

An aerial map of a city grid, likely Al Balad, with green overlays indicating specific areas or boundaries. The map shows a dense network of streets and building footprints. The green overlays are semi-transparent and cover various parts of the city, including what appears to be a central business district and several residential blocks. The overall color palette is light green and white.

Al Balad

PUBLIC REALM
STRATEGY AND
DESIGN MANUAL

Allies and Morrison
January 2020

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A INTRODUCTION

The purpose of a comprehensive Public Realm Strategy and Design Manual is to set an aspiration for the quantity, quality, and consistency of public realm across Al Balad and Jeddah Historic District

A.1 OBJECTIVES AND SCOPE

Purpose of Public Realm Strategy and Design Manual

The Al Balad Public Realm Strategy and Manual will ensure a cohesive future public realm that is responsive to the city's unique character and that aligns to the public realm vision. The document can be used by public authorities, contractors, or private developers as guidance of how to approach any public space from streets, parks, plazas or play areas. The approach is focused at two complementary scales - site wide strategy and place specific design guidance.

PART ONE: STRATEGY

Public Realm Strategy addressed the full extent of the Jeddah Historical District and assess the current nature of public open space, identifies key findings, and sets out a vision. The vision sets out aspirations for the public realm and is accompanied by six 'golden rules' to achieve high-quality designs.

1 CONTEXT

2 VISION AND STRATEGIES

3 AL BALAD

PART TWO: DESIGN MANUAL

Supporting the Public Realm Strategy is the Design Manual which proposes design strategies for existing and future public realm opportunities based on typology. This is supported with case studies for specific streets, souks, and barahat. Standard material, furniture, lighting, and planting palettes are proposed alongside standard details to assure consistency across all levels of public realm. The intention is to promote high-quality design that is durable, sustainable, accessible and inclusive.

4 OPEN SPACE TYPOLOGIES

5 ROUTES TYPOLOGIES

6 HARD LANDSCAPE

7 SOFT LANDSCAPE

8 PUBLIC REALM ELEMENTS

9 DELIVERY AND PHASING

A.2 HOW TO USE THIS DOCUMENT

The Al Balad Public Realm Strategy and Design Manual contains key strategic principles for public realm design, sets out typical arrangements for route and open space typologies, a materials palette, and recommendations on public realm elements including; public realm materials, street furniture and planting.

The recommendations within this report are not prescriptive and should be used as guidance for the design and implementation of public realm. It is recommended that designers take the following steps when using this manual.

- 1** Locate the site and character area – i.e. Al Balad, North Lagoon, South Lagoon – and review local policies or governing bodies relevant to the site e.g. Nominated Property boundary.
- 2** Review the recommendations put forward in the public realm strategy – review suggestions for the site and surrounding neighbourhood.
- 3** Establish what typology is defined - street, souk, zuqaq, barahat or garden. Review spatial and material requirements.
- 4** Visit the site and Al Balad nominated property. Determine the character of the space based on historic context, architecture or site narrative.
- 5** Undertake a thorough site analysis documenting predominant land uses, microclimate (sun, shade, air movement), topography, and site access.
- 6** Review available infrastructure, in particular how to access water for irrigation. Potable water must not be used for irrigation. Review options for grey water capture or available Treated Sewage Effluent (TSE)
- 7** Engage the local community through consultation and events, to establish local needs and aspirations for the site.
- 8** Establish the brief for the project by identifying which activities are appropriate for the site. Special consideration should be given to providing equal access to all.

A.3 INVESTING IN PUBLIC REALM

Why Invest In Public Realm

Improving the quality of the public realm has long been an important aspect of economic investment and regeneration activity.

Improving the environment and accessibility to shops supports the retail economy, increases footfall and dwell time, boosts the evening economy, increases visitors and ultimately leads to increased levels of expenditure in the city centre. Likewise investing in the quality of the public realm supports regeneration by stimulating private sector investment, encouraging private land owners to improve the appearance and condition of their premises.

The CBRE / Jan Gehl report 'Place Making: Value and the Public Realm 2017' conducted research into placemaking public realm improvement initiatives combining two distinct but related approaches to determine their success. Good public realm interventions improve both the way in which public spaces meet human needs and contribute to the human experience of urban areas and support commercial and property values and long-term value resilience. It was found that improvements to the public realm create well-being and value uplift in four different ways: improving the image of an area; creating a new destination by the establishment of new commercial or recreational activity; adding versatility to an area so that it can be used for events; and establishing the character of a newly developed area.

What Makes Good Spaces

Good public spaces sit at the crossroads of the best public spaces are:

- Inclusive places of social exchange which do not favour one group over another - men and women, young and old, individuals and groups - everyone is welcome and safe.
- Inclusive places of celebration where communities come together throughout the year for seasonal or spontaneous, religious or secular events.
- Inclusive places of activity - where interesting things happen, where things change throughout the year and where people want to be
- Inclusive places to linger and relax - where the air is clean, the environment is cool, seating is shaded, and something interesting is happening.
- Inclusive places which encourage movement - where people can walk, cycle, play or exercise
- Inclusive places which make cities healthier - where trees clean the air, water is sacred, and the lowest energy is embodied or used.



Banyoles Old Town, Banyoles (Spain)



Palma de Mallorca (Spain)



Via Mazzini, Verona (Italy)



Imam Ouzai Square, Beirut (Lebanon)



Pitt Street Mall, Sydney (Australia)



Bonn Square, Oxford (UK)

A.4 POLICIES AND GUIDANCE

International

Al Balad's status as a UNESCO World Heritage Site makes relevant a range of International best practice guidelines, concerned with the safeguarding and protection of cultural heritage. The inscription of Al Balad as a World Heritage Site in 2014 gives the area special protected status and generates a range of constraints around the safeguarding of the heritage. In addition, to the nomination file text, the following international bodies are significant to the field of heritage in the context of Al Balad.

- UN Sustainable Development Goals
- UNESCO United Nations Educational, Scientific and Cultural Organisation
- ICOMOS International Council on Monuments and Sites
- ICCROM The International Centre for the Study of the Preservation and Restoration of Cultural Property

Kingdom of Saudi Arabia Vision 2030

The Kingdom of Saudi Arabia has adopted "Vision 2030" as a roadmap for economic growth and national development. The National Transformation Program (NTP) was launched as a "Vision Realisation Program," setting the goals and targets for the Kingdom to 2020. The NTP's eighth theme is to develop the tourism and national heritage sectors. This theme has two strategic objectives:

- Strategic Objective 1.3.2 Conserve and promote the Kingdom's Islamic, Arab and national heritage.
- Strategic Objective 3.3.6 Develop the tourism sector
- The Under Objective 1.3.2, the NTP's strategy is to:
 - Develop the survey, exploration, registration and scientific research programs in the field of national heritage and international cooperation
 - Protect national heritage elements
 - Increase awareness and education of national heritage locally and promote the Kingdom as a cultural destination.

The Saudi Commission for Tourism and National Heritage (SCTH)

The Kingdom's existing regulatory framework has recently been streamlined. This has led to the creation of SCTH (formally SCTA) The Saudi Commission for Tourism and National Heritage (SCTH).

SCTH is the official agency responsible for tourism and heritage sector in the Kingdom. They have an institutional responsibility for: Antiquities registration and protection, Antiquities research and Studies, Museums, National Museum, World Heritage Sites.

Within SCTH there are three associations (professional and non-profit bodies) which enjoy legal status: The Saudi Association for Tourist Guides; The Saudi Association for Tourist Accommodation Facilities; Tourism regulation.

Each of these associations have published 'missions' 'guidelines' and 'objectives' for each of their specialisms. They have the power to set procedural rules and criteria to ensure quality.

SCTH interacts with both the public and private sector to implement National Tourism Development Plan Projects through co-operation agreements.

SCT National Tourism Development Project

The National Tourism Development Project is a long-term tourism strategy developed to cover the period of 2001-2020. Relevant to the discussion of cultural, natural and intangible cultural heritage, it contains policy objectives and sectors relating to both cultural and natural heritage:

- Environmental considerations in Tourism Development
- Role of Cultural Heritage in Tourism Development
- The policy document sets out the role of cultural heritage within the Kingdom with not only the opportunities that each sector represents but also the constraints that are important to consider in their development and implementation.

National, Regional, and Municipality laws, policy, strategies, and guidance.

Any proposals taken forward by designers must relate to relevant national, regional, local and municipal policy, standards and guidance. The following public realm strategy and manual illustrate design intent only. Any design or construction risk is the responsibility of the project designer.

Note for designers

The document is intended to show design intent only. For your consideration:

- Any plans, sections or details must not be directly replicated or used for construction purposes
- Any risk for the design is passed onto the designer
- It is the designers responsibility to research all relevant national, regional and local guidelines and apply them
- Any drawn or mapped information has potential for inaccuracies and should not be relied upon
- Any streetscape products shown are for reference only and must only inform streetscape designs. It is the designers responsibility to choose the appropriate product for any public realm designs in accordance with relevant procurement requirements.
- Any precedents are shown for reference only as supporting material to show design intent

Allies and Morrison are not responsible for nor shall be liable for the consequences of any use made of this Report other than that for which it was prepared by Allies and Morrison for the Client unless Allies and Morrison provide prior written authorisation for such other use and confirms in writing that the Report is suitable for it. It is acknowledged by the parties that this Report has been produced solely in accordance with the Client's brief and instructions and without any knowledge of or reference to any other parties' potential interests in or proposals for the Project.



PART ONE

STRATEGY

1 CONTEXT

This section examines Al Balad's place within a wider context and summarises key findings from surveys and research conducted in 2019. These findings outline issues and opportunities in the Jeddah Historical District.

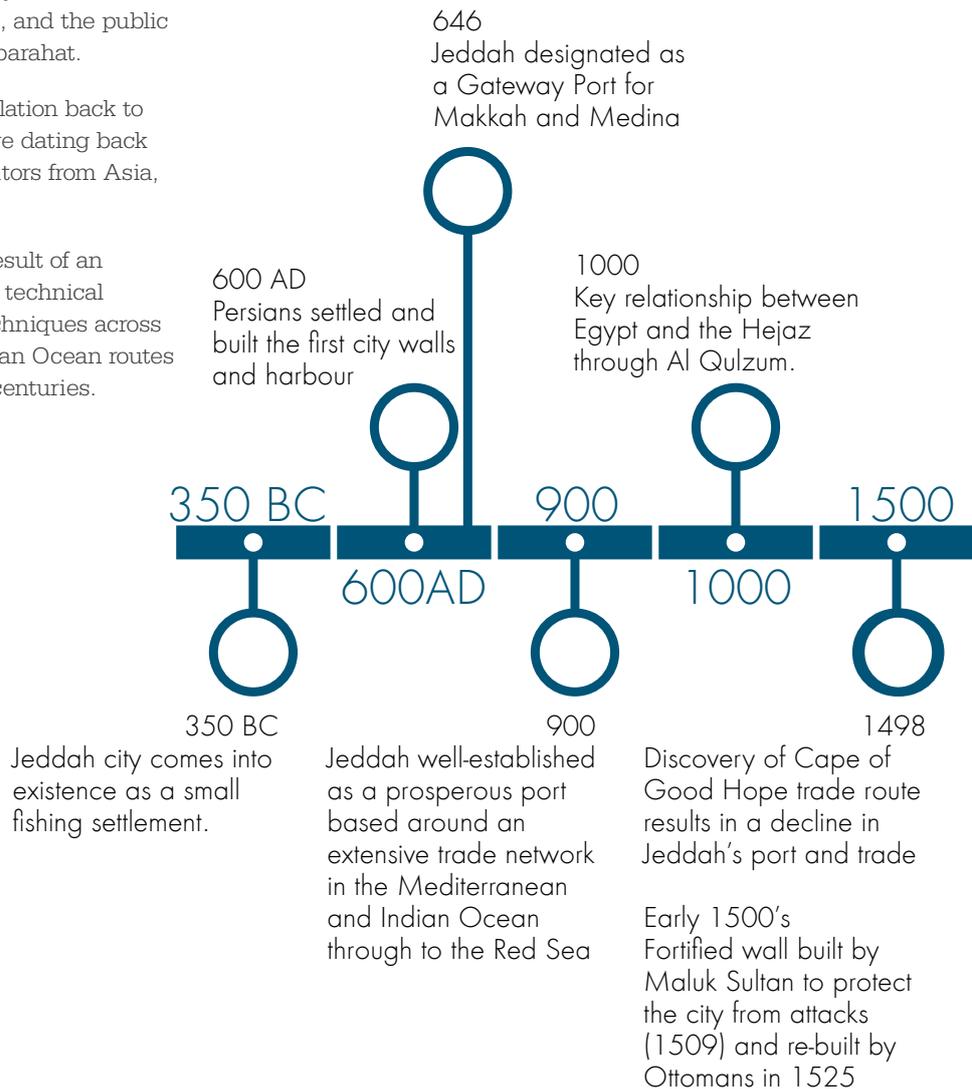
1.1 A BRIEF HISTORY OF JEDDAH

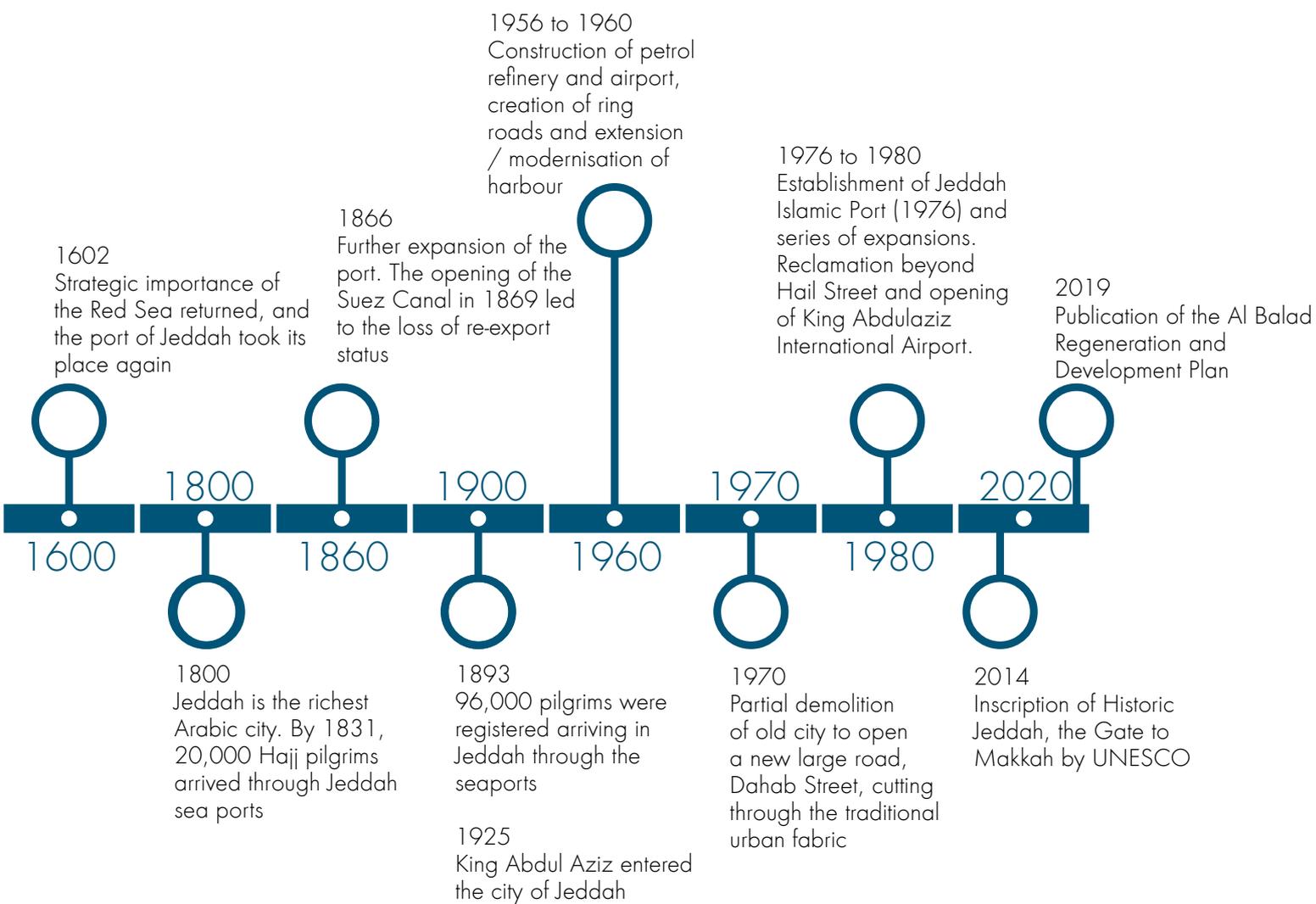
MORPHOLOGY OF AL BALAD

Al Balad is recognised by UNESCO as a culturally important historic cityscape defined by historic buildings of unique architectural style, and the public space network of souks, zuqaqs, and barahat.

Al Balad traces its cosmopolitan population back to its association with the Hajj pilgrimage dating back to the 7th Century AD welcoming visitors from Asia, Africa, and the Middle East.

UNESCO describes Al Balad as "the result of an important exchange of human values, technical Know-how, building materials and techniques across the Red Sea region and along the Indian Ocean routes between the 16th and the early 20th centuries.





Source: Jeddah Historic Development Report by HAK



URBAN GROWTH AND NATURAL TRANSFORMATION IN JEDDAH THROUGHOUT THE YEARS



350 BC: Jeddah comes into existence as a small fishing village



600: Persian settlement - first city walls and harbour



1948: post-wall demolition, coinciding with greater prosperity



1960: Creation of ring roads surrounding the older core



1762: Enlarged harbour and expanded city walls as drawn by C. Neibur in 1762



1894: Ottoman map depicting wall re-alignment of wall and reclamation



1980: Significant expansion of the city including growth of the port and new airport



2019: Jeddah in the current day - the alignment of the waterfront and further growth to the north is noticeable

1.2 REGENERATION CONTEXT

Al Balad Regeneration

The Al Balad Regeneration and Development Plan (BRDP) was commissioned by the Saudi Ministry of Culture for the regeneration of Al Balad and its surrounding areas. The lead consultant Strategy& appointed Allies and Morrison to devise the plan with the support of Mobility in Chain as the transport planners and Buro Happold as the environment, sustainability and security consultants. Dar Al Handasah were also commissioned to address the infrastructure of the masterplan. The masterplan proposed three phases of development



Al Balad Regeneration and Development Plan Phase 1 - Priority Zones

Phase 1 proposes a regenerated core of projects that can establish uplift Al Balad and act as a catalyst for the next phases. The focus of Phase 1 will be:

- Six Priority Zones along key historic routes
- Public realm upgrades of the key historic routes
- Priority restoration and building adaptation for heritage buildings along those routes
- Routes towards the waterfront of Al Arbaeen Lagoon
- New underground parking structures, beneath Al Arbaeen waterfront park and in key sites south and south east of the Nominated property to begin addressing the shortage of parking in Al Balad.
- Public transport solutions to interchange with the parking structures and reduce car access into Al Balad
- A new temporary waterfront park west of Hail Road and north of the existing Beach Mosque.

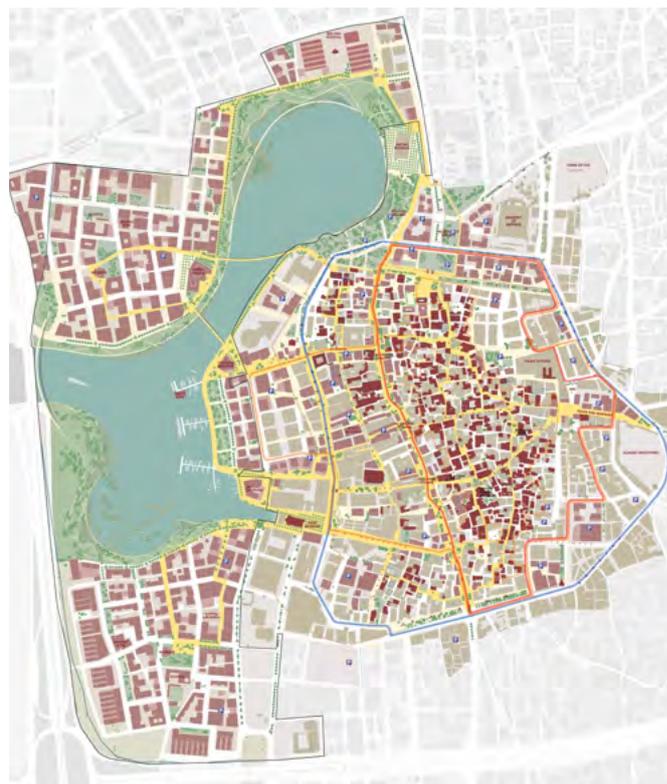


Al Balad Regeneration and Development Plan Phase 2 - Opportunity Sites

Phase 2 builds on the prioritised regeneration in phase one. It takes advantage of the remaining opportunity sites in Al Balad to infill vacant sites, intensify underdeveloped or problematic sites and restore severed historic routes. In addition, it comprehensively overhauls the public realm of Al Balad and introduces new parking structures and a public transport system.

In addition, Allegiance Square is reconfigured to reduce car dominance and reduce driving speeds while improving permeability from Al Balad to Al Arbaeen Lagoon and beyond. The aim is to achieve comprehensive regeneration of Al Balad in Phase 2.

Phase 1 and 2 are referred to as the 'Regeneration of Al Balad'.



Al Balad Regeneration and Development Plan Phase 3 Wider regeneration

Phase 3 capitalises on the success of the comprehensive regeneration of Al Balad and extends development to the waterfront. At the same time, it creates a new setting and a new prosperous urban context for Al Balad. In particular, it overcomes the severance with the water by removing Hail Road bridge and reducing the quantum of vacant reclaimed land.

In Phase 3 the waterfront improvements will be delivered to create a waterfront built edge for Al Balad, a new waterfront park and two new communities north and south of the expanded lagoon.

1.3 PUBLIC REALM REVIEW

1.3.1 HISTORIC ANALYSIS

Al Balad was a place of pilgrimage and trade. The city flourished with the import of culture, building materials and spices from around the world. Visitors built large, elaborate houses which were specifically adapted to Jeddah's climate - Roshan facades, absence of courtyard, ground floors used for offices and commerce and rooms rented for pilgrims.

The urban structure of Al Balad also emphasised the importance of the Hajj with its east-west running souk linking the custom's buildings on the seafront to Bab Makkah. UNESCO recognises that "The overall landscape of Jeddah is characterised not only by the aesthetically remarkable tower houses, but also by the dense accumulations of lower houses, the ensembles of structures that related to trade, religion and the accommodation of pilgrims, and for the overall urban form and its division into clearly defined quarters".

The public realm in Al Balad has always been highly functional with direct relation to the transient nature of the population. Four distinct characteristics are evident.

Adaptability

Al Balad would have seen significant population increases at different times of the year, especially for Hajj. During those times it would have been bustling with traders and pilgrims. As the population became more permanent, souks and baraha would have seen an overlay for festivals – a tradition which continues today.

Terrain

Historically, the ground surface in Al Balad was compacted earth, a terrain without pattern or adornment. Any hierarchy was defined by the scale of routes or spaces, the ground floor activities, or by compaction of the surface due to wear. Level changes were historically resolved through sloping topography rather than introducing intermittent steps or walls.

Ephemerality

Furniture or other public realm elements were lightweight and could be easily picked up and brought indoors. Any formal elements were part of buildings such as Merkaaz benches built into walls.

Water

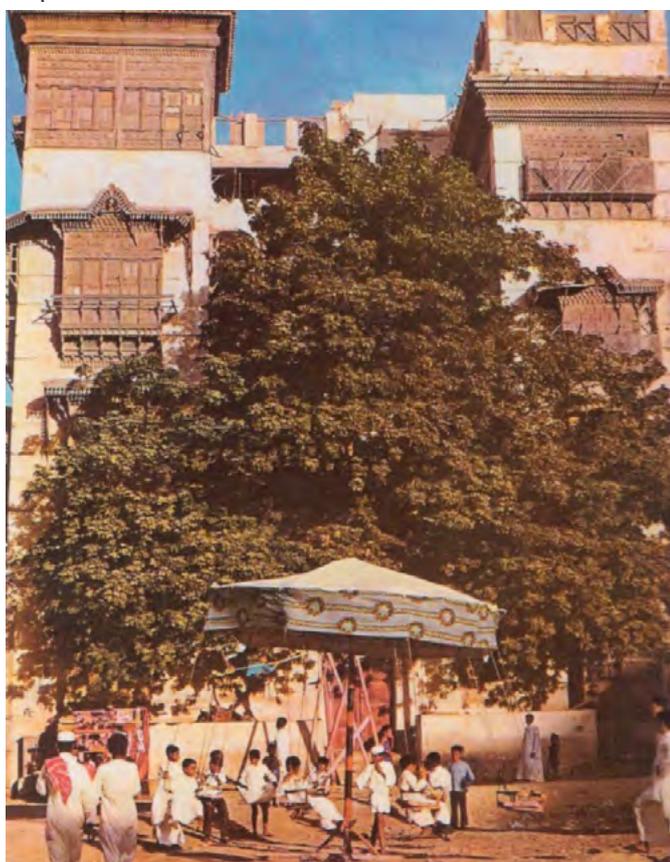
Water was traditionally scarce and the population transient so there was very little planting. Vegetation when planted was functional: to be edible, medicinal, for spices, or to be material for building or making.



Outdoor Life: family and community life spills out of buildings into the public realm



Programme: areas of specific use, such as gardens, were typically enclosed and associated with an architectural volume.



Trees as places: the shade from trees creates special places for public life to happen.



Hierarchy of wear: Surface marking is a consequence of the amount of use along a route of in a place



Ephemerality: furniture in the public realm was ephemeral, easy to take indoors. Public realm was animated by activities and people.



Terrain: surface was compacted earth devoid of pattern or expression to detract from the quality of the architecture and spaces.



Elements: permanent elements in public realm extensions of building mass.

1.3.2 KEY FINDINGS

An important part of the work to develop the Masterplan and Public Realm Strategy has been undertaking mapping, photographic studies and exploring Al Balad throughout 2019. The survey recorded the way in which residents and visitors use Al Balad at different times of year and at different times of day. What has become evident is that Al Balad is not a museum, rather it is a living, complex piece of city with nearly 50,000 residents. The key survey findings are summaries below:

Open Space

Al Balad lacks sufficient open space to support its residents. Most open space is in the form of paved baraha with little greenery. Highways infrastructure severs Al Balad's connection to the waterfront and what was once a waterfront park is now a car park.

Designing for Children

Very little play or recreation provision exists for children and young people. In place of formal play equipment local residents have contributed items such as table football or trampolines.

Traffic

Not unlike many cities, Jeddah (in particular Al Balad) is detrimentally impacted by 20th century transport planning and a lack of significant public transport. Major vehicular arteries isolate and sever Al Balad. Around 35% of all open spaces are used as car parks.

Water

Water is scarce in Al Balad with potable water supplied by carbon intensive desalination. Trees are accessing water through a variety of means including broken drainage, groundwater moisture or hand irrigation. There is potential for water capture from mosque ablutions or from air conditioning. Heavy storm events do occur which can lead to flooding and storm sewers backing up. A high groundwater table exists at lower levels closer to the original shoreline.

Material

Al Balad has been paved extensively in basalt setts. While basalt is known to this region of Saudi Arabia, the material is likely sourced from abroad (possibly Jordan). At first appearance the material seems relentless, but with closer inspection variety does occur and the overall character is in keeping with Al Balad. The basalt paving is true to Al Balad's origins as a collection of buildings sat within a common ground plane condition. Variety exists in finish, unit size, tone, and pattern (in isolated conditions). The overall the laying condition is poor.

Street furniture and lighting

Street furniture is lacking generally in Al Balad. Typically where benches, bins and drinking fountains exist they have been provided privately. People are regularly seen sitting on kerbs, steps, found objects, or on the ground. Streets are not over lit which is part of the character of the place. The light fixtures are "traditional" in their style but are poorly executed with large, overwrought, and visually distracting features

Trees

Trees coverage in Al Balad is limited but the trees are magnificent. The palette is limited but species such as Neem and Washingtonia make significant contributions to the cityscape. The trees themselves have been loosely arranged and often naturalised. The trees are full of character collectively and individually and are as much a part of Al Balad's identity as the Architecture. Trees are the markers of place with special relationships with cafes, markets, and outdoor seating.

Uniqueness

Al Balad is a special place with a diverse community which can only be understood by spending time and exploring. Each route and space has its own identity and character which should be preserved, celebrated, and encouraged.



Trees as places: community life plays out under the shade of trees - in this case neem Trees



Designing for Retail: three layers of selling in the souks - shops, market stalls, and informal sellers



Gardens are often enclosed with railings and can be poorly maintained



Designing for young people: there is a significant lack of places for children and play equipment across all ages



Water is regularly found in the public realm dripping from air conditioners or other sources



Healthy Cities: while better recreation space is required, impromptu recreation should continue to be encouraged



Public Life: the theatre of public life can be played out beautifully in Al Balad. That uniqueness should not be designed away



Elements: evidence of under performing public realm - no place to sit, expansive carriageway, overly elaborate light columns

2 VISION AND STRATEGIES

The following section outlines the public realm vision, golden rules for public realm projects and six overarching strategies to realise the vision aspirations and deliver incremental improvements to the public realm

2.1 PUBLIC REALM VISION FOR AL BALAD

The vision outlines the objectives and ambitions for the Jeddah Historical District public realm and is accompanied by six principles to guide decision making processes. The vision and principles were informed by surveys, research and key findings.

VISION

The Jeddah Historical District will be a connected heart of Jeddah, respecting the heritage and character of Al Balad, enabling public life to thrive throughout the day and evening and acting as an exemplar of inclusively, sustainability and civic generosity.

PUBLIC LIFE

- Create accessible spaces for all people
- Enable public life to thrive and celebrate the unique characteristics places
- Design for children and young people

TREES MAKE PLACES

- Selectively increase tree cover to enhance microclimate
- Encourage passive activities in the shade of trees

CAPTURE EVERY DROP

- Collect and reuse grey water from mosques and new buildings for irrigation.
- Avoid using carbon intensive desalinated water

TERRAIN

- Coherent, legible public realm expressed through a simple material palette
- Rebalance the public realm in favour of pedestrians

SIMPLE + EPHEMERAL

- Respect the urban context favouring architectural and spatial qualities which make Al Balad unique.
- Respect the ephemeral legacy of historic public realm

CRAFT

- Innovate and realise high-quality design suited to contemporary heritage
- Celebrate craft and cultural heritage without replicating



2.2 GOLDEN RULES

The Golden Rules are six directives which align with the findings and public realm vision for Al Balad. They are essential to maintaining the integrity of Al Balad as it is improved and modernised. The application of the Golden Rules will assure continuity of design standards. They should be used in the delivery of all public realm, public open space and environmental improvement works in Al Balad and the wider Jeddah Historical District.

PUBLIC LIFE

The quality of the public realm will come through uses provided and the ability incorporate a variety of uses respectfully into the historic fabric. It is important to consider appropriate uses such as play areas, market stalls, festival overlay, sport, recreation, seating, and social areas.

TREES MAKE PLACES

Trees must be used sparingly and only when water for irrigation can be sourced sustainably. Desalinated potable water must never be used for irrigation. Trees should mark special places, their shade is valued, and they ultimately support social interaction. Trees should be loosely arranged and never in avenues or other formal arrangements.

CAPTURE EVERY DROP

Water must be considered in any proposal. Only desalinated water is supplied to Al Balad which carries a high carbon footprint and makes any planting carbon intensive. Planting must only be proposed where sustainable water harvesting methods can be utilised for irrigation.

TERRAIN

Design with a respect for terrain and the setting of buildings or spaces. Designs must avoid paving patterns, banding, feature steps, raised elements or similar. Public realm interventions in the 1980's used elaborate paving patterns and decorative planters, which proved to be incongruous with the place – they were eventually removed as a consequence. Public realm proposals must avoid similar patterning and impositions.

SIMPLE + EPHEMERAL

Proposals for public realm design must be subtle and never distract nor detract from the qualities of space or architectural enclosure. Furniture should reinforce concept of ephemerality by using timber benches with minimal fixings. Seating should be arranged to encourage conversation, community, and family groups.

CRAFT

The unique details of roashan or gypsum engraving can be a source for inspiration but should never be replicated. Patterns and details should be limited to special areas or on street furniture elements



2.3 CELEBRATE AL BALAD'S UNIQUENESS

The public realm strategy aims to celebrate the unique characteristics of Al Balad.

Al Balad is a special place with a diverse community, interesting mix of uses and spectacular urban fabric. The starting point for any design in Al Balad's public realm should be understanding what's already there and finding ways to celebrate and highlight the special qualities.

Key considerations should include:

- Considering heritage sensitivities including the UNESCO nominated property designation and any historic features
- Utilising the crafted qualities of buildings as a source for inspiration, ensuring designs are never replicated in pastiche ways
- Understanding the character area and location, ensuring designs are distinct in different places
- Understanding the history of places and any narratives relevant to the public realm
- Considering surrounding uses at both ground and upper floors, to ensure public realm designs meet the needs of local users



Al Balad: Nominated Property

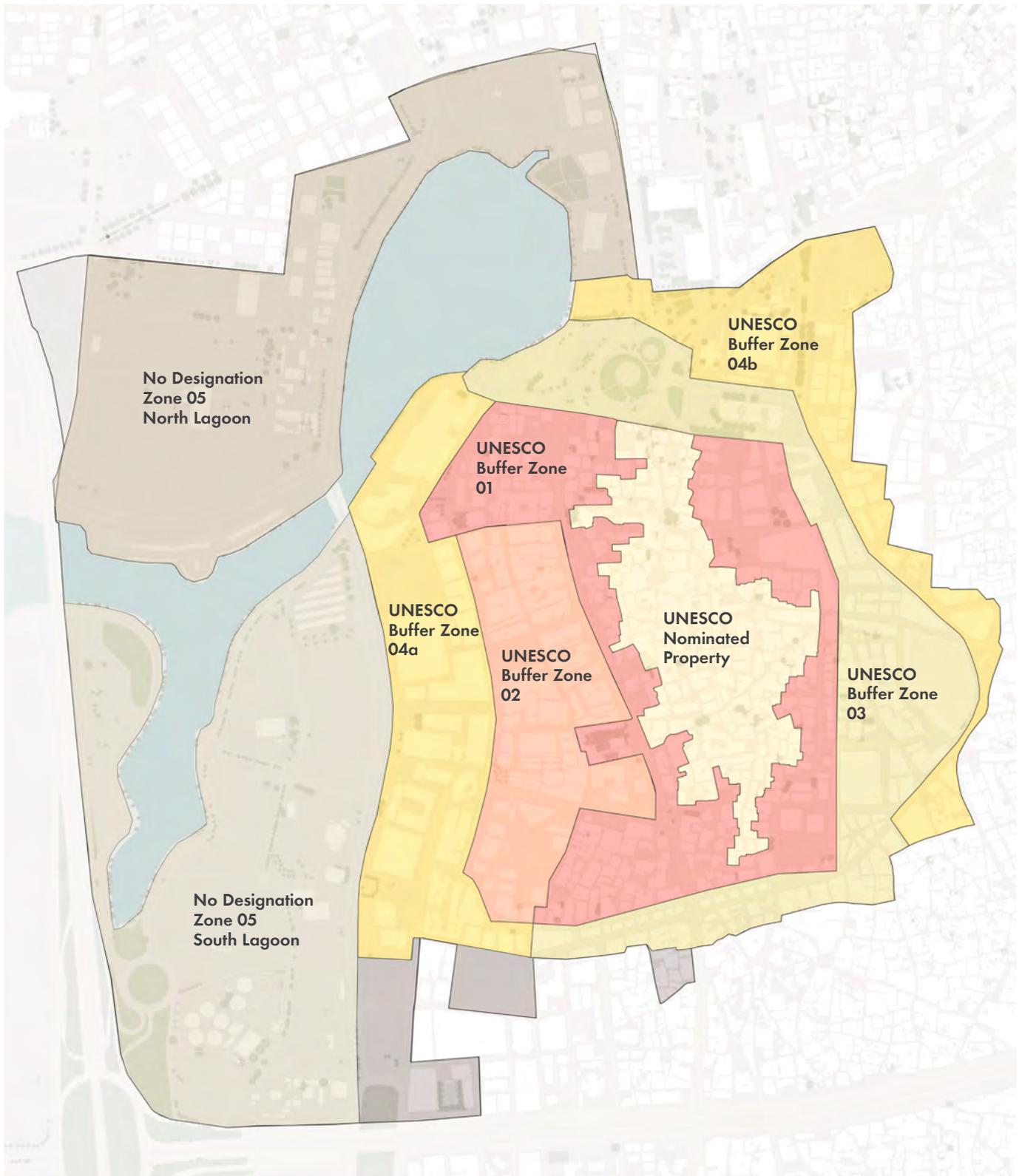


Al Balad: Buffer Zone 1 example



Jeddah Historical District: North Lagoon

UNESCO NOMINATED PROPERTY AND BUFFER ZONES



2.3.1 HISTORIC CHARACTER AREAS

The pre-modern form of historic Jeddah consisted of three or four quarters that had different characters. Although the structure of the city was typically mixed without clear demarcation of functions, many differences between historic neighbourhoods can still be observed within Jeddah today.

