coast. The eastern slopes have gentler inclines allowing water from rainfall to travel downhill, creating oases in the valleys, or wadis.

The three main towns (Duba, Al Wajh and Umluj) have close relationships to the coastline and are all set within natural bays. This particular setting is the driver for the local variety and character with development all sharing a layered horizontality. Historically, building on difficult terrain has been avoided, favoring the flatter strata of the coastal plains.

II.2 **Climate**

The climate of the Red Sea impacts the coastal plain, with its extremely warm temperatures, high evaporation rates and seasonally changing currents. Summer temperatures along the Tabuk Coast can reach 40 degrees celcius. In Winter, the average temperature is closer to 26 degrees celcius. The heaviest rainfall takes place between November and January, while the coldest month is February.

These climatic conditions make it uncomfortable to be outside during the day without adequate consideration of shading and other passive cooling techniques. It also means that building design has to consider how to mitigate the heat to create comfortable indoor environments. Examples of how these conditions have influenced the area's architecture can be seen in the shuttered windows and balconies that capture cooling sea breezes in this humid environment.

II.3 **Architectural influence**

One traditional building material that is commonly found along Red Sea coast is coral stone. Facades made of this material are often finished in lime-washed render to seal the stone in this corrosive coastal environment.

The coastal location has also enabled a history of trade and therefore access to non-local materials such as tropical woods which have been deployed for special elements. More local timber is likely to have been used for the horizontal timber elements that stabilize the coral stone walls.

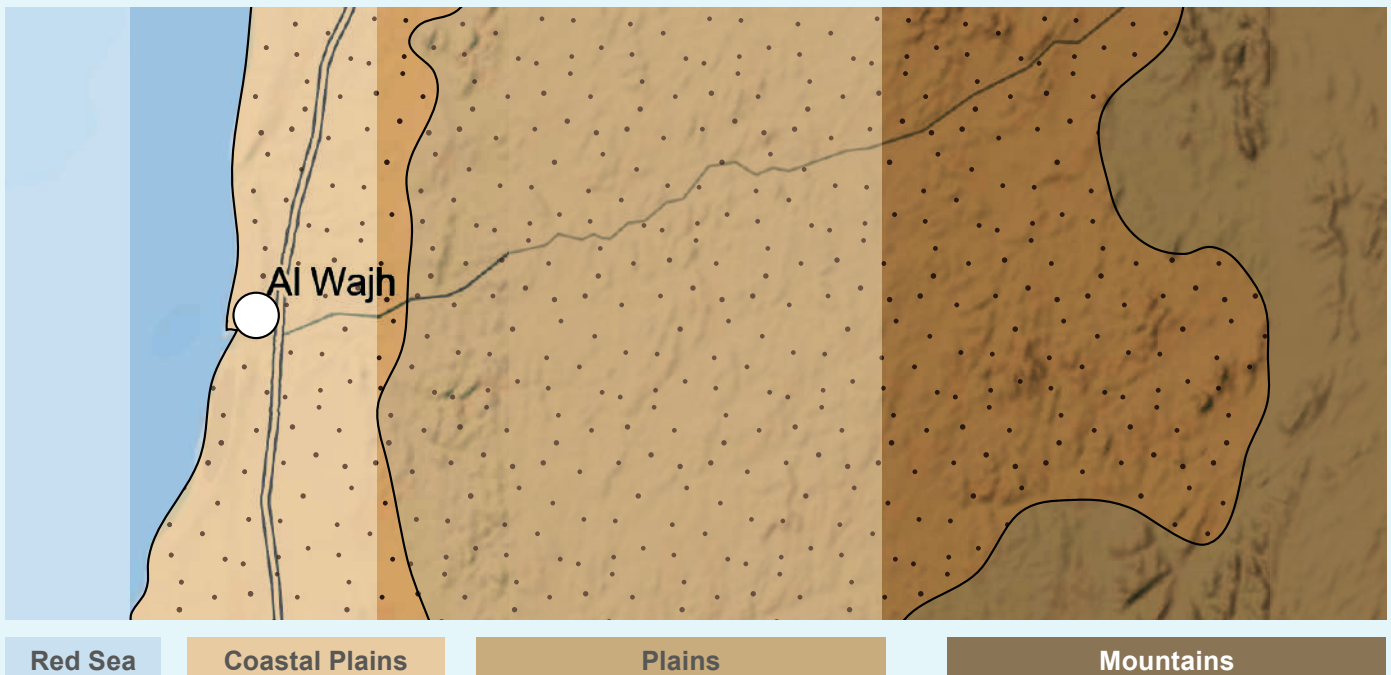
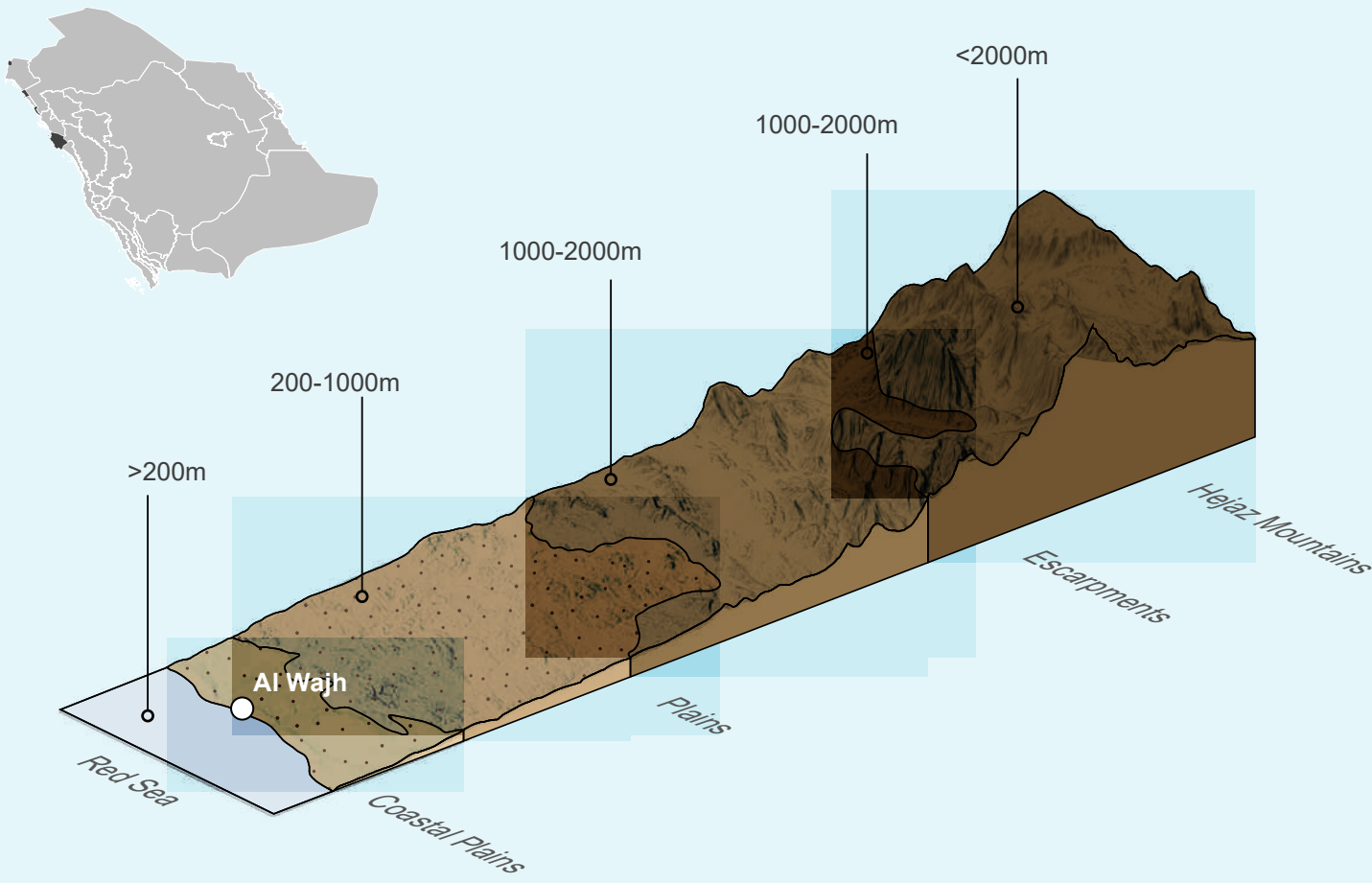


FIG.5 TABUK COAST TOPOGRAPHY AND LANDSCAPE

III Overview of Tabuk Coast Architecture

A summary of the existing character of traditional architecture and settlements of Tabuk Coast.

For the more embellished buildings, entrance doors often have an arched head within a recessed bay. The woodwork is mostly plain, yet roshans and balconies occasionally feature.

III.1 Architectural character

The archetypal buildings of Tabuk Coast have predominantly flat facades made of coral stone. Some examples have more embellishment than others. These coral stone walls are more solid and less 'frame-like' than those found in Jeddah with vertical rectangular windows.

There is little evidence of rooftop activation and outdoor uses are served by small, informally arranged courtyards.

In terms of finer articulation, there is a prevalence of projecting water spouts that break up the low parapets and decoration is expressed through simple motifs, often carved into the timber elements.

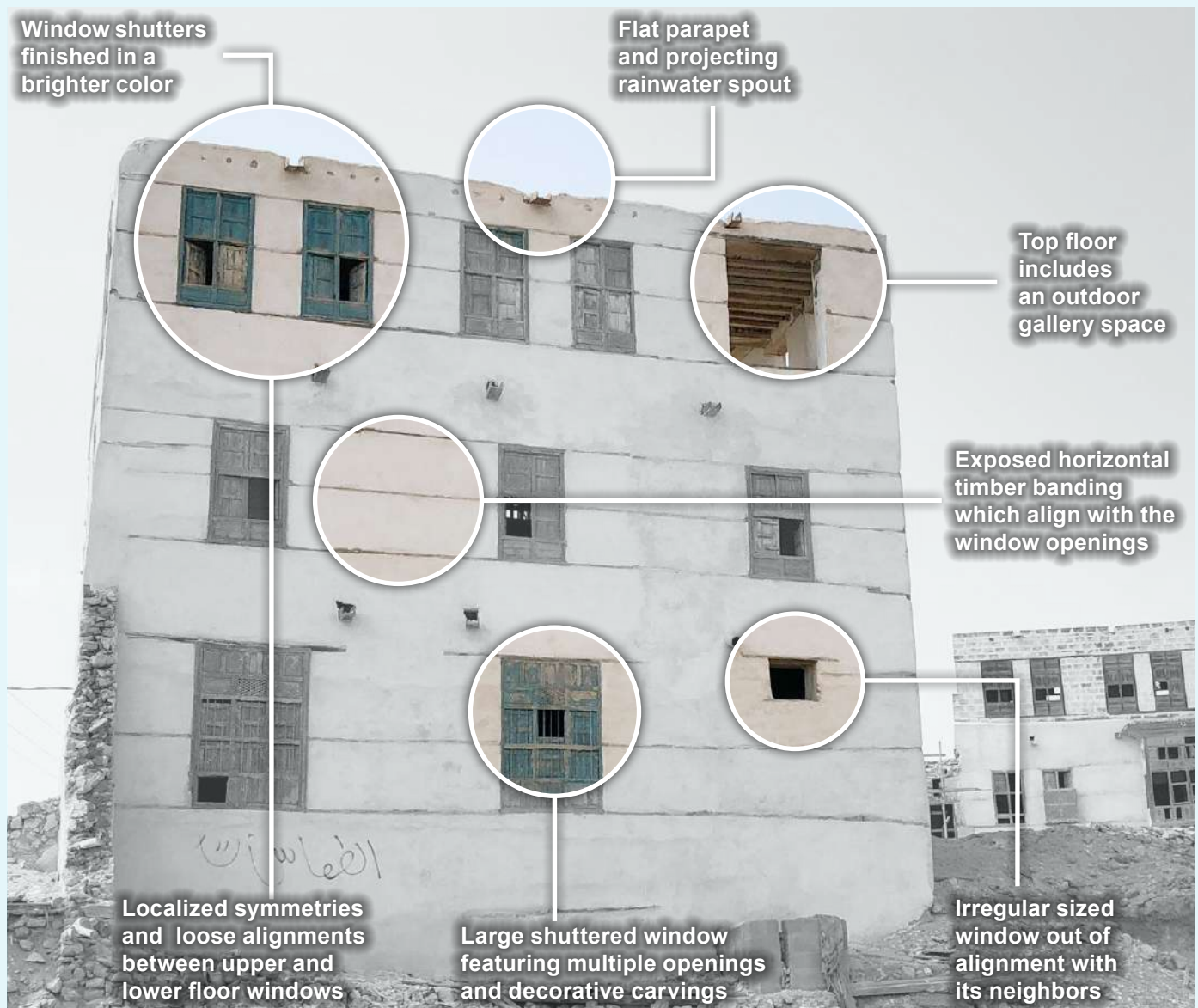


FIG.6 TYPICAL HISTORIC STRUCTURE IN AL WAJH

The scale of ornamentation found on existing buildings can be less pronounced, with some displaying a distinct plainness. In these examples, Roshans rarely feature and a simpler architectural language is deployed.

For these buildings, Pale rendered facades predominate with some areas of coral stone left unprotected by the render, adding texture to the built form.

Flat roofs are punctuated by a rhythm of rainwater spouts and occasional projecting joists.

Vertical timber windows are placed across the facade, often misaligned with those below, giving a relaxed composition of openings across the elevations. The horizontal shifts to the window placement respond to internal functions and the buildings' development over time.

Rectangular ventilation slots are placed symmetrically above the windows.

The overriding effect is of simple low horizontal buildings with vertical elements distributed functionally across the facades.

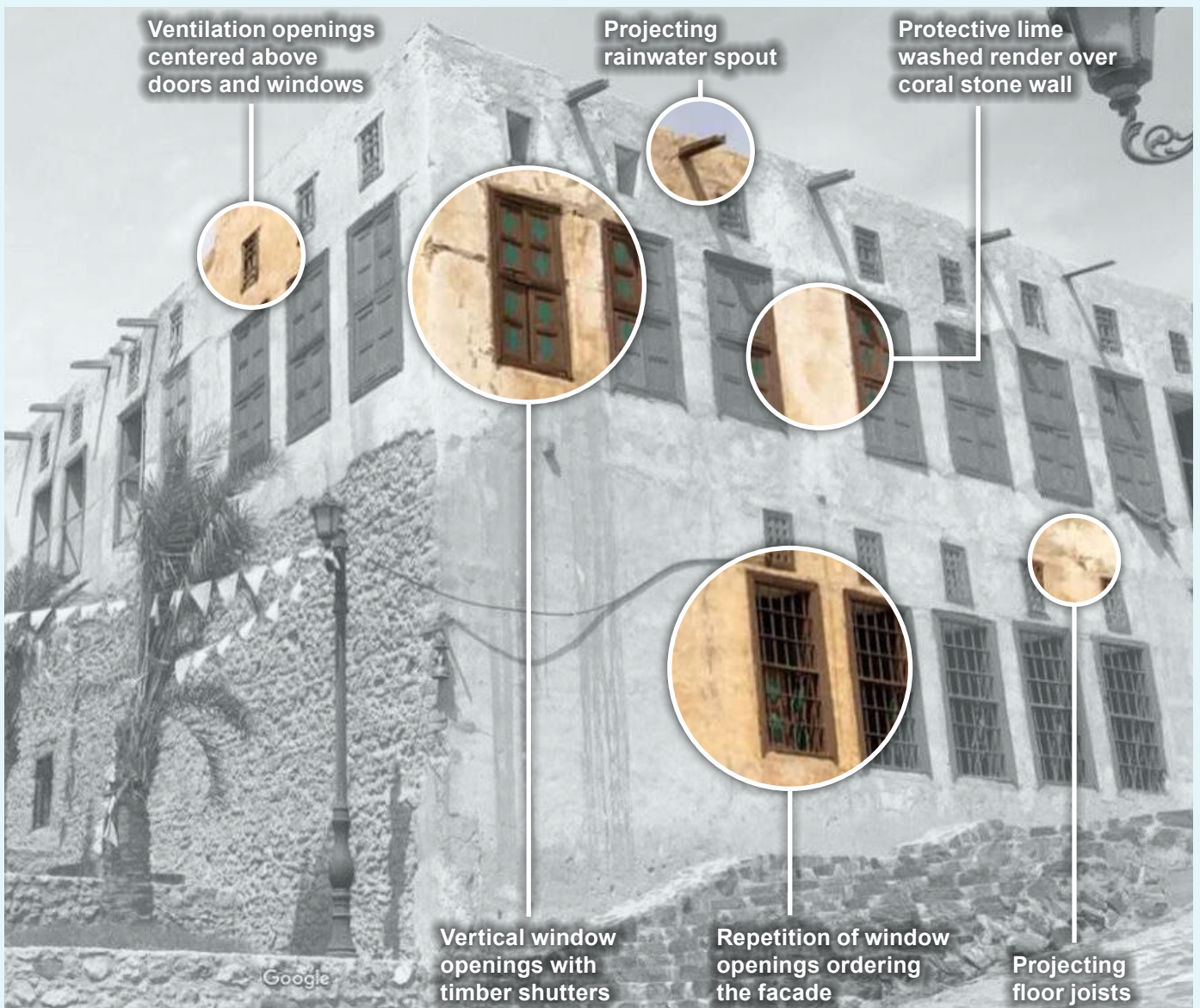


FIG.7 TYPICAL HISTORIC STRUCTURE IN DUBA

III.2 **Public realm character**

The public realm is formed of buildings that are grouped together to form a dense urban grain with streets, laneways and public squares that are both well defined and legible.