Designs for Al Balad's public realm should respond to and reinforce difference between character areas. This includes modern parts of the city (outside of the historic character areas) which should be distinct but still recognisably part of Al Balad.



Harat Al-Sham

Located in the northern part of the old city, Harat Al-Sham was characterized by being home to some of the more affluent residents of the city as well as housing most of the foreign consulates. Its fabric is characterized by a notable looseness in form and a larger sizing of building plots.



Harat Al -Mazloun

The central quarter of the old town. It characteristically links the western port-related parts to the Makkah Gate through the vital commercial spines of Al-Jamea and Al-Alawi.



Harat Al -Bahr

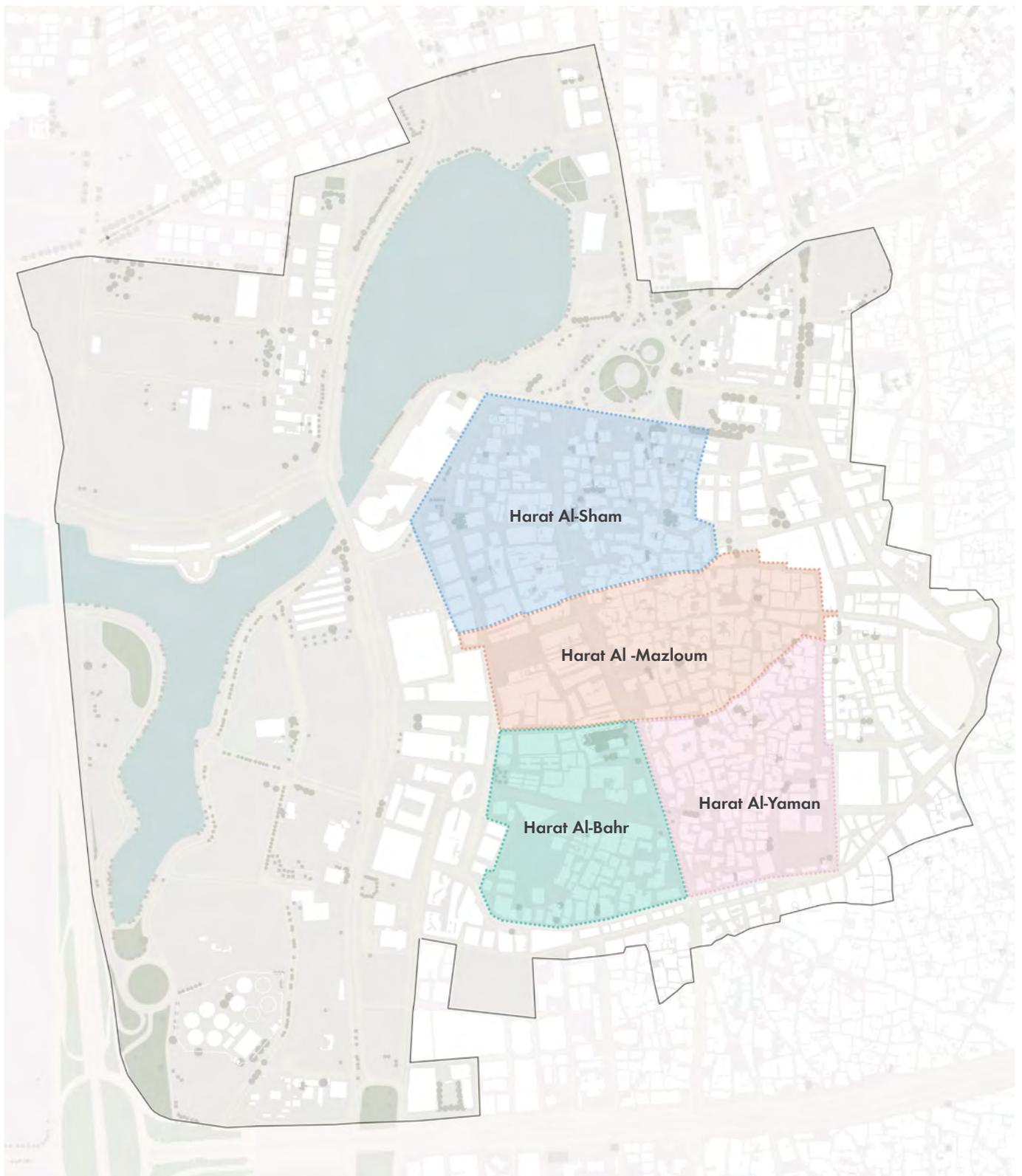
A relatively late distinction of the western part of Harat Al-Yaman. It was defined by its direct openness towards the port area as well as the large percentage of its residents working in sea-related jobs or trades.



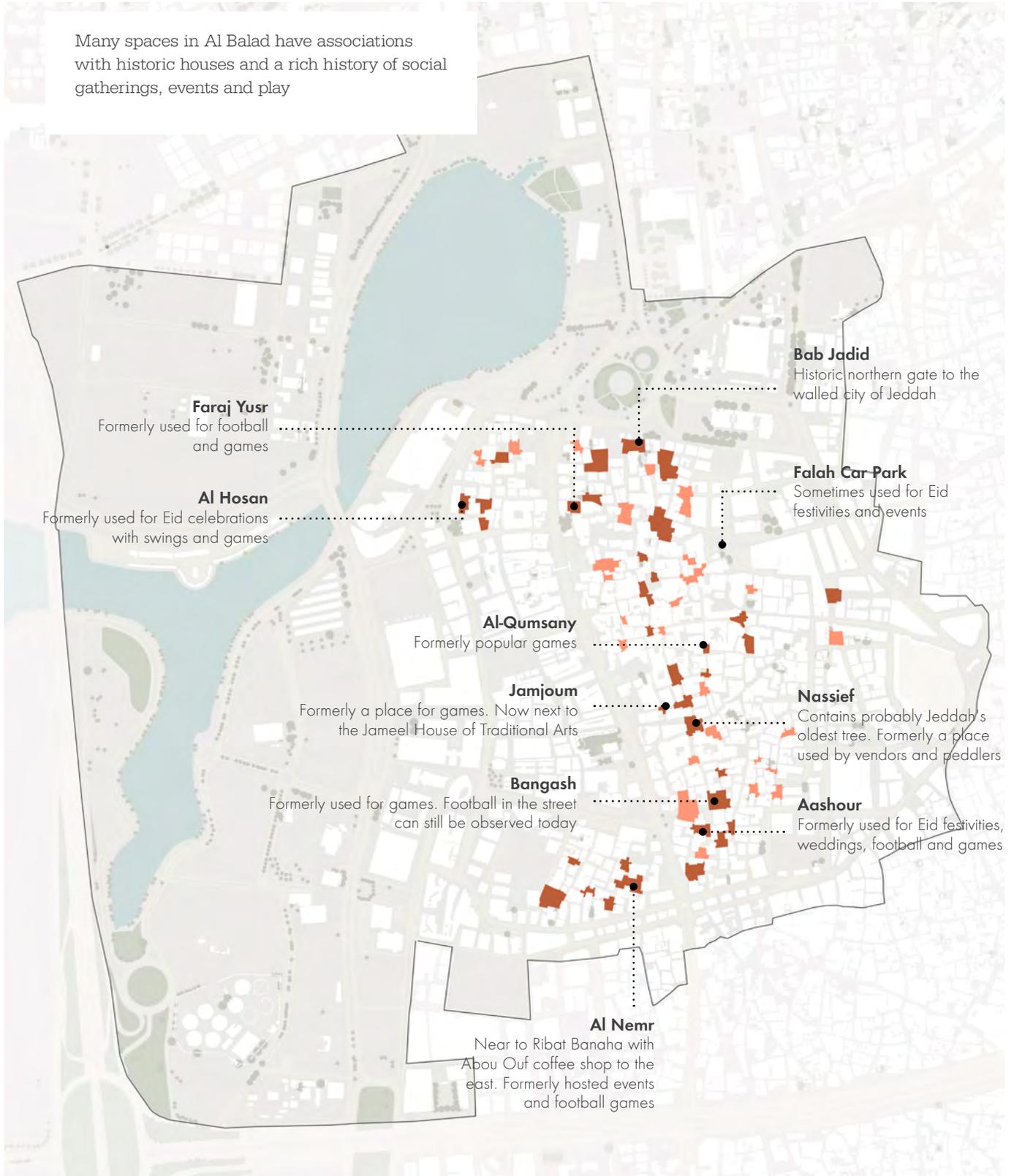
Harat Al -Yaman

The southern quarter of the city. It is characterized by a tighter urban fabric with smaller plot sizing.

HISTORIC CHARACTER AREAS



2.3.2 HISTORIC NARRATIVES

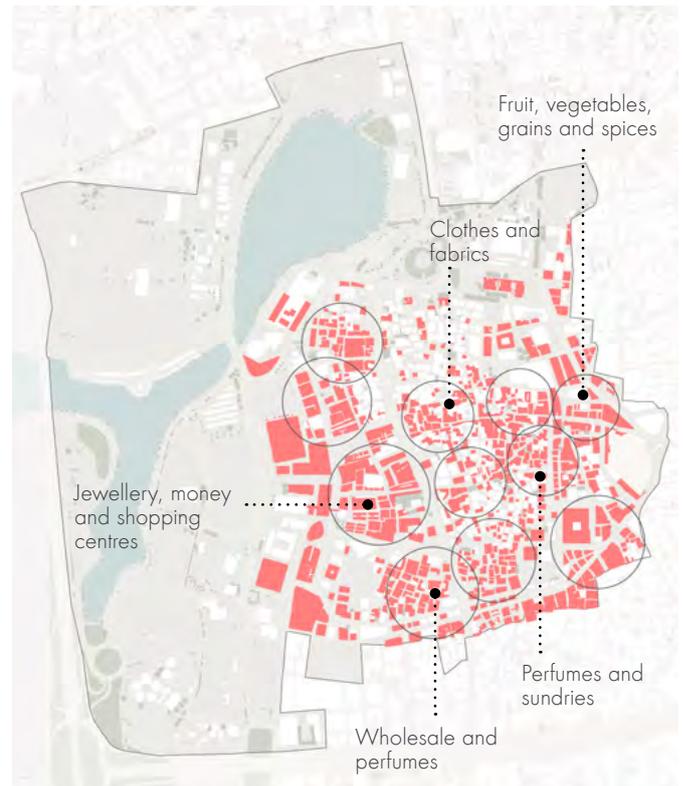


2.3.3 EXISTING USES

Commercial uses

Mapping existing ground floor commercial activities reveals that there is relatively even distribution of commercial uses across Al Balad. However, in reality these commercial uses range enormously from butchers to perfume shops, clothes and fabric shops, restaurants, wholesalers, jewellers and household goods shops.

Given the different types of commercial uses, designers should visit their site, understand the existing uses and consider their significance

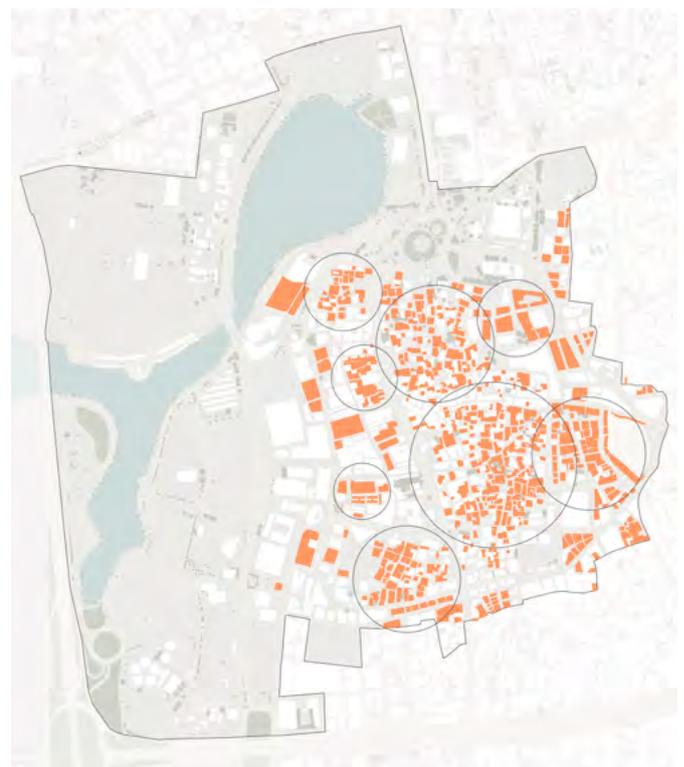


Residential uses

Mapping ground and upper floor residential uses in Al Balad reveals several clusters of residential communities.

Designers should seek to understand the age, gender, ethnicity and needs of different communities when designing for the public realm.

Visiting Al Balad, consulting the local community and learning from local residents and workers is strongly recommended.



2.4 MAKING SPACE FOR PUBLIC LIFE

Increasing civic amenity and open space will be critical in improving the health and wellbeing of all people within the Jeddah Historical District.

Al Balad has a major under-provision of high-quality open space. Only 0.4m² of open space is currently provided per person in Al Balad – well below the World Health Organisation standard of 9.0m² per person – and of the spaces that exist, the majority lack basic amenities.

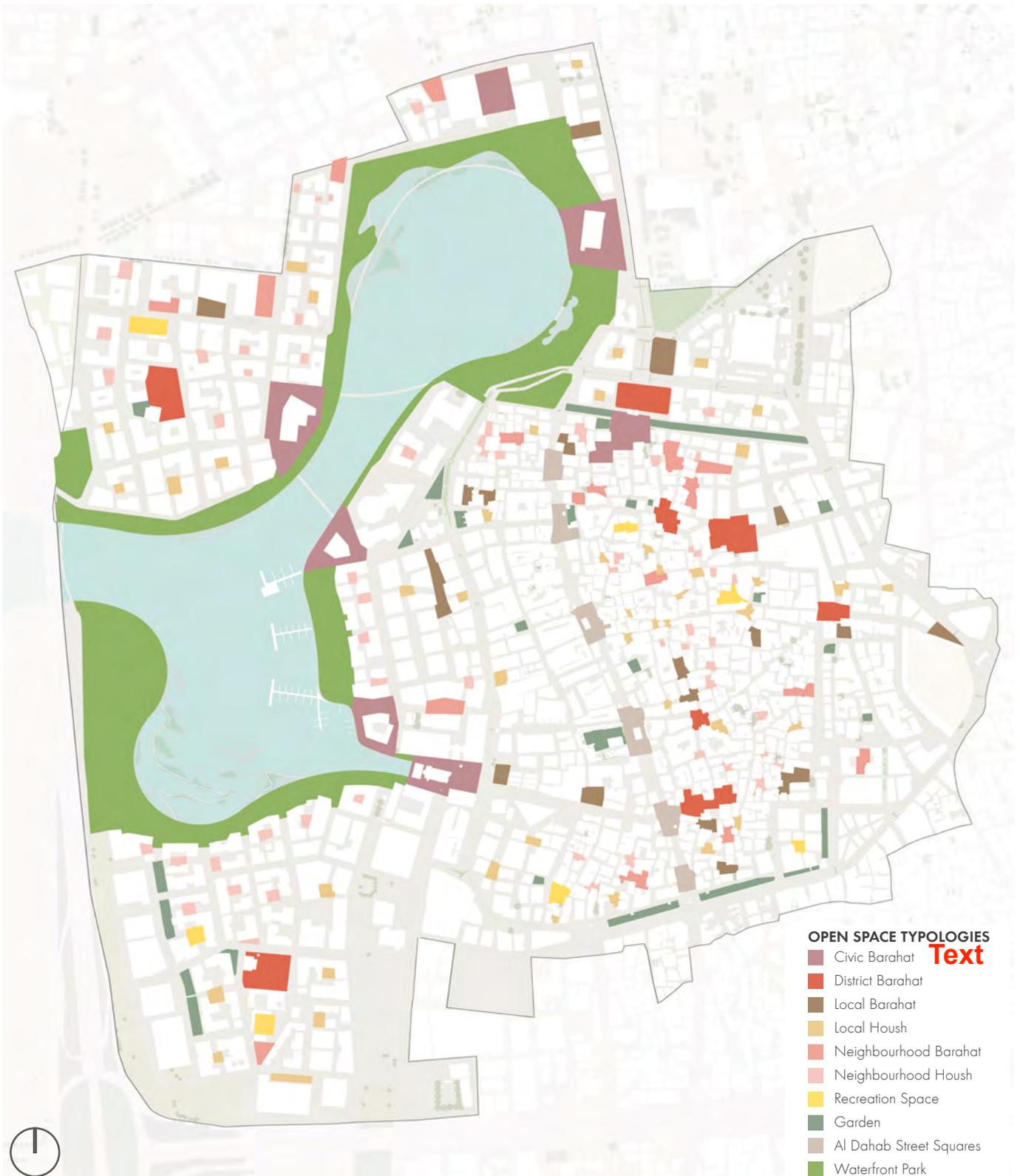
The public realm strategy identifies a number of opportunities to deliver new public spaces, improve existing spaces and create better amenity.

The public realm strategy establishes ten open space typologies within the public realm. These typologies are defined by scale, character, and relationship to predominant land uses. Each typology defines ways in which different open spaces should perform. The different requirements will help to provide Al Balad with a broad and diverse set of open spaces that cater to residents and visitors alike.

Key measures include:

- Utilising the open space typologies, which have been classified by scale, character and relationship to land uses, to guide decision-making and understand requirements for the public realm
- Unlocking open space through the consolidation of vehicle movement and relocation of parking (as part of the wider transport and parking strategy).
- Utilising development and regeneration opportunities to increase the provision of quality open space and to open private gardens for public use
- Increasing the provision of open spaces through the transformation of vacant, ruins and under-utilised sites into valuable public space.
- Increasing the provision of green open space by reshaping the waterfront and providing a metropolitan park around the water's edge
- Improving the amenity of existing spaces by upgrading public realm elements such as paving, lighting, planting and seating

OPEN SPACE TYPOLOGIES



2.4.1 PLAY AND RECREATION STRATEGY



Play is an essential way to make Jeddah welcoming for everyone, especially children and young people

The mayor of Bogota, Enrique Peñalosa, famously claimed: “If we can build a successful city for children, we will have a successful city for everyone”. By designing streets and spaces for children, the quality of the public realm is improved for all.

To achieve this, key measures will include:

- Providing accessible play and recreation that meets the needs of children and the communities they live in
- Locating play in spaces that can be accessed within the appropriate walking time for: Recreation spaces, Playgrounds and Play Areas (see opposite)
- Designing play space that is bespoke, enhances the local environment and is sensitive to heritage

- Where appropriate, re-establishing play in spaces that historically hosted play activities
- Locating play and recreation in spaces that are; welcoming for children, away from dangerous roads and overlooked by other activities
- Integrating varied play facilities suitable for children of different ages, interests, genders, and ability/disability
- Providing play and recreation spaces that have longevity with designs that are; environmentally sustainable, easily maintained and adaptable to changing needs
- Utilising parks and gardens for integrated play and recreation to engage children with natural environments
- Promoting sports and recreation for adults including walking, cycling and fitness

Recreation



- Equipped play with areas for recreation and sport
- Within 15 minute walking distance
- Multi-age range with equipment mainly for older children
- Play 'zones' that enable inclusive play for different ages and genders
- A recommended activity zone of 1000m² with an area for play equipment and a 465m² hard surfaced area

Playground



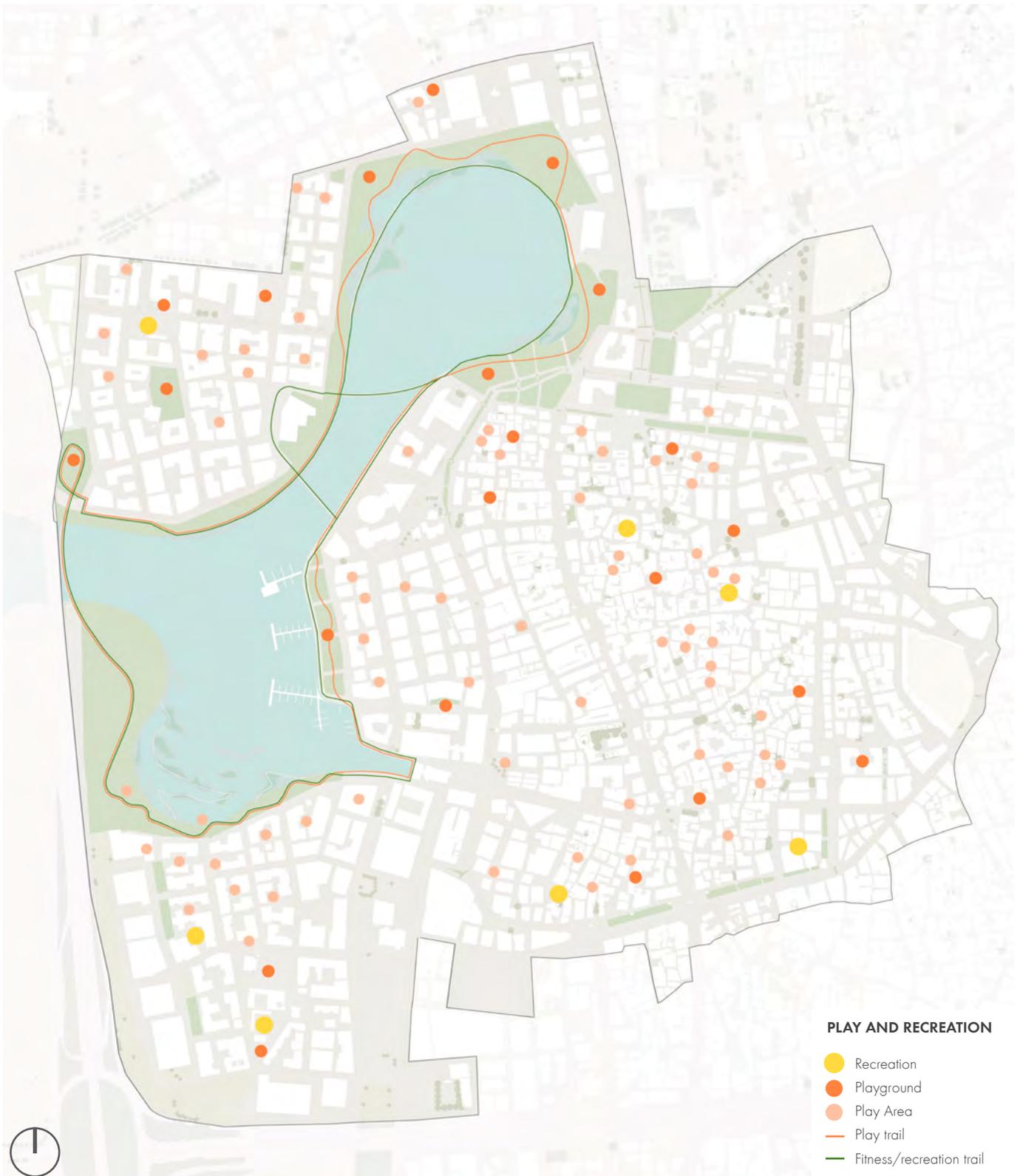
- Equipped play
- Within 5 minute walking distance
- Multi-age range with equipment for children starting to play independently
- Play 'zones' that allow inclusive play for different ages and genders
- A recommended minimum activity zone of 400m²

Play Area



- Informal play
- Within 1 minute walking distance
- 0-5 years old
- A recommended minimum activity zone of 100m²

PLAY AND RECREATION STRATEGY



2.4.2 EVENTS AND MEANWHILE STRATEGY



Festivals and events in Al Balad are incredibly popular and well-loved.

Previous festivals in Al Balad have been hugely successful in transforming both small and large spaces with activities including: outdoor screenings, performance, artwork installations and play. The range of interventions have helped to highlight special features in Al Balad in a memorable, non-permanent way.

With improvements to the public realm there are opportunities expand activities into more spaces and a wider area. The Film Festival site is a particularly significant opportunity; the site represents a step change in the scale and ambition of festivals in Jeddah and will provide a valuable space for future events.

Key considerations for events and the public realm:

- The public realm should provide infrastructure to support events in public spaces i.e. electricity supply and water supply utilities
- Events should be used to test ideas in the public realm. For instance, events could be used to test road closures or to determine potential activities in a space
- Events should not compromise key community spaces and their functions. For example, important play spaces could be celebrated during festivals, but their core functions should remain uninterrupted
- Events should be used to highlight special features of Al Balad e.g. historic trees or interesting narratives. Refer to artwork strategy (opposite)



Examples of festival and event installations from summer 2019

2.4.3 ARTWORK STRATEGY



Jeddah is known for its craft of beautiful objects and architecture

Public art can be beautiful, provocative and an attractor for places but its use in the Jeddah Historic District should always be scrutinised and sensitively curated. Public art should never be considered as an alternative to good quality public realm designs. It should also never detract from Al Balad and its public life.

Key principles for artwork include:

- Introducing artwork in the public realm that is sensitive and appropriate to the Jeddah Historical District and Al Balad, specifically artwork that is curated of and for the place
- Placing artwork that is purposefully designed and that does not compete with Al Balad's character
- Incorporating artwork that reveals written or oral narratives of places
- Ensuring the type, size and materials used for artwork are sensitive and appropriate to the historic context
- Utilising temporary artwork and permanent artwork to explore different themes and ideas
- Incorporating artwork in selected locations – including, but not limited to: civic, district and local baraha or within parks – and ensuring the artwork is always appropriate to the space
- Ensuring artwork is not obstructive in narrow or busy routes and never damages/detracts from the historic fabric
- Favouring artwork that isn't sculpture – e.g. glazing, metalwork, relief sculpture or lighting – and promoting designs that have functionality



Sculpted bench, Kings Cross, London (UK)



Fountain, Via Mazzini, Verona (Italy)



Souk Al Franj, Beirut (Lebanon)



Flock of Words, Moorcambe (UK)

2.5 INCREASING PLANTING SUSTAINABLY

Trees make places in Al Balad. Their shade enables social interaction and they improve the microclimate significantly

Trees are one of the most valuable assets in Al Balad but no sustainable system for irrigation currently exists; only desalinated water is supplied to Al Balad, which currently carries a high carbon footprint.

The public realm strategy identifies opportunities to increase tree planting that compliments the character of Al Balad and enables planting through sustainable means.

Key measures of the strategy include:

- Using trees sparingly and only where they can be irrigated sustainably
- Capturing relatively clean excess water (greywater) from mosque ablutions to use for irrigation
- Capturing surface water runoff e.g. from air conditioner drips or rainwater and directing it towards planting
- Potentially using historic house cisterns to capture, store and irrigate nearby planting
- Potentially utilising greywater from new commercial developments to irrigate nearby planting
- Choosing tree and planting species according to their water use and saline tolerance
- Selecting trees that are characterful and contribute to the quality of routes and spaces. In particular, considering how a tree is seen and how trees can be used as wayfinding markers in the public realm
- Avoiding formal arrangements of trees and typically keeping trees in clusters to maximise shade potential and maximise their visual impact
- Providing trees where shade can be best utilised or where shade is necessary to encourage using the public realm (e.g. crossings at junctions)
- Using planting that is both native and plants that have locally adapted



Trees as markers of place and terminating long views



Relationship between trees and cafes - trees make places



Trees shaping spaces

TREES AND PLANTING STRATEGY



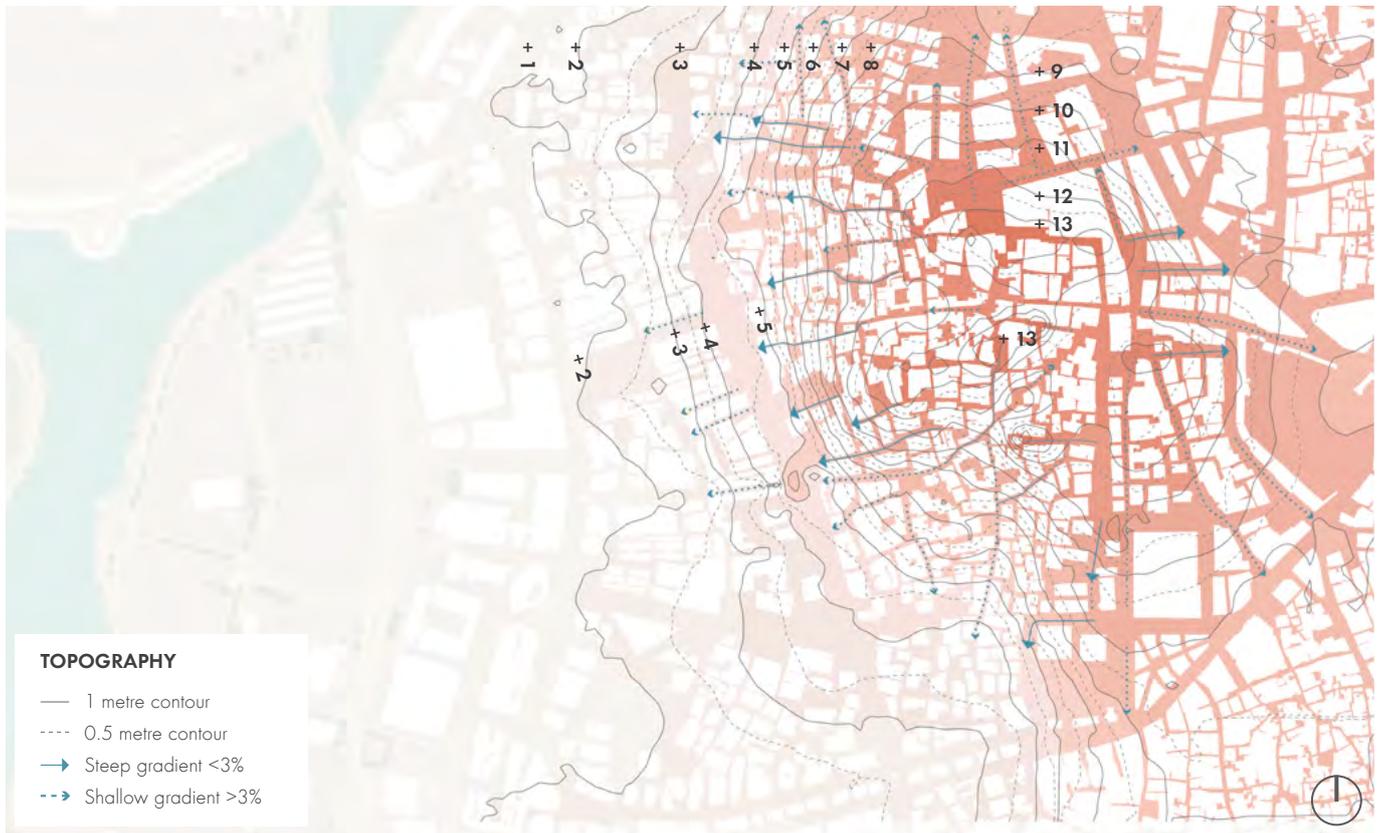
2.5.1 WATER CAPTURE STRATEGY: TOPOGRAPHY



Designs should use natural topography and gradients of routes to efficiently capture water in Al Balad.

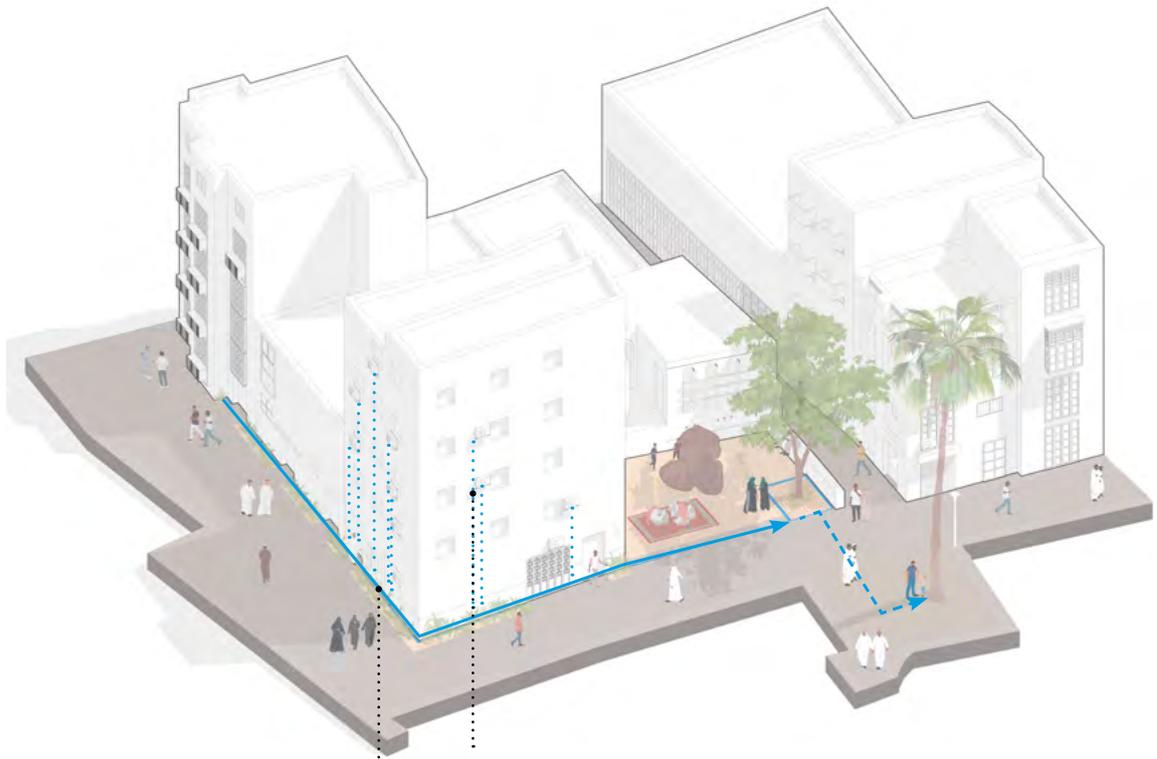
Al Balad has 11 metres of level change which means water can move downhill relatively easily. Capturing water as it does this will not only benefit planting irrigation but will also help to mitigate the impact of flooding – a problem which has previously affected Al Balad.

In conjunction with water capture strategies, designs should consider drainage gullies, channels, paving details and irrigation pipework to efficiently capture and direct water where it is needed. In specific instances, water pumps could be used to move water a short distance uphill, but this should generally be avoided.



2.5.2 WATER CAPTURE STRATEGY: SURFACE RUNOFF

Illustrative surface water runoff capture



Drainage channels to catch and direct water towards planting

Trees and planting irrigated through surface water runoff (air conditioner drips)

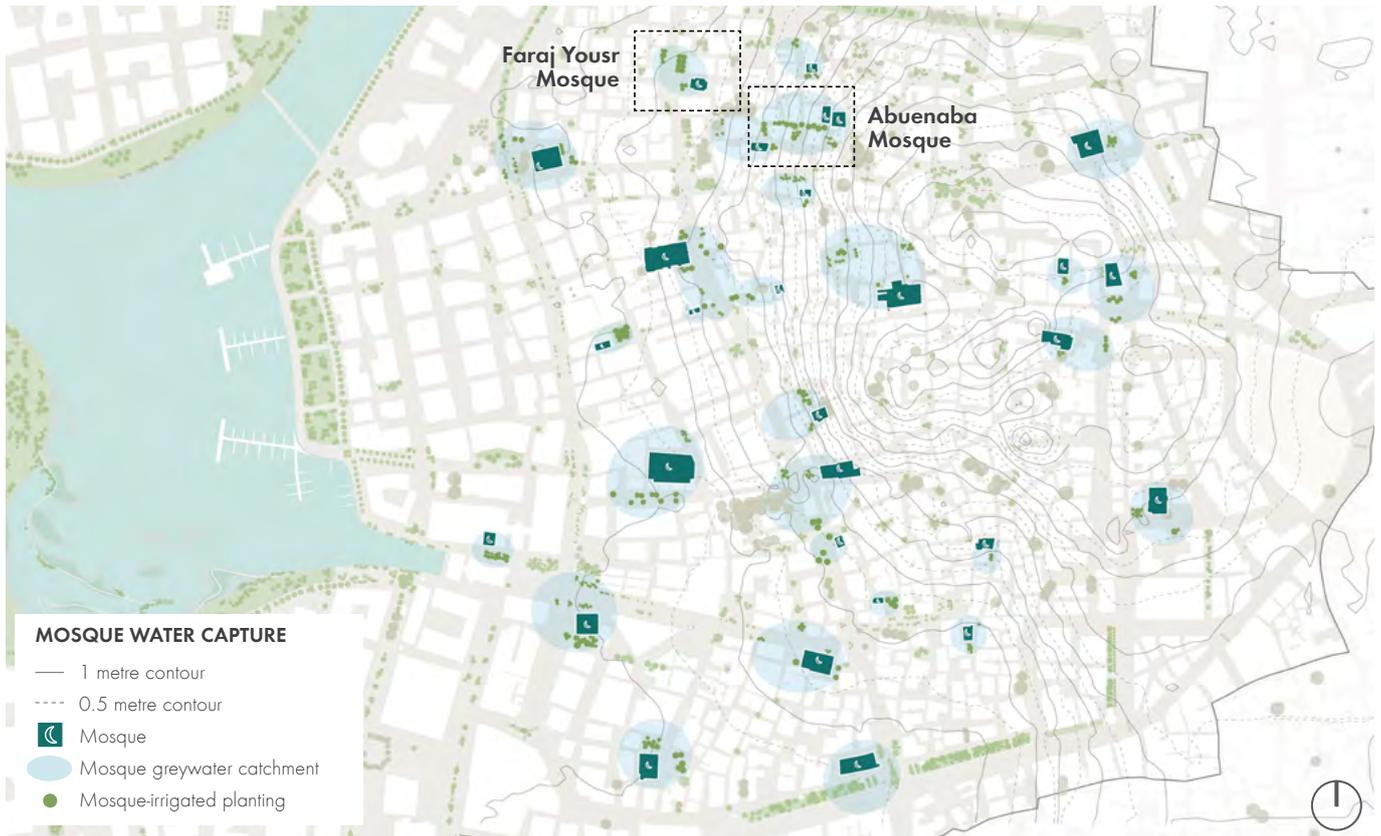


Souq Al Alawi: existing condition. Water used to wash the street in front of shops flows downhill and could be used to irrigate planting

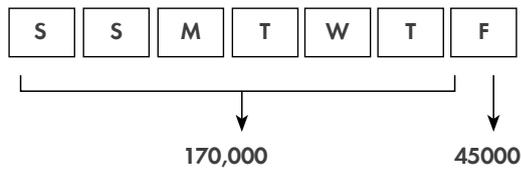


Hambouli Lane: existing condition. Water drips from air conditioner units waste a substantial amount of water

2.5.3 WATER CAPTURE STRATEGY: MOSQUES



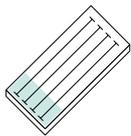
Mosque greywater capture estimate



215,000 ablutions each week
 @ 2 litres collected per ablution

430,000 litres per week

Equivalent to:



20% of an Olympic Swimming Pool

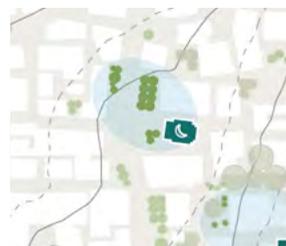


850 Neem Trees @ 75 litres per day

Assumptions:
 50,000 people living and working in Al Balad
 50% are praying on Friday @ 2.5 prayers a day = 62,500 prayers
 25% shower at home = 45,000 ablutions
 Rest of the week: 60% of Friday attendance = 28,125 ablutions per day
 x6 days = 170,000 ablutions

Mosque greywater per m²

Total mosque area in Al Balad: 168,057m²
 Litres per m²: 431,250/168,057 =
25.7 litres per m² per week



Faraj Yousr Mosque

298m² x 25.7L/m² per week
 = 7,658.6 litres per week

Equivalent to 14 neem trees



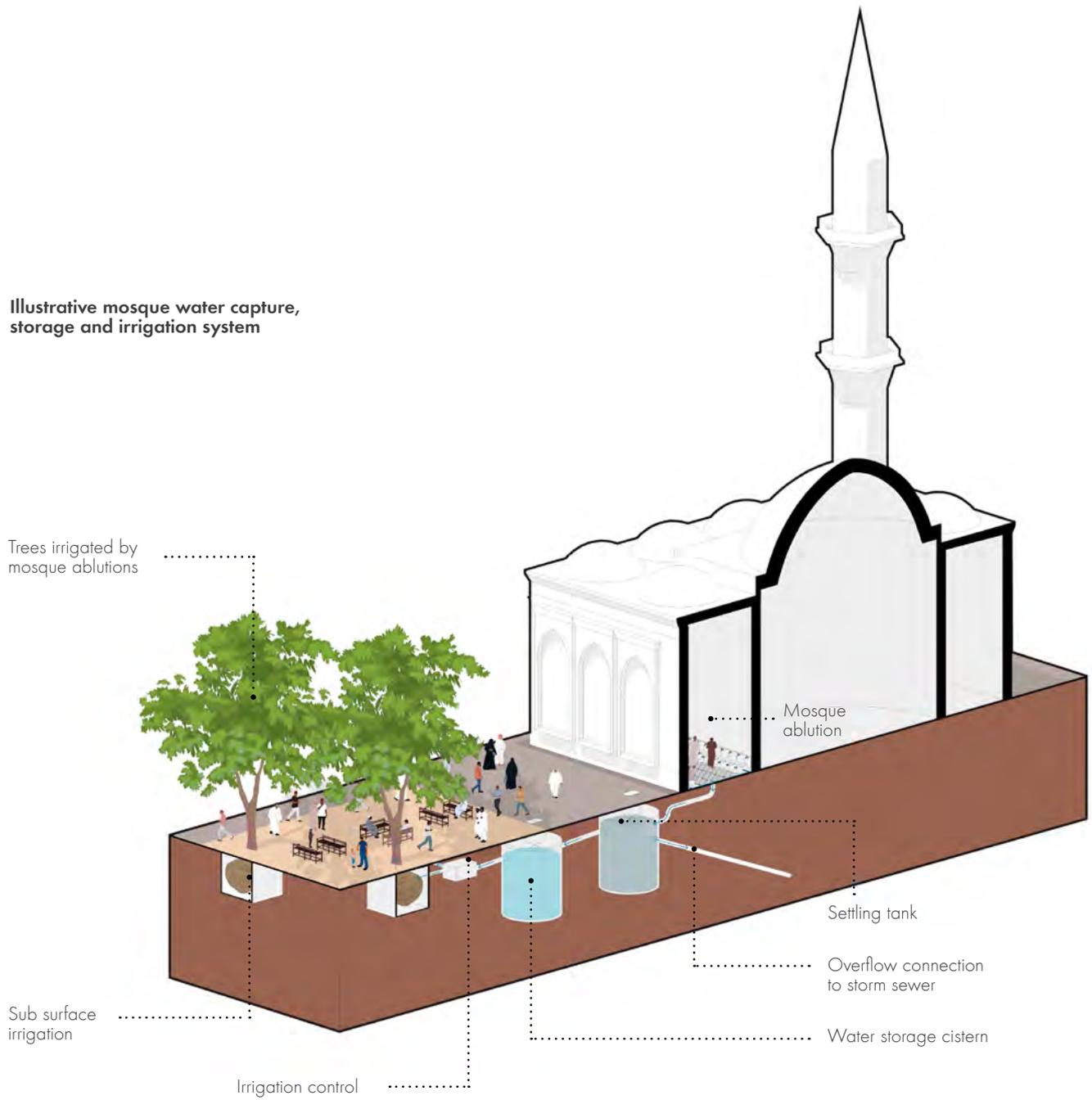
Abuenaba Mosque

648m² x 25.7L/m² per week
 = 16,653.6 litres per week

Equivalent to 32 neem trees



Illustrative mosque water capture, storage and irrigation system



Exposed water channel
Banyoles Old Town, Banyoles (Spain)



Water rill feature
Bad Salzuflen (Germany)



Water rill feature
Bad Salzuflen (Germany)

2.6 IMPROVING THE ROUTE NETWORK

Making Al Balad and the Jeddah Historical District well-connected and accessible to all is a fundamental part of the public realm strategy.

The public realm is currently a mixed network of historic and modern routes that are difficult to navigate for pedestrians. The public realm strategy seeks to comprehensively improve the route network.

Key measures include:

- Utilising the routes typologies – which have been classified by scale, character and relationship to land uses – to guide decision-making and understand requirements for the public realm
- Repairing historic connections and making routes more legible through public realm and wayfinding improvements
- Rebalancing space currently used by vehicles in favour of pedestrians
- Mitigating the impact of vehicles through streetscape improvements



Vehicles use Al Balad's narrow lanes for access and conflict with pedestrians. Footway space is usually insufficient for pedestrians

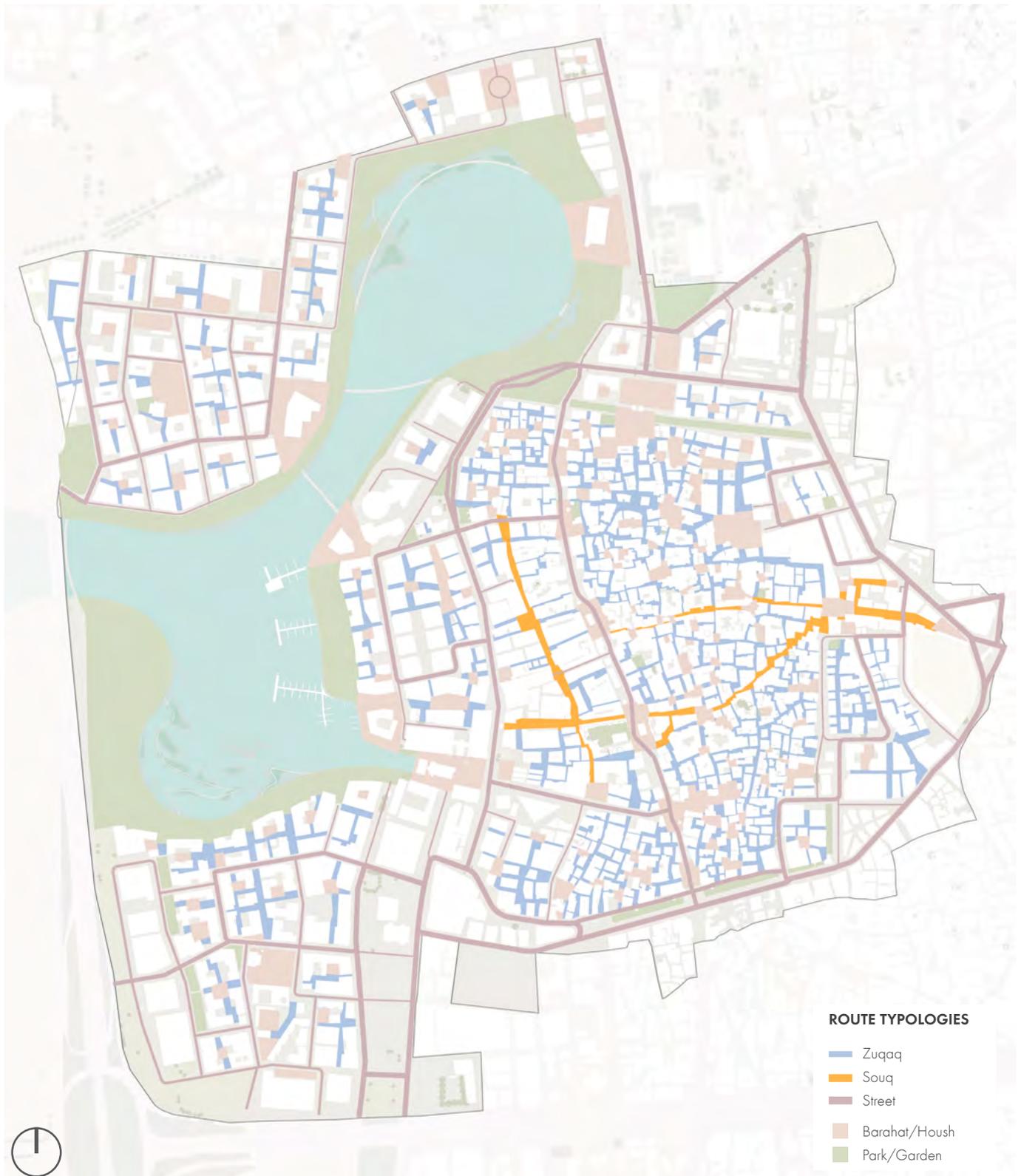


Parked vehicles are often obstructive to pedestrian movement and squeeze the available space for pedestrian footways



Many existing open spaces in Al Balad are currently used for car parking

ROUTES TYPOLOGIES



2.6.1 IMPROVING ROUTES FOR PEDESTRIANS

Improvement to the public realm should be focused to emphasise key routes

- Improvements to routes should align with and compliment Phase 1 Masterplan initiatives
- Upgrades to the public realm should be high-quality, acting as catalyst to wider regeneration and investment in Al Balad
- Upgrades along key routes should aim to emphasise the importance of these routes – as key connectors between historic assets, civic attractions and new development
- Enhancements to key routes should create a circuit of souks and zuqaqs connecting the key sites in Al Balad

KEY ROUTES



Reconnecting Al Balad back to the water is a major ambition for the masterplan and the public realm strategy

- Designs for the public realm should seek to repair historic routes, particularly the historic east-west Hajj route through Al Balad
- Streetscape improvements should mitigate the impact of Dahab Street and King Abdul Aziz to reconnect routes interrupted by these streets.
- Enhancements to the public realm along east-west routes should act as a catalyst for waterfront regeneration

REPAIRING EAST-WEST CONNECTIONS



Al Balad needs to have more safe, controlled pedestrian crossings to enable pedestrian movement across major streets

- Pedestrian crossings should be located along key routes and should correspond to the routes and wayfinding strategy
- Crossings do not necessarily have to be at the junction of streets and should be located according to pedestrian demand and key routes
- The frequency and spacing of crossings should be rationalised along entire streets, to ensure traffic flow is not overly-impacted
- The design of pedestrian crossings should ensure safety for pedestrians with traffic signals and other traffic control measures used
- All crossings should be accessible with tactile paving and level access at crossing points. This is preferably achieved through raised tables, rather than dropped kerbs which can often be poorly installed

PEDESTRIAN CROSSINGS



Prioritising pedestrians within Al Balad should be an important consideration for transport and streetscape

- As part of a considered transport strategy, designs for Al Balad should seek to limit or discourage private vehicle access within Al Balad
- Strategies for transport and streetscape should ensure servicing and deliveries needs are met and consolidated wherever possible
- Parking access for existing and future parking should always be considered when upgrading the public realm
- All zuqaqs currently used for private traffic and servicing (see right) should be upgraded to a level surface condition – i.e. all kerb upstands removed and sufficient space given to pedestrians
- Bollards or flush kerbs to demarcate vehicle movement should be avoided. Where required, bollards should provide sufficient space (typically 1.8 metres footway width) for pedestrians

PEDESTRIAN PRIORITY ZUQAQS



2.6.2 TRANSPORT AND STREETScape STRATEGY



The Al Balad Regeneration and Development Plan: Transport Strategy proposes comprehensive change to Jeddah and Al Balad's street network.

Designers should familiarise themselves with these proposals and understand the impact they will have on streets, parking and public transport within the Jeddah Historical District.

Of these improvements, designers should understand four strategic transport projects in particular to inform streetscape improvements:

A1: Al Dahab Street

- This street sits at the centre of Al Balad and its transformation will be paramount in reconnecting eastern and western parts of the city. Streetscape designs will need to be considered, high-quality and exemplary – demonstrating ways in which Jeddah's streetscapes could be dramatically improved

A2: Limiting traffic and access control

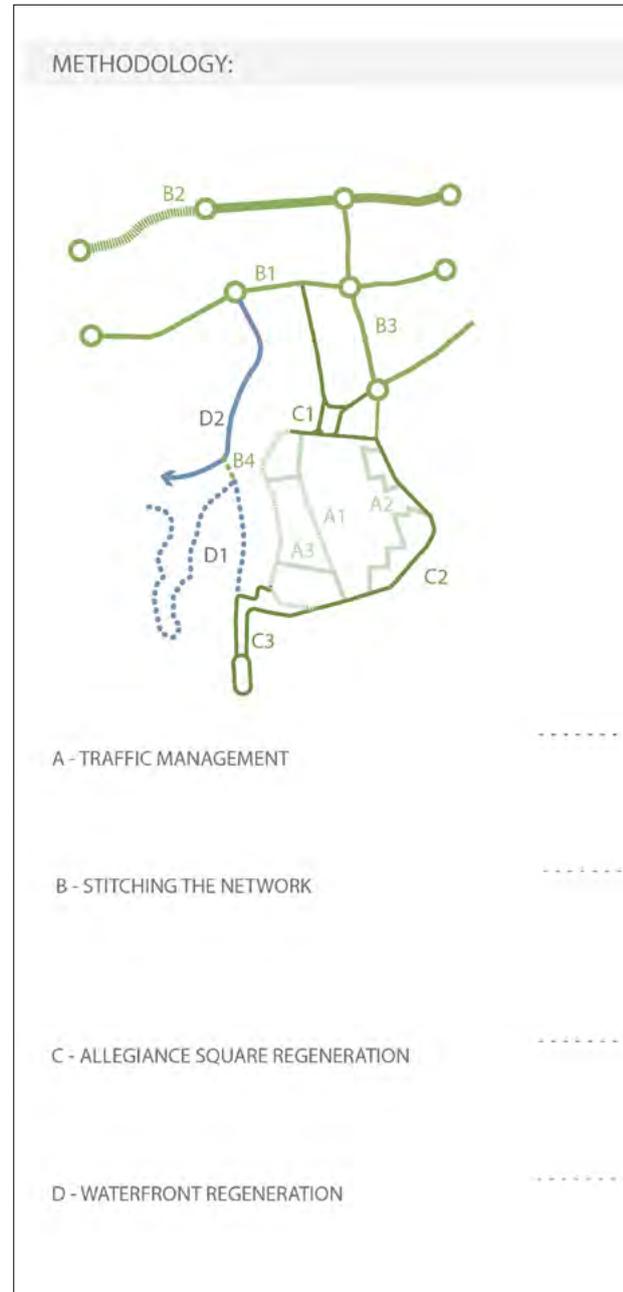
- This project is an important move to unlock open spaces and rebalance the public realm in favour of pedestrians. Successfully enacting it and resolving access requirements will be key for Al Balad.

A3: King Abdul Aziz

- Similar to Al Dahab Street, improvements to King Abdul Aziz should be catalytic, enabling wider regeneration and improved east-west connections within Al Balad

C: Allegiance Square

- Any upgrades to the waterfront and film festival site will require connections back to Al Balad. Civilising Allegiance Square – i.e. realising rationalised junctions, reducing lane widths and creating better connections must be a priority

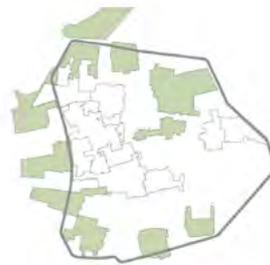
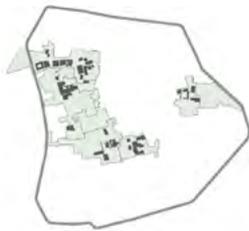


Extract from Al Balad Regeneration and Development Plan: Transport Report produced by MIC

PHASE 1 PRIORITY PROJECTS

PHASE 2 OPPORTUNITY SITES

PHASE 3 WATERFRONT DEVELOPMENT



- A1. Downgrading Al Dahab Road + Partially closing it for Vehicular Traffic
- A2. Limiting Traffic + Access Control inside the boundary of the Center
- A3. Reducing the capacity of King Abdul Aziz with Tactical Urbanism action

- B1. Upgrading the capacity of the Existing System
- B2. Closing the west ring + Enhancing the connection along Al Andalus

- B3. Reinforcing the connectivity of the network with Allegiance Square
- B4. Preliminary demolition of the bridge on Baishin Rd

- C1. Downgrading Al Madina Rd System + Traffic & Alignment management of Allegiance Square
- C2. Converting the existing Ring Road into a Two-Way Boulevard in the East side
- C3. Regeneration of the South Lagoon Junction + Integration into the road network system

- D1. Diverting Hail Rd to the West + Pedestrianizing and Repurposing of Baishin Rd Area
- D2. Connecting the North & South lagoon areas + Waterfront Regeneration

2.6.3 STREETScape IMPROVEMENTS



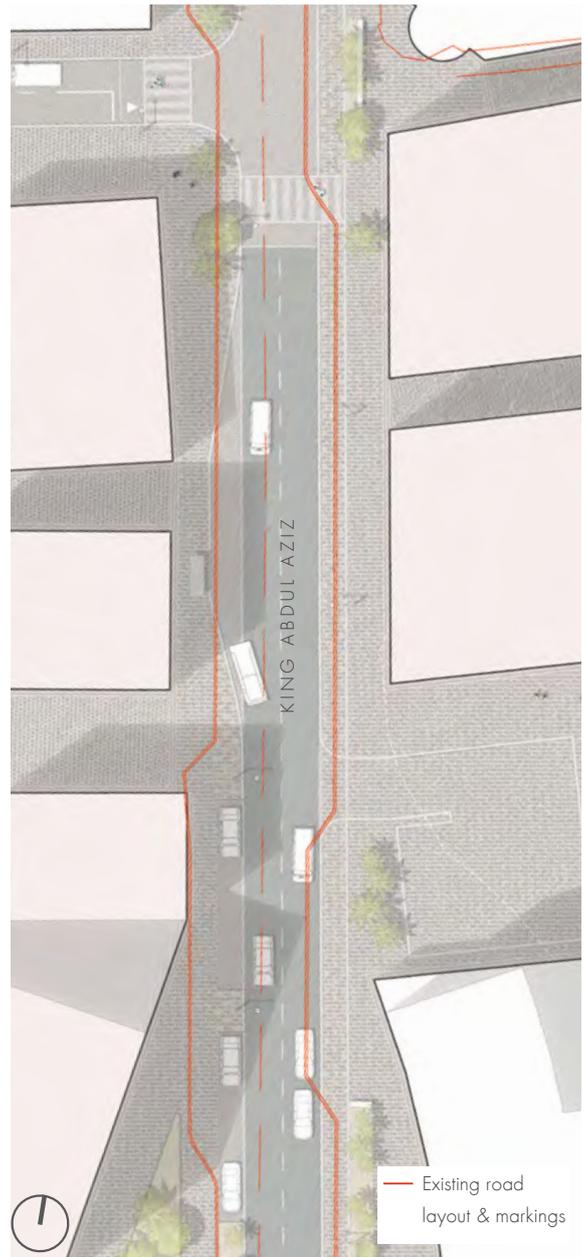
To create a high-quality public realm for Al Balad, space for pedestrians must come from existing space for cars. Key measures include:

- Narrowing large carriageways and standard lane widths to naturally slow the movement of vehicles
- Minimising corner radii wherever possible and whenever it is safe to do so
- Rationalising the road centreline and parking positions to make more space for pedestrians on the shadier side of the street
- Providing space for cyclists and public transport to promote sustainable methods of transport
- Introducing more pedestrian crossings that are safe and accessible to all
- Rationalising on-street parking locations and paving parking bays to increase the perceived footway width

In conjunction with these measures, public realm upgrades should take measures to improve the streetscape environment for pedestrians. Key measures include:

- Rationalising kerb upstand heights and removing unnecessary kerbs wherever possible
- Ensuring flush surfaces at vehicle crossovers and pedestrian crossings to improve accessibility
- Removing unnecessary street furniture and obstructions to pedestrian movement
- Increasing shade and amenity for pedestrians i.e. trees, seating and water fountains

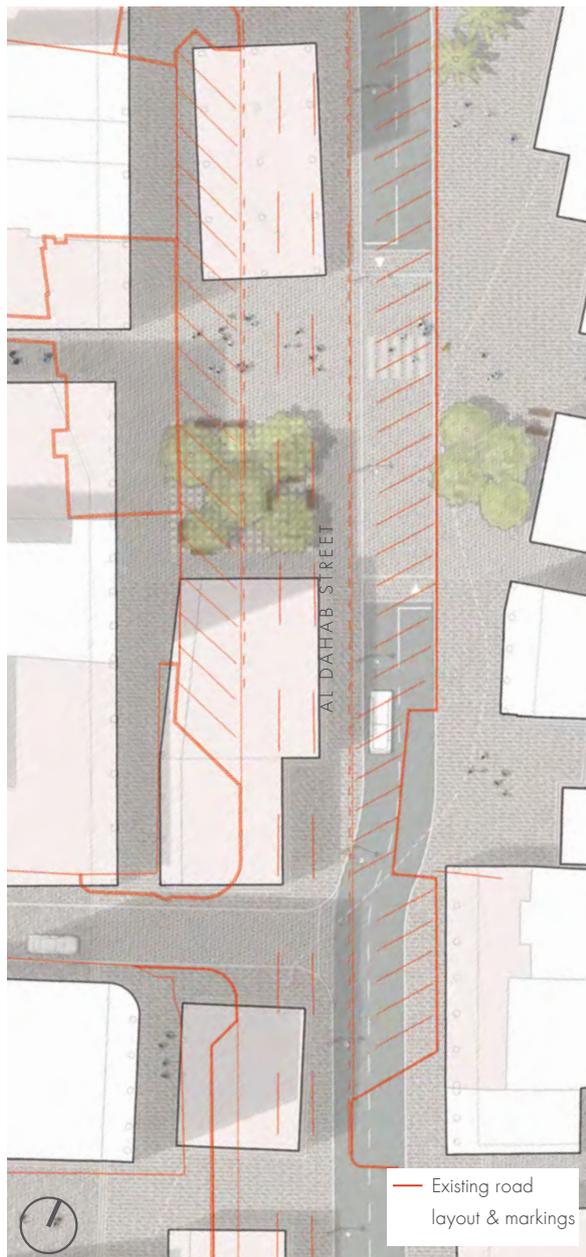
KING ABDUL AZIZ



Key approaches:

- Narrow carriageway width and standard lane widths
- Introduce controlled pedestrian crossings and raised tables at key junctions
- Make provision for buses and cyclists
- Rationalise parking locations and pave parking bays
- Minimise radii at junctions and turnings to side streets
- Create flush surfaces at vehicle crossovers

AL DAHAB STREET

**Key approaches**

- Narrow carriageway width and standard lane widths
- Introduce controlled pedestrian crossings and raised tables at key junctions
- Make provision for buses and cyclists
- Reduce parking and pave any parking bays
- Minimise radii at junctions and turnings to side streets
- Create flush surfaces at vehicle crossovers

TYPICAL ZUQAQS

**Key approaches**

- Restrict vehicle movement through Al Balad's narrow lanes
- Rationalise vehicle access for servicing and delivery
- Remove all kerb upstands and kerbs in zuqaqs
- Create a flush surface with allowance for occasional vehicle access

2.6.4 TRAFFIC SEPARATION



Proposals for the public realm aim to establish appropriate levels of separation between pedestrians and vehicles. There are generally three conditions to be considered for streets:

Trafficked streets

- Typically 125mm kerb upstand
- Visually different footway and carriageway materials
- Kerb to provide visual separation between footway and carriageway
- Raised tables at pedestrian crossings

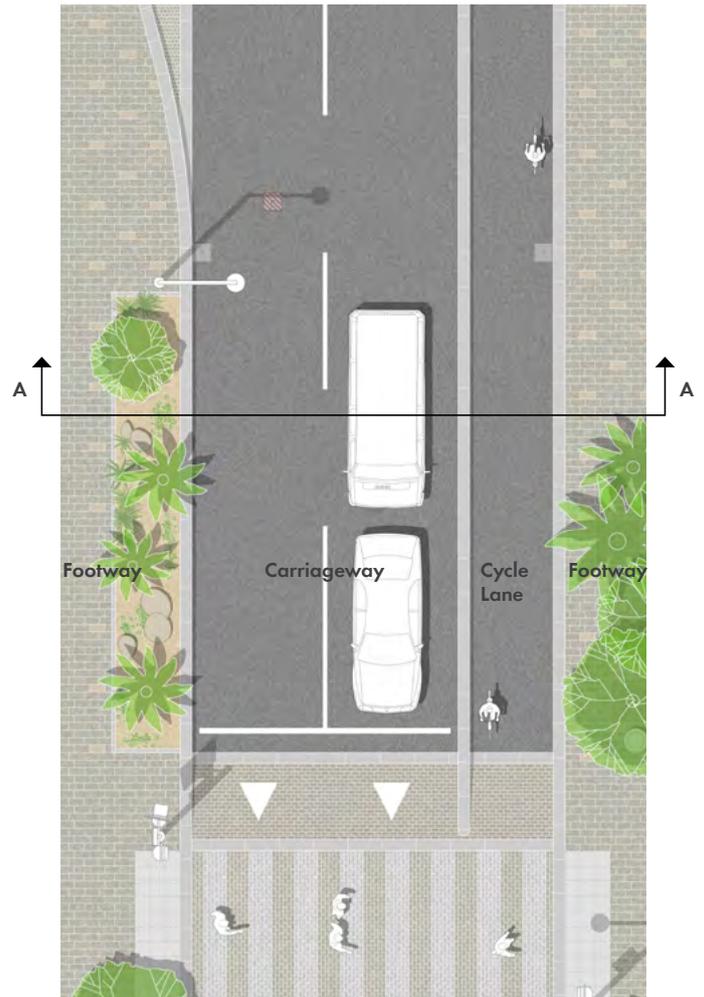
Pedestrian priority street

- Typically 60-125mm kerb upstand
- Asphalt carriageway or paved carriageway
- Kerb to provide visual separation between footway and carriageway
- Raised tables at pedestrian crossings
- Bollards or street furniture at long raised tables

Access only streets

- Flush kerb or 60mm kerb upstand
- Typically paved carriageway
- Kerb to provide visual separation between footway and carriageway
- Bollards may be used to guide vehicle movement

TRAFFICKED STREETS

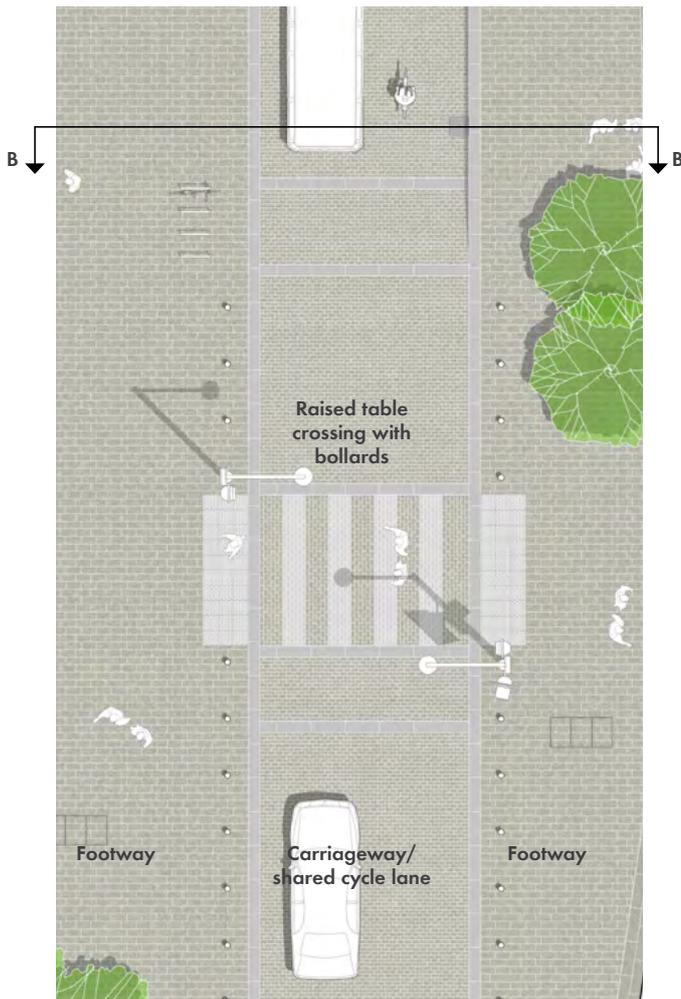


Abdul Aziz - proposed streetscape arrangement

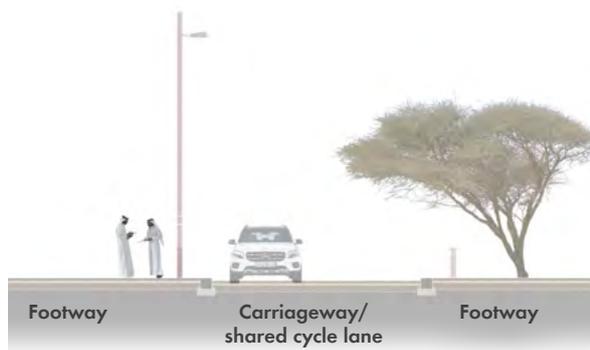


Section A

PEDESTRIAN PRIORITY STREETS

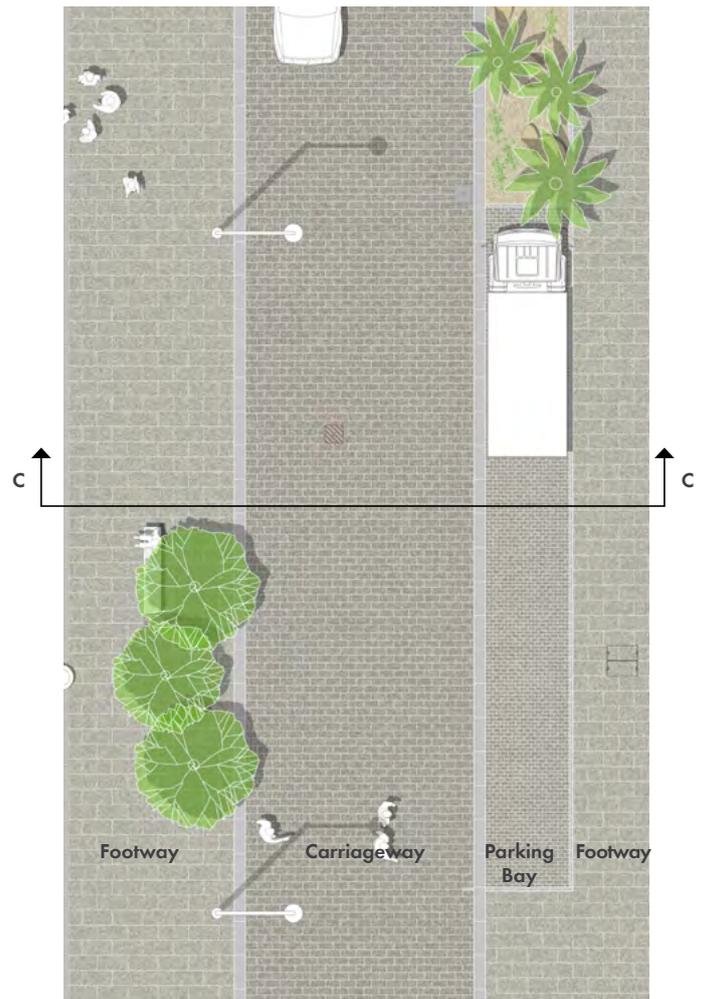


Al Basha- proposed streetscape arrangement



Section B

ACCESS ONLY STREETS



Lagoon proposed access street arrangement



Section C

2.7 SENSITIVELY UPGRADING THE PUBLIC REALM

Al Balad is a UNESCO World Heritage Site and as such the public realm should always respect and compliment the city's historic character.