The hard landscaping compliments the earthy materiality of the stone and lime plastered facades of the buildings that face them.

The window openings are repeated in a simple manner and have subtle variations in their dimensions. This ensures the streetscape never becomes staid or dull. Rather, it helps create a calm and modest atmosphere.

Certain details occur such as a raised line of stonework to mark the boundary between buildings and the ground. Building thresholds are also often raised to mark main entrances and deal with differences in level, as well as offering protection against flooding.

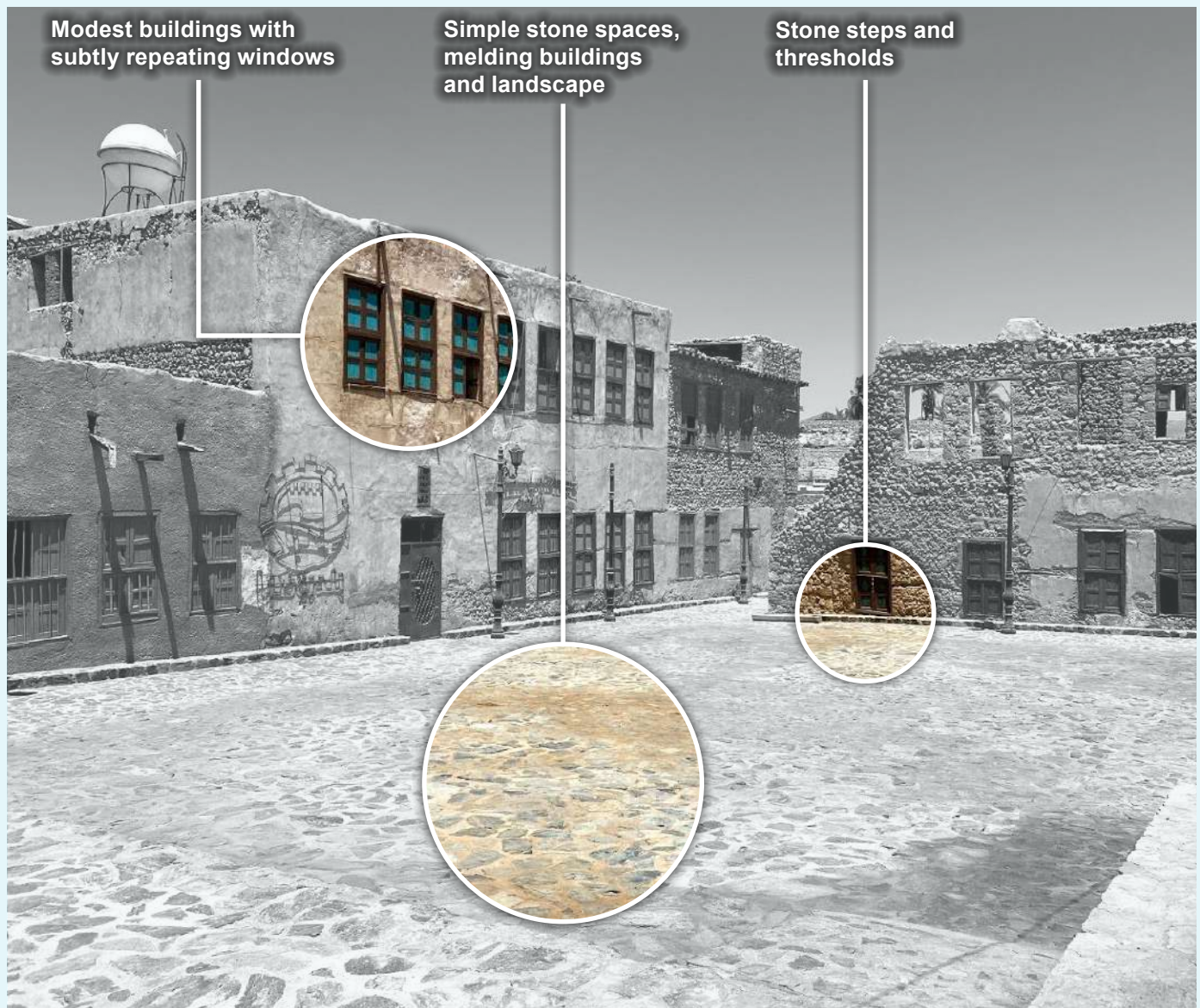


FIG.8 **TYPICAL PUBLIC SPACE IN DUBA**

III.3 Settlement character

Each settlement brings its own local flavor, presenting unique interpretations of the character area. These variations add to the overall attractiveness of the Historic Red Sea Ports, providing a diversity of experiences and encouraging interaction between the towns.

Moreover, the architecture of the Red Sea Ports are tempered by modesty, a casual atmosphere and straightforwardness that contributes to its approachability. This intangible character should be considered in the composition and development of new buildings.

The layering of the urban planes responds to the headland plateaus, cliff face condition and harbor level.

An architecture of stepped horizontal building forms merge with the low lying topography with modest heights of around three stories. The parapet line, comprised of flat roofed structures with shallow parapets, nestles comfortably into surrounding views.

The block clusters are perforated with private courtyards of varied size, reinforcing the informality of buildings.

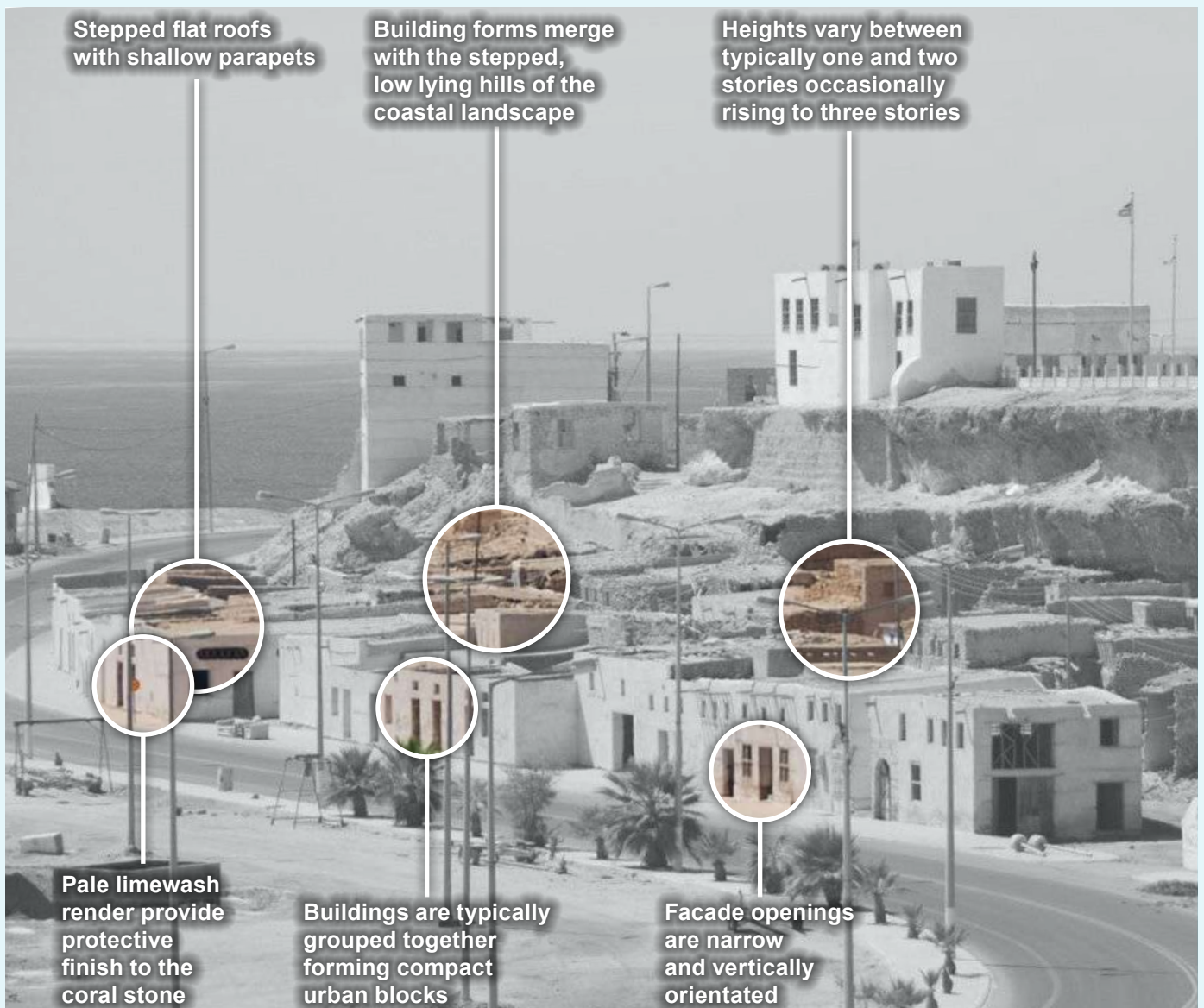


FIG.9 TYPICAL COASTAL SETTLEMENT IN AL WAJH

IV Analysis of Tabuk Coast Architecture

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

To find objective characterizations of vernacular architecture, elevation studies were conducted of archetypal buildings to assess overall building proportions and the solid-to-opening ratio of 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.

Vernacular residential buildings are marked by strong horizontal proportions, indicated by a width-to-height ratio between 1:0.36 to 1:0.68. In Al Wajh there are a few incidents of vertical buildings.

The horizontal proportion is reinforced by the timber banding which hold the coral stones together and give a broken horizontal line.

The facades are plain and simply punctuated with 13% - 25% opening percentage substantiating this observation.

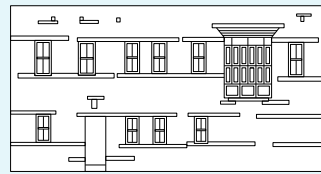
Building projections are limited to balconies with occasional roshans in Al Wajh, both constructed in timber with a pared-down expression, used in a traditional manner to address climatic conditions.

Entrances are simply positioned at ground level, often asymmetrical or offset and subtly demarcated within larger, sometimes arched entrances.

Locations



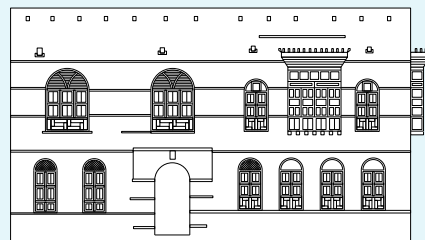
Typical facade - Duba



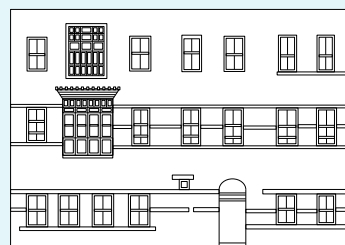
Typical facade - Al Wajh



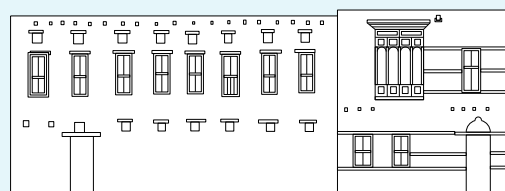
Typical facade - Al Wajh



Typical facade - Al Wajh



Typical facade - Al Wajh

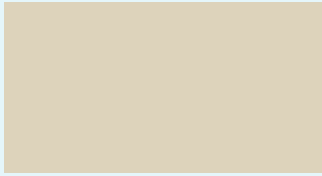


Typical facade - Al Wajh

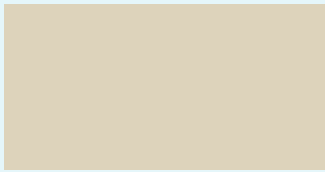
FIG. 10 Vernacular facade studies

Vernacular facade studies

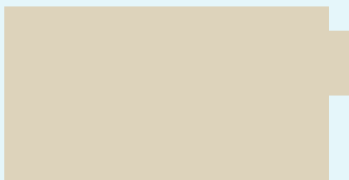
Width-to-height ratio



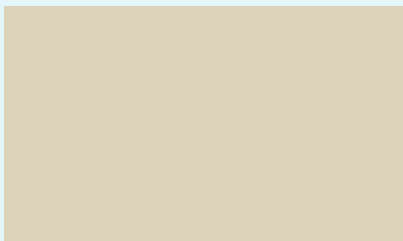
1:0.53



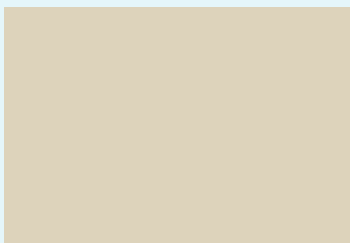
1:0.51



1:0.53



1:0.58

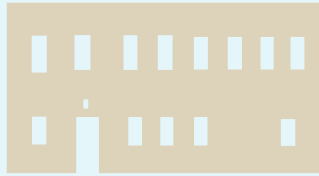


1:0.68



1:0.36

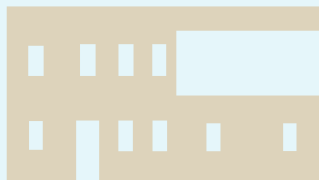
Facade analysis



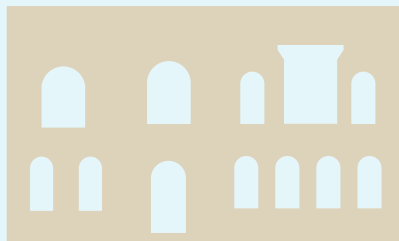
Facade area: 80.3sqm
Masonry - 69.8sqm
Timber - 10.5sqm
13% void



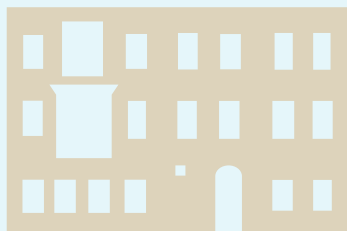
Facade area: 79sqm
Masonry - 67.7sqm
Timber - 11.3sqm
14% void



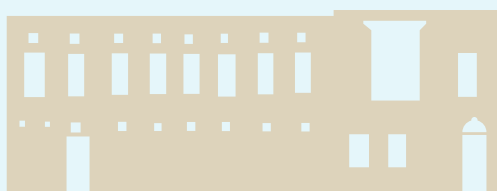
Facade area: 83.4sqm
Masonry - 73.6sqm
Timber - 9.8sqm
13% void



Facade area: 138.6sqm
Masonry - 106.6sqm
Timber - 32sqm
23% void



Facade area: 123sqm
Masonry - 92sqm
Timber - 31sqm
25% void



Facade area: 133sqm
Masonry - 109.6sqm
Timber - 23.4sqm
17.5% void

IV.1 **Strong horizontal organization**

The building facades are divided vertically into three clear tiers: a base, middle and top of varying heights. The base of the facade is the highest (as is often the case with architectural proportions), with the first and second floors following similar determinants.

The horizontality is emphasized by the timber banding ('taglilat') that stitches across the facade often in broken lines.

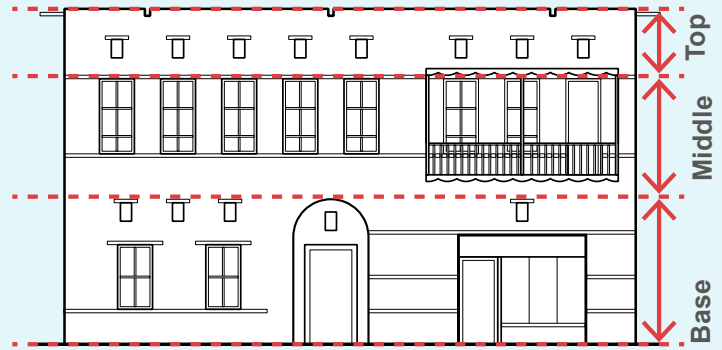


FIG. 11 Horizontal organization

Facades are typically split into 3 separate tiers with their own distinct character: base, middle, and top.