Surveys of Al Balad identified many basic issues in the public realm including; poorly maintained paving, inconsistent lighting, a lack of high-quality street and utilities that are poorly installed.

The public realm strategy recognises the need to make sensitive improvements to the public realm. Key measures include:

- Utilising a simple material palette that creates a simple, consistent backdrop to public life and architecture
- Sensitively upgrading lighting in the public realm by making it more consistent and better suited to the historic context
- De-cluttering the public realm and introducing high-quality street furniture that is appropriate to Al Balad



Souq lighting can be overly bright due to private shopfront lighting



There are many issues with the surface quality of the public realm



Zuqaq lighting is often inconsistent, with an incoherent colour temperature



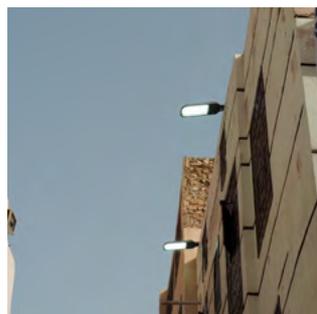
Traffic barriers and street clutter obstruct movement



Street lighting is often high level and overly-bright



Inconsistent mounting heights



Lights on during daytime



Streets are often cluttered with poor quality street furniture

2.7.1 MATERIALS STRATEGY



Upgrading materials will be an important way to sensitively improve the public realm

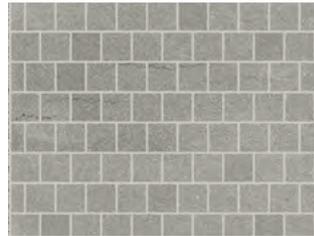
Across Al Balad the paving condition is currently inconsistent. Different sized paving units, varied materials, discordant paving finishes and incidental patterns are applied sporadically.

To improve the material condition, the public strategy seeks to integrate a simple palette that acts as a backdrop to public life and architecture. Subtle changes to paving are proposed to highlight difference between typologies.

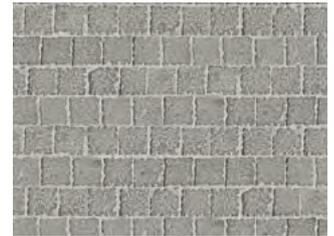
Key measures for the strategy include:

- Using a consistent material palette predominantly formed of Saudi basalt to unify old and new in the public realm
- Ensuring materials are sustainable, with consideration of source, durability, maintenance, influence on microclimate and carbon emissions
- Using different levels of wear to reflect the use and footfall of different routes.
- Making good existing streetscapes where basalt is already used and ensuring materials are replaced only when necessary to minimise carbon footprint
- Using a larger paving field to emphasise more prominent routes
- Incorporating special patterns to emphasise important places or spaces
- Using different paving designs to emphasise difference between Al Balad and the Lagoon area
- Utilising sandstone in the waterfront park to define the waterfront as a singular entity that joins new and old.

AL BALAD PAVING: TYPICAL CONDITIONS



Zuqaq - primary route



Zuqaq - secondary route



Souq



Street

NORTH AND SOUTH LAGOON: TYPICAL CONDITIONS



Zuqaq



Street

CIVIC AND DISTRICT BARAHA



WATERFRONT PARK



MATERIALS STRATEGY



2.7.2 LIGHTING STRATEGY



The approach to lighting will be one of the most significant factors in creating the desired ambience after dark.

A coordinated lighting strategy will help to create an appropriate and distinctive atmosphere for different areas and will reinforce Al Balad's sense of identity and history.

Key measures will include:

- Minimising lighting levels wherever possible and whenever safe to do so
- Providing lighting that is appropriate to; patterns of use, character and context and determined on a site-by-site basis
- Utilising lighting temperature to reinforce difference between routes and to define contrast between character areas
- Managing private light spill, light pollution/trespass – particularly over-lighting of shopfronts on souqs and streets
- Increasing consistency by balancing localised lighting needs with site-wide lighting standards
- Sensitively highlighting historic buildings, mosques and public buildings after dark, subtly revealing their architecture without over-use of light.
- Utilising lighting that is appropriate to scale and context of routes and spaces e.g. lower mounted lights on smaller lanes and in historic conditions
- Upgrading all lighting to new technologies that are energy-efficient, with a life expectancy of at least 20 years.
- Upgrading light that is capable of producing diffuse, soft and warm light – redolent of the historic Al Balad lighting condition
- Introducing lighting control system that allows variable light levels at different times of evening and night to save energy wherever possible

LIGHTING PRECEDENTS



Consistent lighting contributes to the identity of place
Jemaa el-Fnaa, Marakesh (Morocco)



Subtle architectural lighting articulates the building features
Royal Opera House, Muscat (Oman)



Consistent lighting temperature and a minimised lighting level
Dubrovnik Old Town, Dubrovnik (Croatia)



Subtle highlighting of a feature tree
Windrush Square, London (UK)



Luminaires mounted at consistent height and casting warm ambient light
Medina Quarter, Tunis (Tunisia)



Distributed illuminance with a balance of light and dark
Lighting demonstration, Derby (UK)

LIGHTING STRATEGY



The lighting strategy proposes different approaches to lighting depending on different typological conditions. The colour temperature (kelvin), illuminance levels (lux) and mounting heights (metres) listed opposite should be used as guidelines, with a full lighting strategy commissioned to classify appropriate lighting. Colour, illuminance and lighting should also be determined on a site-by-site basis in response to patterns of use, local character and site-specific requirements.

Lighting should be designed in accordance with international best practice standards, with acknowledgement of Jeddah Municipality standards. A preference for warm, minimal lighting, at a pedestrian scale should be taken wherever possible and whenever safe to do so.

Type	Colour	Illuminance (lux)	Mounting
Streets			
Arterial	4000k	High: 9-18 lux	8-10m
Link	4000k	High: 6-12 lux	6-8m
Local/Access	3500k	Medium: 5-9 lux	6-8m
Souqs			
	3500k	Medium: 4-9 lux	4-6m
Zuqaqs			
Residential	2700k	Medium/low: 3-7 lux	4-6m
Commercial	3000k	Medium: 4-9 lux	4-6m
Lagoon	3500k	Medium/low: 4-9 lux	4-6m
Waterfront			
	3000k	Low: 3-6 lux	0-4m
Open space			
Barahat	3500k	Medium: 4-9 lux	4-8m
Housh	3000k	Medium/Low: 3-7 lux	0-6m
Gardens	3000k	Low: 3-6 lux	0-4m

COLOUR TEMPERATURE



- Consistent wherever possible
- Typically warmer for pedestrian streets and spaces (2700k-3500k) and cooler (4000k) for trafficked routes
- Coloured lighting used for festivals and events only

ILLUMINANCE



- Typically higher lux levels for busier pedestrian routes, trafficked routes and gathering places
- Lower lux on lesser-used streets
- Distributed lighting where possible to achieve suitable lux levels
- Localised lux increases for localised conditions (e.g. pedestrian crossings)

MOUNTING



- Typically lower mounting heights for pedestrian routes (4-6m) and higher mounting (6-10m) for trafficked streets.
- Wide streets could use high and low level lighting in conjunction
- Lighting wall mounted on narrow routes (with exception of historic buildings)
- Adjacent to natural habitats, mounting should be typically lower to minimise light spills

LIGHTING STRATEGY



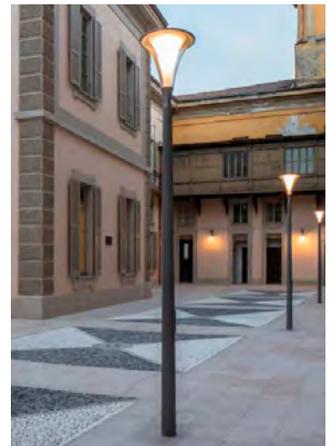
2.7.3 STREET FURNITURE



Public realm elements are the urban furnishings such as seating, lighting, bollards. Within a sensitive setting such as Al Balad, the furnishing suite has been carefully selected to provide simple continuity. The colours are coordinated and have been chosen to blend into the context rather than stand out as features. Given the level of detail and craft within the traditional architecture, an intentional decision has been made to keep the public realm elements simple so they do not compete or attempt to replicate architectural details.

Key considerations

- Street furniture should be distributed evenly across the entirety of Al Balad and associated areas.
- This street furniture should not obstruct pedestrian movement nor clutter public open spaces.
- Consideration should be given to accessibility with seating distributed at a maximum of every 100 metres. Seating should be suitable height and have backs and/or armrests to improve accessibility.
- Traditionally there has been minimal furniture in the public realm and what did exist was moveable. Street furniture should feel ephemeral and informal, acknowledging the historic condition of street furniture in Al Balad.
- Colour and material consistency is essential
- Designs should aim to incorporate furniture that is; high quality, coherent, and rationalised to minimise street clutter. The appearance of street furniture should also be coordinated, with a consistent materials and colour palette that compliments Jeddah's unique character
- Minimise duplication of street furniture by rationalising and combining elements (e.g. attaching street signage to light columns)
- Use street furniture that is high quality and robust
- Ensure all street furniture can be easily maintained and repaired with replaceable components
- Retain and improve street furniture that has heritage value



Coordinated materials, colour palette and finish and recommended to make the street furniture suite look and feel consistent

2.7.4 SIGNAGE AND WAYFINDING

Exploring the lanes, souqs and streets of Al Balad is an enjoyable and unique experience

A coordinated signage and wayfinding strategy should help to enable intuitive navigation through Al Balad, while still encouraging exploration and discovery. The considerations listed below should be used as guidelines, with a full signage and wayfinding strategy commissioned separately to create signage that is appropriate and sensitive to the historic context

Key considerations

- Utilise signage that is sensitive, appropriate and bespoke to the Jeddah Historical District and Al Balad
- Acknowledge that Al Balad is relatively small and distribute signage accordingly. A good strategy should distribute signage where it is most needed (e.g. between key attractions or at important intersections)
- Use visual markers such as planting, paving, lighting and frontages to enable intuitive wayfinding, and encourage exploration and discovery
- Utilise designs that are bespoke, purposefully designed and complimentary to the identity of Al Balad and different character areas
- Avoid large totems, sign posts and obstructive signage that will visually detract from heritage features and the public realm appearance
- Incorporate signage that is light-touch (e.g. wall mounted, paving signage or light column mounted signage) and complimentary to the scale of routes and spaces
- Ensure the materials, font, designs and size of signs are sensitive and appropriate to the historic context
- Ensure signage and wayfinding are accessible to all people including; people with visual impairment and people of different languages, through innovative use of symbols, colour and texture
- Consider providing public Wi-Fi and wayfinding apps for those not familiar with Al Balad



Arnhem Central Station signage, Arnhem (Netherlands)



Points of historical interest, Barcelona (Spain)



Walthamstow Wetlands signage London (UK)



Low Line signage, London (UK)

2.8 DELIVERY AND PHASING

Proposed improvements to the public realm range in size, cost, impact, timescale and complexity.

The delivery and phasing strategy is designed to help identify projects that can be undertaken over a range of timescales: immediately, in a year and targeted for implementation in two years.

The recommendations and timescales loosely align with the masterplan phases, although many public realm improvements are not contingent on development or transport initiatives. Improvements to the public realm could also preempt development and act as catalyst to regeneration.

The phasing and delivery strategy is focused on the conditions immediately surrounding Al Balad and the peripheries. It does not try to anticipate future investment in development projects around the North and South Lagoon.

A: 'QUICK WINS'

Six months - ongoing

- **A1** Cleaning and localised improvements
- **A2** Site-wide regimes
- **A3: Utilities and accessibility**

B: SHORT-TERM

One year or less

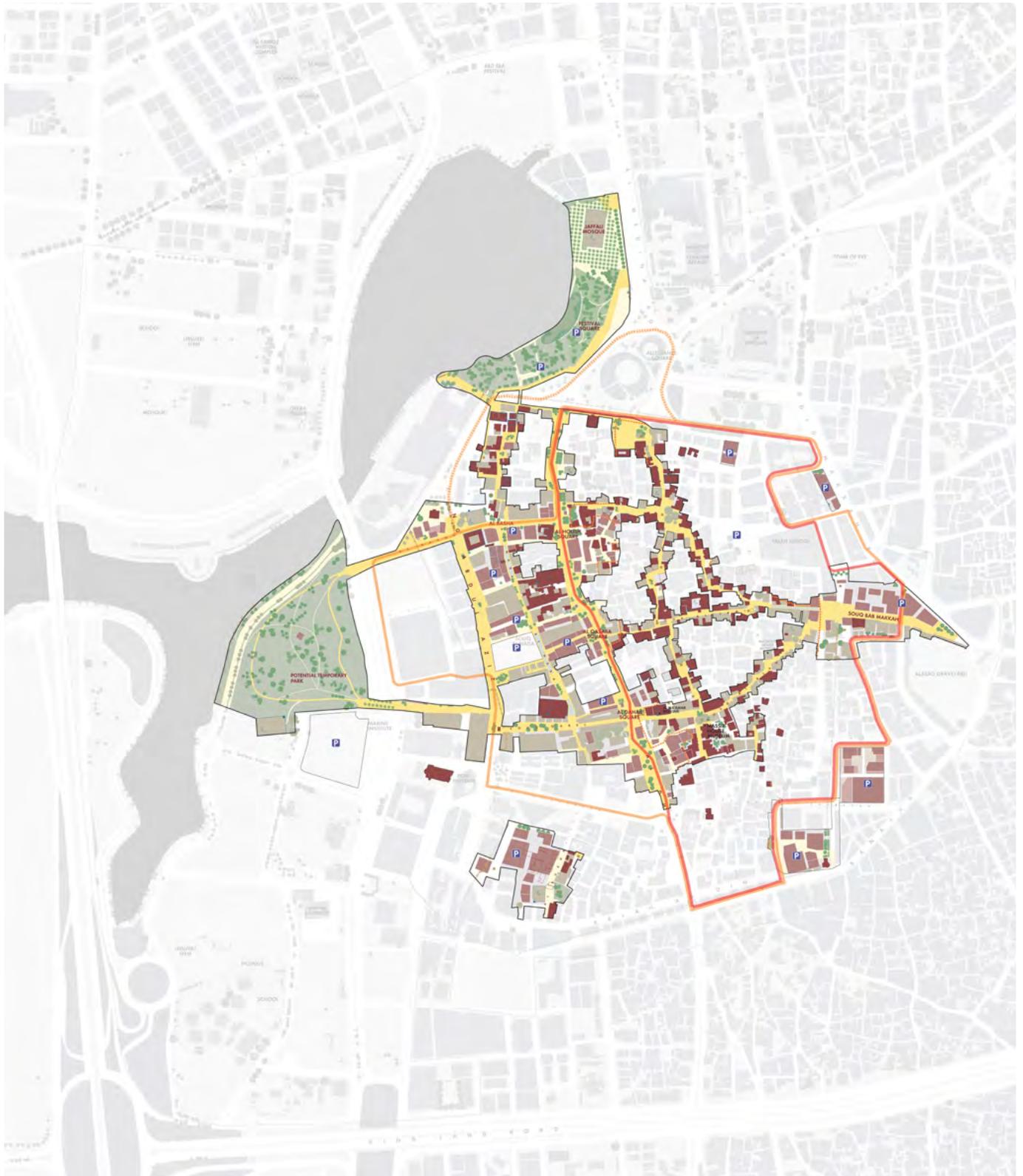
- **B1: Key routes**
- **B2: Key spaces**
- **B3: Priority projects**

B: MEDIUM-TERM

Two years or less

- **C1: Streetscapes**
- **C2: Trafficked Zuqaqs**
- **C3: Parking**

DELIVERY AND PHASING: MASTERPLAN PHASE 1



2.8.1 DELIVERY: 'QUICK-WINS'

Public realm improvements do not always have to be the product of major capital works programmes. Often impactful improvements can be made through identifying deficiencies and making simple upgrades. 'Quick-wins' could be implemented quickly (within 6 months) but should be ongoing with a long-term view of potential future needs.

A1: CLEANING AND LOCALISED IMPROVEMENTS

Quality of construction

The quality of construction within the public realm can often be poor, with materials laid inconsistently and utilities not properly integrated. Material upgrades to the public realm will need to be laid well with skill and care. Good construction will rely on expertise and will require training/skills development as part of the roll out of the public realm.

Maintenance and management

Maintenance and cleaning are as important as good design in creating high quality public realm. A detailed management and maintenance strategy should be formulated with the Jeddah Municipality, including an ongoing process for auditing and monitoring the condition of the public realm.

Cleaning

The public realm needs to be cleaned more regularly and refuse more frequently collected. Cleaning should comprise a combination of mechanical and hand sweeping. A proper cleaning regime will require investment in mechanical sweepers and jet steam cleaning equipment. The cleaning regime should also inform construction and detailing for public realm designs.

Localised improvements

Localised improvements should prioritise de-cluttering and maintenance. Measures should include: repairing broken/uneven paving surfaces, removing redundant street furniture (particularly concrete bollards), rationalising bin locations, and repairing or grading out steps. In tandem, removing redundant wires and broken air conditioners on buildings facades could help to improve the overall public realm appearance.

A2: SITE WIDE REGIMES

Seating

There are very few benches in the public realm in Al Balad. People are often sitting on steps, kerbs and walls. In other cases residents or business are providing plastic chairs or makeshift seating. A quick programme for improvement should be to distribute high quality FSC certified timber benches throughout Al Balad.

Drinking Fountains

Residents and businesses provide drinking water as public good. Today good infrastructure exists to provide drinking fountains easily and they should be included in any public space.

Children's Play

Children are currently underprovided for. A programme to create neighbourhood housh, play (refer to section 2.4) or meanwhile interventions should provide play amenities for boys and girls of all ages. Improvements could utilise vacant plots or gap sites in the first instance to increase play provision.

Lighting

Lighting in Al Balad is inconsistent and unsuitable to the historic context. Following a commissioned lighting strategy, an ongoing programme for upgrading street light fittings should commence. This should include a strategy for managing over-lighting of souqs, which may require consultation, definition of acceptable lighting levels and provision of shopfront light alternatives.

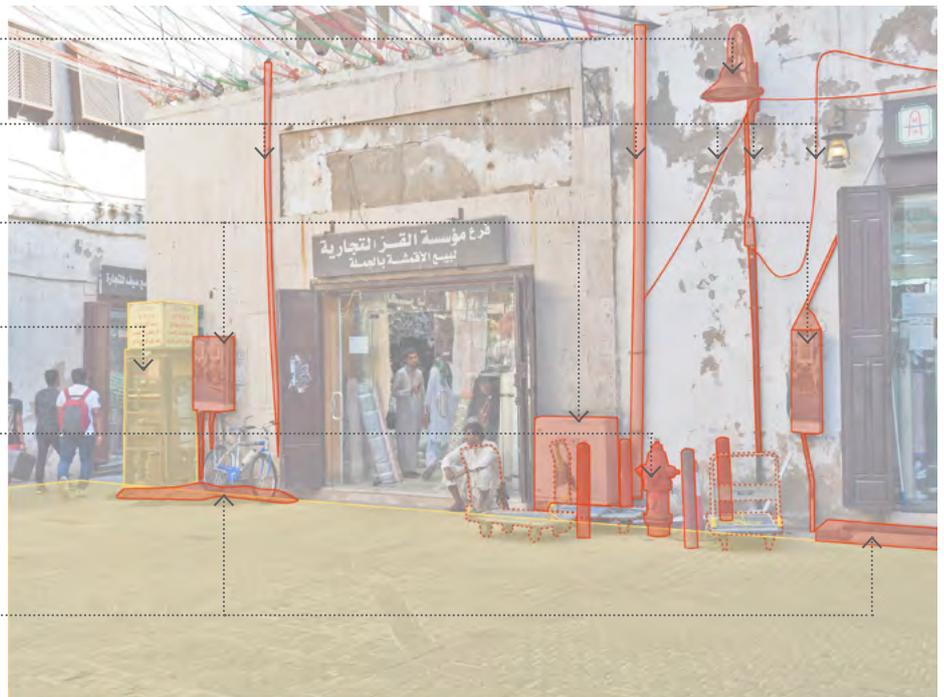
A3: UTILITIES AND ACCESSIBILITY

Utility upgrades should be undertaken as soon as possible to make the public realm safe for pedestrians. Key measures must include: burying electrical cables, fixing sunken/raised utility covers, and consolidating control cabinets. Upgrades should consider future needs and should work in coordination with other public realm enhancements.

In conjunction with utility upgrades, there is an opportunity to transform trafficked zuqaqs; removing kerb upstands and making level surfaces. These enhancements may not be suitable for some frequently trafficked zuqaqs.

QUICK WIN EXAMPLES

- New streetlights
- Consolidate wiring and chase into render of facades
- Consolidate distribution boxes into single cabinet
- Need for drinking water fountains
- Consider alternatives for fire hydrants and protection
- Levels and varied edge conditions



- Capture water from buildings
- Streetlight design and positions detract from heritage setting
- Ducting
- Consolidate wiring and chase into render of facades
- Rubbish collection
- Standardise details for raised building access
- Shared surface with flush kerbs
- Local levels & accessibility
- Capture all water - especially when it is not raining



2.8.2 DELIVERY: SHORT-TERM

Short-term projects should be prioritised for delivery within one year or less. These improvements to key routes and spaces should be catalysts for future investment, funded as part of regeneration and development initiatives.

B1: KEY ROUTES

Identified as an opportunity in Phase One of the masterplan, the key routes create a circuit of souqs and zuqaqs connecting key sites in Al Balad.

Souqs

Upgrades will include Souq Al Alawi, Al Jami, Al Nada and Bab Mekkah. The varied character of each souq should be reflected in the public realm.

Streets

A programme to increase the distribution of safe pedestrian crossings should be initiated to link together a walkable circuit of routes.

Zuqaqs

Improvements to zuqaqs should be high-quality with consideration of existing activities and uses.

B2: KEY SPACES

An evenly distributed selection of open spaces that are mostly available for immediate upgrade and which provide a range of amenity types.

Upgrades to existing spaces

Significant spaces will include Barahat Bab Jadid, Barahat Amm Zakir and Nassief Square. Designs should consider existing conditions and identify activities appropriate for each space.

Vacant sites/ruins

Some open spaces could be formed from the transformation of vacant, ruins and under-utilised sites. These spaces should be programmed for a range of uses, decided through consultation with local communities.

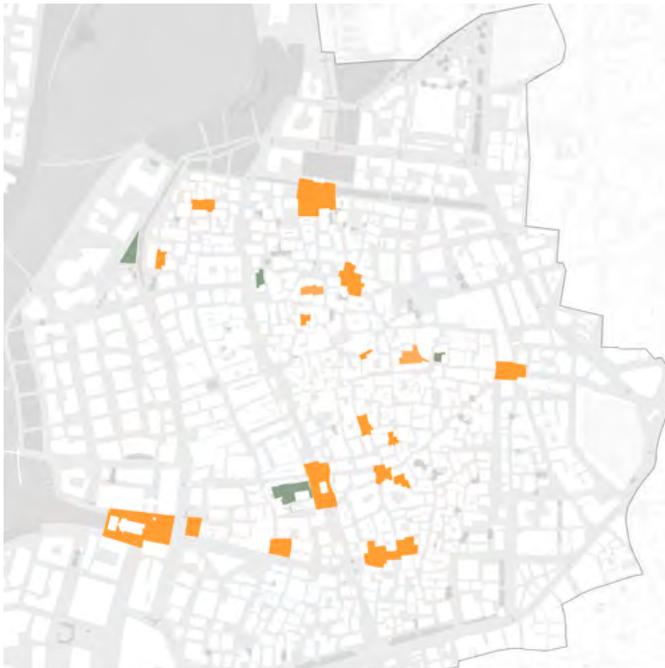
New open space

Barahat Al Bunt will require some demolition of some surrounding buildings to form a major open space but will be a major catalyst for the surrounding area. Designs should ensure the space can be accessed across King Abdul Aziz.

B3: PRIORITY PROJECTS

Open space upgrades associated with early phase developments which could be delivered by development partners. Key spaces include Bab Mekkah and Al Housh Square,

KEY SPACES



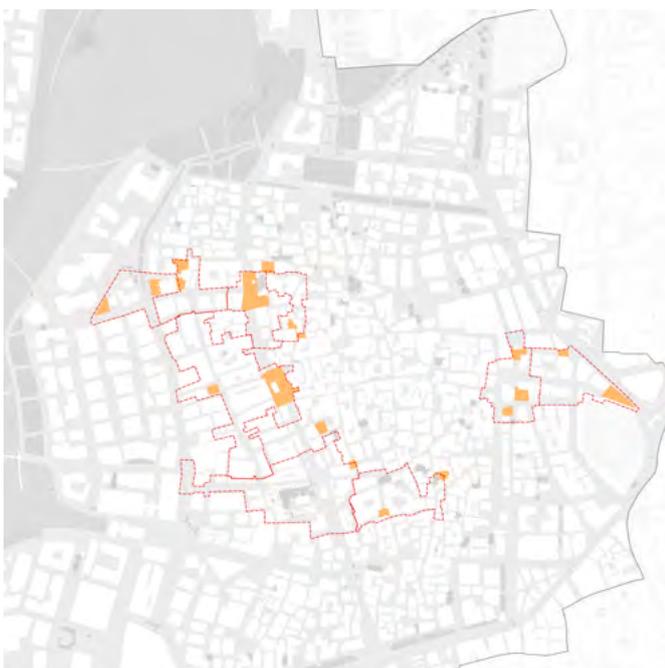
- Catalysts for change
- Evenly distributed
- Mostly unencumbered by development

KEY ROUTES



- Souks: Al Awali, Al Jami, Al Nada, and Bab Makkah
- Zuqaqs: Al Layat, Nadalah Ibn Khalid
- Key spaces along Dahab Street

PRIORITY PROJECTS



- Facilitated by development
- Underground car parking
- Regeneration

2.8.3 DELIVERY: MEDIUM-TERM

Longer-term, large-scale projects will require professional input and engagement with broad stakeholder groups. Projects should be targeted for implementation in two years and will require early planning to start complex negotiations, secure funding and undertake necessary utility upgrades.

C1: STREETSCAPES

Major streetscape projects that are contingent on transforming the way in which vehicles access and circulate around Al Balad. These projects are hugely important for development release.

Key streetscape projects should include Al Dahab Street, King Abdul Aziz, Al Basha Lane, Al Muassasah and Allegiance Square.

Key routes

Upgrades to streetscapes should seek to emphasise key routes – identified within the masterplan – and repair historic routes.

East-west connections

Streetscape improvements should seek to reestablish east-west connections, with the long-term aspiration of reconnecting Al Balad to the waterfront.

Pedestrian crossings

Public realm improvements to streets must include a good provision of safe pedestrian crossings

C2: TRAFFICKED ZUQAQS

Re-configuration the transport networks should seek to limit or discourage private vehicle access into Al Balad, ensuring servicing and deliveries needs are met. Parking access should also be considered when upgrading the public realm.

C3: PARKING

Spaces that are currently dominated by surface car parking, which could be unlocked through relocation of parking to new underground structures. Some open spaces could be made available sooner, if surface parking was consolidated or restricted.

PEDESTRIAN PRIORITY ZUQAQS



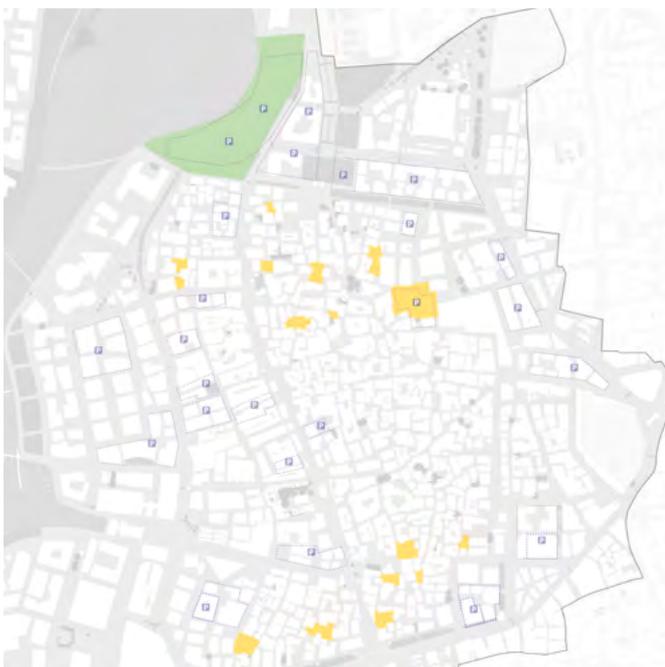
- Prioritise pedestrians
- Limit or discourage vehicle access
- Underground utilities

STREETSCAPES



- Dahab Street
- King Abdul Aziz
- Al Basha Lane and Al Muassasah
- Allegiance Square

PARKING



- Barahat currently used as surface car parking
- Spaces made available by building underground car parking
- Waterfront Park

3 AL BALAD

This section illustrates how Al Balad has a unique, interconnected public realm which could be transformed into amazing places and spaces

Al Balad is an extraordinary, interconnected network of routes and spaces that has great complexity and many unique qualities. Al Balad cannot be understood solely in plan and it is therefore always recommended that designers visit and experience the place.

Public realm projects should always be undertaken with a broader lens and understanding of the context beyond the site boundary. Routes and spaces are often interdependent and therefore improvements should always be considered holistically in Al Balad.





BARAHAT
AMM
ZAKIR

FALAH
SCHOOL

AL QOUBA

AL KABLI

BARAHAT
AL BOSTANIE

AL SHAFEI
MOSQUE

SOUQ AL JAMI

SHUAYB LANE

EBAID

AL QUMSANI

ABDELHAFEEZ

BADEEB

HAMBOULI LANE

SOUQ AL ALAWI

AMRO
HILAL

AL MA'AMAR
MOSQUE

NASSIEF
SQUARE

NASSIEF
HOUSE
MUSEUM

AL BASHA

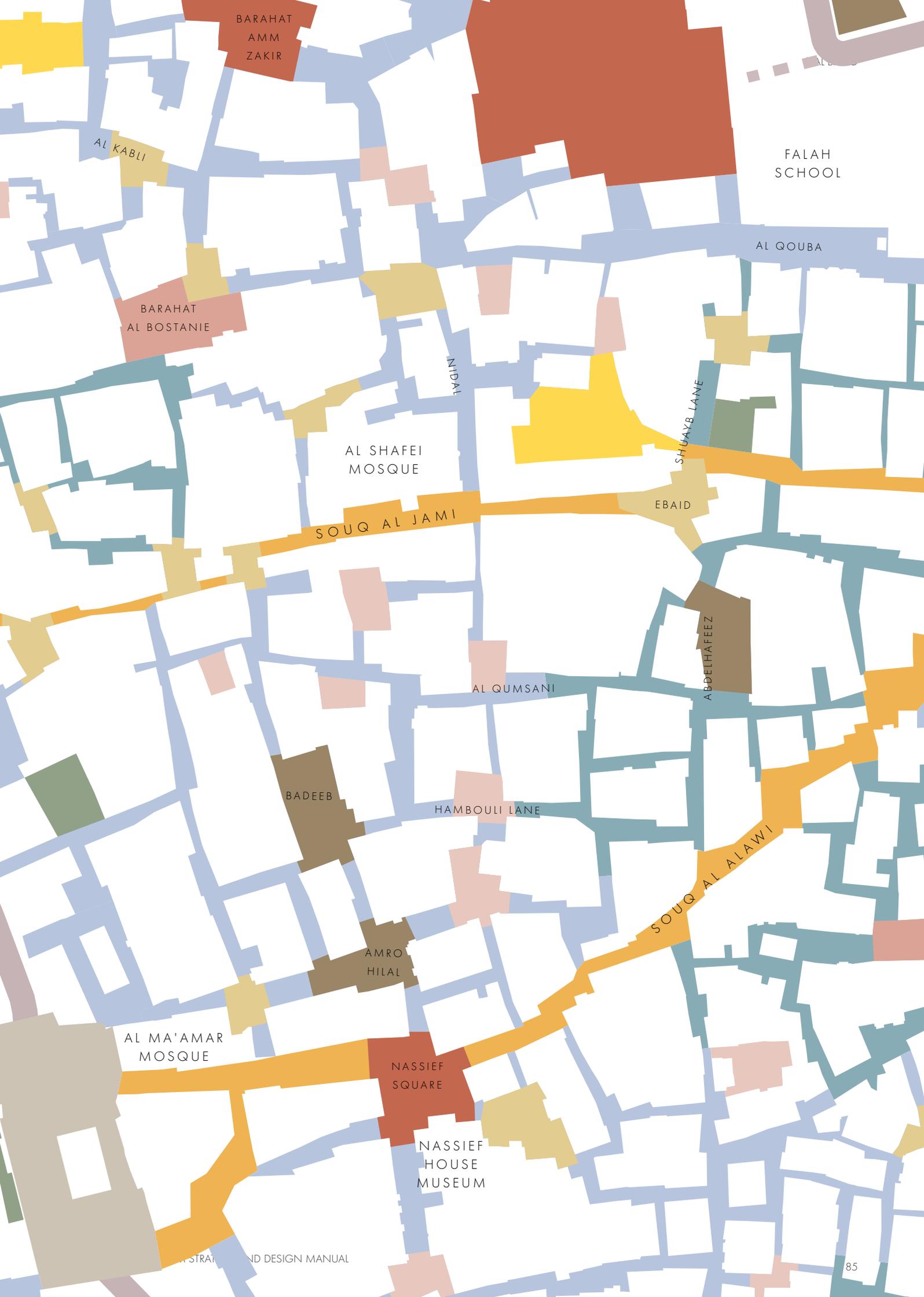
AL DAHAB STREET

KING ABDUL AZIZ

SOUQ AL NADA

SOUQ QABEL





BARAHAT
AMM
ZAKIR

FALAH
SCHOOL

AL KABLI

AL QOUBA

BARAHAT
AL BOSTANIE

NIDAL

AL SHAFEI
MOSQUE

SHUAYB LANE

SOUQ AL JAMI

EBAID

AL QUMSANI

ABDETHAFEEZ

BADEEB

HAMBOLI LANE

SOUQ AL ALAWI

AMRO
HILAL

AL MA'AMAR
MOSQUE

NASSIEF
SQUARE

NASSIEF
HOUSE
MUSEUM

A district open space transformed through planting and new programmed open spaces. A space to dwell during the day and night









A shaded, serene urban space with trees irrigated by the adjacent mosque ablution. A place to escape the heat of the day

A new urban street improved through enlarged pavements, more shade and better crossings. A transformed route through Al Balad





A sensitively enhanced souq with better paving, lighting and seating to make it the most special souq in Jeddah







PART TWO
DESIGN
MANUAL

4 OPEN SPACE TYPOLOGIES

The following section establishes the ten open space typologies defined for Al Balad and the Jeddah Historical District. Each typology represents opportunities to nurture existing characteristics and uses. This, in turn, will help to provide a broad and diverse set of open spaces that will cater to residents and visitors alike.