IV.2 **Punctured walls**

Windows are distributed across the facades as 'punched' openings set in solid load bearing masonry walls.

Warehouse type buildings also exist which are more frame-like.

The windows mainly have flat tops as opposed to more expressive arches.

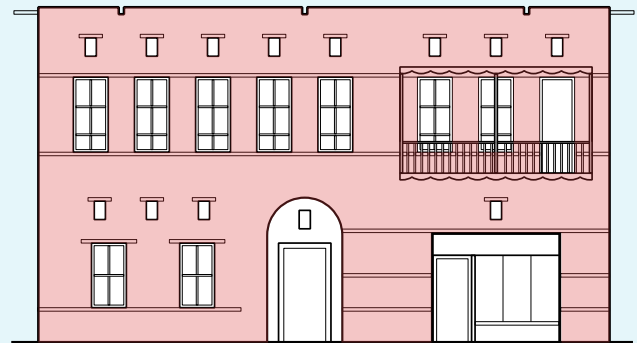


FIG. 12 Window-to-wall ratio

Windows formed of punched openings within solid masonry walls.

IV.3 **Loose Alignment of windows**

The predominantly horizontal building forms are 'offset' by the vertical format of the windows and doors to create a subtle grid, borne out a simple set of guidelines.

These windows are often misaligned vertically and give an irregular informality to the facades, often in localized symmetries.

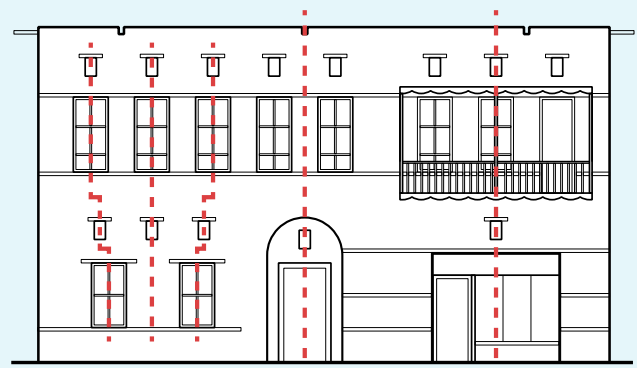


FIG. 13 Loose alignment of windows

The horizontality of the massing contrasts with the verticality of the window and door openings.

IV.4 Projected elements

Where present, shallow projecting balconies characterize the otherwise plain facades. This feature provides privacy and shading to the interior. These balconies are much simpler than those found further south and inland.

The projected gutter spouts add a third level of articulation at the top of the building, borne out of function. Projected timber joists are also present, thought to be the result of retaining this valuable commodity in its original length.

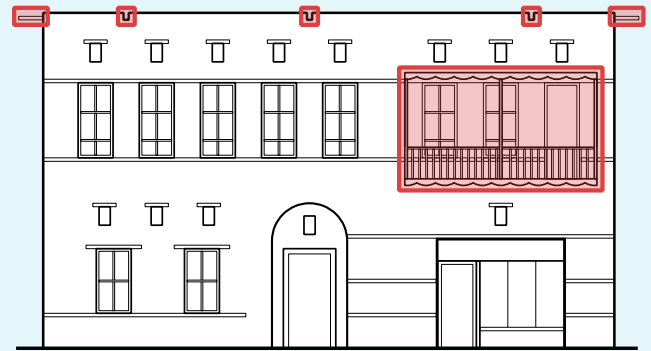


FIG. 14 Projected elements

Roshan, covered balconies and rainwater spouts project from the building.

IV.5 Ventilation expression

Ventilation slots centered above the windows and doors not only provide a functional response to the internal comfort within the building but also a rhythmic patterning across the facade, syncopated with the openings below.



FIG. 15 Ventilation openings

Slot openings provide ventilation for the interior spaces and are centered above the windows and doors.

IV.6 Building entrances

As is befitting the modest nature of the prevailing architecture, the entrance doors at ground floor are low key, often recessed into a larger arched opening to indicate their status above the simple windows. Entrances are often asymmetrically placed along the facade.

Thresholds are often formed by a stone step, likely to reconcile levels but also in response to rainfall levels.



FIG. 16 Building entrances

Entrances are modest in scale and appearance with doorways recessed into a larger opening.

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.

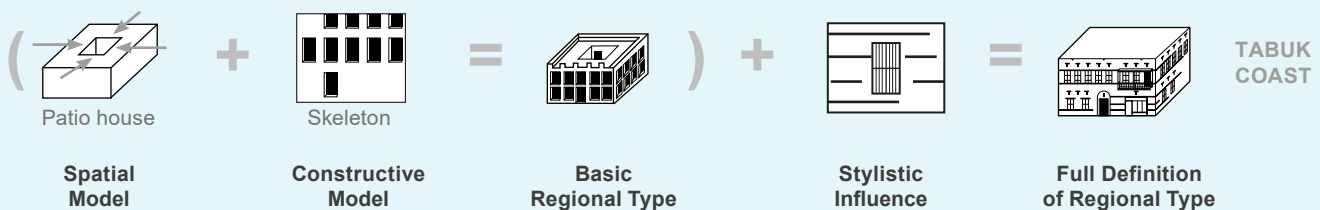
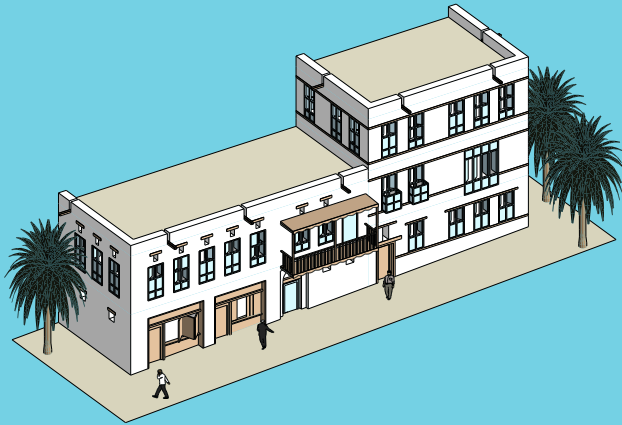


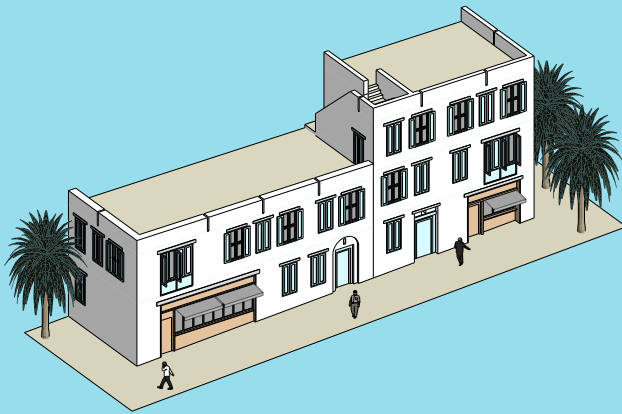
FIG. 17 Character equation for Tabuk Coast (after Ishteeaque & Al-Said 2008)



Traditional building

TRADITIONAL

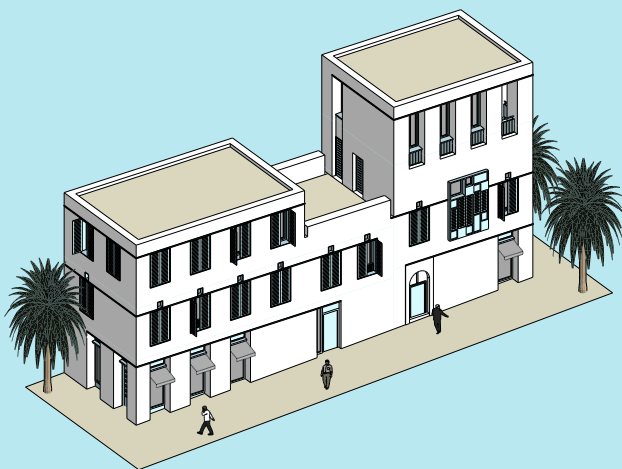
Thick coral stone walls, regular rectilinear profile with simple openings and projecting elements such as roshans, balconies and water spouts.



Transitional building

TRANSITIONAL

A "temporary" model rooted in the traditional but with acknowledgment of developments in construction, skills and interpretation. For example, simple stone walls with aligned vertical windows and flat parapets.



Contemporary building

CONTEMPORARY

Abstraction of geometric planes within a generally rectilinear form, adapting to a range of building types. Perforated walls, screens and projections for shade and comfort.

FIG. 18 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 characteristics 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 local architecture.

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 style 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 Tabuk Coast.

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

1 Chapter number and heading

2 Guideline number and heading

3 General description

4 Guideline actions

5 Rationale

☰ **Tabuk Coast** Architectural Design Guidelines

2 Composition

The rules by which buildings are shaped and elements are related to one another.

2.1 Horizontal organization

The legible horizontal organization is a dominant feature of the vernacular.

New buildings should:

- 1 Have a clear horizontal structure divided into bottom, middle and top.
- 2 Express these layers through the articulation of elements within the facade.

To embrace horizontality which is a strong characteristic of the area.

2.2 Localized symmetry

Buildings are often asymmetrically arranged with grouped openings.

New openings should generally:

- 1 Have windows that are aligned according to the rooms behind them.
- 2 Have openings arranged in horizontal bands with localized symmetries.

To ensure a familiar relaxed character in the window distribution.




FIG. 23 Strong horizontal organization

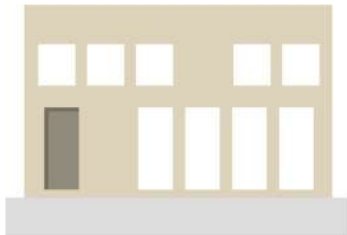


FIG. 24 Loose alignment of windows

22 GUIDELINES

6 Illustrations

FIG. 19 Typical guideline structure

GUIDELINES

1 Key features

The most important attributes essential for conveying the architectural character of Tabuk Coast.



FIG. 20 Tabuk Coast key features

Key features:

- 1 Simple, rectangular building forms.
- 2 Flat, horizontal roof parapets with limited rooftop forms.
- 3 Non-symmetrical facades with loose alignments between upper and lower floor windows.
- 4 Solid, white walls with individual simple, rectangular window openings.
- 5 Expressed lintels and vent openings above windows and doors.
- 6 Details and features in timber tones and blue tones.
- 7 Rare use of external arches, most common in panels above doorways.
- 8 Rare use of single roshans (only in Al Wajh) and projecting balconies.
- 9 Most architectural detail and features present in Al Wajh with less in Duba and the less still in Umluj.

1.1 Character summary

The vernacular character of The Tabuk Coast owes much to its local context and topography. Set in the plain, honest facades in the coral stone from the Red Sea are balconies and the occasional Roshan structures crafted of wood.

The simplicity of the facades reflects the relative wealth of the area, geographically remote from the more embellished and expressive cities of Makkah and Al Madinah where traces of many cultures' craft mingle with influences from across the Arabian peninsula.

As such, vernacular in Tabuk is not so much a vibrant synthesis of many cultures brought by Jeddah's historic role as the maritime gateway to Makkah but a return to its rustic origin.



FIG. 21 Historic structure in Al Wajh



FIG. 22 Historic structure in Duba

2 Composition

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- 2 Have openings arranged in horizontal bands with localized symmetries.

To ensure a familiar relaxed character in the window distribution.

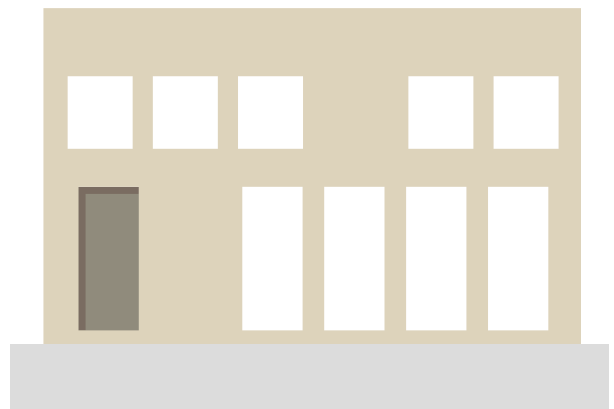


FIG. 24 Loose alignment of windows

2.3 Solid facades

Buildings have solid masonry walls with punched openings.

New facade expression should:

- 1 Express the solidity of the buildings volumes.
- 2 Have vertical openings of regular proportions and ratios.

To ensure the solid character of the architecture of the Tabuk Coast.

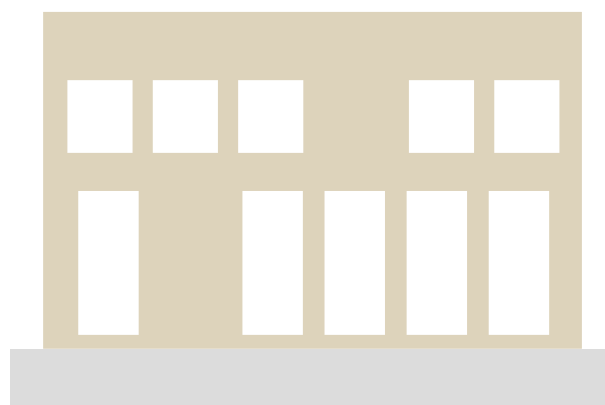


FIG. 25 Punctured walls

2.4 Projecting elements

Projected elements articulate the facade.

New facade elements should:

- 1 Use projected water spouts at parapet level in the traditional model only.
- 2 Employ projected balconies when suitable in the traditional model only.
- 3 Only deploy roshans by exception for buildings of higher status.

To ensure a layered character of the facades, embedded in the vernacular.

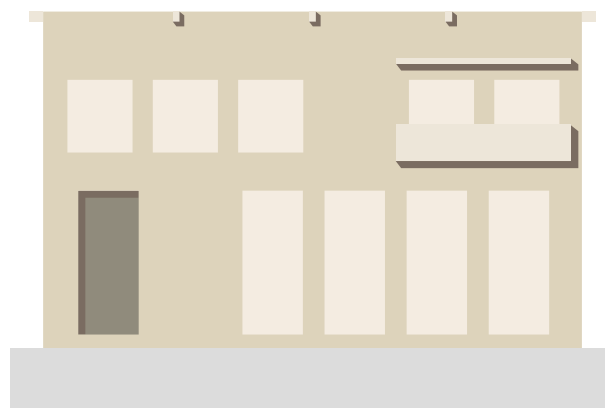


FIG. 26 Projected elements

2.5 Ventilation strategy

Passive ventilation strategies are encouraged.

Building ventilation should:

- 1 Use details that improve cross ventilation, such as above-window vents.
- 2 Incorporate ventilation with strong relationship with the windows.

To reflect the expressive nature of traditional ventilation methods.



FIG. 27 Ventilation strategy

2.6 Simple entrances

Entrances are usually flat-topped or arched and asymmetrically placed on the facades.

New entrances should:

- 1 Sit asymmetrically or off-center in the main facade.
- 2 Be more articulated than windows with a larger recess.
- 3 Reserve arched openings for special entrances.

To reflect the status of the entrance in a modest and straightforward way.

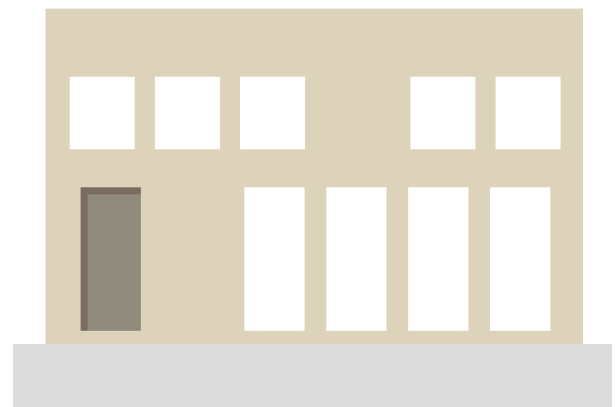


FIG. 28 Simple entrances

2.7 Continuous streetwalls

Buildings and their neighbors should work together to clearly define streetwalls with organic variation.

- 1 Align primary street-facing facades with adjoining buildings.
- 2 Share party walls with neighbors to create larger urban blocks.
- 3 Present subtle variety in height and alignment between neighbors.
- 4 Share a common materiality.

To create clearly defined street structure and urban block composition with some organic variation between buildings.

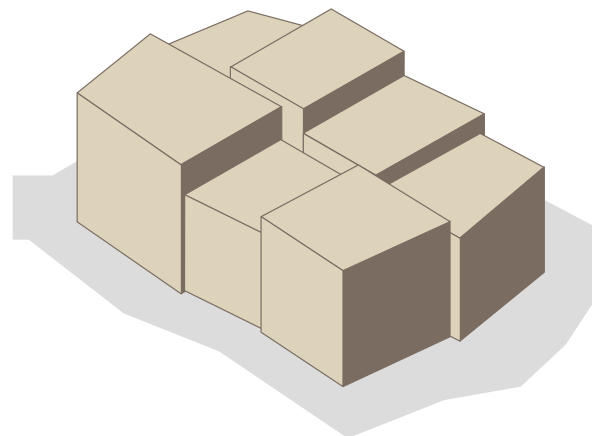


FIG. 29 Continuous streetwalls created by neighboring buildings.

2.8 Courtyards and lightwells

Courtyards and lightwells are an important component of vernacular architecture. Buildings should:

- 1 Provide private outdoor amenity that is enclosed by adjacent buildings on three or more sides, and boundary walls on remainder
- 2 Provide indirect lighting and ventilation to the surrounding building interiors.

To replicate the modest, and humble character of outdoor amenity spaces that characterize the area.

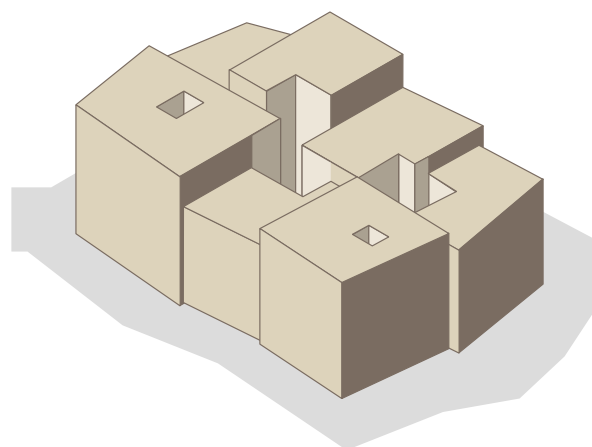


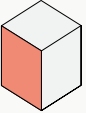
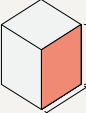


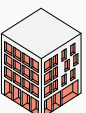
FIG. 30 Courtyards and lightwells within urban blocks

3 Elements

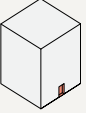
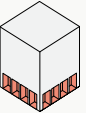
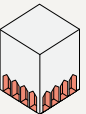
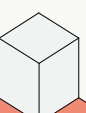
The individual parts that are the building blocks of the Tabuk Coast architecture.

TAB. 1 Tabuk Coast architectural elements



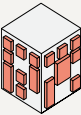
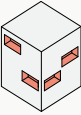

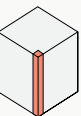
GENERAL ELEMENTS

	Key characteristics	Refer to introduction for key characteristics of the Tabuk Coast architectural character area (pp. 8 and 9).
	Facade proportion	Horizontal proportions to have a width to height ratio of approximately 2:1, with proportions of 5:1. New buildings may be more vertical in proportion as part of the townscape. However, where possible they should remain horizontal and create clear horizontal articulation between base, middle and top.
	Window-to-wall %	Should have a relatively low window-to-wall ratio (approximately 13 to 25%. See analysis pp. 12 and 13).
	Opening proportions	Composition should be asymmetrical with a grouped and/or informal vertical order. Facades should have horizontal banding. Openings are relatively large. Door and window openings should, generally, have vertical proportions. However some windows may have more square proportions.
	Composition	Depending on overall building size, the base may be characterized by as much as the stories above with punched openings disposed in simple solid masonry walls.

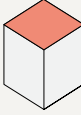
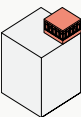
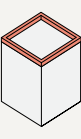
BASE ELEMENTS

	Entrances	Entrances should form part of a asymmetrical composition with other openings on the facade; these may be recessed in a larger opening to reinforce its function and importance.
	Shop fronts	No externally mounted rolling shutters; recessed shutters preferred. If awnings and shades are used, they should be secondary to the main facade and be demountable. Sideways folding shutters flush mounted with the building facade are preferred.
	Arcades	No evidence of arcades on the Tabuk coast.
	Curtilage	The exterior ground floor of buildings should seek material and design integration with the surrounding public realm. The interface between the public realm and the curtilage should be universally accessible, with no sudden changes in level, single steps or other trip hazards. Careful attention should be paid to ensuring a positive pedestrian experience by improving the microclimate around buildings.

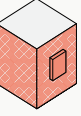
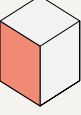
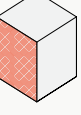
MIDDLE ELEMENTS

	Wall articulation	Horizontal banding should be subtly visible. Banding may be used to differentiate base, mid and top of the building. Openings should be ordered in legible horizontal bands which may break from rigid vertical stacking.
	Windows and Openings	Window and opening design are subject to a number of compositional guidelines.
	Projecting elements	Facade elements such as balconies should project in front of the main facade and not be multiplied on any one facade.
	Recessed elements	Recessed elements are set inwards from the building facade; they extend access or perception of the public realm inside the plot boundary. These are rare in the Tabuk Coast character area,
	Shutters and Shading	Shading may be achieved by recessing openings from the facade, or providing perforated or latticed screens. These may be metal or timber and should use patterns compatible with or reinterpreted from the local vernacular.
	Corner features	Generally square corners. Corner features can be used to assist in architectural wayfinding, create 'marker' buildings with increased in height at the corner, mark main entrances, and provide variation in the street wall height. Corbeled/chamfered corners are permitted at ground level where a building has two primary facades.

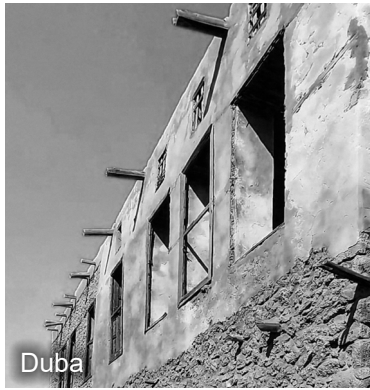
TOP ELEMENTS

	Roofscape	Active, accessible roofspaces are not encouraged. Roofscapes (at parapet) can be punctuated by rainwater elements.
	Rooftop Elements	Non habitable space with expression through water spouts, floor joists and notches.
	Parapets	Parapets should be horizontal without ornamentation and be materially continuous with the wall below. Parapets are typically low in height. Where building plant is located on the roof it should be set back or enclosed so as not to be visible from the public realm.

OTHER ELEMENTS AND ORNAMENTATION

	Materiality	See expanded guideline on "Materials and Colors" in guidelines section 4.
	Color	See expanded guideline on "Materials and Colors" in guidelines section 4.
	Pattern	See expanded guideline on "Patterns" in guidelines section 5.

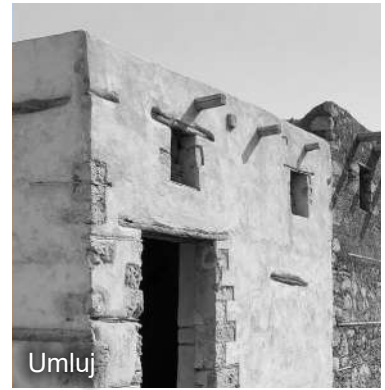
Top



Duba
Water spouts projecting from facade



Al Wajh
Detail of step in parapet



Umluj
Projecting joists and exposed lintels



Duba
Low parapets and rainwater spouts

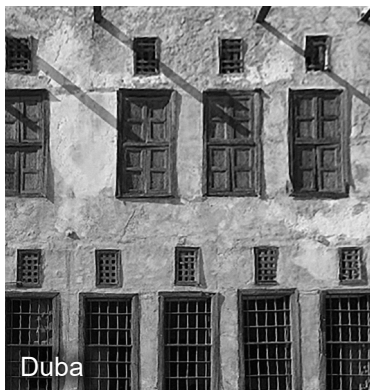


Al Wajh
Projecting parapet

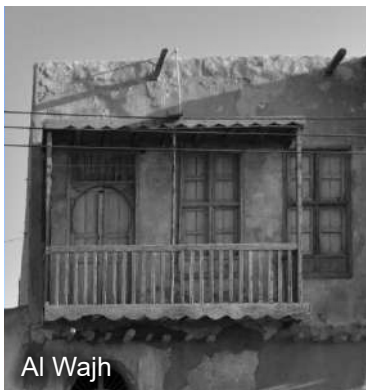


Al Wajh
Low parapets with projecting joists

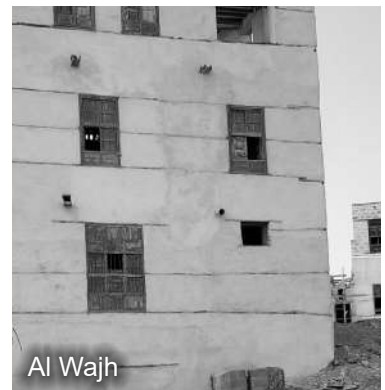
Middle



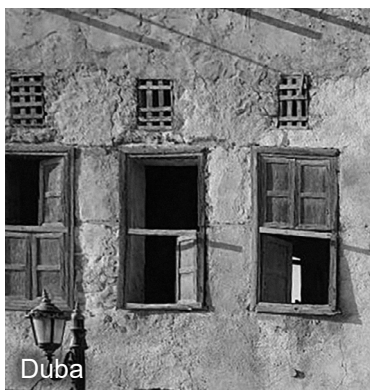
Duba
Misaligned openings with vents above



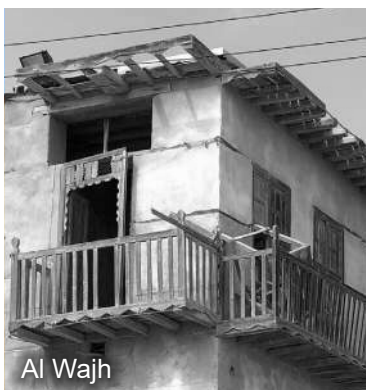
Al Wajh
Projecting covered balcony



Al Wajh
Simple windows with horizontal banding



Duba
Shuttered windows and vent openings



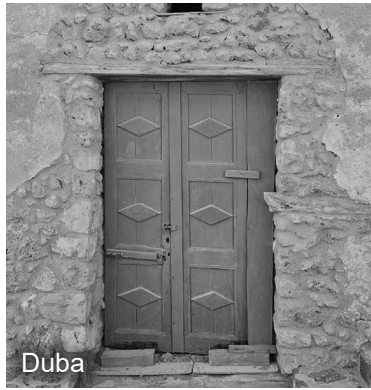
Al Wajh
Projecting balconies meeting at corner



Duba
Shallow balconies with vents above openings

FIG. 31 Examples for top and middle elements

Base



Dubai
Traditional recessed doorway



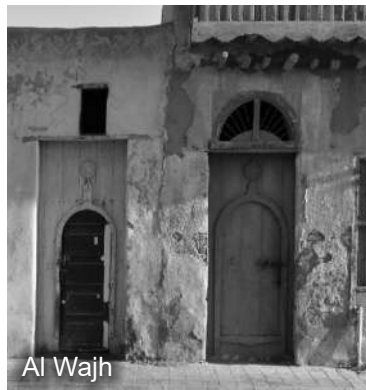
Dubai
Level change between buildings



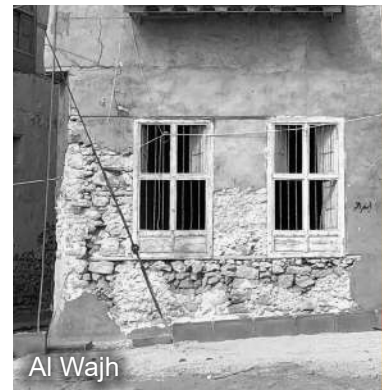
Dubai
Plastered facade meeting stone steps



Dubai
Erosion of plastered finish to base of wall

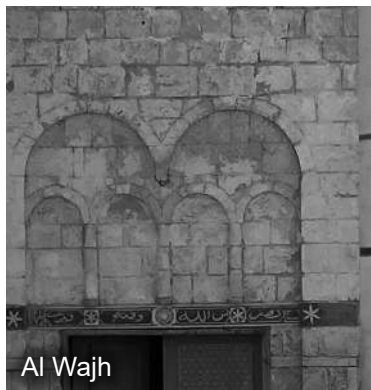


Al Wajh
Recessed entrances with vents above

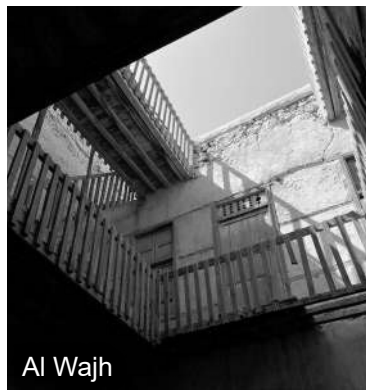


Al Wajh
Shuttered windows at street level

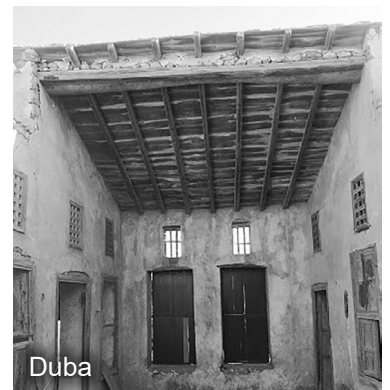
Ornament and other elements



Al Wajh
Decorative stone carving above entrance



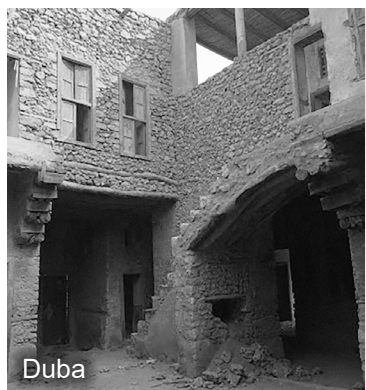
Al Wajh
Courtyard with deck circulation



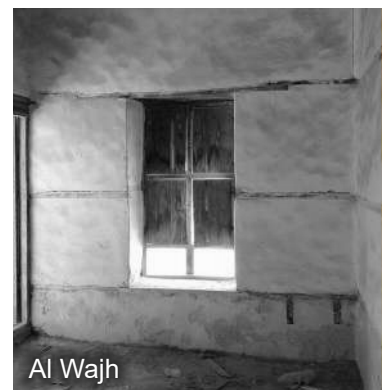
Dubai
Interior with vents above windows



Al Wajh
Veranda in front of entrance



Dubai
Courtyard, overhangs and stairs



Al Wajh
Interior with shuttered window

FIG. 32 Examples for base and other elements

3.1 **Doors and entrances**

Doors and openings should be carefully designed in terms of size, shape, proportions, and orientation. Natural light reduces energy consumption whilst also improving the physical and psychological well-being of occupants. Openings can also help with natural ventilation, which helps with cooling and maintaining a comfortable internal environment.

The traditional architecture of the Tabuk Coast benefits from the craftsmanship brought in part by people from all over the world drawn here for pilgrimage, as well as local tradespeople.

A key location for such craftsmanship are in the windows and doors of traditional buildings.

Elements illustrated here should be used as starting points for interpretation and not simply copied.

Characteristics include:

- 1 Frames and screens with:
 - geometric patterns
 - timber construction
 - typically flush or slightly recessed from the facades.
- 2 Punched entrance doors in solid walls with mainly arched heads.
- 3 Doors that are more generously scaled than windows and often recessed into a larger opening.

To signify the presence of entrances within the character and humility of the Tabuk coast character area.