4.1 OVERVIEW

The open space typologies section establishes ten open space typologies within the public realm. These typologies are defined by scale, character, and relationship to predominant land uses. Each typology represents opportunities for different characteristics and uses which will provide Al Balad with a broad and diverse set of open spaces which will cater to residents and visitors alike

1 Civic Baraha



Civic Barahat are those which are significant to the Al Balad and the wider Jeddah city. Civic Baraha are significant cultural spaces; either with a focus on a major historically important space or as the setting for a significant cultural destination

2 District Baraha



District Barahat are those which are significant to their respective urban districts. District Baraha are layered spaces with a variety of uses. They can accommodate large groups but should not feel empty on quiet days

3 Local Baraha



Local Baraha are medium sized spaces in areas which have predominantly commercial land uses. Local Baraha should have a symbiotic relationship with the adjacent ground floor uses including outdoor seating or pitches for market stalls or food carts

4 Neighbourhood Baraha



Neighbourhood Baraha are medium sized spaces in areas that have predominantly residential land uses. Neighbourhood Baraha should be considered as the centre of a community - an outdoor majilis which caters for women and men, young and old

5 Local Housh



Local housh are small sized spaces in areas which are have predominantly commercial land uses. Local housh should have a symbiotic relationship with the adjacent ground floor uses including outdoor seating or pitches for market stalls or food carts

6 Neighbourhood Housh



Neighbourhood housh are small sized spaces in areas which are have predominantly residential land uses. These spaces should support communities – providing informal spaces for women and men, young and old

7 Recreation



Recreation spaces are major open spaces that provide sports, recreation and play facilities for residential communities within an urban district. These spaces should provide equipped play and games areas for a diverse age range and all genders

8 Gardens



Gardens are small planted open spaces that are located in both commercial and residential areas. Gardens should be secluded, shaded spaces that typically have a symbiotic relationship with mosques, using greywater from ablutions for planting irrigation

9 Al Dahab Squares



Al Dahab Street squares are public spaces along Al Dahab Street that seek to restore and emphasise historic east-west pedestrian routes which have been severed

10 Waterfront Park



The waterfront park is a proposed metropolitan park that would serve both the Jeddah Historical District and wider Jeddah. The park is multi-layered with different character areas and uses.

CONTENTS

INTRODUCTION

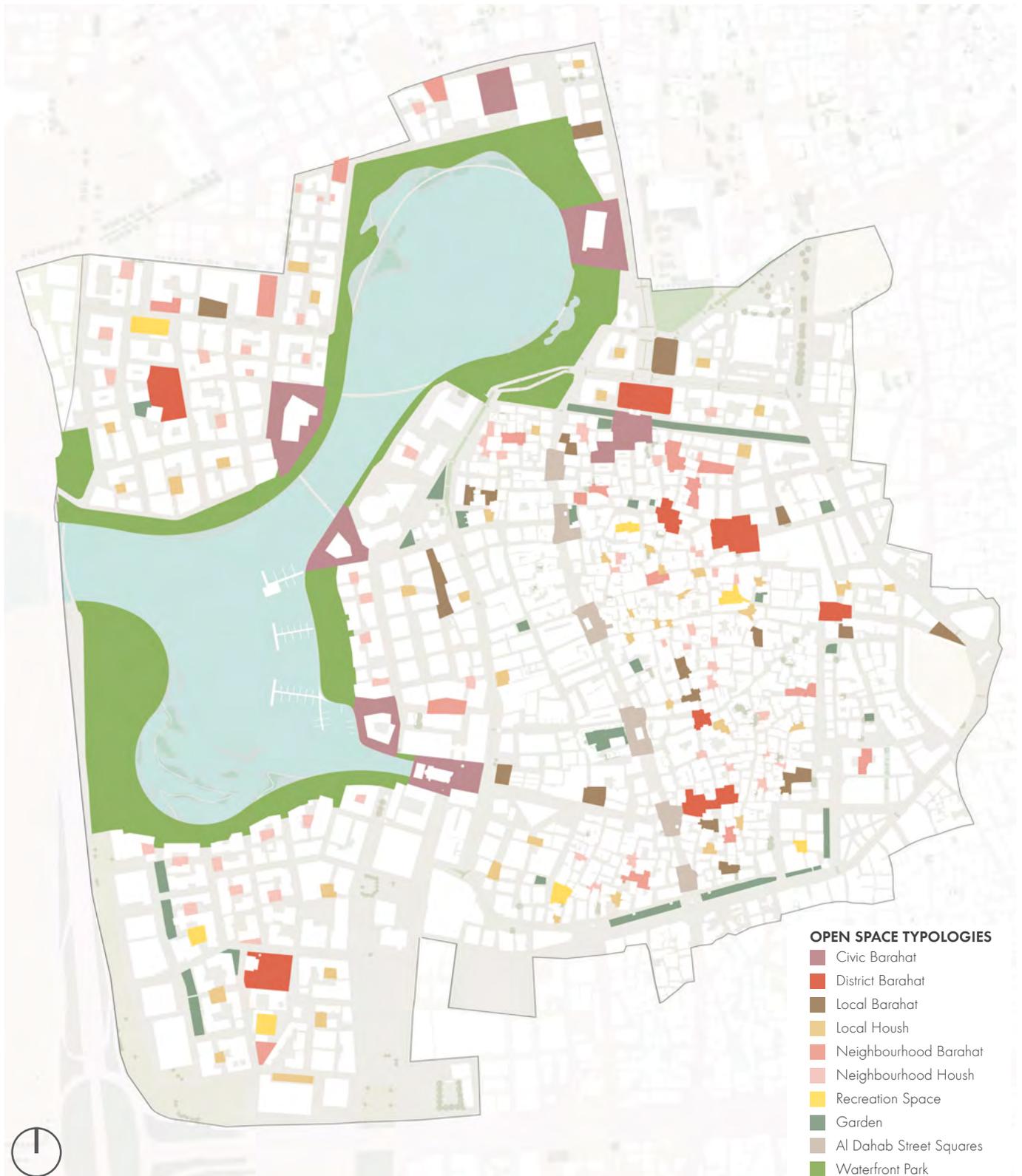
STRATEGY

DESIGN MANUAL

The purpose of this section is to further define each typology and set out explicitly how one should begin to design open spaces.

Each typology has a list of requirements such as vegetation, play, or materiality. The typologies are defined generally with case studies provided to illustrate the application of the requirements.

OPEN SPACE TYPOLOGIES



4.2 CIVIC BARAHA

Civic Baraha are those which are significant to the Jeddah as well as Jeddah Historic District, and Al Balad. Civic Baraha are significant cultural spaces; either with a focus on a major historically important space or as the setting for a significant cultural destination.

Civic Baraha are places where large groups of people travel to from across the city. They are places to gather together and celebrate. Civic Baraha should be primarily generous, open, flexible, programmable spaces which host a regular schedule of events and overlay. These open areas should be framed by shaded seating areas or smaller programmed spaces which are comfortable to use day-by-day.

M² **Scale**
• < 5,000 m²



Activities

- Open, flexible, programmable space for festivals and events
- Shaded seating areas framing central space
- Seating outside cafes and restaurants



Materials

- Field: Basalt, sandstone or feature paving
- Edge: 300x900 basalt or matching to adjacent typologies
- Special: varies by space



Lighting

- Colour: 3500k
- Illuminance: 4-9 lux
- Mounting: 4-8 metres
- Other lighting: selective tree uplighting, ability to incorporate festive lighting, architectural lighting



Vegetation

- Trees: Predominantly large canopy trees for maximum shade.
- Planting: Simple, mass planting mixed with aggregate. Low water use.
- Character: Formal or semi-formal
- Irrigation: Treated sewage effluent network if possible. If not TSE is available, water should be used sparingly and harvested from nearby mosques, cisterns or air conditioning.



Play

- Open area can be used for informal recreation when not in use for events
- Informal play: steps, boulders, etc.



Street furniture and utilities

- Fixed and moveable seating
- Drinking fountains
- Electricity and water supply points for events



Precedent: Jemaa el-Fnaa, Marakesh (Morocco)

CIVIC BARAHA



4.2.1 CIVIC BARAHA - BAB JADID

Character and function

Barahat Bab Jadid is located on the northern threshold to Al Balad. The barahat name refers to the historic gate that stands at the northern edge of the space, fronting onto Allegiance Square. Although Bab Jadid gate was only added to the city walls in the 1930s (to allow access to cars), the space itself was always an important point of arrival into Al Balad and has existed in some form since the 1880s. The barahat is surrounded by many significant historic buildings, including Ribat Banaja and Albtarge House, and the majority of the barahat is within the Nominated Property boundary.

Today, the barahat is formed of a large central space (the historically recorded barahat area) with two secondary spaces to the east and south-west. The central space is regularly used by children to play football and its large scale means it is sometimes used for installations and events.

The main issues within this space relate to; inconsistent paving quality, changing levels and steps, street clutter (particularly utilities), and lack of shade/ poor microclimate during the day

Key considerations

- Incorporate designs that are sensitive to the historic condition
- Avoid over-cluttering the space - allow it to be used flexibly for different activities
- Utilise high quality Saudi materials
- Introduce planting to increase shade
- Upgrade surfacing and street furniture to be high quality, using a consistent palette of materials
- Rationalise levels to increase accessibility
- Retain views from Al Balad towards the gate



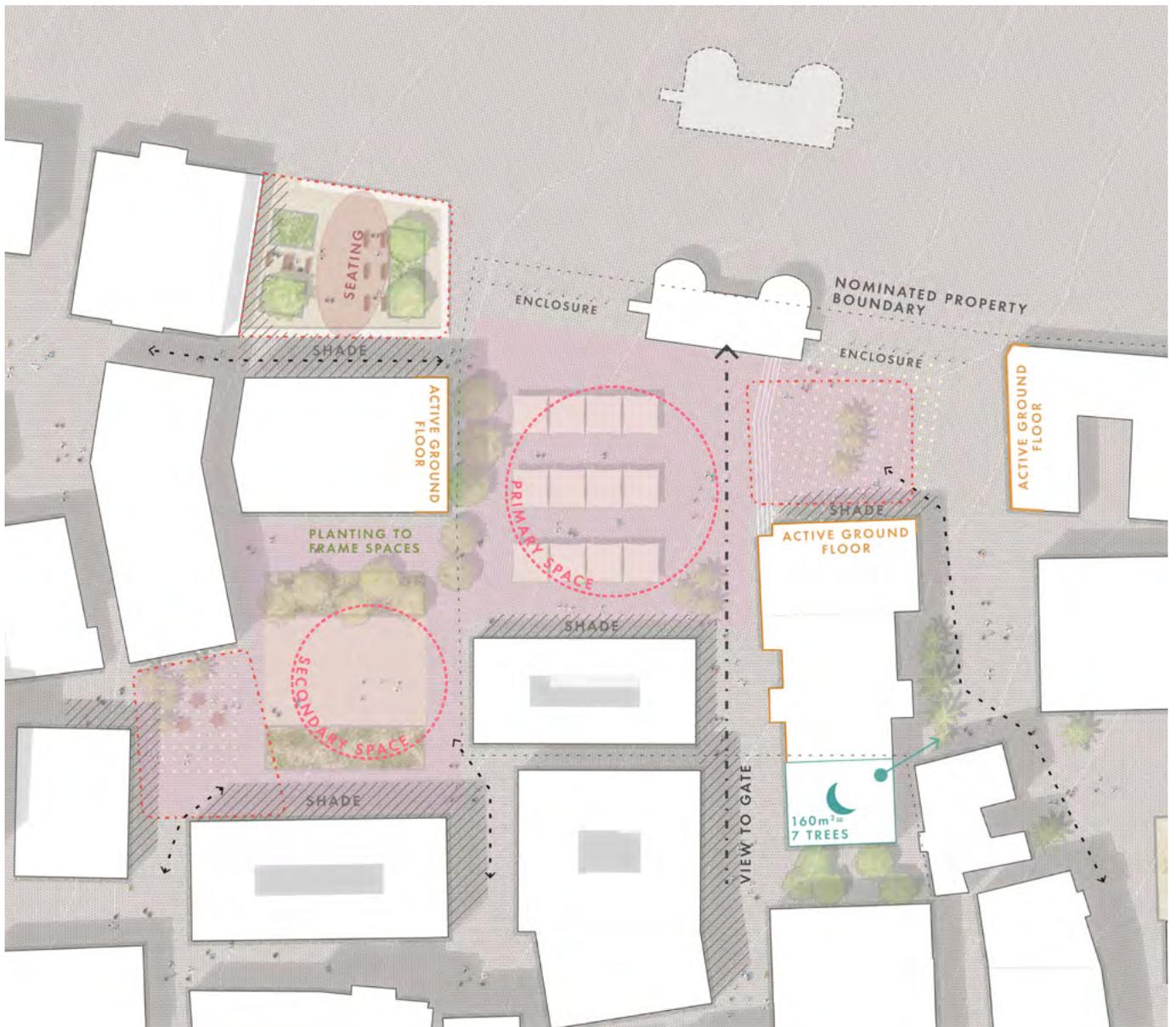
Children using the primary space to play football. A large cistern is currently buried in the space that could be used to gather water and irrigate planting



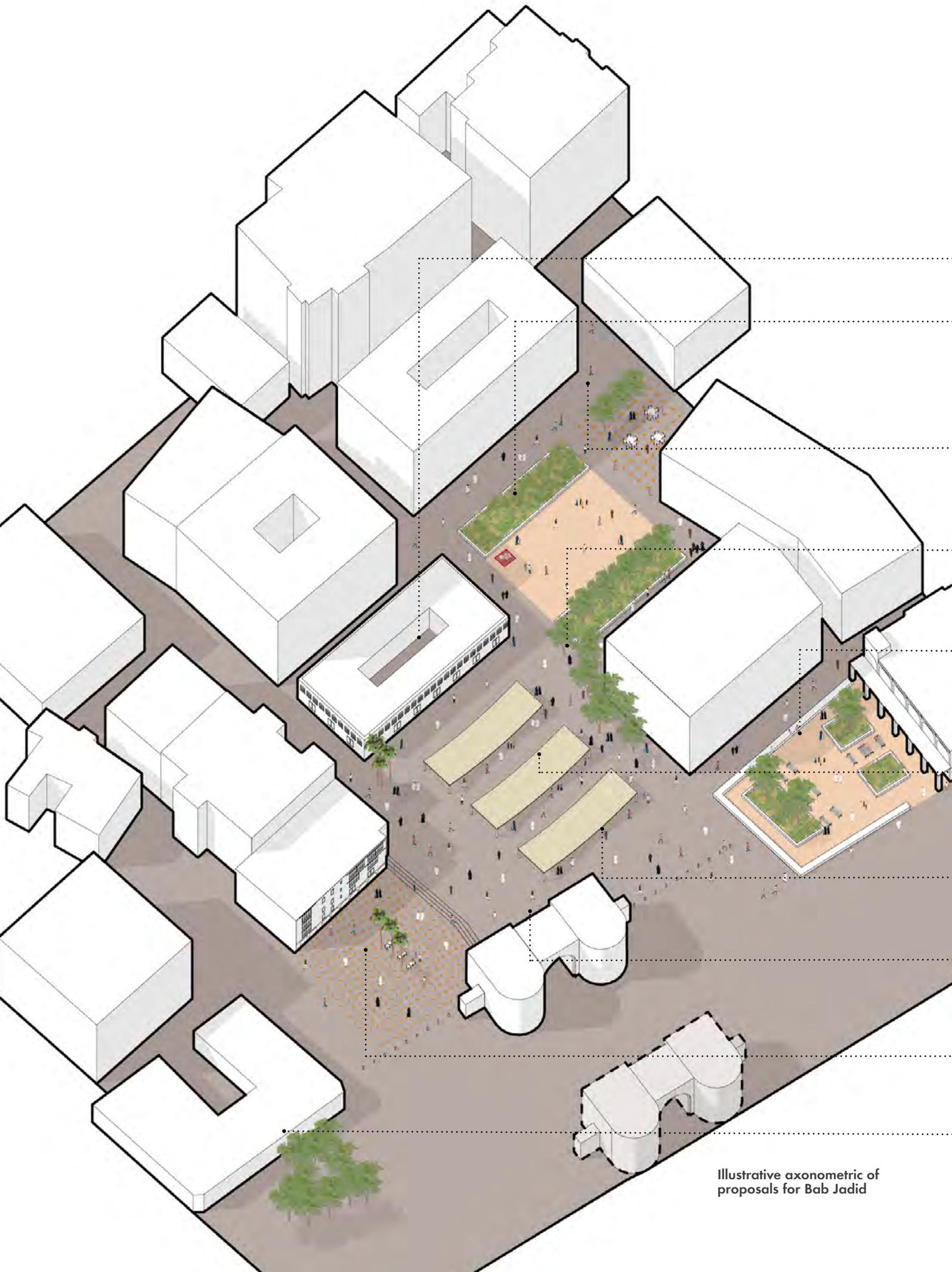
Existing cluster of trees in front of Albattarji house. Level changes can make accessibility challenging in places



View north from Al Balad towards Bab Jadid



Illustrative plan of Barahat Bab Jadid with key considerations for the space



Illustrative axonometric of proposals for Bab Jadid

BAB JADID



Utilities

Where possible, existing utilities in front of Ribat Banaja should be relocated

Microclimate

Potential multifunctional depaved area

Paving

Potential special paving inserts to define a space in the shaded area next to building Taha

Planting

Planting should be used to frame the larger and lesser spaces in Bab Jadid and provide shade for activities

Microclimate and Planting

Depaved area to demarcate where a building historically stood. This space could be garden-like with shade, low level planting and places to sit and relax

Activities and Play

The central open space should avoid fixed street furniture to enable the space to be used flexibly for events and recreation

Transport and Streetscape

Bollards (or similar) must be introduced to restrict vehicle access

Lighting

Bab Jadid should be sensitively illuminated at night to aid wayfinding and mark the northern threshold into Al Balad

Paving

Potential paving inserts to demarcate area in front of Albattarji

Planting

Planting in front of Hosh Aljafali should be maintained and improved with seating and drinking fountains

4.2.2 CIVIC BARAHA - AL BUNT

History and existing condition

Al Bunt is located on the western edge of Al Balad. It was formerly a major arrival point to Jeddah by sea for pilgrims, traders and visitors. The customs house in particular performed a crucial role in processing people arriving to the city and was the primary interface between the historic city and the sea. However, with the transformation of Jeddah's shoreline from the 1980s, the port area slowly lost connection with the waterfront.

Today, the customs house building sits almost 400 metres from the waterfront, with Baishin road creating a major severance to the sea. The area surrounding the port building is also dominated by large-scale C20th buildings.

The Al Balad Regeneration and Development Plan proposes reconnecting the customs house to the waterfront and the creation of a major civic space.

Key considerations

- Incorporate designs that complement and emphasise the customs house
- Consider the cultural significance of the area and reflect this in the design of the space
- Avoid over-cluttering the space - allow it to be used flexibly for different activities
- Utilise high quality Saudi materials
- Introduce planting to increase shade
- Upgrade surfacing and street furniture to be high quality, using a consistent palette of materials
- Improve the junction of King Abdul Aziz and Al Musassasah to unify the space



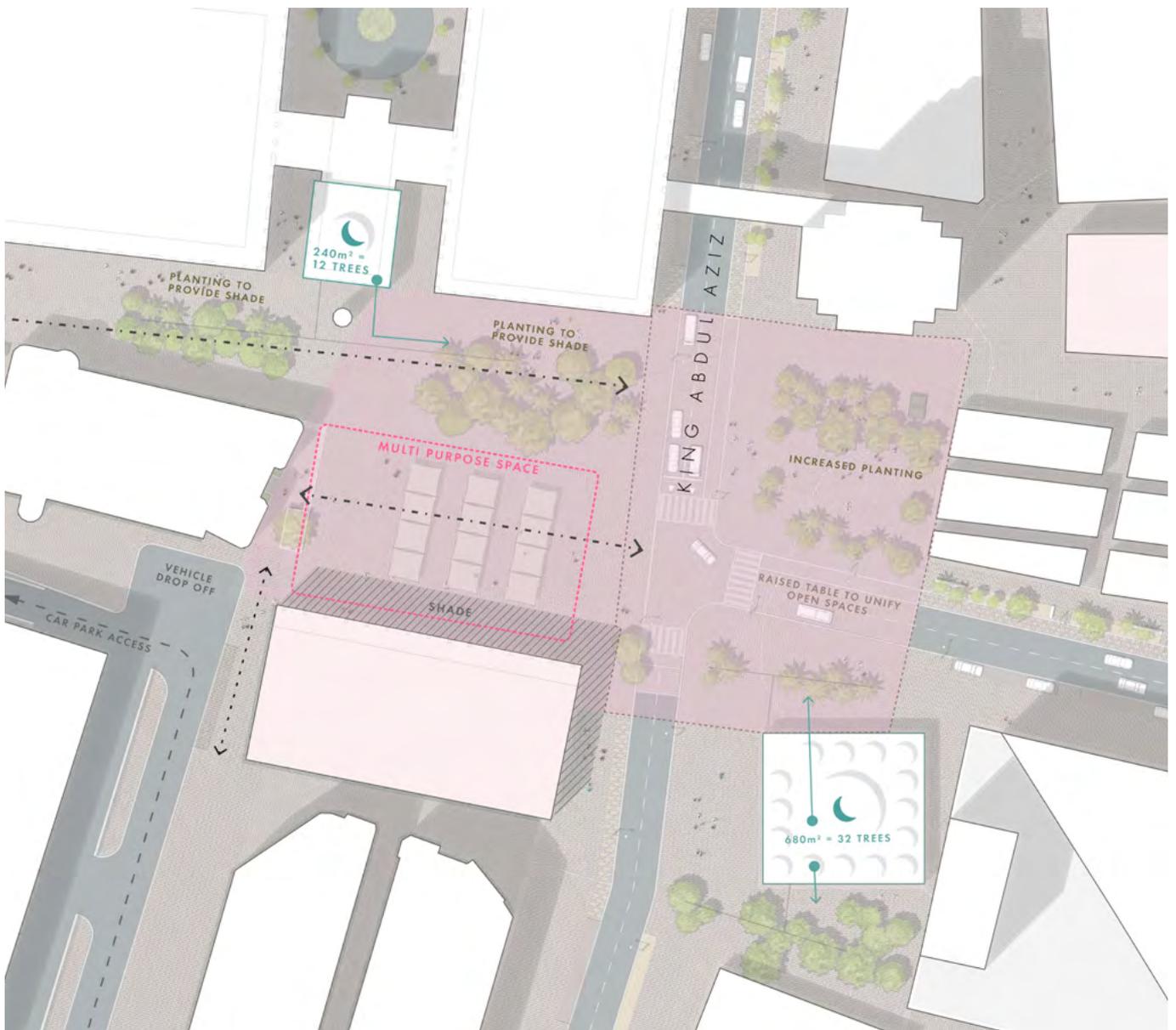
Historic photograph showing view towards the eastern facade of the customs house building



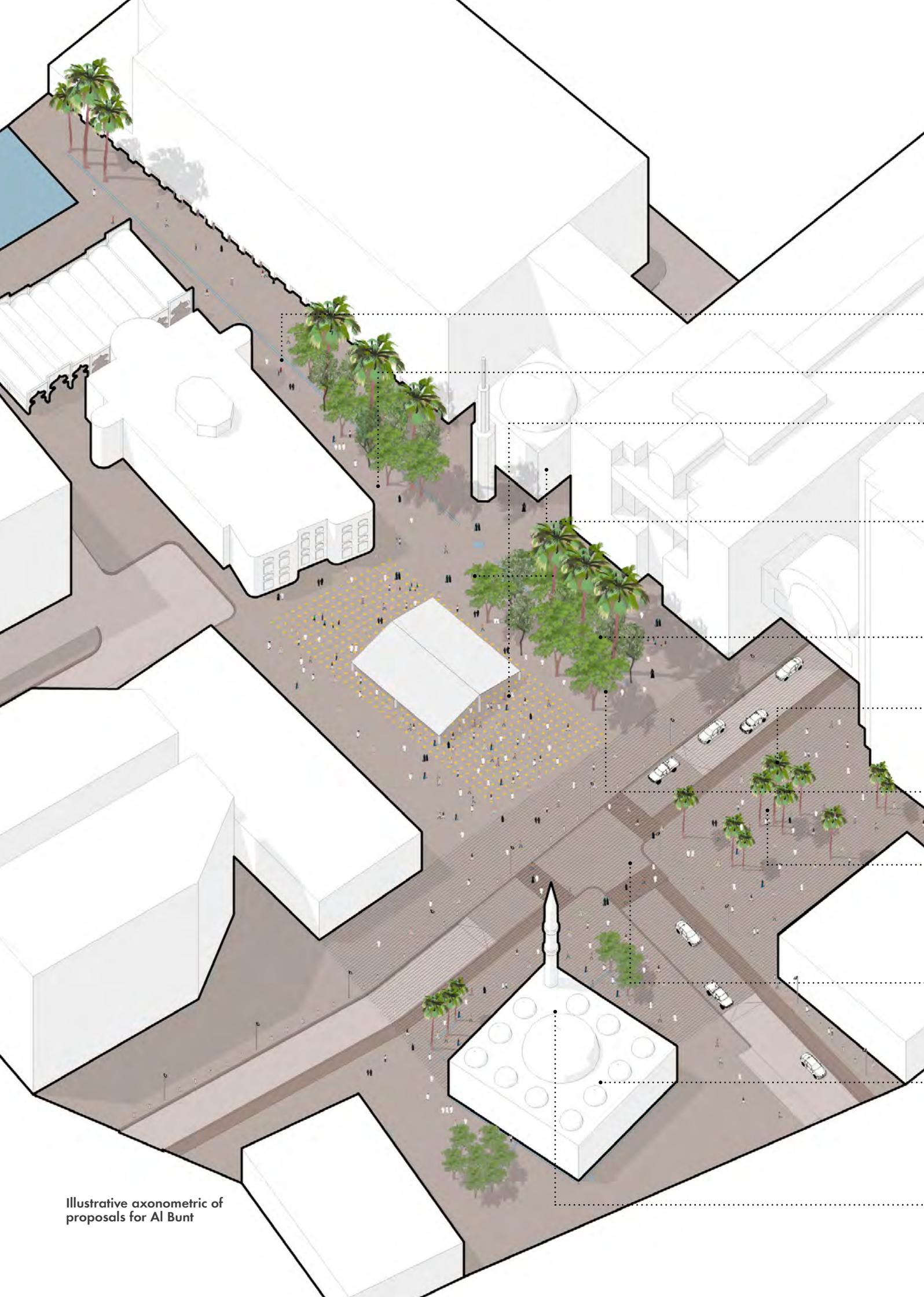
Existing condition with poor quality architecture in front of the customs house building



CGI showing proposal to bring the water edge back to the front of the customs house building



Illustrative plan of Barahat Al Bunt with key considerations for the space



Illustrative axonometric of proposals for Al Bunt

AL BUNT



Paving

Potential for water rill to connect with the lagoon waterfront and draw pedestrians through the barahat. This could also help to improve the microclimate

The field paving condition in Al Bunt should be consistent throughout to unify the space. Materials could be basalt or other high quality Saudi materials

The central area of the barahat should have special paving inserts woven into the field condition to highlight a central multi-use space



Irrigation

Greywater from the Almahmal mosque should be captured, stored and used to irrigate planting within the space



Planting

Planting should be incorporated into the northern side of the space to increase shade and walkability. This planting could potentially be formed of a range of species to reflect the arrival of people from many different cultures to Al Bunt

Potential to improve planting in front of the Al Ahli Bank to provide better shade



Street furniture

Seating and drinking fountains should be provided in shaded places beneath planting in the space

Potential to improve de-clutter the space in front of Al Ahli Bank and provide quality seating that is configured for social interaction



Transport and Streetscape

Proposed three-arm controlled crossing with paved raised table. This junction should seek to unify different spaces across King Abdul Aziz street



Irrigation

Greywater from the Masjid Yousuf Mohammed Naghi mosque should be captured, stored and used to irrigate planting within the space



Lighting

Potential to improve architectural lighting for the Masjid Yousuf Mohammed Naghi mosque



4.3 DISTRICT BARAHA

District Barahat are those which are significant to their respective urban districts. District Barahat are layered spaces with a variety of uses. They can accommodate large groups but should not feel empty on quiet days.

District Barahat are major public spaces which are the focus of an urban district. At their heart should be an area of general use which can host markets, events, or installations. These areas should be shaded, where possible.

The central space should be framed by smaller, shaded, secondary spaces which could have activities such as play areas, gardens, dining areas, or outdoor cinemas. The secondary uses should be framed by seatwalls or low steps for seating.



Scale
• 2,000 - 5,000 m²



Activities

- Multiple spaces with symbiotic uses
- Shaded seating areas framing central space
- Seating outside cafes and restaurants
- Festival/event overlay



Materials

- Field: Basalt, sandstone or feature paving
- Edge: 300x900 basalt or matching to adjacent typologies
- Special: varies by space



Lighting

- Colour: 3500k
- Illuminance: 4-9 lux
- Mounting: 4-8 metres
- Other lighting: selective tree uplighting, ability to incorporate festive lighting, architectural lighting



Vegetation

- Trees: Central space - predominantly large shade trees (Neem) or Palm (Washingtonia) with clear height of 4-6 metres.
- Trees: Secondary space - large and medium height canopy trees
- Planting: Simple, mass planting mixed with aggregate. Low water use.
- Character: Informal
- Irrigation: Treated sewage effluent network if possible. If not TSE is available, water should be used sparingly and harvested from nearby mosques, cisterns or air conditioning.



Play

- Equipped play area for ages 0-5 - approx 250m²
- Activity area for ages 6-12 approx 100m²
- Socle areas for ages 12+ approx 100m²
- Integrated informal play - steps, boulders, etc.



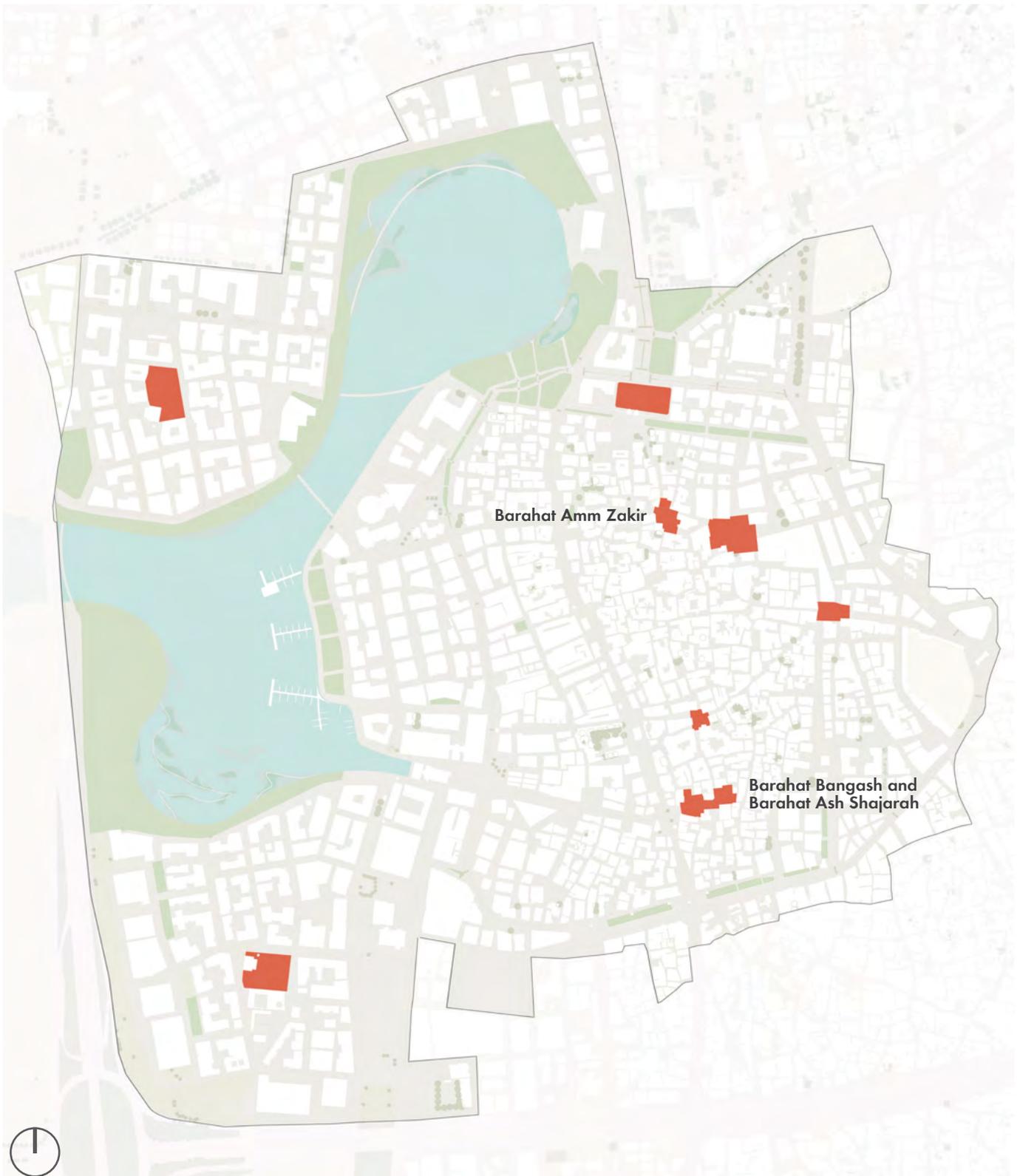
Street furniture and utilities

- Fixed and moveable seating
- Drinking fountains
- Electricity and water supply points for events



Precedent: Place de La Republique, Paris (France)

DISTRICT BARAHA



4.3.1 DISTRICT BARAHA - BARAHAT BANGASH AND BARAHAT ASH SHAJARAH

Character and function

Barahat Bangash and Barahat Ash Shajarah are baraha located just east of Al Dahab Street, in the middle of the Haret El-Yemen historical city quarter. Both baraha are located just outside the Nominated Property boundary and are bounded by historic buildings. Barahat Bangash is documented historically – taking its name from the house of Bangash – and formerly hosted play activities. The main issues for these spaces are; poor quality paving, lack of shade and amenity and a degraded building fabric around the edges of both spaces.