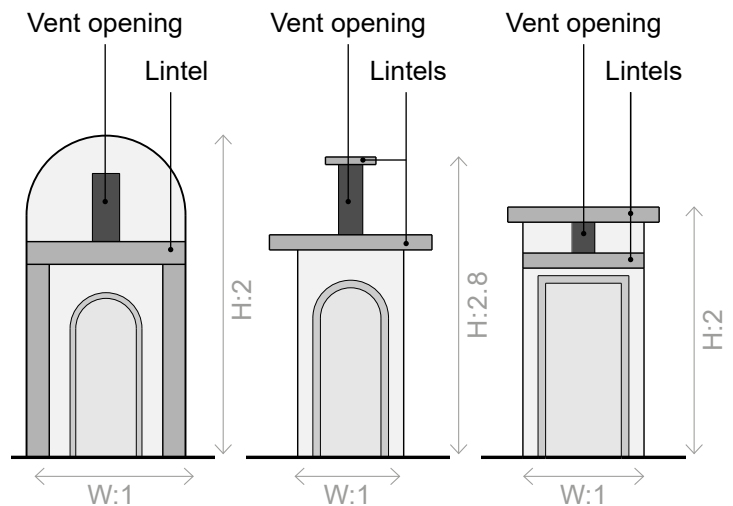


FIG. 33 Traditional entrances

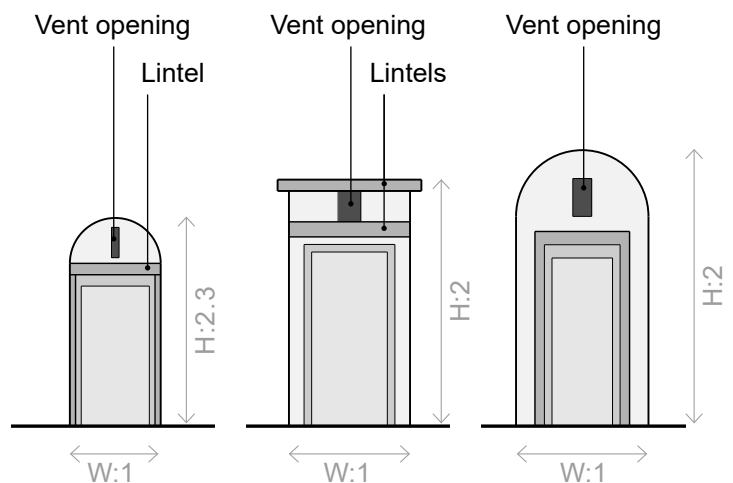


FIG. 34 Transitional entrances

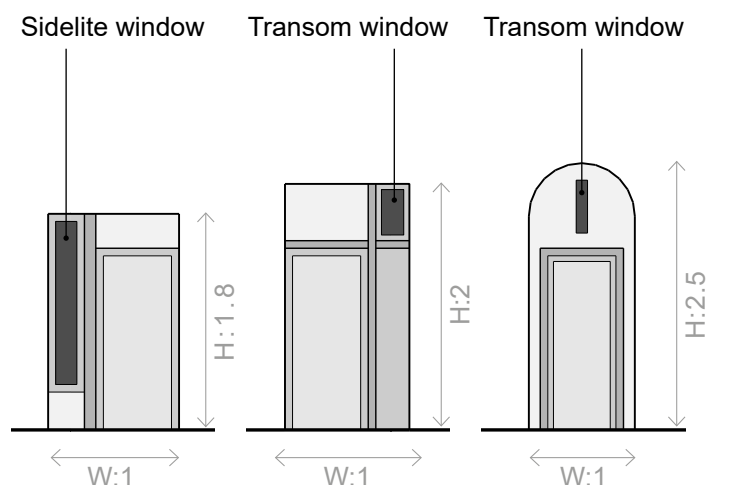


FIG. 35 Contemporary entrances

3.2 Windows and openings

General compositional guidelines have been derived from studies of the window elements of three towns, partly illustrated on this spread. Elements depicted should be used as starting points for interpretation rather than direct copying.

- 1 Openings should be simply articulated and respond to the internal disposition of spaces within.
- 2 Opening surrounds are flush or may be slightly recessed from the main facade to increase compositional layering and the play of light on the facade.
- 3 Windows are traditionally shuttered without glazing. Window shutters come in a variety of different configurations.
- 4 Openings should be symmetrical and aligned horizontally. Windows on different floors should not necessarily use axial alignments (i.e. attic windows, and smaller openings are not always centered above larger ones) to create a relaxed informality in the facade.
- 5 Openings may be grouped, if so they should without symmetry across the facade.
- 6 Doors should ,generally, be of a width to height proportion width 1:2 - 1:4. Generally vertical windows should be of proportions 1:1.5 - 1:3. Occasionally windows could have more square proportions 1:1-1:1.5 .

To evoke the character and humility of the Tabuk Coast area.

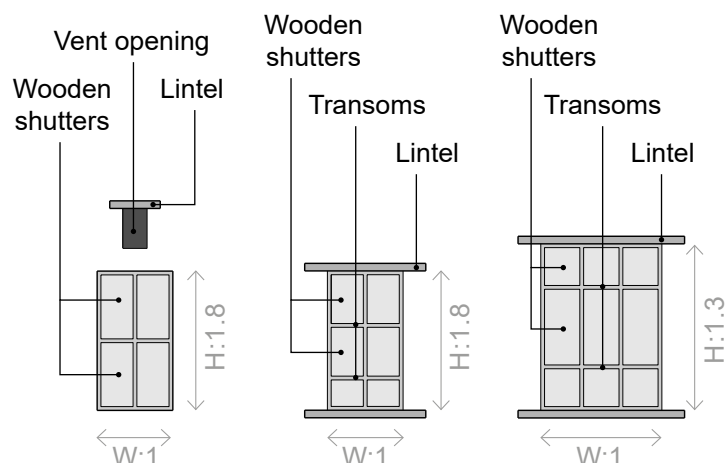


FIG. 36 Traditional windows and openings

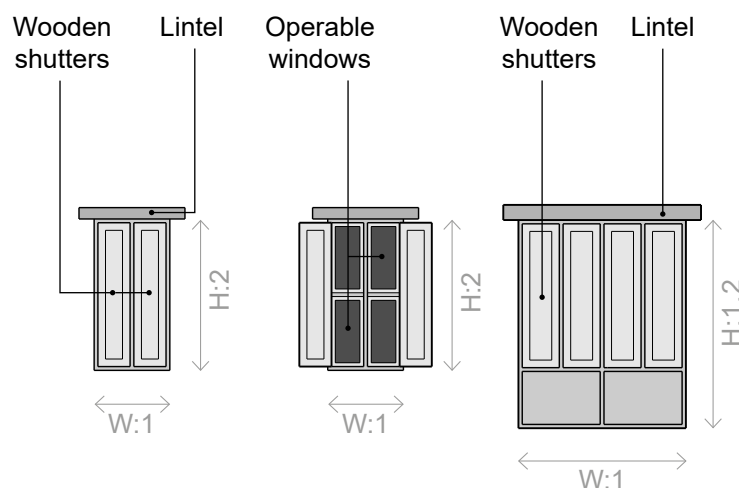


FIG. 37 Transitional windows and openings

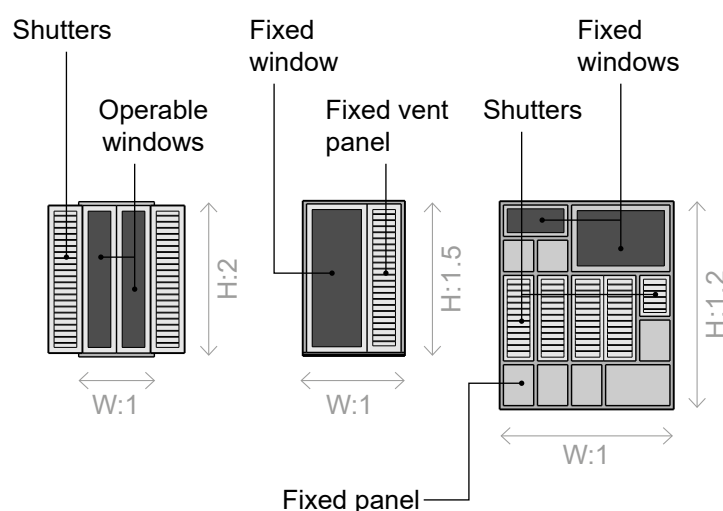


FIG. 38 Contemporary windows and openings

3.3 Rooftop elements

The traditional roovescape is characterized by simple flat rooflines and uninhabited roofs.

Elements of roovescape include:

- 1 A low straight parapet, creating a simplicity where the building meets the sky.
- 2 Projecting water spouts or gutters, often on all sides to deal with the quantity of rainfall.
- 3 Projecting joists thought to be the result of retaining this valuable commodity in its original length. These are not promoted as requiring retention.

To create simple roof lines within the spirit of the Tabuk Coast.

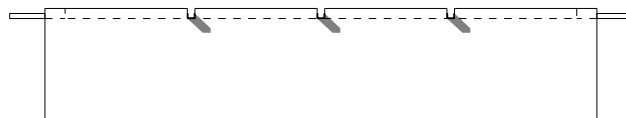


FIG. 39 Traditional parapet at rooftop

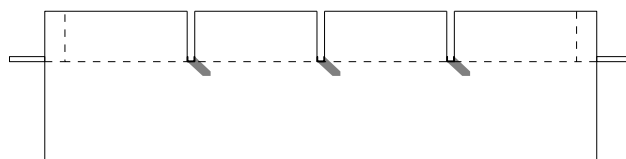


FIG. 40 Transitional parapet at rooftop

3.4 Projecting elements

Facades are typically composed of projected elements in addition to the windows and doors.

Projected elements include:

- 1 Timber balconies that fulfill the function of providing outdoor space but also are used to give a layered expression to the facades.
- 2 Timber screens that integrate shutters for shading and privacy but also deliver scale and variety.
- 3 Roshans by exception for buildings of higher status, again to add function and texture at a building scale.

To create a rich layering to the facades, typical of the character area.



FIG. 41 Traditional projecting balcony



FIG. 42 Contemporary shopfront with projecting canopy

3.5 Arches

The table below shows the range of arch shapes and head of openings evident along the Tabuk Coast. The illustrations show center points and construction lines to create the correct geometries.

- 1 These shapes may be applied to interiors and exteriors, to door recesses, frames, windows, vent openings, parapets and window hoods.
- 2 When set into stone or masonry walls, these openings should function structurally, and be spaced appropriately to maintain the structural integrity of the building.

To relate the design of arches and openings to the prevalent patterns of the area.

	FLAT (LINTEL)	ROUND ARCH	TREFOIL ARCH (ROUNDED)	HORSESHOE ARCH
ILLUSTRATION (showing centre points of circles and construction lines, to aid use of the correct geometries)				
EXTENT OF APPLICATION				
Duba	Extensive - for all applications	Very Limited	n/a	n/a
Al Wajh	Extensive - for all applications	Limited	Very Limited	Very Limited
Umluj	Extensive - for all applications	Very Limited	n/a	n/a
TYPICAL APPLICATION	<ul style="list-style-type: none"> Multiple applications Windows, door frames, vent openings 	<ul style="list-style-type: none"> Multiple applications Ground floor passages and interiors Door recesses and door frames Rare use for windows 	<ul style="list-style-type: none"> Focused applications Carved door hood recess, niches 	<ul style="list-style-type: none"> Focused applications Carved door hood recess, niches

TAB. 2 Table of arch types and wall openings

4 Colors and materials

The prevalent materials used and color range characteristic of traditional architecture of the Tabuk Coast.

Buildings on the Tabuk Coast combine the earthen tones of the desert with man-made colors bleached by the sun and weathered by the sea.

- 1 New buildings should draw inspiration from this palette and select material finishes and colors that are compatible with it.
- 2 Large building surface areas should be compatible with the range of background colors represented by the larger swatches to the right.
- 3 Accent colors of limited application should be compatible with the range of highlighted colors represented by the smaller swatches to the right.
- 4 Materials should be matte finished. Large areas of reflective and glossy materials should not be used.

To accentuate the coastal character of the Tabuk Coast.

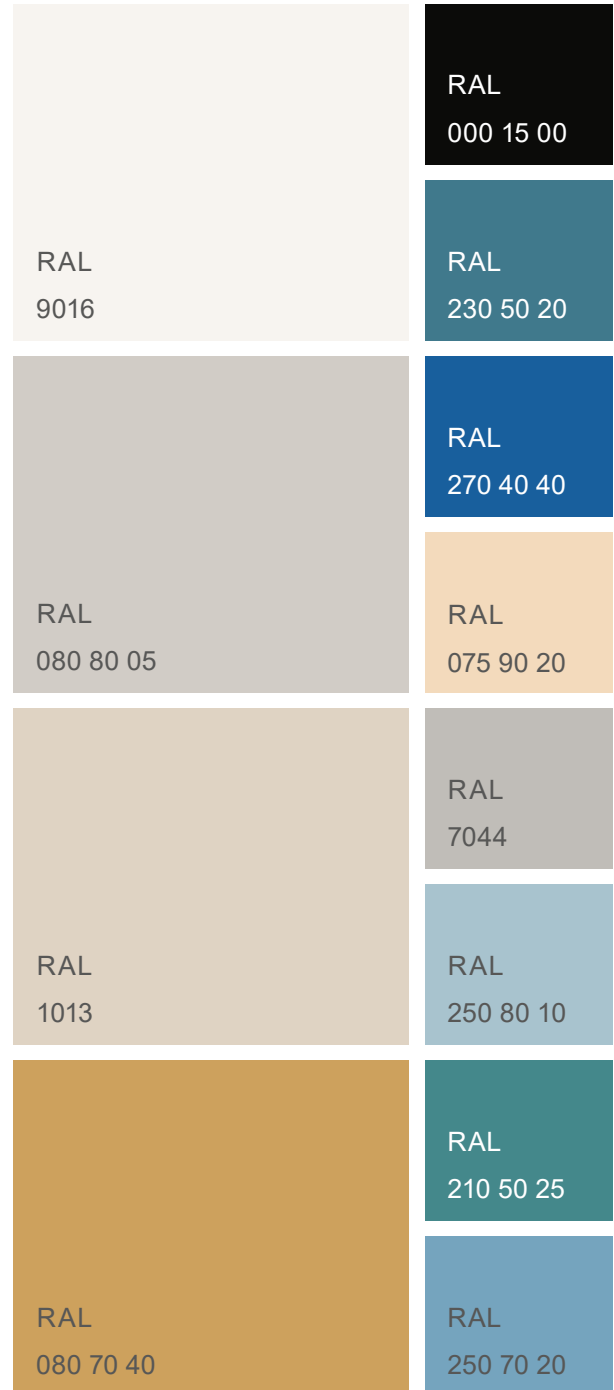


FIG. 43 RAL color palette

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/



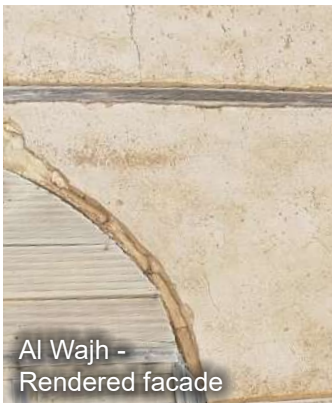
Al Wajh - Rendered facade



Al Wajh - Timber roshan



Al Wajh - Coral wall



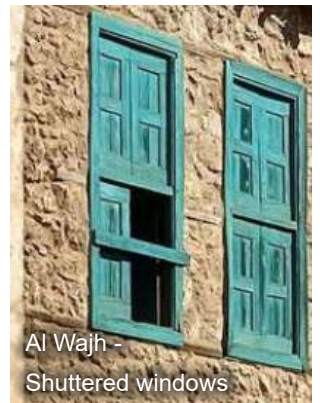
Al Wajh - Rendered facade



Al Wajh - Shuttered window



Duba - Shuttered windows



Al Wajh - Shuttered windows



Duba - Door Detail



Duba - Coral wall



Al Wajh - Shuttered window

FIG.44 **COLORS AND MATERIALS**

5 Patterns

Common motifs and patterns used in the traditional craftsmanship and material culture of the Tabuk Coast architectural character area.

Patterns should sensitively interpret those found in heritage settings, the landscape, or reference the Tabuk Coast's artistic and craft traditions.

Patterns lift architectural elements out of the ordinary, adding expression to the way a building is constructed.

- 1 The most prevalent motif found in the Tabuk coast are simple diamond shapes, typically applied to timber doors and window shutters. Interpretations and abstractions of the diamond motif is encouraged.
- 2 In remote areas of the Tabuk Coast, a simple and restrained approach to pattern use may be the most appropriate way to strengthen its rural character. Patterns should be applied sparingly and in increasingly simple forms as one travels northwards up the coast.
- 3 Building facades facing the public realm should be given added consideration when using patterns.
- 4 Private, interior facades of buildings are an opportunity to explore and provide more delicate and refined patterns.
- 5 Calligraphy and minor carvings, where they exist, are not as pronounced as further south and should be limited as such.

To express local character, sustain traditional craft and construction techniques.