Key considerations

- Incorporate designs that are sensitive to the historic fabric and the nearby Nominated Property boundary
- Consider both baraha in conjunction and reinforce the space as a key confluence of different routes
- Create designs that are flexible, multi-use and that consider the needs residents and workers in the district
- Use planting to reinforce east-west links through the space and to shade different activities
- Define sub-spaces where buildings once stood and use these areas for programmed activities or play
- Utilise a limited palette of materials with different sizes and finishes to unify both spaces
- Utilise high quality Saudi materials - basalt, sandstone or other high quality materials
- Relocate existing parking in the baraha and restrict private vehicle access
- Integrate fixed and moveable seating, drinking fountains and bins into the space
- Remove redundant street clutter and rationalise utilities wherever possible



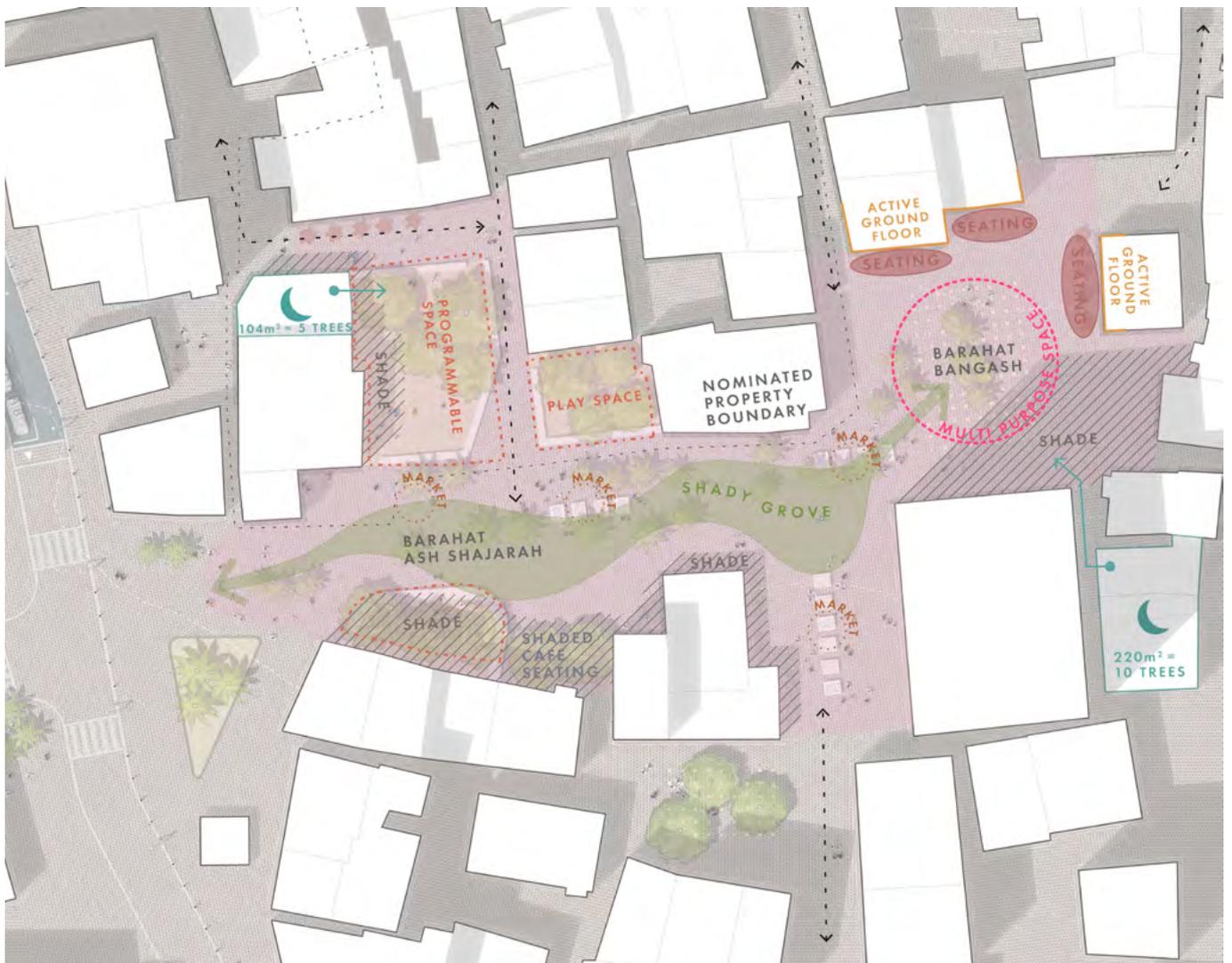
View north from Barahat Ash Shajarah. The building fabric needs major restorations and makes the edges of the space unwelcoming



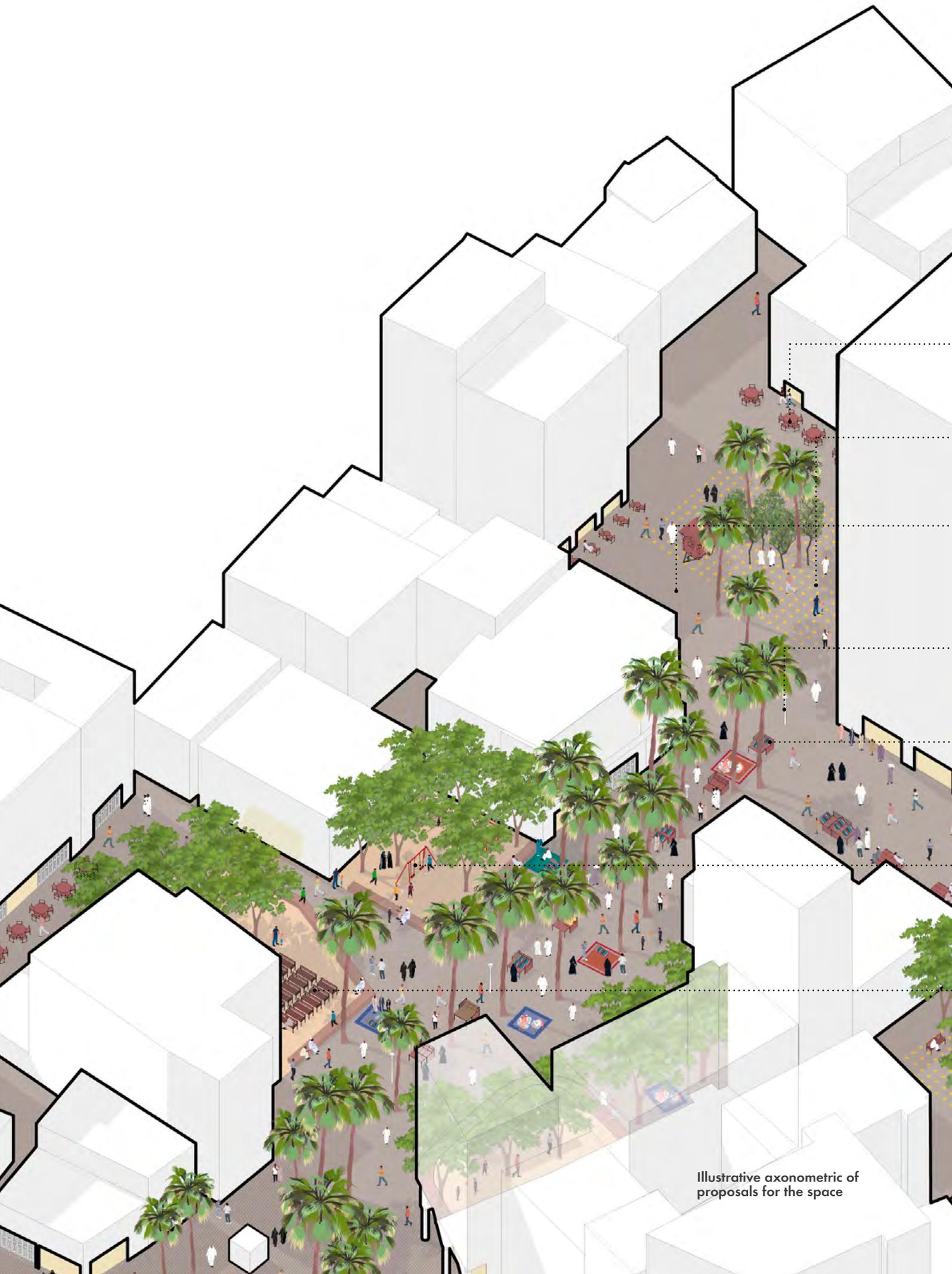
View of Barahat Bangash. The barahat is currently cluttered by utilities and bollards and is currently used for car parking



Existing neem trees in Barahat Ash Shajarah provide valuable shade and a place for socialising



Illustrative plan with key considerations for Barahat Bangash, Barahat Ash Shajarah and surrounding spaces



Illustrative axonometric of proposals for the space

BARAHAT BANGASH AND BARAHAT ASH SHAJARAH



Street furniture

Chairs and tables could be provided around the open space to support active ground floor uses

Paving

Special paving inserts should be used to demarcate a zone for programmed activity

The paving field condition should be consistent with adjacent zuqaqs. In certain spaces, the field condition could vary in size or texture to denote different areas

Lighting

Street lighting columns should be interspersed between planting to enable use of the space at night

Street furniture

Market stalls could be integrated into the space to animate it throughout the day and night

Activities and Play

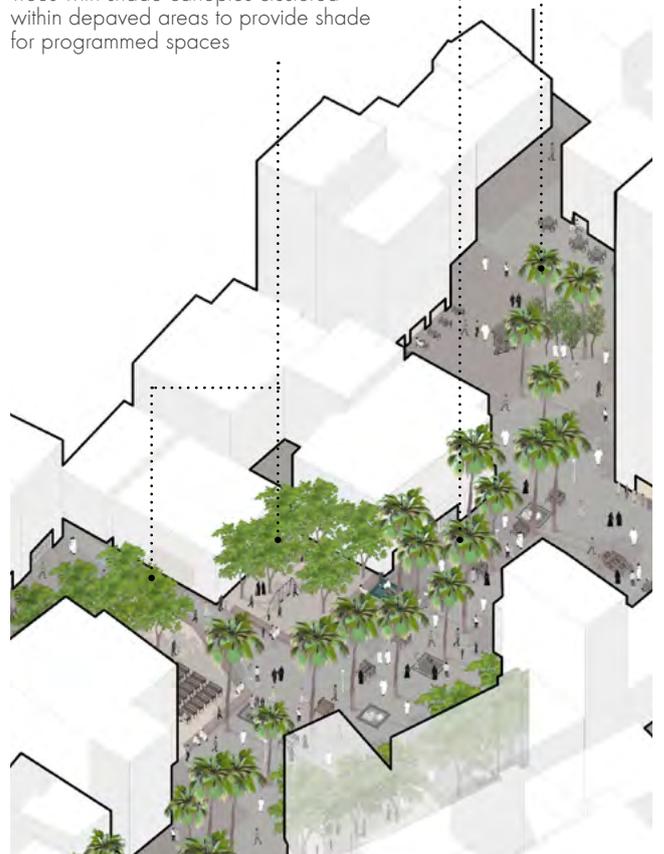
Proposed depaved area to mark where a building once stood. This could be used for play or other programmed activities and should be shaded

Planting

Existing trees should be retained with new shade trees clustered around them

Proposed palm trees to provide shade along the main routes through the barahat

Trees with shade canopies clustered within depaved areas to provide shade for programmed spaces





Illustrative view of proposals
for the space



4.3.2 DISTRICT BARAHA - BARAHAT AMM ZAKIR

Character and function

Barahat Abu Inabah is a relatively large barahat in the Haret Al-Sham historical city quarter (northern Al Balad). The barahat is located within the Nominated Property Boundary and is surrounded by exceptional historic buildings and a diverse mix of uses – including a mosque, workshops, houses and offices. Its locations at the confluence of many routes makes the barahat an important gathering place.

The space itself hosts many activities such as socialising, play, festivals and events. It is able to do this, in part, because of the large cluster of neem trees at its centre.

Key considerations

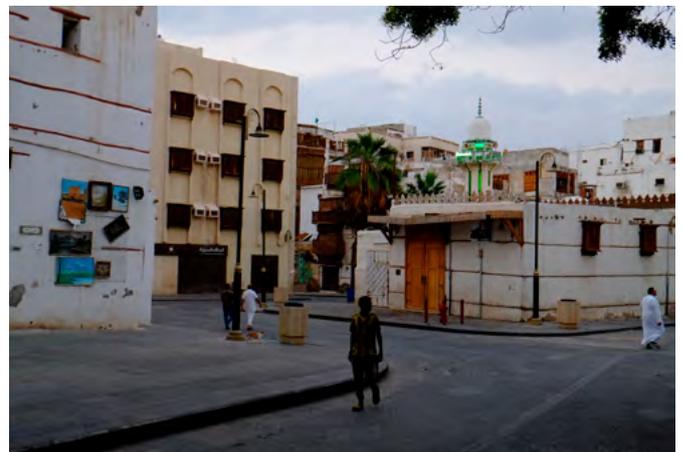
- Incorporate designs that are sensitive to the heritage context
- Make designs that are simple, high-quality and that compliment existing characteristics of the space
- Improve the quality and provision of seating, lighting, bins and other amenities within the space while allowing flexibility for events and community activities
- Remove unnecessary kerb upstands and resolve levels to increase accessibility
- Increase planting to improve microclimate and shade, utilising greywater from the Abuenaaba mosque and surface water runoff
- Demarcate sub-spaces that can be used for programmed activities and play for different ages and genders



Neem trees at the centre of the barahat create a brilliant space for gathering and community activities



Play equipment in space is sometimes privately owned and not suitable for all ages and genders. Levels around this edge are also poorly resolved and uneven



The barahat could be divided into further sub-spaces with programmed activities. Kerbs and vehicle movement should also be removed from the space



Functional plan with key considerations for Barahat Amm Zakir and surrounding spaces



Illustrative axonometric of proposals for the space

BARAHAT AMM ZAKIR



Accessibility

Designs should rationalise steps to enable level access to the central space within the barahat

Paving

Potential special paving inserts to demarcate planting

Planting

New palm trees could be clustered around the existing palm on the southern edge of the space. The placement of planting should ensure potential vehicle access is not obstructed

Lighting

Lighting in the open space should be subtle and intimate to enable the space to be used at night

Utilities

Designs should consider water and power supply to enable the barahat to host events

Furniture

Designs should improve the quality and provision of seating, lighting, bins and other amenities within the space while allowing flexibility for events and community activities

Paving

Field condition should be unified across the space and designed for anticipated vehicle access overrun

Proposed special paving inserts could be used to demarcate a sub-space within the barahat

Planting

Potential to increase tree planting by the Alrashaida building to increase shade and improve microclimate

Proposed trees and planting in front of the Abuenaba Mosque to provide a shaded, garden-like space for people to dwell and socialise

Irrigation

Greywater from the Abuenaba Mosque should be captured, stored and utilised to irrigate new planting



Illustrative view of proposals for
the Barahat Amm Zakir



4.4 LOCAL BARAHA

Local Baraha are medium sized spaces in areas which are have predominantly commercial land uses. Local Baraha should have a symbiotic relationship with the adjacent ground floor uses including outdoor seating or pitches for market stalls or food carts.

Planting should be primarily for shade. Shaded areas should be used for seating in the form of either benches or cafe tables and chairs. Herbaceous and perennial planting should relate to the history of the place where possible - for example planting jasmine where perfume was sold or planting Schinus molle - Pepper Tree where spices were sold.

Feature paving can be used to provide additional identity. Feature paving is to be used to highlight a special moment or area within a larger space. Refer to section 5.1 for guidelines on feature paving.

M² **Scale**
 • 500 - 2,000 m²

Activities

- Shaded seating area
- Encourage outdoor seating outside cafes and restaurants
- Pitches for market stall or food cart
- Small installations during festivals or events

Materials

- Field: Basalt - size and finish varies by space
- Edge: 300x900 basalt or matching to adjacent typologies
- Special: varies by space

Lighting

- Colour: 3500k
- Illuminance: 4-9 lux
- Mounting: 4-8 metres
- Other lighting: ability to incorporate festive lighting

Vegetation

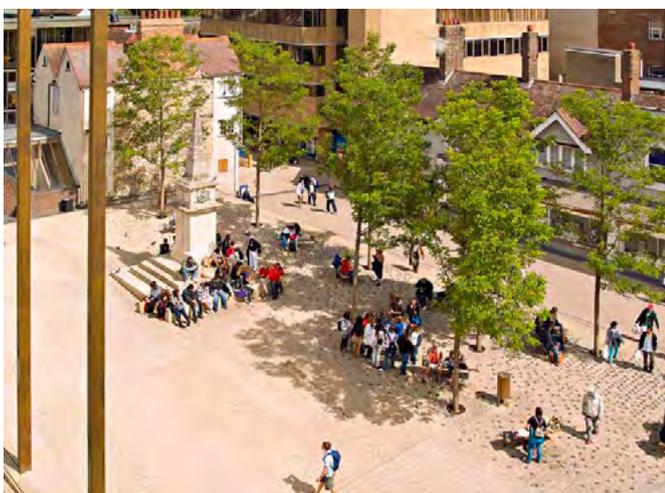
- Trees: Large shade trees with clear height of 4-6 metres.
- Planting: Simple, mass planting mixed with aggregate. Low water use with a particular focus on species with strong scent e.g.. jasmine. Where possible species should have a direct relationship with the heritage of a space e.g.. perfume, herbs, spices, etc.
- Character: Informal
- Irrigation: Water should be used sparingly and harvested from nearby mosques, cisterns or air conditioning.,

Play

- No formal play requirement

Street furniture and utilities

- Fixed and moveable seating
- Drinking fountains
- Electricity and water supply points for events



Precedent: Bonn Square, Oxford (UK)

LOCAL BARAHA



4.4.1 LOCAL BARAHA - BARAHAT AL FAHM

Character and function

Barahat Al-Fahm, located just south from Souq Bab Mekkah, is an exceptional space. Along its edge the barahat has shops selling spices, pulses and grains. Pigeons gather at the centre, occasionally fed grains by the shop patrons or passers by. Meanwhile on the opposite edge, people sip tea in the shade and watch this everyday theatre unfold.

Although everyday life in wonderful to watch in this space, the public realm could be greatly improved. Issues such as unclean paving, rubbish and refuse/cardboard boxes and lack of seating could be addressed without designing out the special qualities of this space.

Key considerations

- Make designs that support and compliment the existing life and function of the space
- Improve the quality and provision of seating, lighting, bins and other amenities within the space while respecting existing functions
- Remove unnecessary kerb upstands and resolve levels to increase accessibility
- Incorporate bollards (or similar) in place of the temporary concrete roadblocks
- Create a place for refuse that does not block pedestrian movement
- Consider a cleaning regime to regularly clean paving within the space



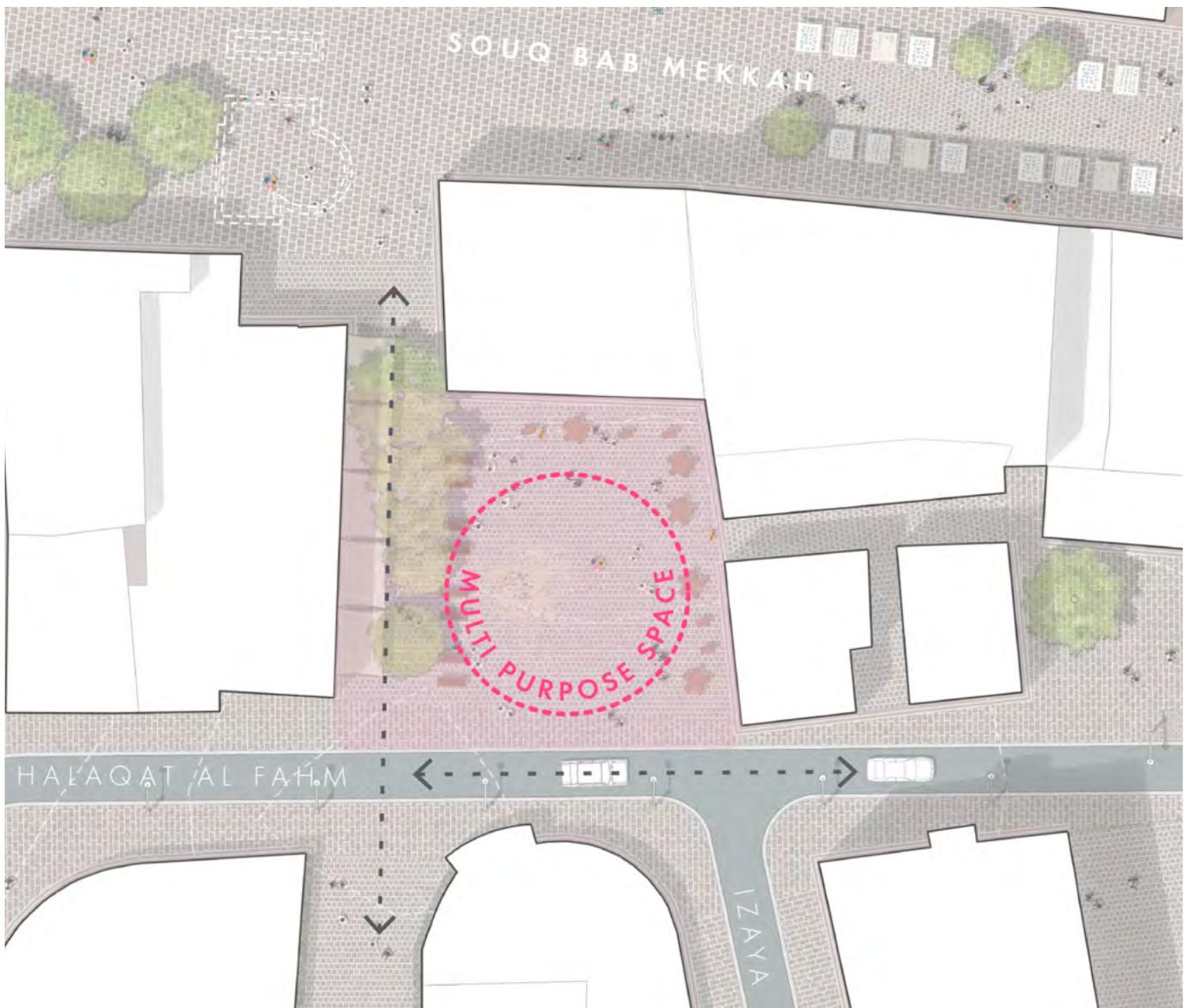
Spices, pulses and grains are stacked under trees on the western edge of the barahat



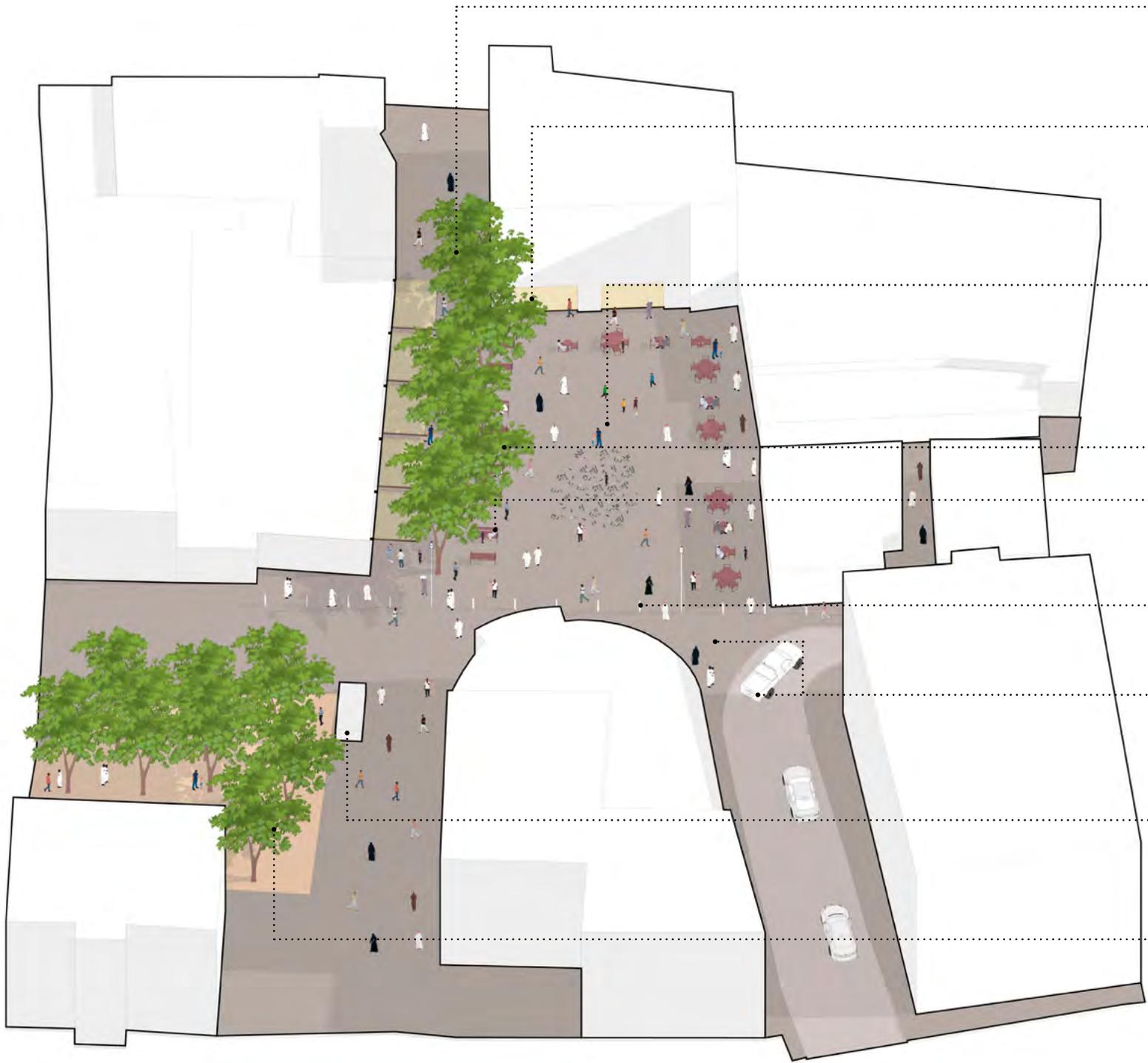
Temporary road blocks, commercial bins and parked cars make an unwelcoming southern edge to the space



Refuse for cardboard boxes needs to be better managed in the space



Illustrative plan with key considerations for Barahat Al-Fahm and surrounding spaces



Illustrative axonometric of proposals for the space

BARAHAT AL FAHM



Planting

Existing trees should be maintained and protected, with any objects potentially damaging the trees relocated

Utilities

Potential to relocate transformer and create active frontages on the northern edge of the barahat

Paving

Paving in the central portion of the barahat should remain largely the same but should be cleaned as part of a regular maintenance routine

Street furniture

Informal tables and chairs should be encouraged around the space to animate its edges

High quality public seating should be provided on the shaded edge of the barahat

Transport and Streetscape

Bollards should replace temporary concrete roadblocks to increase the permeability of the barahat

Proposed redirection of primary traffic flow. The existing street should be re-paved as a local access street and vehicle access managed

Refuse

Potential bin store location to remove the large amounts of refuse currently in the barahat

Planting

Potential to open up, clear our refuse and enhance planting in the existing garden space

4.5 NEIGHBOURHOOD BARAHA

Neighbourhood Baraha are medium sized spaces in areas which have predominantly residential land uses. Neighbourhood Baraha should be considered as the centre of a community - an outdoor majilis which caters for women and men, young and old. The spaces should have ample, shaded seating (with and without backs), small tables and low lighting. Seating should be arranged in ways to facilitate conversation with enough space for large families.

Play and recreation areas should cater to children and young people ranging in age from 1-18, and for boys and girls. Activity areas should encourage physical play, exercise or sport. Refer to section 2.4 for guidelines on feature play.

Trees planting should be primarily for shading seating and play areas. Planting should be useful for the residents, ideally all plants should be edible (fruit, vegetables, herbs) medicinal or produce flowers which can be cut and brought into the home.

Feature paving can be used to provide additional identity. Feature paving can be used to define seating areas much like a rug would in a room. Refer to section 5.2 for guidelines on feature paving.



Scale

- 500 - 2,000 m²



Activities

- Shaded seating area
- Encourage family and group seating
- Pitches for market stall or food cart
- Small installations during festivals or events



Materials

- Field: Basalt - size and finish varies by space
- Edge: 300x900 basalt or matching to adjacent typologies
- Special: varies by space



Lighting

- Colour: 3500k
- Illuminance: 4-9 lux
- Mounting: 4-8 metres
- Other lighting: ability to incorporate festive lighting



Vegetation

- Trees: Large shade trees with clear height of 4-6 metres.
- Planting: Simple, mass planting mixed with aggregate. Low water use with a particular focus on edible, herbs or medicinal planting
- Irrigation: Water should be used sparingly and harvested from nearby mosques, cisterns or air conditioning.



Play

- Equipped play area for ages 0-5 - approx 250 m²
- Activity area for ages 6-12 approx 100 m²
- Social areas for ages 12+ approx 100m²
- Integrated informal play - steps, boulders, etc.



Street furniture and utilities

- Fixed and moveable seating
- Drinking fountains
- Electricity and water supply points for events



Precedent: Banyoles old town public space, Banyoles (Spain)

NEIGHBOURHOOD BARAHA



4.5.1 NEIGHBOURHOOD BARAHA - BARAHAT AL BOSTANIE

Character and function

Barahat Al-Bostanie is a historic barahat located within the Harat Al-Madhloum historic city quarter and within the Nominated Property boundary. The Barahat was named after the house of Sheikh Mohammed Ali Bostany (Al-Sayrafy) which is located on its southern edge. According to historic documentation, the barahat was formerly a playground for children but today, it is dominated by car parking.

The barahat has been considered in conjunction with Barahat Baeshin and an empty building plot.

Key considerations

- Incorporate designs that are sensitive to the heritage context and nominated property designation
- Re-establish the former building grain by demarcating the empty building plot (next to Barahat Al-Bostanie) as a programmed space for activities.
- Provide amenities in the programmed activity space such as shade, seating, lighting, drinking fountains and power supply to allow it to be used for a range of activities
- Remove unnecessary kerb upstands and resolve levels to increase accessibility
- Increase planting to improve microclimate and shade, utilising greywater from nearby mosques and surface water runoff
- Where possible, animate adjacent ground floor building frontages, to ensure the barahat and activity space is overlooked.