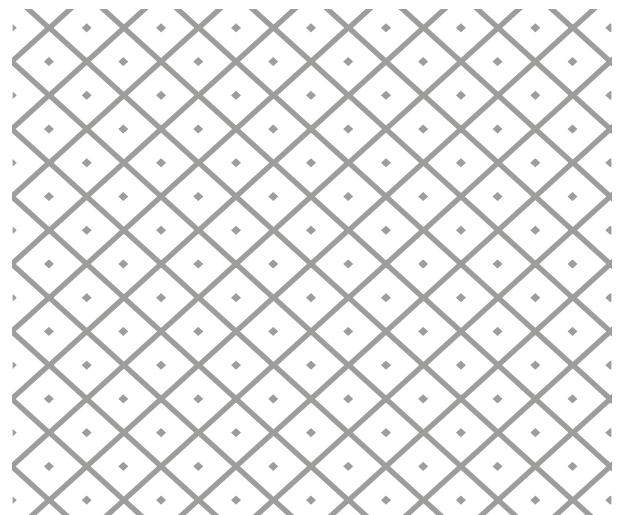
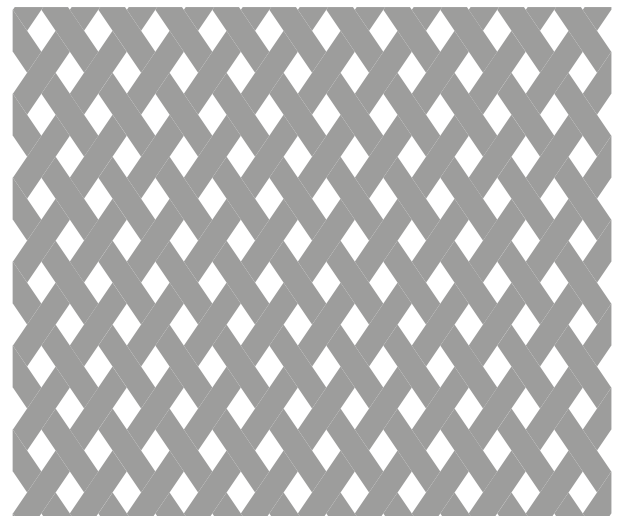
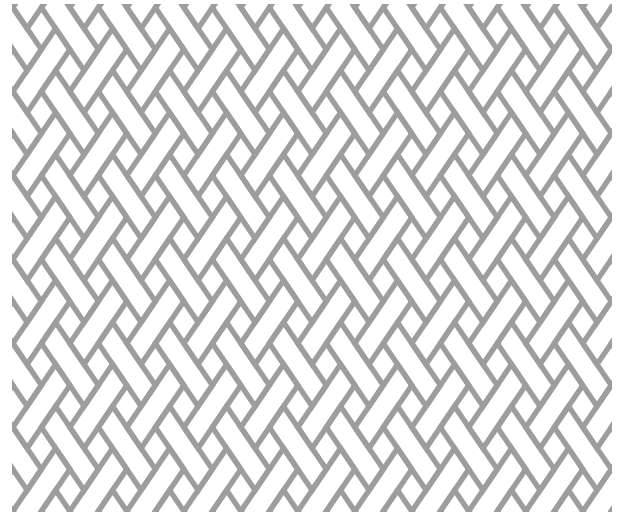


FIG. 45 Patterns abstraction



Roshan pattern (Al Wajh)



Lintel inscription (Dubai)



Diamond motif on door (Dubai)



Diamond motif on door (Dubai)



Balcony (Al Wajh)



Shutters (Dubai)



Diamond motif on balustrade (Al Wajh)



Diamond motif on door (Dubai)

FIG.46 PATTERNS

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.

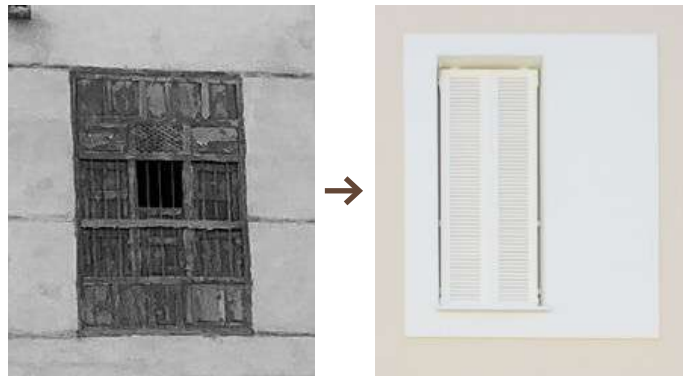


FIG. 47 Example of building material abstraction*

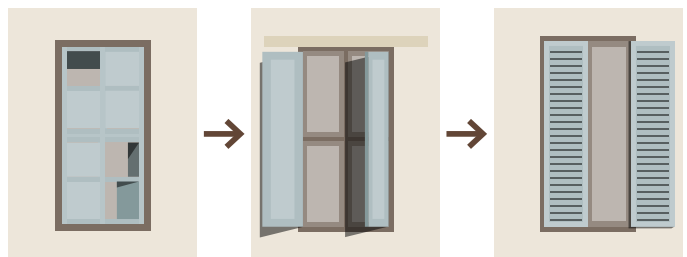


FIG. 48 Example of window shape abstraction*

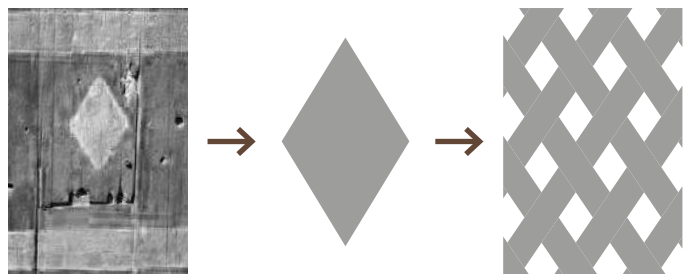


FIG. 49 Example of pattern abstraction*

*Note: Diagrams in this chapter are for explanation of design concepts only. The examples are taken from a variety of sources, and do not form part of the definition of the Tabuk Coast architectural character.

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 a 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.

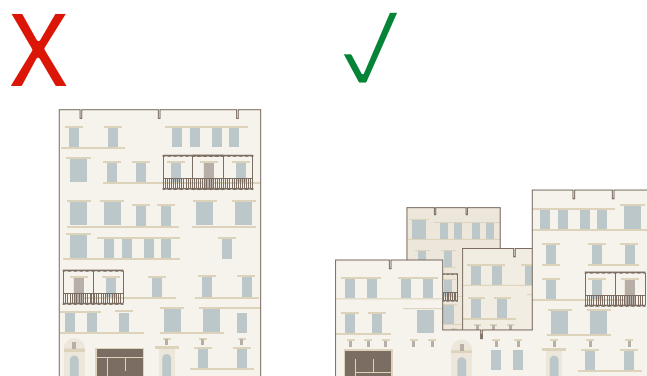


FIG. 50 Break down building massing to better fit traditional architectural elements *

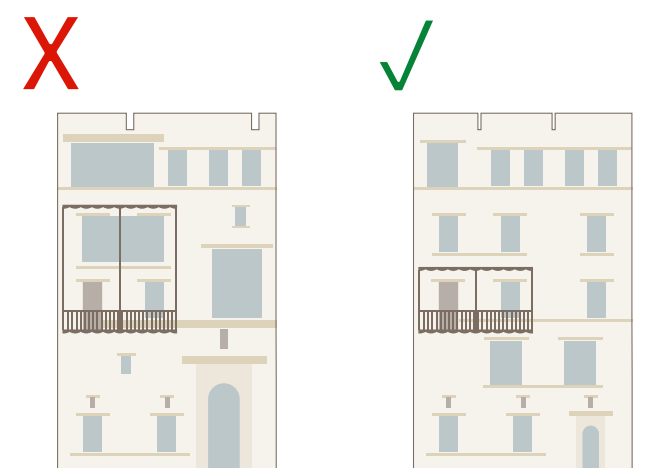


FIG. 51 Do not scale and distort smaller elements into oversized graphic features*

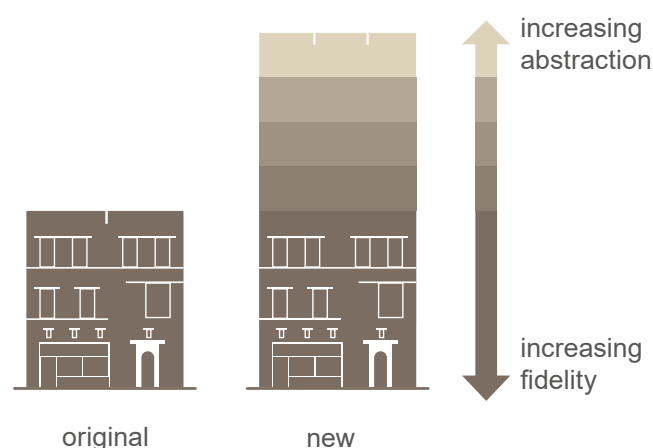


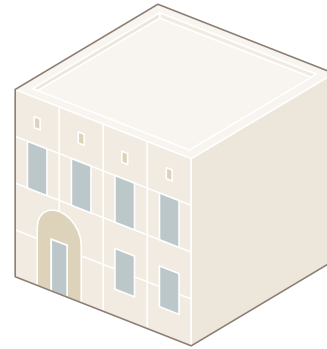
FIG. 52 Pay attention to building elements near the public realm, especially at the ground floor*

6.3 Functionality

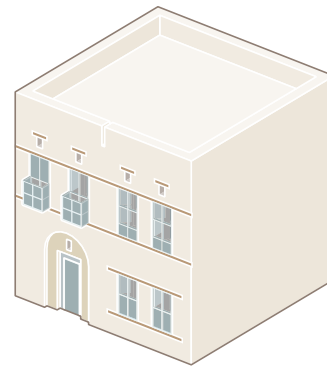
Architectural elements should perform functionally like their traditional counterparts, and not be applied superficially like graphic signage.

- 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.



Superficial arcade and window screens



Functional arcade and window screens

FIG. 53 Functional use 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.

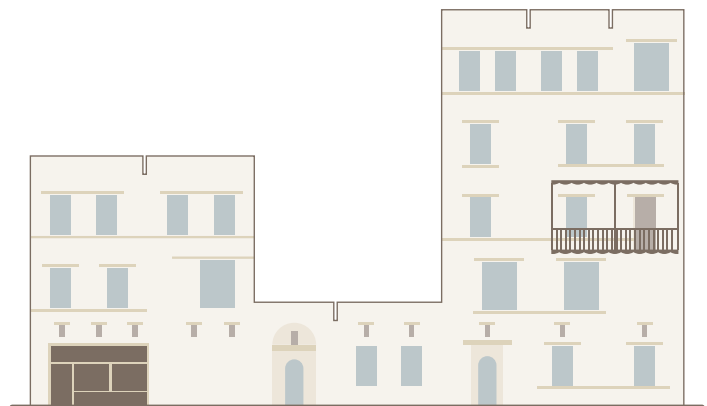
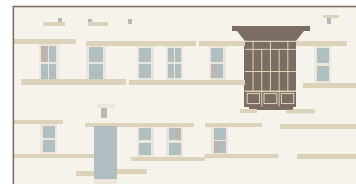


FIG. 54 Adaptation of traditional architectural elements to a contemporary building*

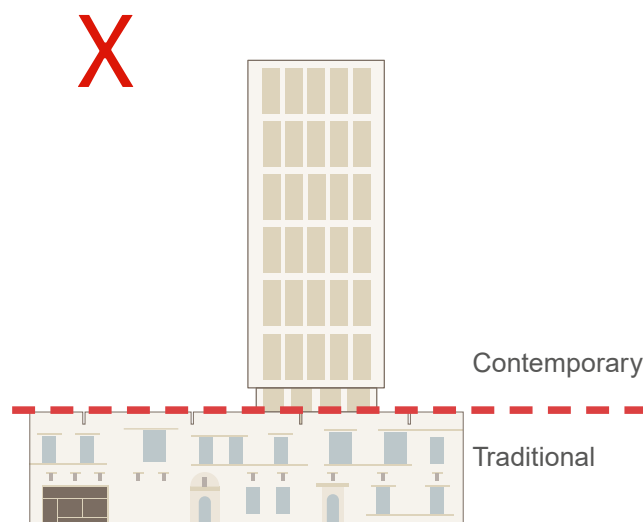
*Note: Diagrams in this chapter are for explanation of design concepts only. The examples are taken from a variety of sources, and do not form part of the definition of the Tabuk Coast architectural character.

6.5 Mixing

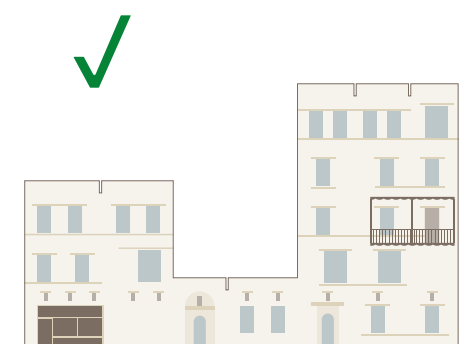
Architectural characters are part of living cultures that continually grow and change. The boundaries defining architectural character areas should be understood as provisional, open to influences from all around, rather than as fixed borders. This invites the possibility of styles and character strengths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

- 1 In large scale projects, when the project site is located at the edge of two or more characters, the adjacent character 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 scale projects.



Do not create hard breaks between mixed sources*



Create gradual transitions between mixed sources and strengths of architectural character application*

FIG. 55 Appropriate mixing of sources

7 Worked examples

A set of design studies illustrating the application of the Tabuk Coast architectural character to buildings, at different strengths and scales.

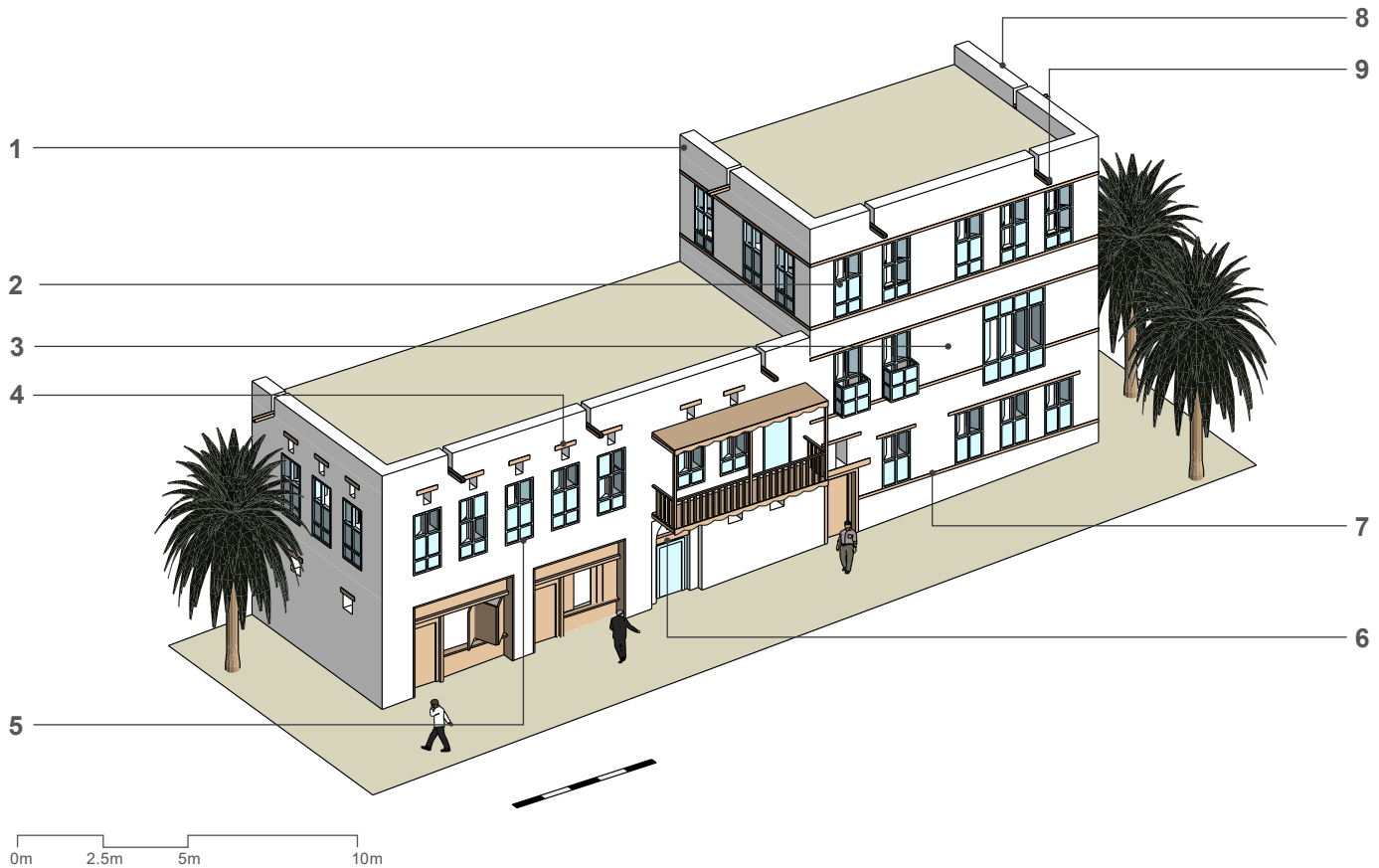


FIG. 56 Medium sized building

7.1 Traditional

These composition guidelines are applied to create a 'full strength' traditional character to new buildings. They should not be adhered to rigidly but rather used as examples of ways in which features and elements are applied.

The following guidance covers both medium and large size buildings.

- 1 Simple, rectangular building forms.
- 2 Facades with localized symmetries and loose alignments between upper and lower floor windows.
- 3 Solid pale walls in either stone or render.
- 4 Expressed lintels and vent openings above windows and doors (relevant to medium sized buildings only).
- 5 Individual simple, rectangular window openings.



FIG. 57 Large sized building

- 6 External arches in panels above entrance doorways to signify their function.
- 7 Representation of horizontal timber banding to tie building together and emphasize layering, simplified in larger building forms.
- 8 Flat, horizontal roof parapets.
- 9 Projecting water spouts at roof level.

To create a strong connection and celebration of the Tabuk Coast architecture.

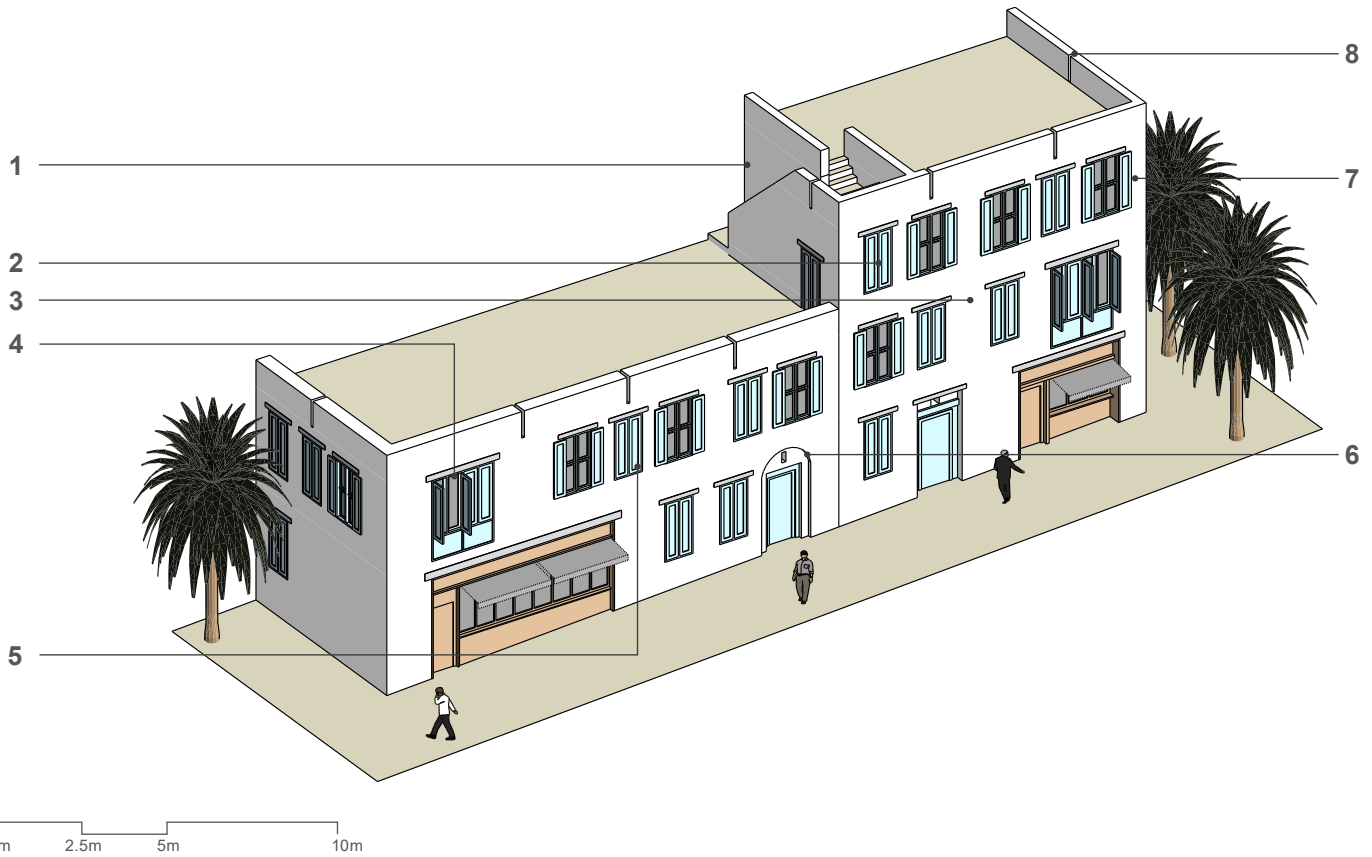


FIG. 58 Medium sized building

7.2 Transitional

The transitional model is a progression of the traditional form, without embracing all elements of the contemporary model.

Many of the traditional features remain present, but some variations signal an evolution and reinvention of specific elements.

- 1 Simple, rectangular building forms.
- 2 Facades with localized symmetries and alignments between upper and lower floor windows.
- 3 Solid pale walls in either stone or render.
- 4 Expressed lintels and integration of ventilation related to windows and doors.
- 5 Individual or grouped simple, rectangular window openings.



FIG. 59 Large sized building

- 6 External arches or other articulation in panels above entrance doorways to signify their function.
- 7 Horizontal window alignments to tie building together and emphasize layering.
- 8 Flat, horizontal roof parapets with articulation to recall projecting elements.

To ensure that transitional buildings create a clear continuity between traditional and contemporary forms.



FIG. 60 Medium sized building

7.3 Contemporary

The transition to the contemporary model ensures buildings conform to modern regulations with regard to energy, safety and other building standards. This is relevant to all new buildings and should be carefully controlled in the contemporary model.

Building forms and expressions can also reflect changes in construction methods as well as the availability of skills and materials.

The result should update functions to modern ways of living and working.

- 1 Overall form to follow similar massing and proportions of traditional buildings, with taller buildings sensitively extruding traditional forms.
- 2 Wall to opening ratio to retain original proportions with potential for adjustments with the use of screens and panels.
- 3 Symmetries to be adhered to with localized inflections to avoid strict replication of historic facade treatment.



FIG. 61 Large sized building

- 4 Windows and doors translated into abstracted versions of original forms within overall ratios and increased interaction with the street.
- 5 Screen and projections employed in abstracted forms, retaining principle of function (privacy/ventilation /shading).
- 6 Decorative elements recalling original patterns and colors.
- 7 Rooftop inhabitation encouraged, with terraces and concealed plant areas incorporated.

To create opportunities for simple, attractive design solutions which celebrate the essential characteristics of the area, and respond to changing ways of living and working.

8 Public realm

An overview of public realm character in Tabuk Coast.

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 Tabuk Coast. 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 Municipal and Rural Affairs 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. 62 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 characteristic public realm found in the character area.
- **Types of public space** - A selection of spatial types that provide the architectural character area's distinctive character.
- **Materials** - A summary of hardscape materials for the architectural character area.

- **Planting** - A summary of softscape character for the architectural character 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 Tabuk Coast.

8.2 General character

The adjacent photographs summarize the typical characteristics of the public realm and the local landscape in the Tabuk Coast. The area is characterized by the meeting of the Red Sea and the coastal plain. This also informs the materiality of the character area, with vernacular structures built of coral stone and buildings being grouped together for shelter, squeezed between the coast and the steep cliff face of the foothills of the Hejaz mountain range.



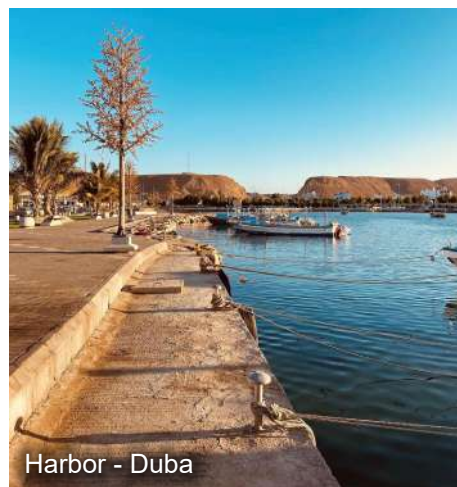
Street - Al Wajh



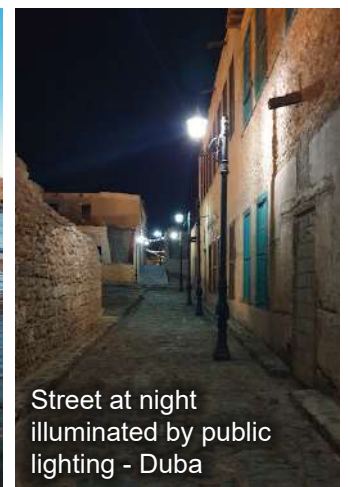
View out to sea looking over historic streetscape - Al Wajh



Square - Dubai



Harbor - Dubai



Street at night illuminated by public lighting - Dubai



Cliff face overlooking the coast - Al Wajh



Street - Dubai



View out to sea looking over historic streetscape - Al Wajh



Harbor - Dubai

FIG.63 PUBLIC REALM

8.3 Types of public space

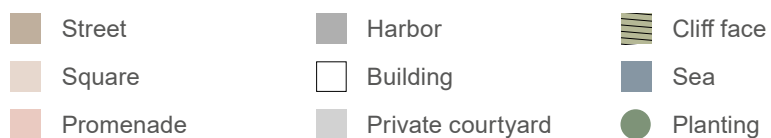
Tabuk Coast's public realm is characterized by a hierarchy of typical streets and spaces. These typologies are distinguished by their scale, character, and relationship with predominant land uses. Together, these spaces create a diverse public realm which caters for residents and visitors alike, and contributes to the distinct architecture of Tabuk Coast.

The plan below shows a typical hierarchy of urban spaces and streets of the character area. The following spaces are considered to be the principal typologies:

- Streets: The key thoroughfares through the historic centers of the towns and cities in the character area.
- Squares: Open, public spaces enclosed by buildings that serve a variety of civic purposes including hosting the local markets. They act as a focal point for social gathering.
- Harbors: areas of waterfront where ships are moored and industry was formerly located.
- Promenades: elevated pathways offering unobstructed views out to sea.



FIG. 64 Typical urban plan



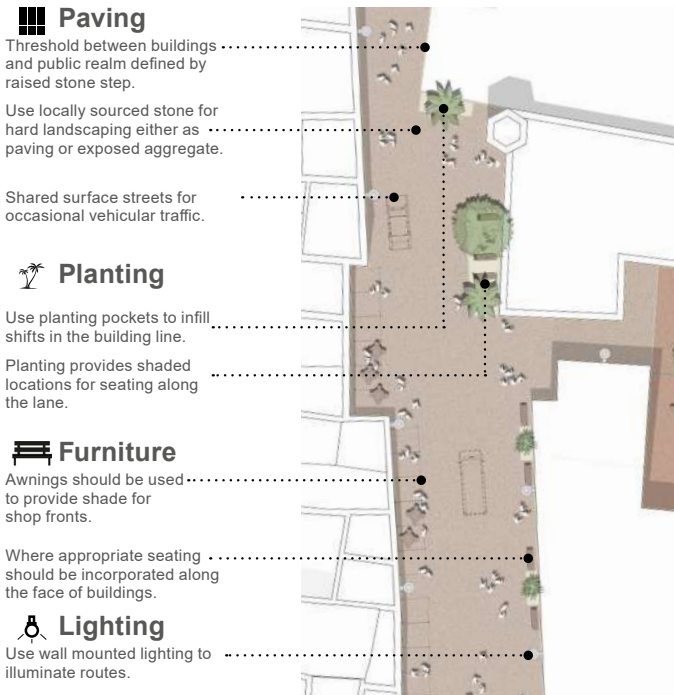


FIG. 65 Streets

The historic cities along the Tabuk Coast were arranged around a network alleys, lanes and streets varying in their scale and function, some serving purely residences while others served warehouses, workshops and businesses close to the harbor.

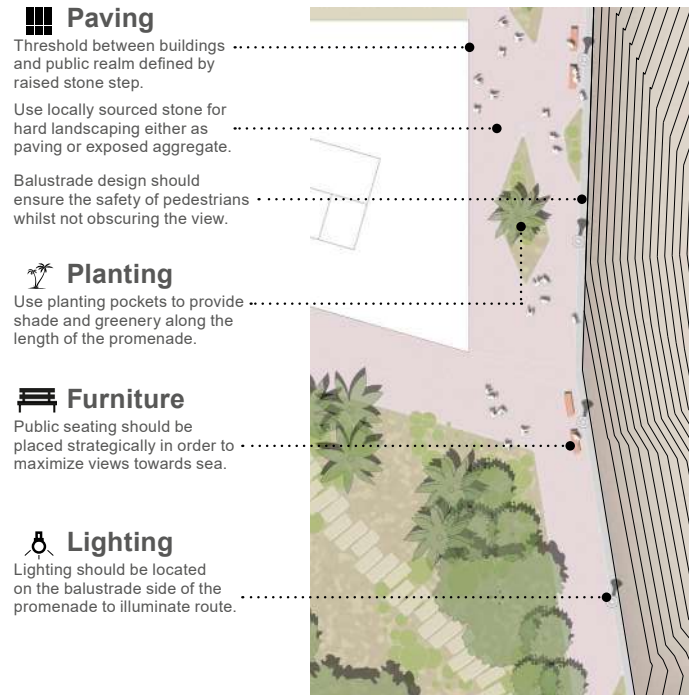


FIG. 66 Promenades

The topography of the Tabuk Coast is marked by steep sandstone cliffs loosely following the line of the coast. These cliffs plateau sharply and offer an opportunity for promenades that snake through the historic city centers offering unobstructed, panoramic views of the sea.

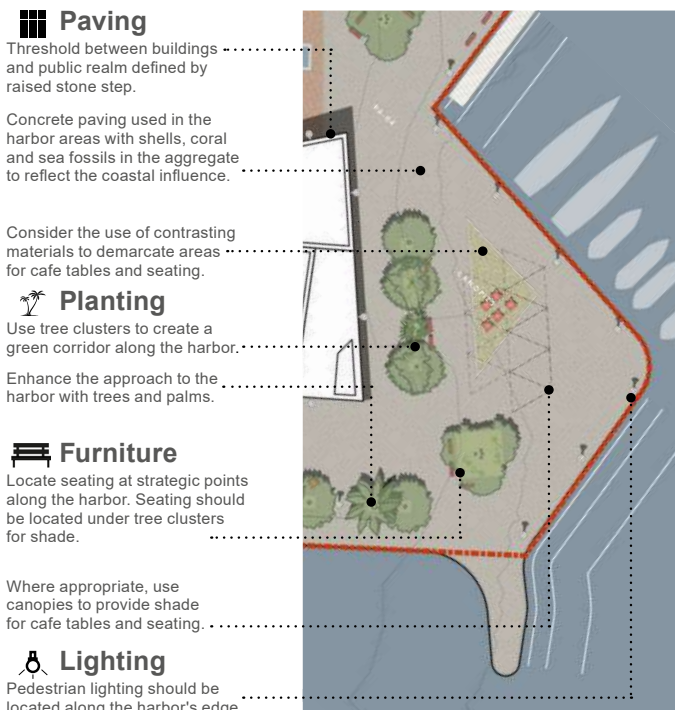


FIG. 67 Harbors

Tabuk's strategic location along the Red Sea resulted in a long history of maritime trade commerce and fishing. Harbors are a prominent feature but no longer serve as trading and fishing hubs. Their restoration offers the opportunity to reconnect coastal cities with the sea for people to visit, shop and meet.