Barahat Al-Bostanie is currently dominated by car parking



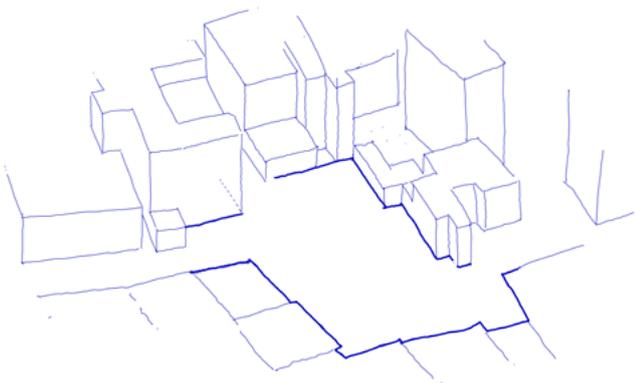
Vacant open space where a historic building once stood



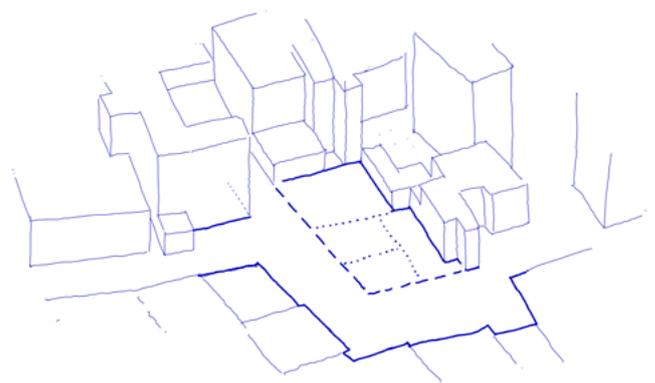
Some building frontages could be improved to better overlook the space



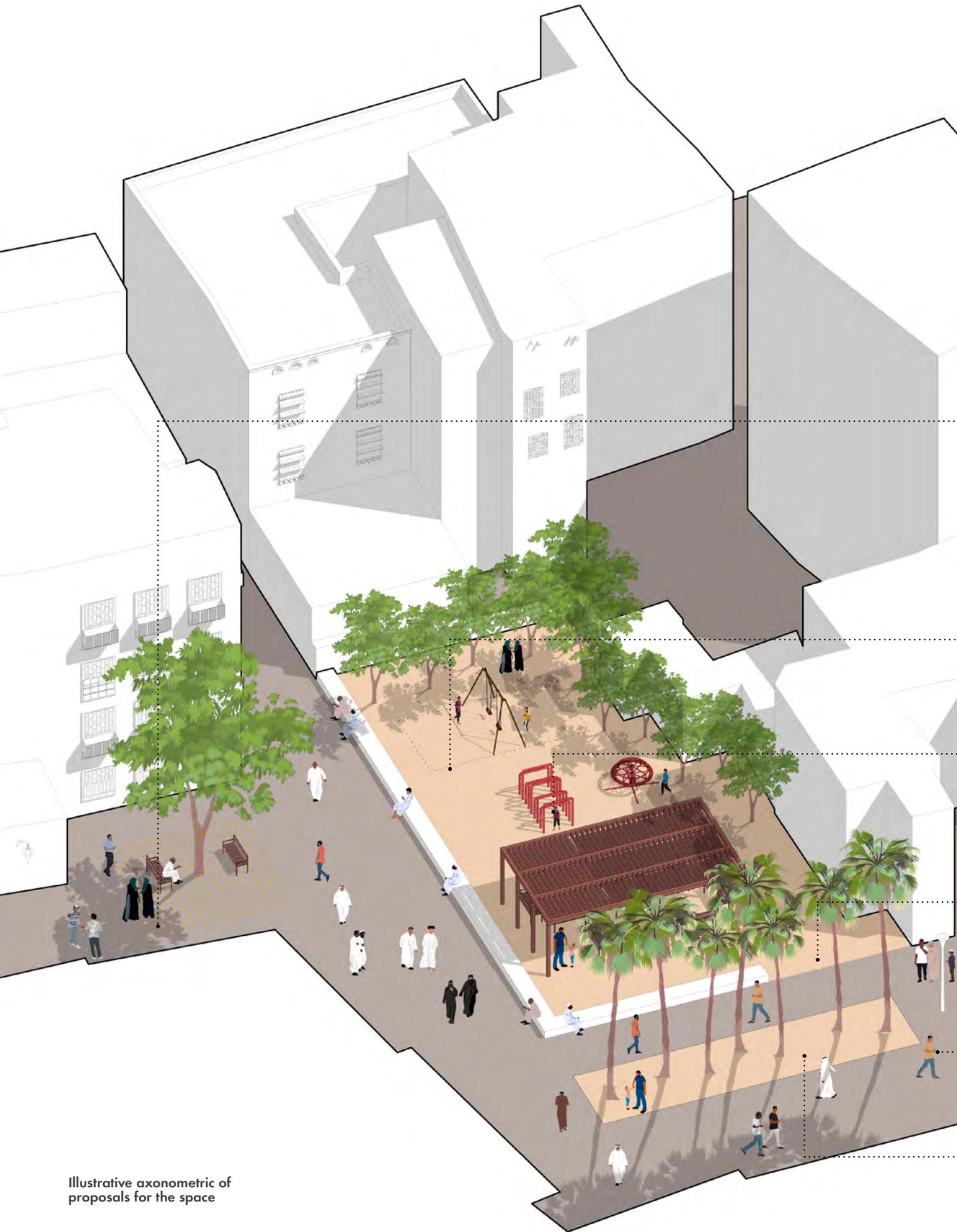
Functional plan with key considerations for Barahat Al-Bostanie, Barahat Baeshin and surrounding spaces



Existing site



Re-establishing the urban grain



Illustrative axonometric of proposals for the space

BARAHAT AL BOSTANIE



Paving

Special paving inserts should be used to demarcate sub-space within the barahat

Street furniture

Street furniture should be located in shaded positions and should not obstruct pedestrian movement. Seating should ideally have a bin adjacent

Lighting

The programmed space should be sensitively illuminated to enable to space to function at night

Activities, Play and Planting

Proposed depaved area to mark where a building once stood. This could be used for play or other programmed activities and should be shaded by trees and planting

Accessibility

The programmed activity zone should be designed to provide level access in at least one location

Paving

Paving should reinforce circulation routes through the barahat and should tie into adjacent zuqaq paving types

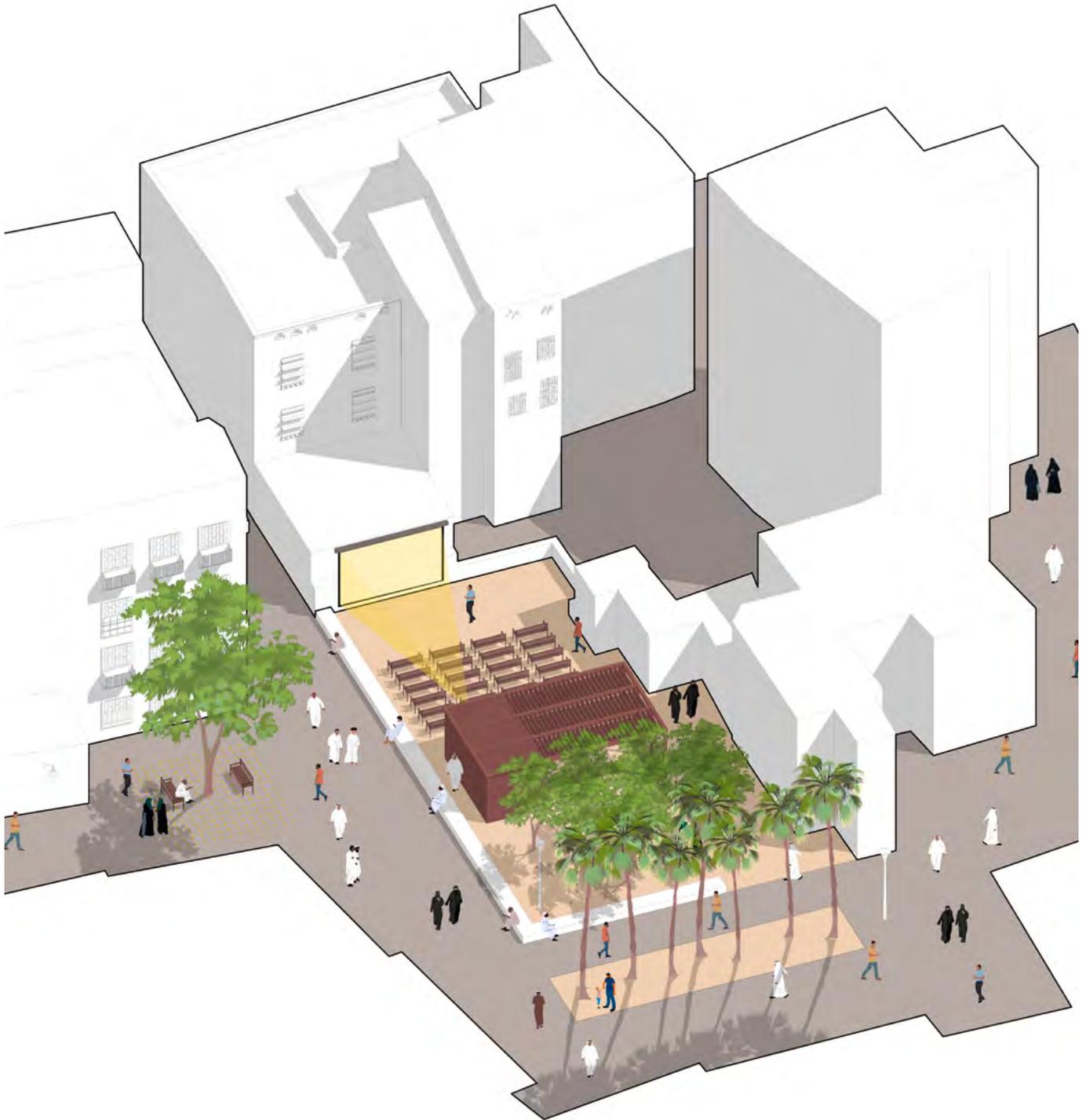
Microclimate and planting

Proposed depaved area and planting should be distinct from the central programmed space within the barahat. This planting should provide shade for pedestrians moving through the barahat



Square design that demarcates the location of a former building and highlights historic walls through surface design. Valensio Square, Lyon (France)

4.5.2 NEIGHBOURHOOD BARAHA - BARAHAT BAESHIN AND AL BOSTANIE



Cinema configuration

Potential to use blank walls surrounding the space as a projection surface

Illustrative axonometric of proposals for the space



 **Community garden**

Potential to use treated greywater from the nearby Al-Shafei Mosque to irrigate community gardens and other planting

Illustrative axonometric of proposals for the space

4.6 LOCAL HOUSH

Local housh are small sized spaces in areas which are have predominantly commercial land uses. Local housh should have a symbiotic relationship with the adjacent ground floor uses including outdoor seating or pitches for market stalls or food carts.

Planting should be primarily for shade. Shaded areas should be used for seating in the form of either benches or cafe tables and chairs.

Feature paving can be used to provide additional identity. Feature paving is to be used to highlight a special moment or area within a larger space. Refer to section 5.1 for guidelines on feature paving.

M² **Scale**
• > 500m²

Activities
• Shaded seating area
• Encourage family and group seating

Materials
• Field: Basalt - size and finish varies by space
• Edge: 300x900 basalt or matching to adjacent typologies
• Special: varies by space - typically under trees to highlight sub-space

Lighting
• Colour: 3000k
• Illuminance: 3-7 lux
• Mounting: 0-6 metres
• Other lighting: Low level lighting by seating

Vegetation
• Trees: Large shade trees with clear height of 4-6 metres.
• Planting: Minimal understorey planting
• Irrigation: Water should be used sparingly and harvested from nearby mosques, cisterns or air conditioning.,

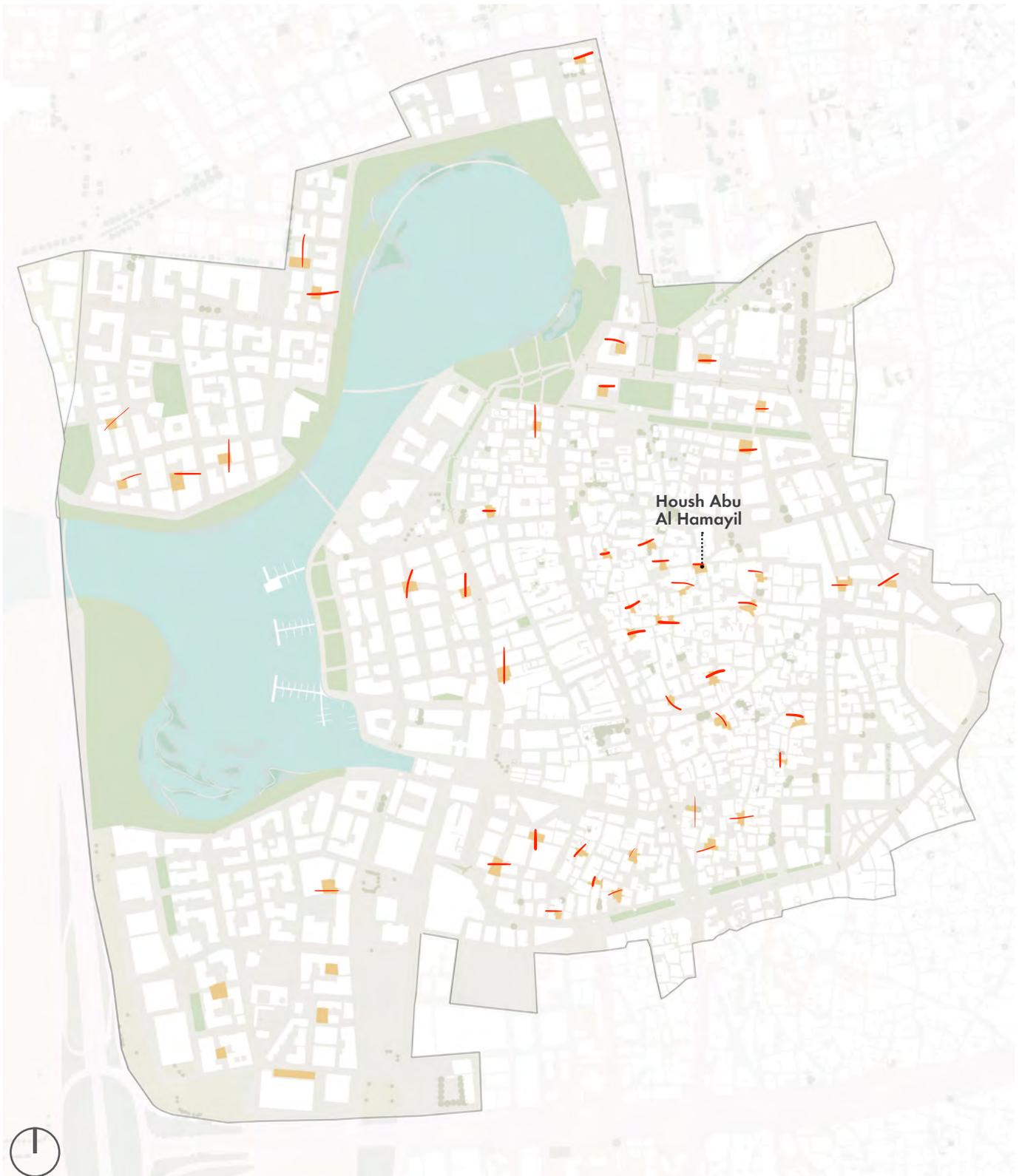
Play
• No specific play requirement

Street furniture and utilities
• Fixed and moveable seating
• Drinking fountains
• Electricity and water supply points for events



Precedent: Intabli Fountain Square, Beirut (Lebanon)

LOCAL HOUSH



4.6.1 LOCAL HOUSH - HOUSH ABU AL HAMAYIL

Character and function

Housh Abu Al Hamayil is a small space within the Harat Al-Madhloom historic city quarter and within the Nominated Property boundary. The housh is surrounded by ground floor commercial activities and some historic buildings.

Key considerations

- Incorporate designs that are sensitive to the heritage context and nominated property designation
- Make the housh a distinct place through small interventions e.g. planting, feature paving or bespoke street furniture (see opposite).
- Where possible, provide planting by using mosque greywater or surface water runoff
- Remove unnecessary kerb upstands and resolve levels to increase accessibility
- Where possible, animate adjacent ground floor building frontages, to ensure the housh is overlooked
- Rationalise and remove redundant utilities



Photo showing inactive frontages, utility boxes and kerb upstands currently around the edge of the housh



Illustrative plan with key considerations for Housh Abu Al Hamayil

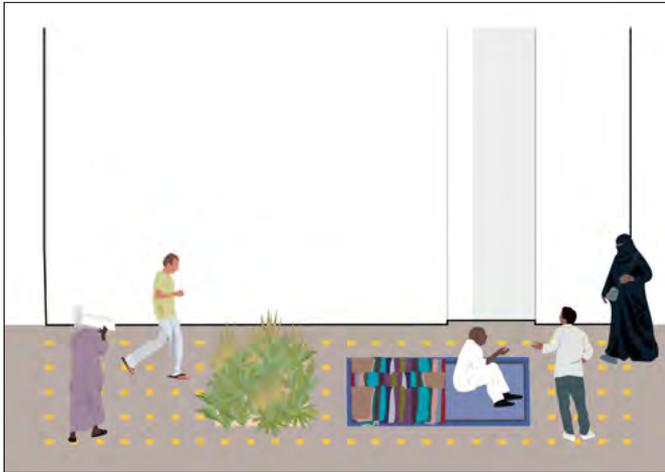
POTENTIAL PUBLIC REALM ELEMENTS



Depaved area, rocks and planting



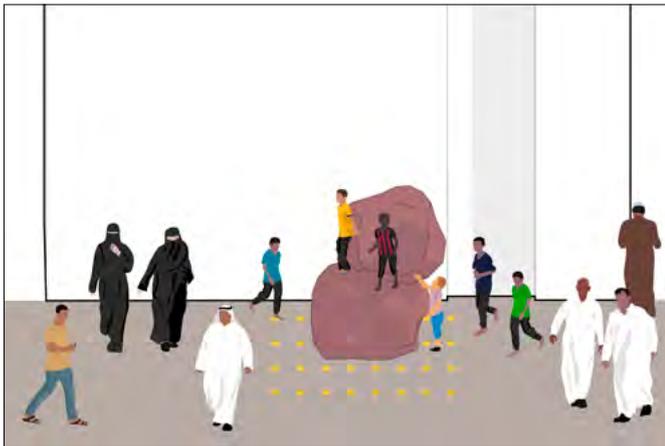
Fire pit and communal seating



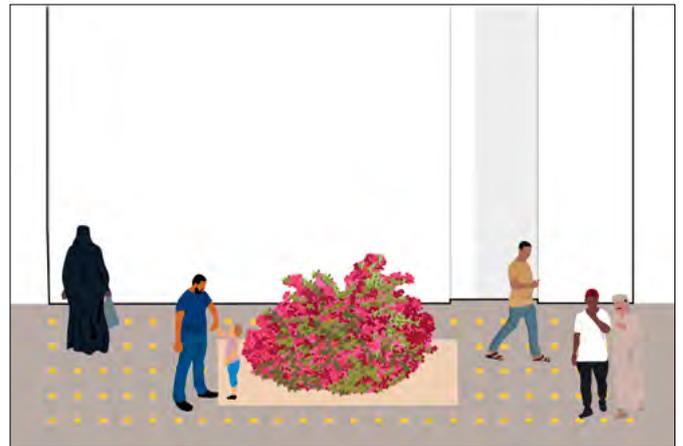
Feature paving and planting to mark a space for a market stall



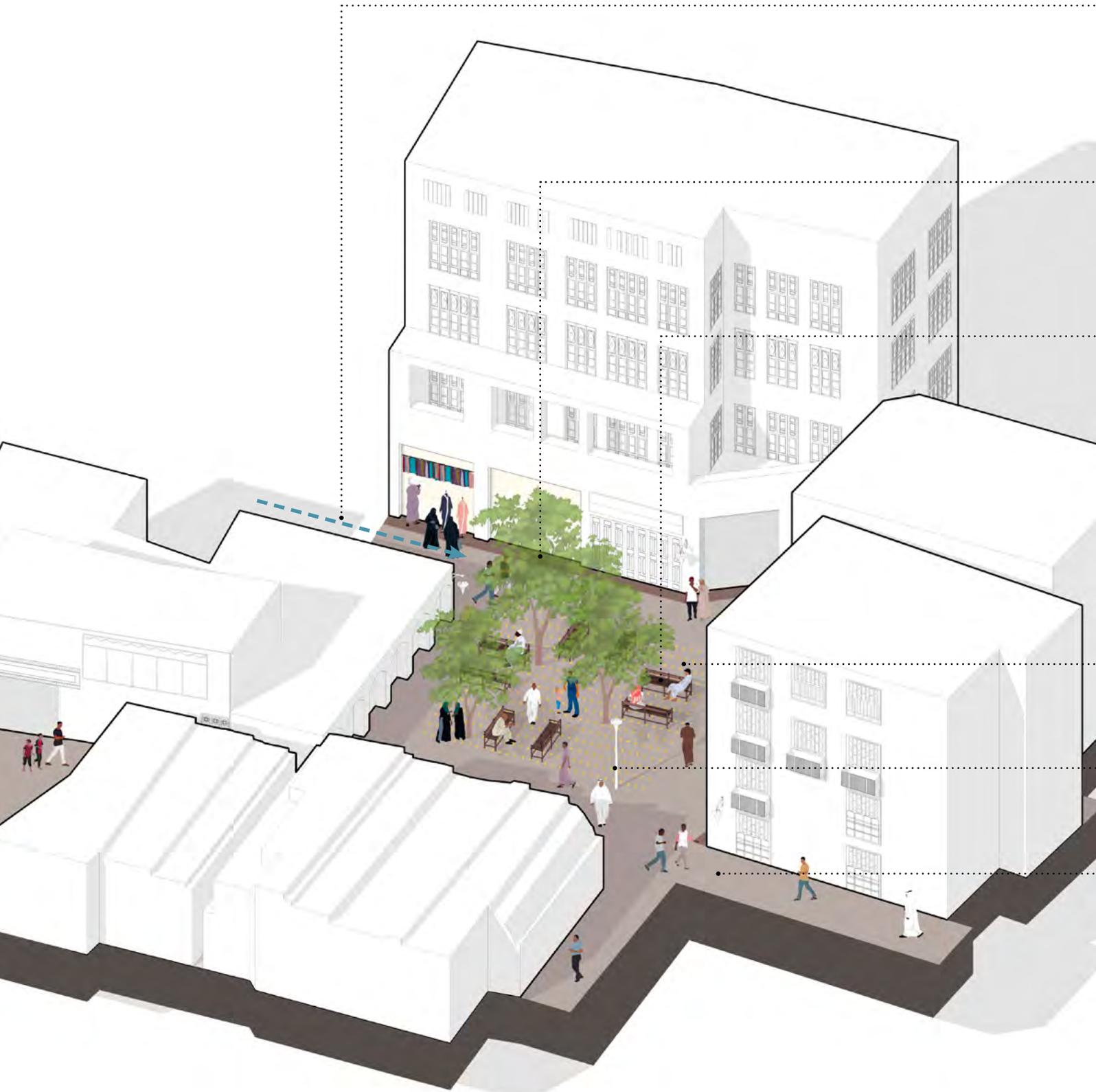
Feature paving and planting to mark a space for socialising



Feature paving and artwork



Distinctive planting or shrubs



Illustrative axonometric of proposals for the space

HOUSH ABU AL HAMAYIL



Irrigation

Planting should utilise greywater from the nearby Al-Shafi'i Mosque to irrigate planting. A cistern for water storage could be integrated at the centre of the barahat



Planting

Trees should be positioned to provide shade and should assist wayfinding. This central feature could also be a number of features, not just planting (see previous page)



Street furniture

Seating, drinking fountains, bins and other public realm amenities should be located in shaded area. Seating should be informal and ideally arranged in pairs to encourage social interaction

Street furniture should not clutter the space and should enable clear pedestrian movement through the space



Paving

Special paving inserts should be used to demarcate a central zone for planting and street furniture within the barahat



Paving

Lighting columns in conjunction with wall mounted lighting could be used to illuminate the space



Paving

Paving field condition should be consistent with adjacent zuqaqs

4.6.2 LOCAL HOUSH - HOUSH UBAYD

Existing character and function

Housh Ubayd is a small space at the eastern end of Souq Al Jami. It is located in the Nominated Property boundary and is directly next to several historic buildings.

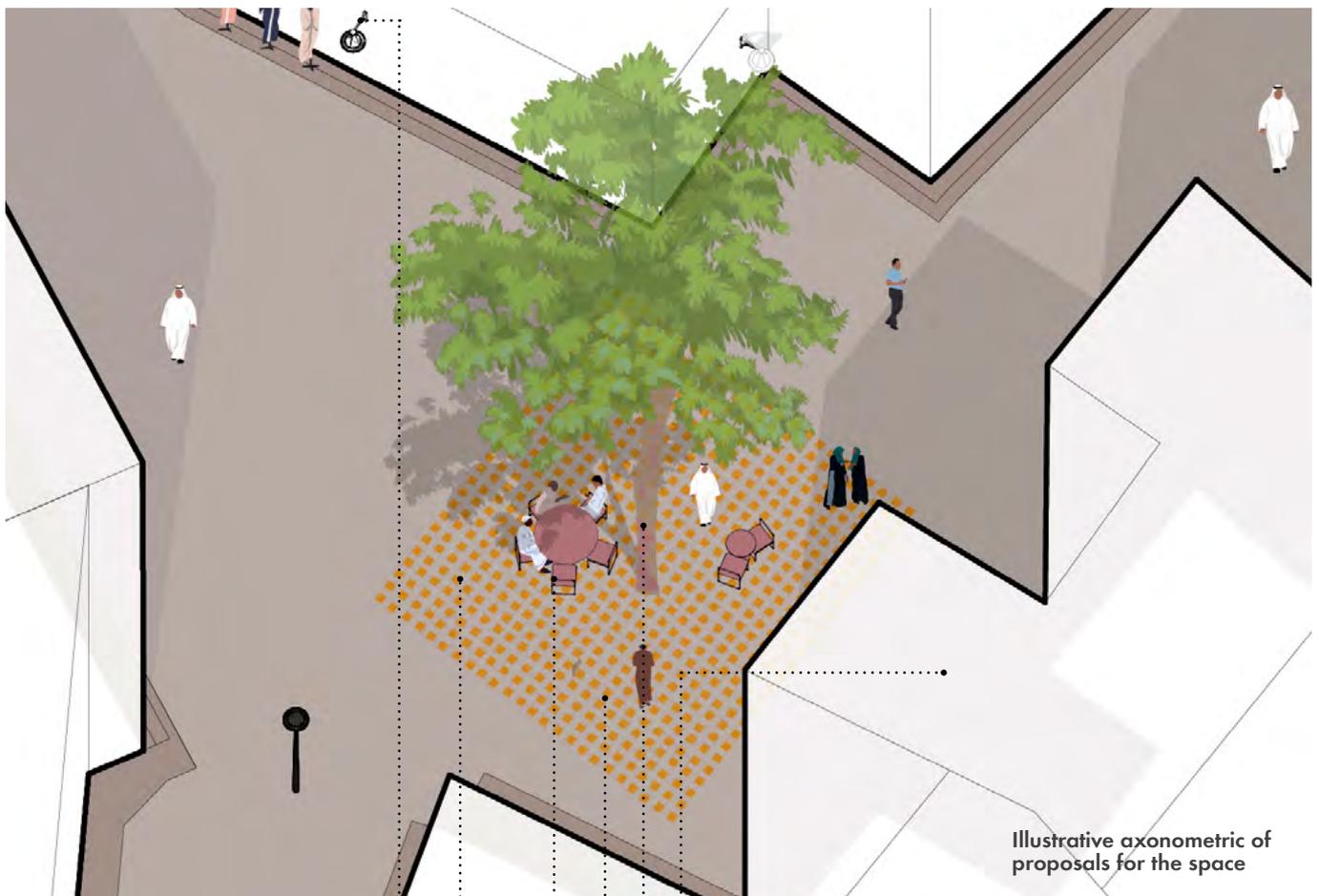
The main issue in this space is street clutter, refuse and lack of active frontage. As a key moment along Souq Al Jami, this space could be a valuable place to meet, socialise and rest.

Key considerations

- Incorporate designs that are sensitive to the historic condition
- Rationalise and relocate street clutter including: bins and refuse, concrete road blocks and utility boxes
- Consider ways to animate blank frontages around the space e.g. a kiosk or market stalls
- Use markers such as feature paving, a specimen tree (or similar) or market stalls to define the housh as a termination point to Souq Al Jami
- Provide shade, high-quality seating and lighting to make the space a place for gathering



Photo showing inactive frontages, overflowing bins, redundant road blocks and a large water cistern (right)



 **Lighting**

Wall mounted lights should be used on Souq Al Jami to minimise obstruction to pedestrian movement

Light columns and low-level lighting could be used in the open space to enable activities at night. Lighting should avoid uplighting or feature lighting

 **Street furniture**

Informal public seating should be provided to create a place for rest and socialising. This seating should support active ground floor uses

 **Refuse**

Refuse currently located in this space should be rationalised and hidden with timber screening or relocated nearby

 **Planting**

A specimen tree (or similar) should be used to define the housh as a termination point to Souq Al Jami. The tree should be positioned to be seen from the adjacent zuqaqs as a wayfinding tool. The tree should also provide shading to the associated seating

 **Paving**

Special paving inserts could be used to define the extents of the housh area

4.7 NEIGHBOURHOOD HOUSH

Neighbourhood housh are mall sized spaces in areas which are have predominantly residential land uses. These spaces should support communities – providing informal spaces for women and men, young and old. The spaces should have shaded seating (with and without backs), a small tables and low lighting. Seating should be arranged in ways to facilitate conversation.

Informal play should be provided to cater to young children such as boulders for climbing. Tree planting should be primarily for shading seating and play areas. Planting should be useful for the residents, ideally all plants should also be edible (fruit, vegetables, herbs), medicinal or flower producing – to be cut and brought into the home.

Feature paving can be used to provide additional identity. Feature paving can be used to define seating areas much like a rug would in a room. Refer to section 5.1 for guidelines on feature paving.

M² **Scale**
• > 500m²

Activities
• Shaded seating area
• Encourage family and group seating

Materials
• Field: Basalt or sand
• Edge: No specific requirements
• Special: to highlight any sub-spaces

Lighting
• Colour: 3000k
• Illuminance: 3-7 lux
• Mounting: 0-6 metres
• Other lighting: low level lighting for seating

Vegetation
• Trees: Large shade trees with clear height of 4-6 metres.
• Planting: Minimal understorey planting
• Irrigation: Water should be used sparingly and harvested from nearby mosques, cisterns or air conditioning.,

Play
• Integrated informal play - steps, boulders, etc.

Street furniture and utilities
• Moveable seating
• Drinking fountains



Precedent: Mosque garden, Msheireb (Doha)

NEIGHBOURHOOD HOUSH



4.7.1 NEIGHBOURHOOD HOUSH - HOUSH HAMBOULI

Existing character and function

Housh Hambouli is a small space at the centre of the nominated property area. The space is currently a loose space without function and a large building ruins next to it.

Key considerations

- Incorporate designs that are sensitive to the heritage context
- Make designs that are simple, high-quality and that compliment existing character of the area
- Demarcate the vacant site as a programmed activity area for informal play
- Increase planting to improve microclimate and shade, utilising surface water runoff from air conditioner drips
- Remove unnecessary kerb upstands and resolve levels to increase accessibility



Existing condition



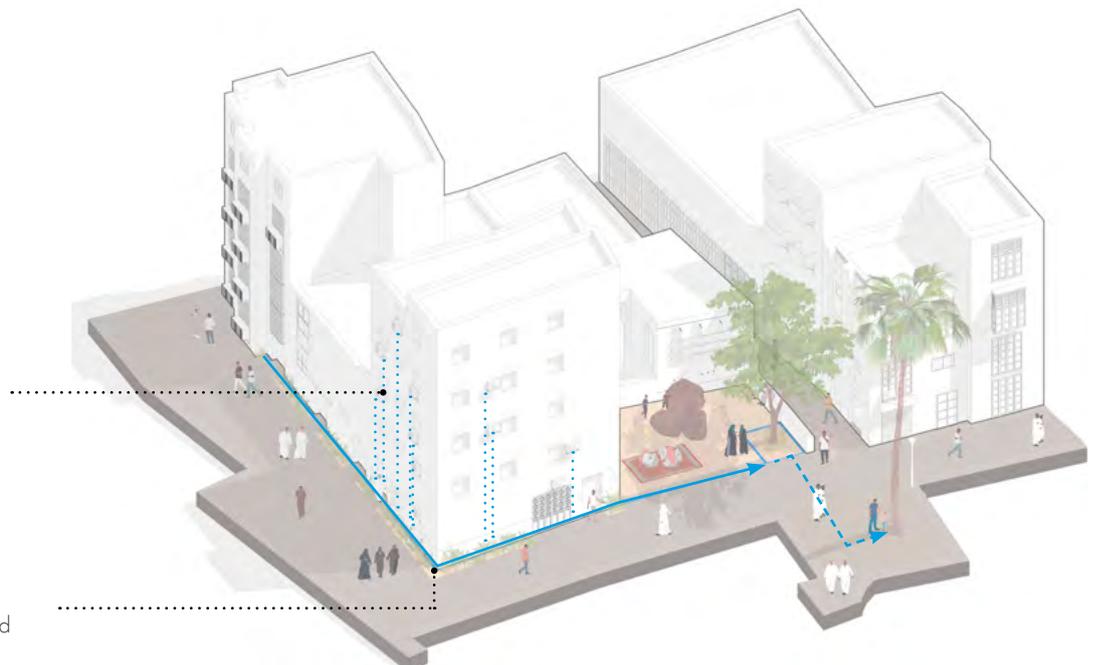
Irrigation

Trees and planting in the space should be irrigated through surface water runoff (air conditioner drips)



Paving

Paving in zuqaqs leading to the housh should incorporate drainage channels to catch and direct water towards planting





 **Play**

Informal play features should be integrated within the space e.g. boulders

 **Paving**

Where appropriate, edges of the zuqaq should be depaved and planted to improve microclimate conditions

The vacant site at the centre of the zuqaq should be depaved and demarcated to formalise an activity zone

Special paving inserts could be used to demarcate a sub-space beneath planting within the zuqaq

 **Planting**

A palm tree (or similar) could be introduced at the junction of Hambouli lane to aid wayfinding and provide shade

A tree or trees should be provided to shade the open space. The species should have low water requirements and should be irrigated by surface water runoff from the surrounding streetscape (see left)

4.8 RECREATION SPACE

Recreation spaces are major open spaces that provide sports, recreation and play facilities for residential communities within an urban district. These spaces should provide equipped play and games areas for a diverse age range and all genders.

Spaces should have ample shade, appropriate lighting for recreation uses and seating should be arranged in ways to facilitate conversation with enough space for large families.

Play and recreation areas should cater to children and young people ranging in age from 1-18, and for boys and girls. Activity areas should encourage physical play, exercise or sport. Refer to section 2.4 for guidelines on feature play.

Trees planting should be primarily for shading seating and play areas. Paving designs should be simple with materials that support different play functions

M² **Scale**
• 500m² - 2300m²

Activities
• Sports, recreation and play for different ages and genders
• Encourage family and group seating

Materials
• Field: Basalt or sand
• Edge: No specific requirements
• Special: to highlight any sub-spaces

Lighting
• Colour: 3000k
• Illuminance: 4-9 lux
• Mounting: 4-8 metres
• Other lighting: High level sports area lighting

Trees
• Trees: Large shade trees with clear height of 4-6 metres.
• Planting: Minimal understorey planting
• Irrigation: Water should be used sparingly and harvested from nearby mosques, cisterns or air conditioning.

Play
• Equipped play area for ages 0-5 - approx 250 m²
• Activity area for ages 6-12 approx 100 m²
• Social areas for ages 12+ approx 100 m²
• Integrated informal play - steps, boulders, etc.
• Typical 1000 m² activity zone approx 250 m²
• Activity area for ages 6-12 approx 100 m²
• Social areas for ages 12+ approx 100 m²
• Integrated informal play - steps, boulders, etc.
• Typical 1000 m² activity zone and play - steps, boulders, etc.

Street furniture and utilities
• Moveable seating
• Drinking fountains



Precedent: Square in Guissona (Spain)

RECREATION SPACE



4.8.1 RECREATION SPACE - BARAHAT ALSHAFIE

Character and function

Barahat Alshafie is located within the Nominated Property boundary. It is near to the Al Shafie Mosque and Souq Al Jami. The space is a sandy vacant site that has been appropriated for sports and play.

Existing palm trees mark the western entrance to the space and these are flanked by Muhammad Saeed Farsi house and Alshafie house. The space currently lacks seating and shade but could be a fantastic space if properly executed.