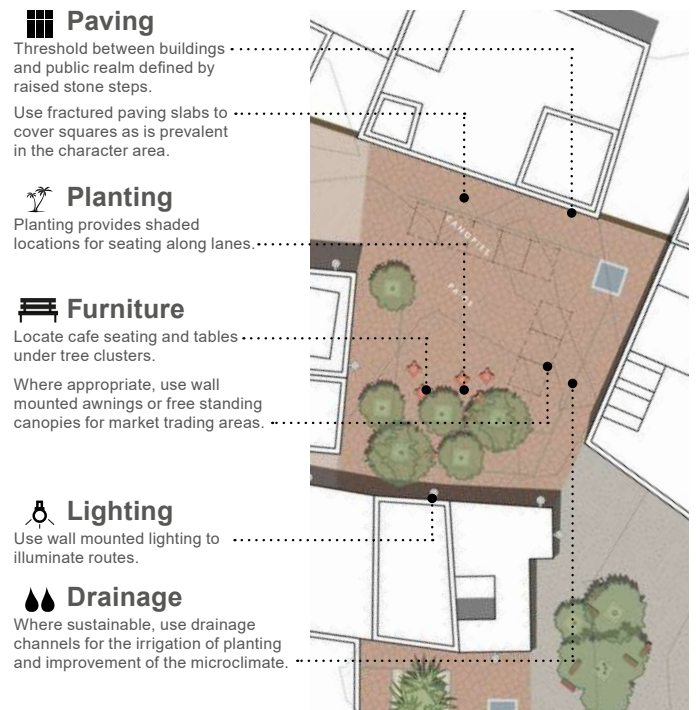


FIG. 68 Squares

The main function of squares is to host markets and as a focal point for social gathering. Squares can be also used for formal events or cultural installations. They have an important role in both the economic and social life along the Tabuk Coast.

8.4 **Materials**

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

Key considerations

- 1 Select locally sourced Saudi materials with low embodied carbon and high content of reused or recycling aggregates (for non-natural materials).
- 2 Areas with higher footfall should have higher specification and materials that are durable, minimizing the need for regular repair and replacement.
- 3 Re-use materials, where possible formed from waste material.
- 4 Where possible, deliver materials using sustainable means of transport.
- 5 Select materials that have longevity and that can be easily cleaned, repaired and sourced with high-quality materials replaced like for like.
- 6 De-pave where possible to improve the microclimate and use sands or aggregates in place of paving.
- 7 Materials should provide varying textures within a simple color palette to complement the area's character.
- 8 Employ subtle changes to paving to highlight difference between typologies.
- 9 Make good existing streetscapes and ensure materials are replaced only when necessary to minimize carbon footprint.
- 10 Use larger paving format to emphasize more prominent routes.
- 11 Consider incorporating special patterns to emphasize important spaces.

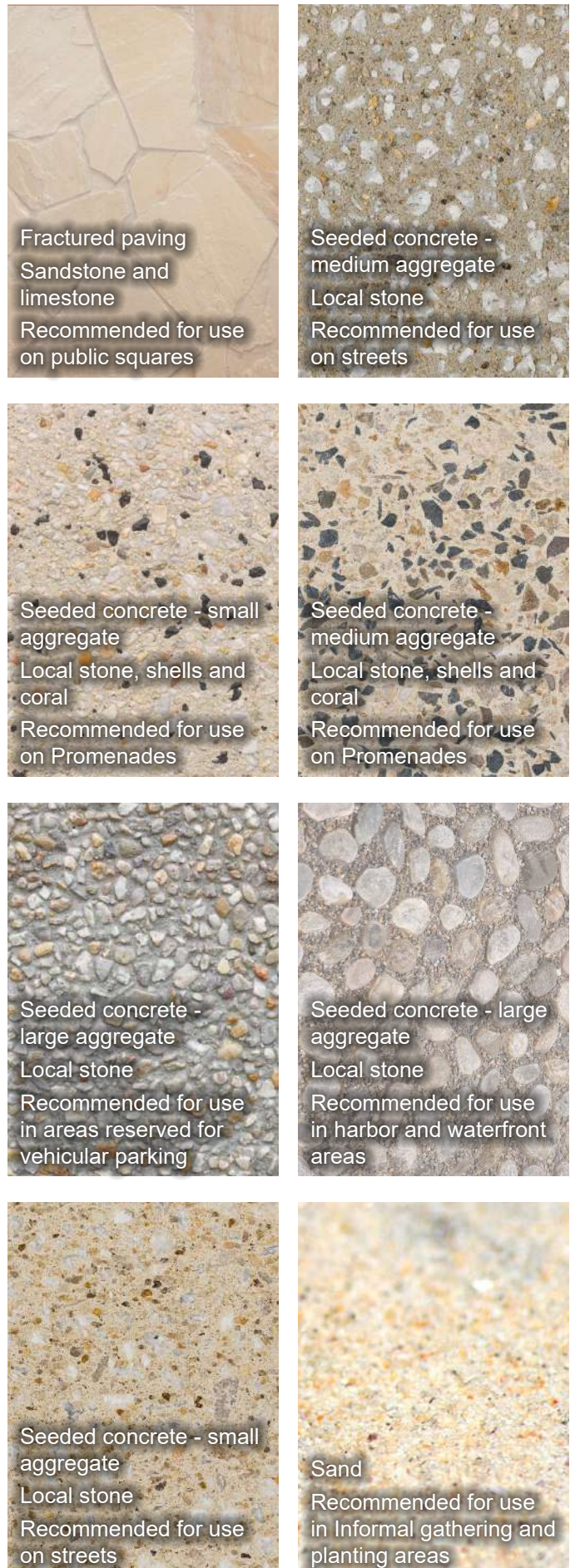


FIG. 69 Public realm material references

8.5 Planting

Tree planting should complement the overall character of the Tabuk Coast area, helping to shape places and enable planting through sustainable means.

Key considerations

1 Water must:

- Be considered carefully, responding to the local microclimate, water availability and landscape character.
- Use drought tolerant and water sensitive species.
- Consider salinity tolerance in low lying areas.

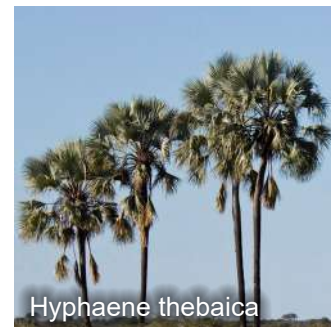
2 Trees should:

- Adopt an informal layout, avoiding overly linear or formal planting.
- Only be planted where shade can be best utilized or where shade is necessary to encourage the use of public realm.
- 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.

3 Planting should:

- Be relatively limited within the urban area, mainly in baraha areas.
- Contribute to maintaining and enhancing oasis areas, using multi-layered planting where appropriate comprising a variety of palm species, fruit trees and fodder grasses.
- Consider additional habitat value such as fruits for birds.
- Understory and decorative planting should be minimized. If necessary, it should be functional e.g. herbs or edible.
- Have a palette which aims to use both native plants and those that have locally adapted.

Palm trees



Shade trees



Ornamental species



FIG. 70 Planting references

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 find opportunities to use local materials, respond to the local landscape and cultural heritage and celebrate local craft skills.

Key considerations

- 1 Be distributed evenly across all areas with reference to space types above.
- 2 Not obstruct pedestrian movement nor clutter public open spaces.
- 3 Consider color and material consistency.
- 4 Be minimal in the public realm as traditionally was the case and potentially movable.
- 5 Feel ephemeral and informal, acknowledging the historic condition of street furniture in the region.
- 6 Give consideration to accessibility with seating distributed at suitable intervals and have suitable heights, backs or armrests.
- 7 Be of high quality, coherent, and rationalized to minimize street clutter.
- 8 Have a co-ordinated appearance, with consistent material and color palette to complement the local character.
- 9 Avoid duplication by rationalizing and combining elements.
- 10 Be easily maintained and repaired with replaceable components.
- 11 Be retained and improved where existing furniture has heritage value.

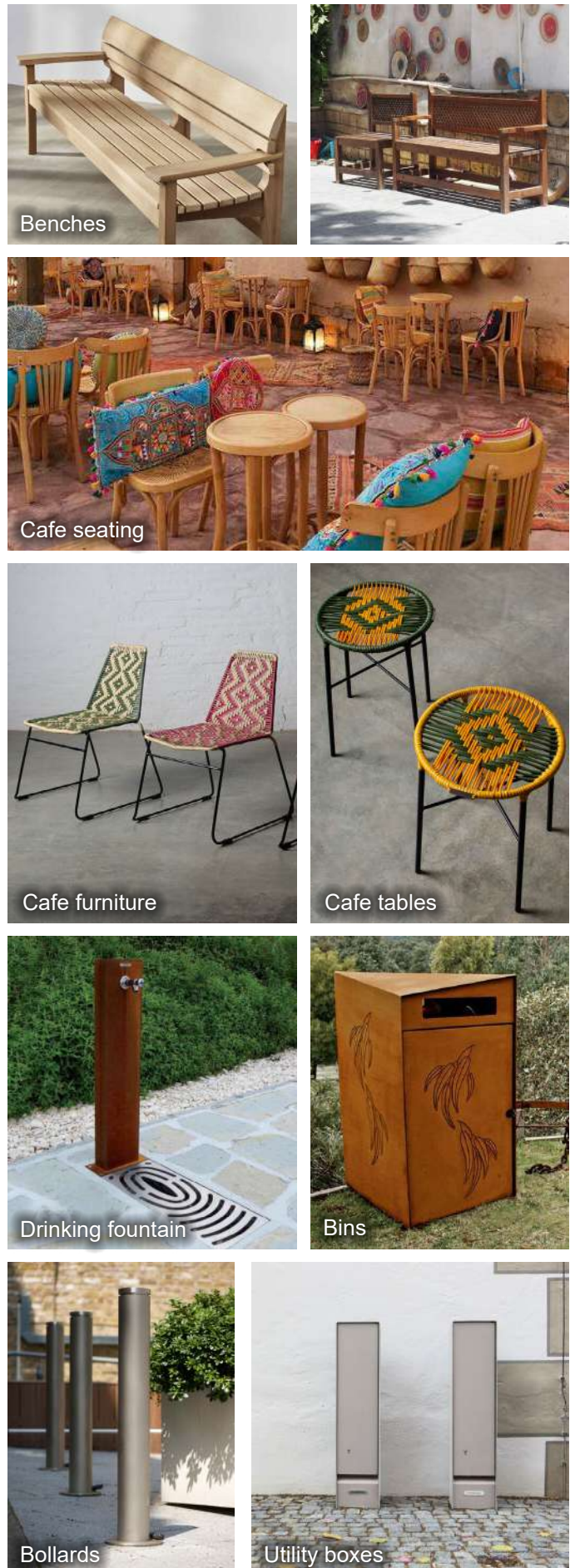


FIG. 71 Street furniture references

8.7 Lighting

A coordinated lighting strategy should create an appropriate and distinctive atmosphere for different areas to reinforce Tabuk Coast's sense of character. Lighting should not be distracting, the focus should always be on the setting, 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 Sensitive highlight historic buildings, mosques and public buildings 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 at different times of evening and night to save energy wherever possible.

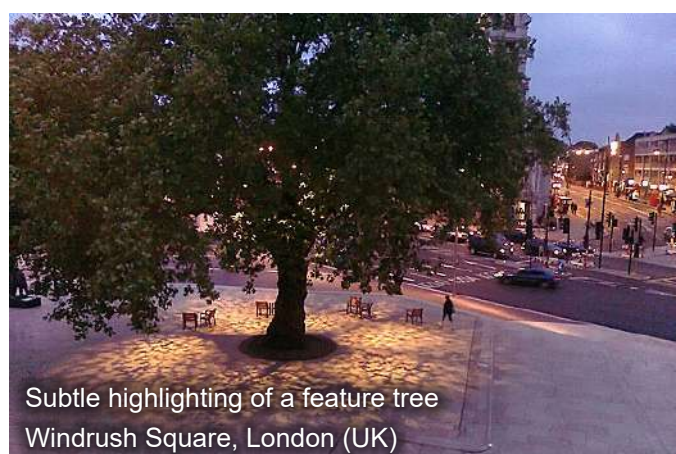


FIG. 72 Lighting references

8.8 Signage

Signage should play a vital role in supporting good wayfinding across settlements in Tabuk Coast. An appropriate signage strategy will contribute to a positive experience of navigating streets and spaces.

General considerations for signage are set out below:

- 1 Establish an appropriate distribution of signage based on analysis of the hierarchy of routes, and location of destinations or key buildings. Focus the position of signage where it is most suitable, for example between key destinations or at important intersections.
- 2 Use visual markers such as locally appropriate planting, paving, lighting and frontages to enable intuitive wayfinding.
- 3 Embrace signage design which is bespoke and complementary to the character of Tabuk Coast.
- 4 Avoid large totems, signposts and obstructive signage that detracts from the public realm appearance.
- 5 Adopt a light touch approach to signage which aligns with the scale of routes and spaces. For example, signage could be wall-mounted, in paving or mounted on sensitively designed light columns.
- 6 Ensure that the approach to materials, font, color and size of signs is sensitive and appropriate to the local context.
- 7 Ensure signage and wayfinding are accessible and intuitive to all people including those with visual impairment and of different languages, through innovative use of symbols, color and texture.



FIG. 73 Sensitive integration of street signage for a historically sensitive urban context

8.9 Parking

The approach to parking is a key component in the overall approach to the public realm. The appropriate location and design of parking has the potential to enhance the experience of moving across for streets and spaces for people.

General considerations for parking are set out below:

- 1 The design of streets and spaces should seek to prioritize the experience of people movement. In general, efforts should be made to find more space for pedestrians, avoid obstructive parking locations, integrate pedestrian crossings in suitable locations and manage traffic speeds.
- 2 The position of parking should enable the provision of greater space for pedestrians in shadier areas. On-street parking should be rationalized, with the incorporation of appropriate surface treatment of parking to achieve an increased footway width.
- 3 Tree planting should be integrated between bays to create greener streets.
- 4 Access to parking areas should be considered at the outset of the public realm design process.
- 5 Where appropriate, spaces that are currently dominated by car parking could be re-imagined as public spaces by relocating parking underground. Alternatively, some parking might be reduced alongside improvements to walking, cycling or public transport, or relocated to the edge of central destinations.
- 6 Access to smaller spaces or streets should be restricted to local private vehicles access
- 7 Local businesses to agree the timing of servicing to minimize the impact on areas with high pedestrian footfall.
- 8 Parking bays should adopt a surface treatment which is suitable to the local area and scale of the street or space.
- 9 In larger accessible spaces where unlawful parking is a concern, limited use of bollards should be considered.
- 10 Cycle parking should be carefully integrated to the public realm and be positioned at local destinations including shops, souks, mosques or transport hubs.
- 11 Cycle parking should respond to the width of streets. On narrower streets, parking should be parallel to the curb edge and on wider streets, stands can be perpendicular to the curb.



FIG. 74 Integration of parking into pedestrian orientated streetscape

8.10 Public realm worked examples



FIG. 75 Proposed market square in Al Wajh

The worked public realm examples above illustrate typical spaces on the Tabuk Coast. The illustrations seek to demonstrate the application of some of the main public realm principles. Specific opportunities and features are annotated on the images above.

Proposals for key spaces and streets should prioritize the following public realm moves:

- 1 Create spaces which celebrate Tabuk Coast's setting with views and connections to the water.
- 2 Strengthen streets and spaces which re-connect, key buildings and destinations.
- 3 Create high-quality streets and spaces which enhance the setting of buildings with a hierarchy of spaces related to the status of buildings they face.
- 4 Create of well-ordered streets generous spaces for pedestrians.
- 5 Develop a pedestrian friendly, walkable environment.
- 6 Establish comfortable experience for residents and visitors, as part of a vibrant urban setting.

Attractive public realm and active frontages

Shading elements in the public realm

High quality landscape giving access to the water

Architectural elements reflecting the coastal character



FIG. 76 Proposed sea-view square in Al Wajh

- 7 Reinforce a clear hierarchy of streets and spaces as part of a local network.
- 8 Use traditional local materials.
- 9 Create a range of scales of space, including larger public spaces, smaller neighborhood squares and tighter, well-shaded streets.
- 10 Adopt an integrated approach to the provision of street trees, planting and drainage features to create shade, and establish green, resilient places.
- 11 Adopt a coherent approach to the activation of key streets and spaces, identifying suitable locations for retail and leisure.
- 12 Embrace opportunities for public art to enliven space.
- 13 Employ careful application of architectural guidelines to create places with a suitable scale, and appropriate character.
- 14 Find opportunities to reinforce or create legible streets and wayfinding.
- 15 Use the arrangement of space and buildings to create enticing glimpses, and longer views or vistas to key landscape features, civic or religious buildings as appropriate.

To create a welcoming, comfortable and walkable network of streets and spaces.

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