Key considerations

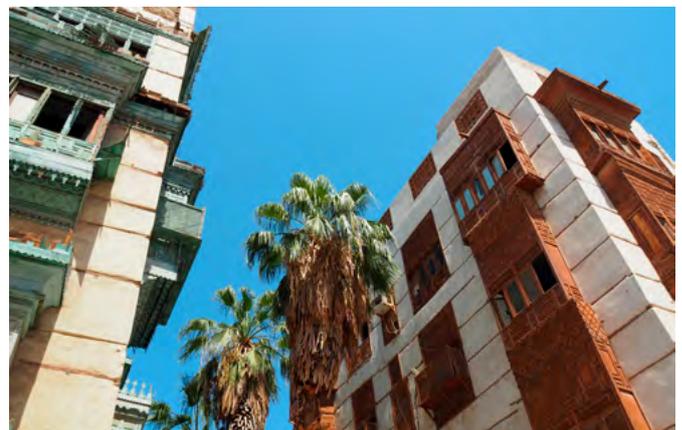
- Incorporate designs that are sensitive to the heritage context and nominated property designation
- Introduce public realm elements such as shade, seating lighting, drinking fountains and play equipment to support play, recreation and events
- Increase planting to improve microclimate and shade, utilising greywater from surface water runoff
- Where possible, animate adjacent ground floor building frontages, to ensure the barahat and activity space is overlooked.
- Use visual markers such as trees to draw people through the space
- Consider introducing a community pavilion or cafe that can have a symbiotic relationship with the play space and that provides toilet facilities



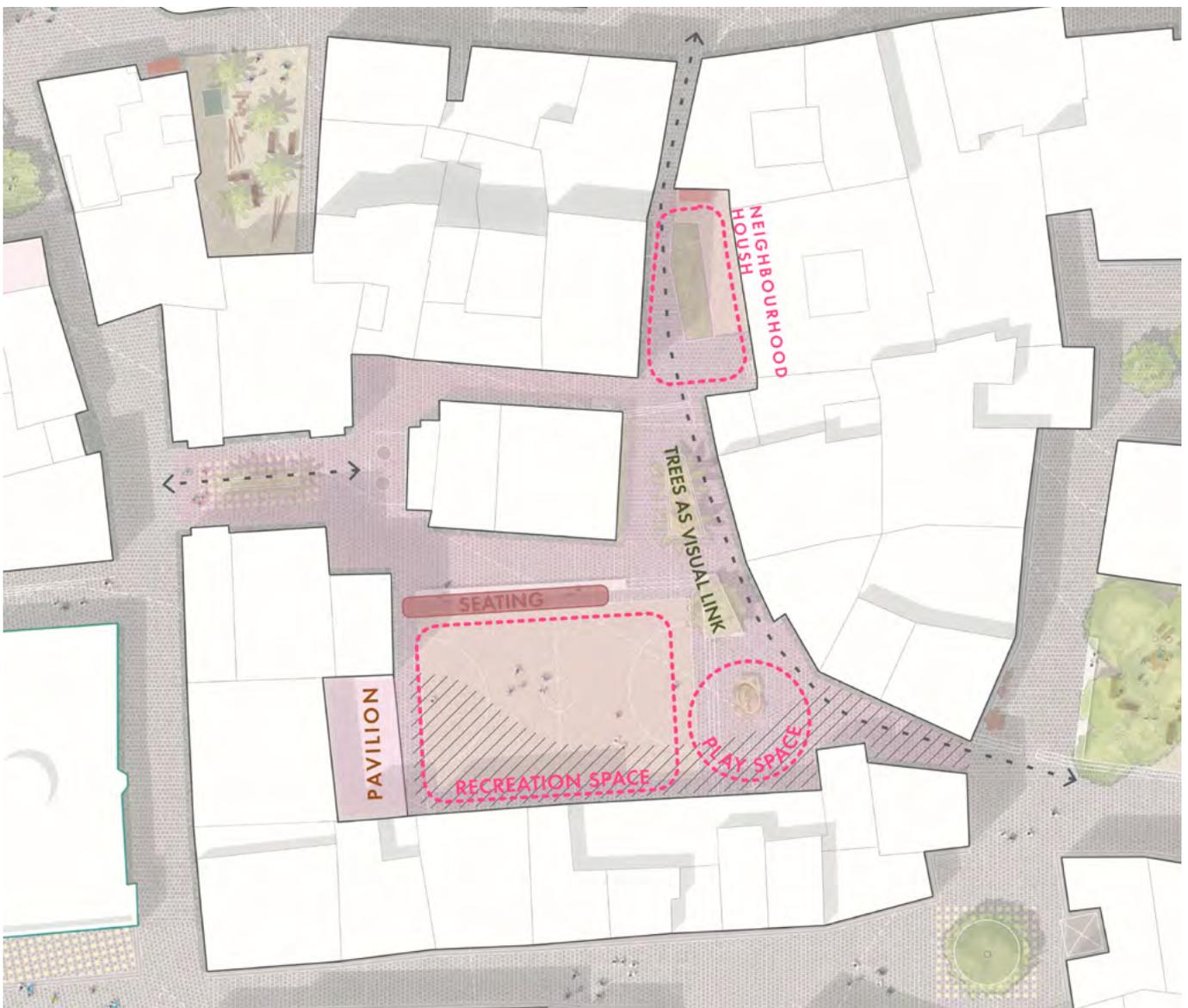
The public realm condition is very poor and is not designed to properly accommodate play and sports activities



Sub-spaces within the barahat could be used for different play activities



Tall palms and Muhammad Saeed Farsi house and Alshafie house mark the western entrance to the space



Functional plan with key considerations for Barahat Alshafie Recreation Space



Illustrative axonometric of proposals for the space

BARAHAT ALSHAFIE



Paving

Designs could enhance the threshold space to Barahat Alshafie by using special paving inserts

The paving field condition within the space should be consistent and interspersed with special paving inserts or depaved areas, where appropriate

Activities

Potential canopy structure, shaded play area or cafe/community building

Planting

Potential palm trees (or similar) to shade neighbourhood housh space and improve microclimate along pedestrian route

Existing palm trees maintained. Designs could aim to improve the tree base with a simple depaved tree pit

Proposed planting to provide shade to the recreation space. The tree species should ideally have low water requirements, using water captured from surface runoff

Potential palm tree (or similar) to compliment existing palm trees, wayfinding and draw people into the space

Play

Proposed secondary play area. Additional play equipment should suit the needs and interests of different ages and genders

Proposed sand area for sports and recreation. The space should be suitably enclosed and could have seating around its edges

Lighting

Designs should ensure the recreation space is well-illuminated to enable the space to function in the evening. Lighting designs should avoid tall columns and floodlights to light the space, instead using dispersed light sources

4.9 GARDENS

Gardens are small planted open spaces that are located in both commercial and residential areas. Gardens should be secluded, shaded spaces that typically have a symbiotic relationship with mosques, using greywater from ablutions for planting irrigation

M² **Scale**
• 100m² - 4000m²



Activities
• Sports, recreation and play for different ages and genders
• Encourage family and group seating



Materials
• Field: Basalt, sand or lawns
• Edge: No specific requirements
• Special: to highlight any sub-spaces



Lighting
• Colour: 3000k
• Illuminance: 3-7 lux
• Mounting: 0-4 metres
• Other lighting: Vertical illumination and low level lighting



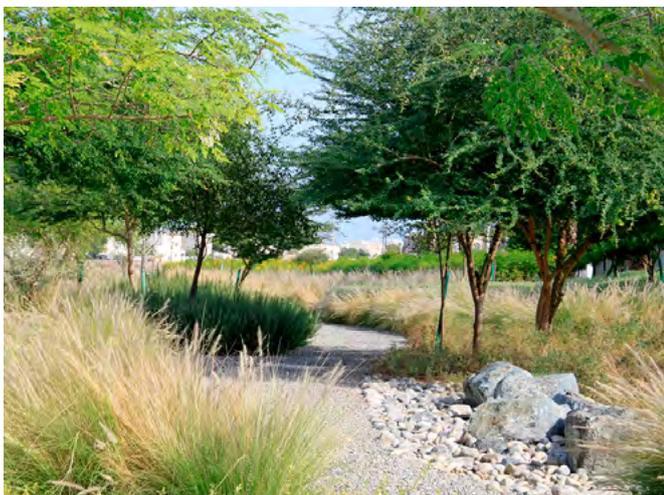
• Trees: Large shade trees with clear height of 4-6 metres.
• Planting: Minimal understorey planting
• Irrigation: Water should be used sparingly and harvested from nearby mosques, cisterns or air conditioning.,



Play
• No formal play requirements



Street furniture and utilities
• Moveable and fixed seating
• Drinking fountains



Wadi Al Azeiba, Muscat (Oman)

GARDENS



4.9.1 GARDENS - SHUAYB LANE GARDENS

Existing character and function

Shuayb lane gardens are located at the eastern end of Souq Al Jami. They are also within in the Nominated Property boundary and are directly next to several historic buildings.

The garden itself heavily planted but overgrown and in need of maintenance. The edges of the garden are poorly designed, with awkward levels and fencing that can make access difficult.

Key considerations

- Manage planting and maintain the garden to allow for public use and enjoyment
- Resolve levels around the edge of the garden to allow easier access
- Where possible, remove railings to open up the gardens
- Provide lighting and seating to allow the gardens to be used safely at night



The garden is densely planted but requires some maintenance to allow more light to penetrate the space



The edge of the garden has awkward levels and looks untidy and unwelcoming



Street furniture

Where possible, garden railings should be removed to encourage public access and enjoyment. Along garden edges, seat walls or steps could be integrated to allow people to dwell on the garden fringes

Informal seating, drinking fountains and bins should be introduced into gardens to enable their enjoyment

Lighting

Gardens should be lit very sensitively at night and should avoid uplighting of trees. For instance, designs could use low-level lighting or could illuminate flank walls to create planting silhouettes

Accessibility

Garden designs should resolve levels and create designs that are accessible to all

Planting

Planting should be regularly maintained and cut back to ensure gardens don't become overgrown or completely block sunlight

Ground planting and a variety of species should be introduced into gardens to increase biodiversity

4.10 AL DAHAB SQUARES

Al Dahab Street squares are public spaces along Al Dahab Street that seek to restore and emphasise historic east-west pedestrian routes which have been severed. These squares are traffic-calmed, public spaces at the most significant crossings points within Al Balad. The squares are formed by redevelopment, infill construction and tightening of the carriageway.



Scale

- Approx. 1600m² - 3600m²



Activities

- Shaded seating area
- Encourage outdoor seating outside cafes and restaurants
- Small installations during festivals or events



Materials

- Field: Basalt - size and finish varies by space
- Edge: 300x900 basalt or matching to adjacent typologies
- Special: varies by space



Lighting

- Colour: 4000k
- Illuminance: 6-12 lux
- Mounting: 4-8 metres
- Other lighting: Subtle architectural lighting, selected tree uplighting, ability to incorporate festive lighting



Trees:

- Large shade trees with clear height of 4-6 metres.
- Planting: Simple, mass planting mixed with aggregate. Low water use with a particular focus on species with strong scent e.g.. jasmine. Where possible species should have a direct relationship with the heritage of a space e.g.. perfume, herbs, spices, etc.
- Character: Informal
- Irrigation: Water should be used sparingly and harvested from nearby mosques, cisterns or air conditioning.,



Play

- No formal play requirements



Street furniture and utilities

- Fixed and moveable seating
- Drinking fountains
- Electricity and water supply points for events



Illustrative view of an upgraded Al Dahab Square

AL DAHAB SQUARES



4.10.1 AL DAHAB SQUARE



Proposals for this zone are characterised by the following themes and interventions:

- Celebrate the Hajj route and the history of pilgrimage
- Introduce tree planting in the western section of Souq Qabel to provide shading and enclosure to the wider section of the souq.
- Create an urban square on Dahab Street to prioritise pedestrians and reduce the dominance of cars
- Create a further improvement for pedestrians along the Hajj route and re-establish the historic east west route.
- Introduce pavilions on Dahab Street to narrow down the perceived width of the road width, redefine the urban enclosure and force vehicular traffic to change direction and slow speed.
- Provide new spaces for retail and an information centre that can direct tourists visiting Al Balad.



4.10.2 AL HOUSH SQUARE



Proposals for this cluster are characterised by the following themes and interventions:

- Remove unsightly pedestrian bridge and upgrade public realm to improve east-west connectivity at ground level.
- Extend the urban character of the area to the north, southward through new public spaces and restored lanes.
- Redevelop apartment building south of Al Jadida centre to enable widening of connecting street between Souq Al Nada and Al Dahab Street and to improve pedestrian safety and environmental quality along this street and the lane to the south.
- Develop a combination of public space and infill buildings on surface parking areas, realign and reduce width of Dahab Street to discourage through-traffic.
- Restore historic pavilion and garden space as part of the cultural cluster.



- Repair streetscape by completing urban blocks and concealing side elevations of existing buildings where detrimental to historic character.
- Adaptive re-use of former police station in combination with reconstruction and connection to recently collapsed historic buildings, restoring a lost lane and providing a critical mass of upgraded accommodation.

4.11 WATERFRONT PARK

The waterfront park is a proposed metropolitan park that would serve both the Jeddah Historical District and wider Jeddah. The park is multi-layered with different character areas and uses. It has a varied form and will host a range of activities including nature-related uses, community events, cultural programmes and fitness trails.



Scale

- Approx. 200,000m²



Activities

- Open, flexible, programmable space for festivals and events
- Walking, cycling and fitness trails
- Nature trails and related activities (e.g. bird watching)
- Culture trail and culture-related programme



Materials

- Sandstone, exposed aggregate concrete and self-binding aggregate



Lighting

- Colour: 3000k
- Illuminance: 3-6 lux
- Mounting: 0-4 metres
- Other lighting: selective tree uplighting and low level lighting



Vegetation

- Planting varies by character areas



Play

- Integrated natural play in selected locations with natural play elements



Street furniture and utilities

- Fixed and moveable seating
- Drinking fountains
- Electricity and water supply points for events



Berges du Rhône, Lyon (France)

WATERFRONT PARK



4.11.1 WATERFRONT PARK - CHARACTER AREAS

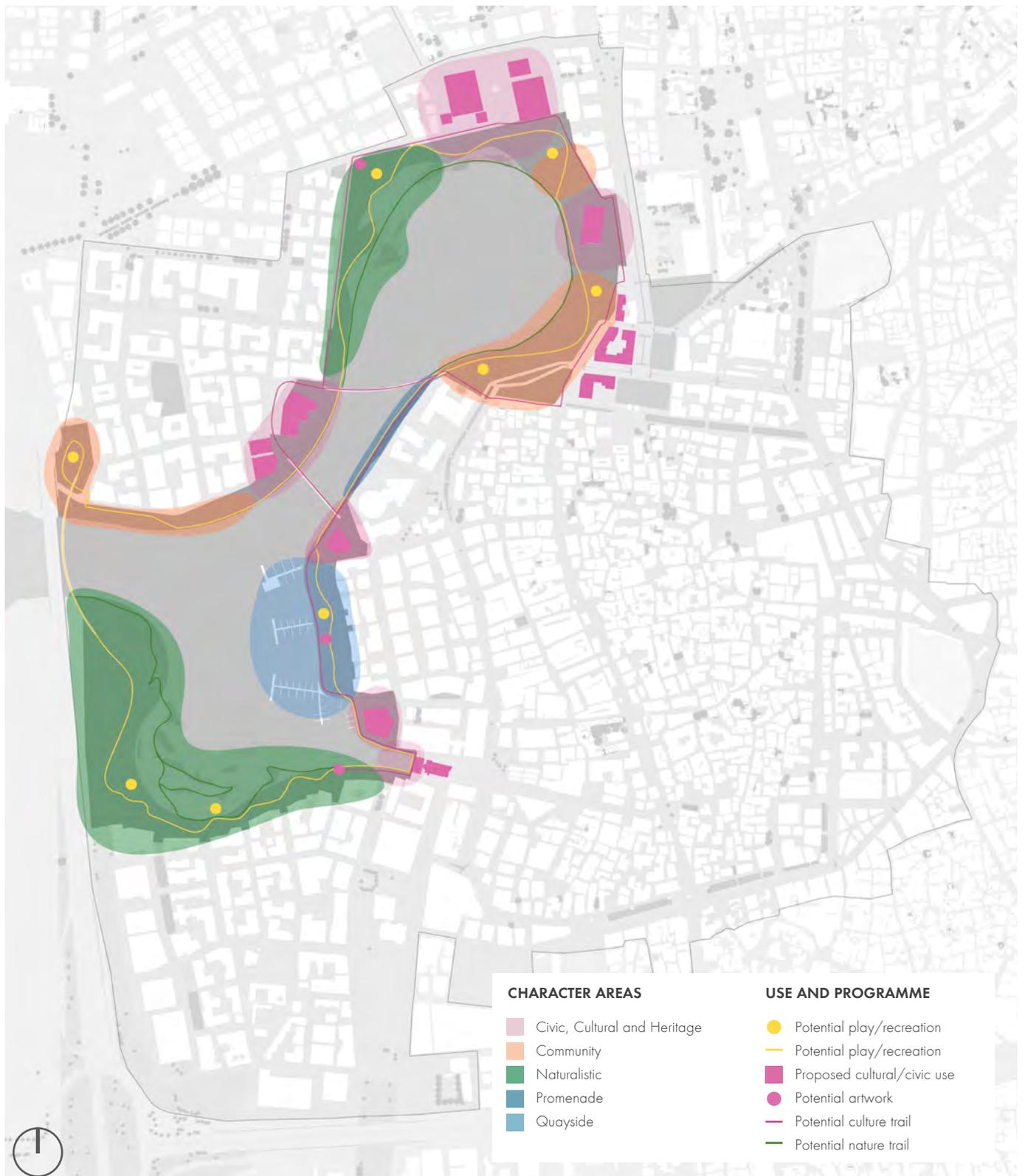
The Waterfront Park character areas are defined by a number of factors including: existing and proposed uses adjacent to the park, proposed play and recreation locations, aspirations to create biodiverse habitats and requirements to make the lagoon a healthy water body.

There are five types of character area in the proposed Waterfront Park (as shown opposite)

- Civic, Cultural and Heritage
- Community
- Naturalistic
- Promenade
- Quayside

Across the park, there is also the potential to integrate a number of uses/programmes that could animate the park and encourage exploration. These potential locations align with the strategies outlined earlier in this document (see section 2.4)

WATERFRONT CHARACTER AREAS



COMMUNITY AREAS

- Playground and recreation areas
- Open lawns and spaces for community use
- Shade and seating provision
- Mixed planting with provision for shade



Open community area that interacts with the water
Weiliu Wetland Park, Xianyang (China)



Natural play and recreation
Teardrop Park, New York (USA)



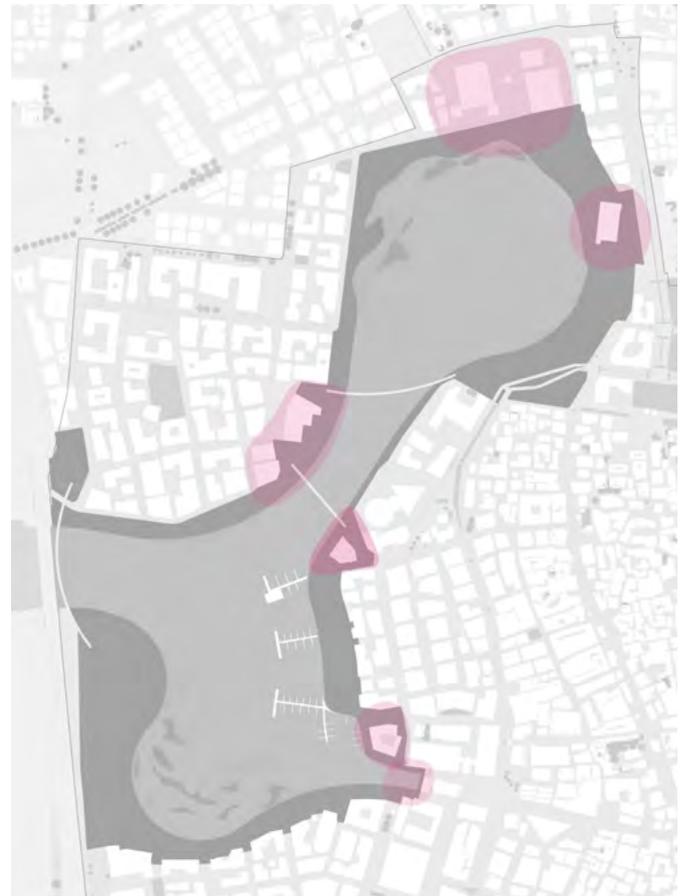
Paths and shoreline shaped to create lawns and open spaces
Hornsbergs Strandpark, Stockholm (Sweden)



Open lawns for community events and picnics
Brooklyn Bridge Park, New York (USA)

CIVIC AND CULTURAL AREAS

- Civic spaces with programmed uses related to adjacent cultural and civic uses
- Shade and seating provision
- Mixed planting with provision for shade



Generous terraces that can be used informally or programmed
Berges du Rhône, Lyon (France)



Rectilinear elements mixed with natural boulders
Jack Evans Boat Harbour, Tweed Heads (Australia)



Simple and unified material palette
Ferdinando Savoia Square, Peschiera del Garda (Italy)

COMMUNITY AREAS

Naturalistic areas

- Natural play and recreation
- Nature-orientated uses (e.g. bird watching, nature trails and kayaking)
- Habitat creation and preservation
- Low water use species and wetland emergent planting species



Low water use planting and stony features
Wadi Al Azeiba, Muscat (Oman)



Curved timber deck boardwalk with aquatic planting
Weiliu Wetland Park, Xianyang (China)



Water activities designed for nature appreciation
Skidaway Island State Park, Savannah (USA)

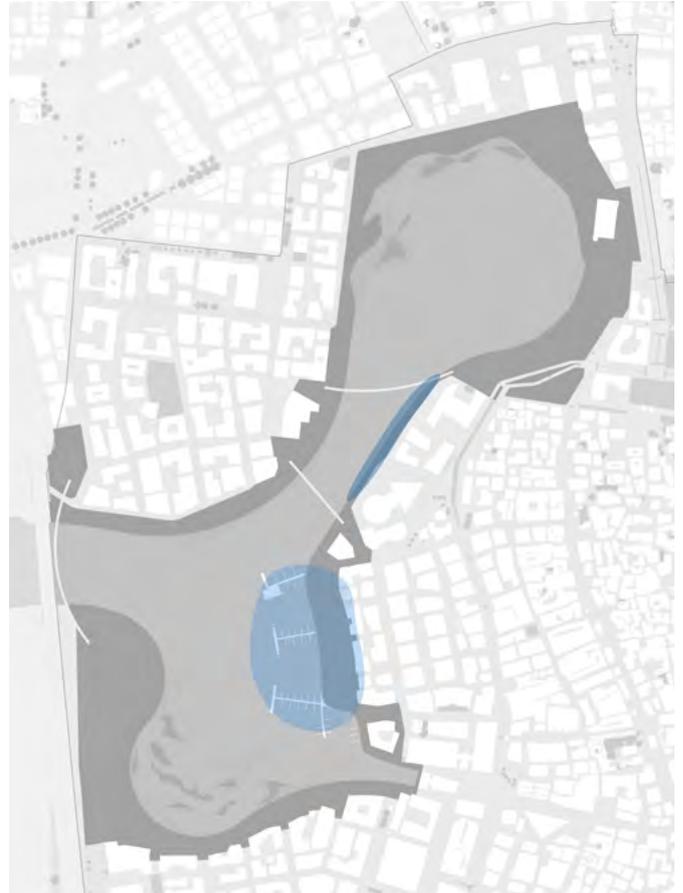


Desert botanical garden with varied arid planting
Arizona State University, Arizona (USA)

CIVIC AND CULTURAL AREAS

Quayside / promenade areas

- Playground or play areas
- Commercial / food and beverage orientated uses
- Character and appearance tied to Al Balad
- Planting related to Al Balad



Park with hard edge to the water and distinct planting
Tidal Basin, Washington D.C. (USA)



Informal edge between pathway and adjacent park
South Cove Park, New York City (USA)



Simple expressed edge water edge
Ferdinando Savoia Square, Peschiera del Garda (Italy)

4.11.2 WATERFRONT PARK - MATERIAL APPROACH

The materials palette for the waterfront park is intended to unify the different character areas through a coherent and concise set of materials. The recommended paving materials palette (set out below) should be used throughout the Waterfront Park for consistency.

In all instances, the application and detailing of these materials should be considered, with components laid with skill and care. Like other typologies in the public realm, variation should be achieved through texture (e.g. change in scale or orientation) rather than pattern.

Designs should consider the following criteria for materials

Criteria for materials

- Select appropriate materials for the context, for example, footpaths that are expected to have higher footfall require more durable surface materials
- Ensure pathways are level and accessible for all users
- Select materials that are robust, durable and fit for purpose
- Use materials that are practical and flexible as well as maintainable/replaceable
- Use local materials that can be locally sourced and replaced in future
- Use materials with recycled/secondary aggregates

Type 1



- 200x200-600 locally- sourced basalt
- Honed finish
- 1/3 running bond
- Open jointing

Type 2



- 400x600 Saudi-sourced sandstone
- Honed finish
- Staggered bond
- Open jointing

Type 3



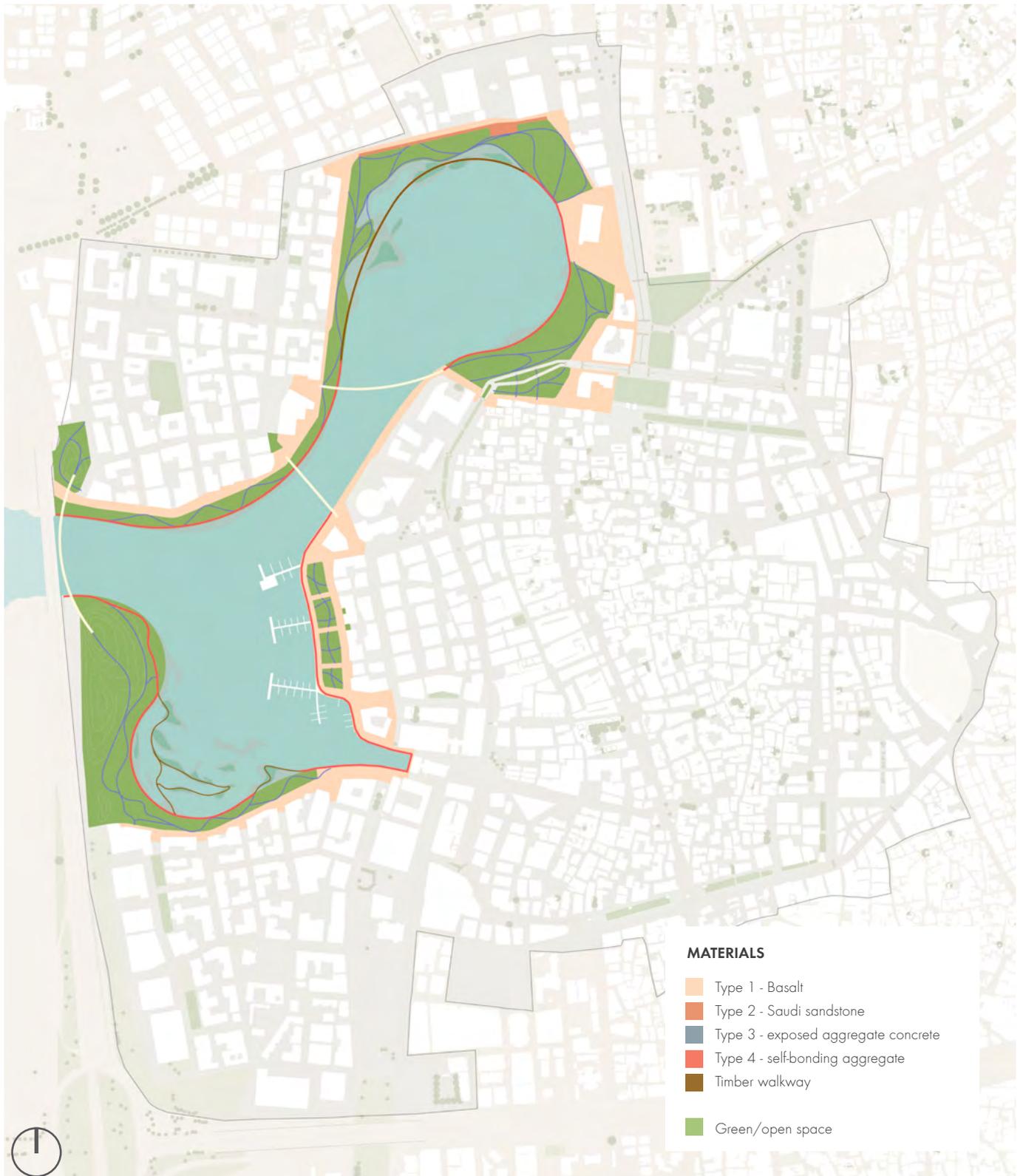
- 10-15mm exposed aggregate concrete

Type 4



- 6-10mm self-bonding aggregate

WATERFRONT MATERIAL APPROACH



4.11.3 WATERFRONT PARK - PLANTING APPROACH

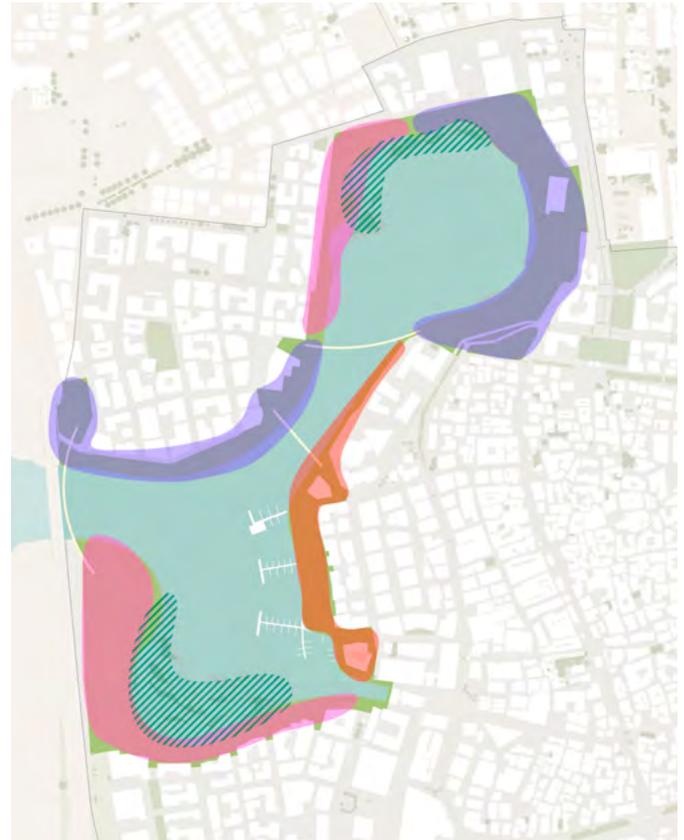
The planting approach for the waterfront park should be defined primarily by the availability of water for irrigation to ensure planting aspirations align with irrigation capabilities. Planting must not rely on potable water as a long-term irrigation solution. Once a TSE network is built, as part of the wider Al Balad regeneration, the planting and irrigation network should be reviewed and potentially expanded.

As shown in the adjacent map, the approach to planting varies by character area, with a balance between functional/more decorative landscapes and 'wilder' naturalistic landscapes. In addition, the placement, distribution and design of planting should consider the following principles.

Criteria for planting

- Distribute planting to provide shade at appropriate intervals, ensuring well-used areas have adequate shade for different uses.
- Encourage biodiversity and wildlife through the creation of different habitats.
- Select plants that are high-impact planting with low maintenance needs
- Integrate species that are native and suited to localised conditions
- Use trees of different sizes and specimen trees to bring variety and define key moments within the park
- Integrate both low-level planting and trees to bring variety and encourage biodiversity
- Avoid overly-formal placement of trees to promote a naturalistic character
- Use planting to frame important views both within the park and when looking from outside

WATERFRONT PLANTING APPROACH



PLANTING

- Mixed planting
- Green planting
- Arid planting
- Wetlands / emergents

ILLUSTRATIVE APPROACH TO TREE PLACEMENT



Clustering of trees to define moments for rest and shade is preferred to formal/equally spaced planting



Where shade is important, trees should have denser canopies with lawns /understorey planting beneath to create spaces to sit and gather



Planting should be used to define difference in the landscape, with specimen trees or large trees given special prominence

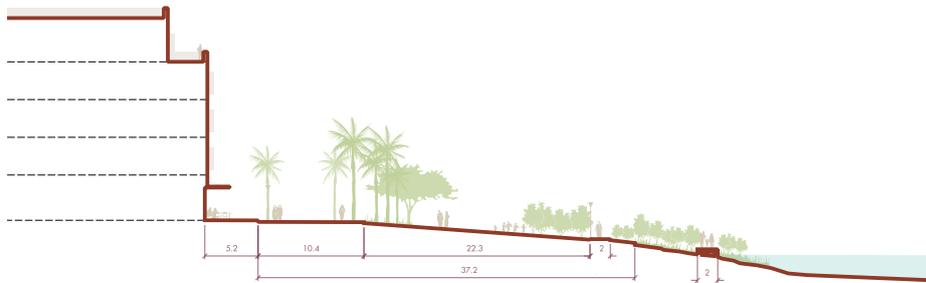


In naturalistic areas, planting should have low-water use with a range of species to create visually interesting natural habitats

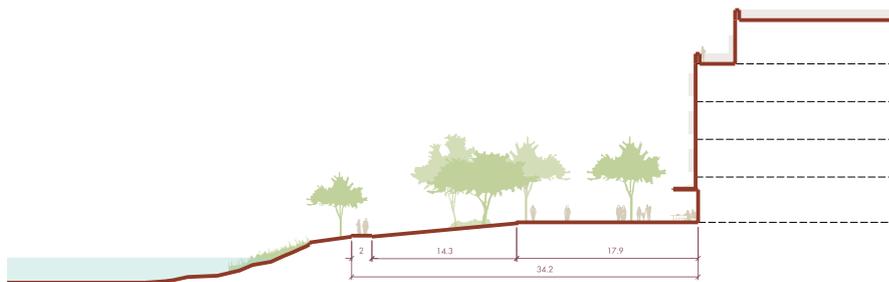
4.11.4 WATERFRONT PARK - SECTIONS

The following sections show the different widths of open space within the park, indicating ways in which levels might work in these spaces, how the park relates to the water and the relationship of the park with the built edge and trafficked conditions

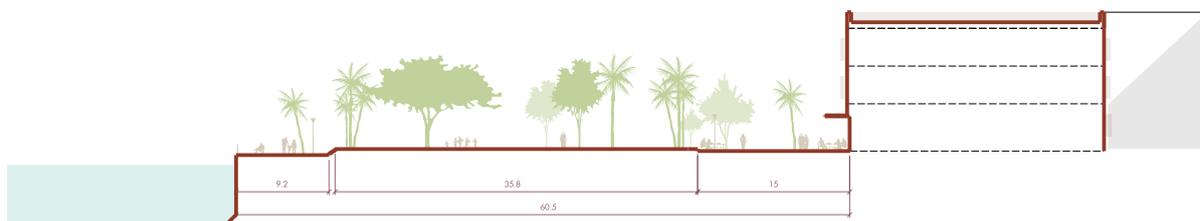
Section A



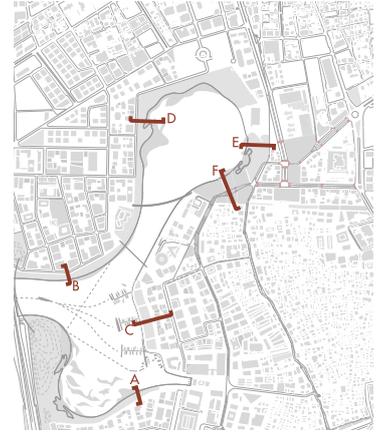
Section B



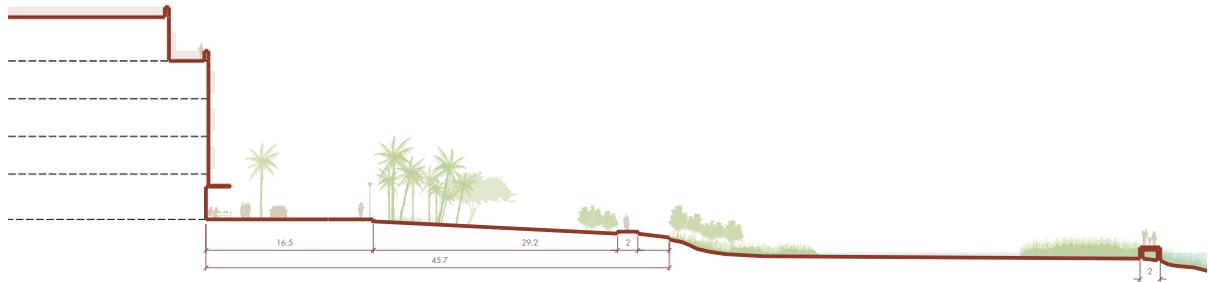
Section C



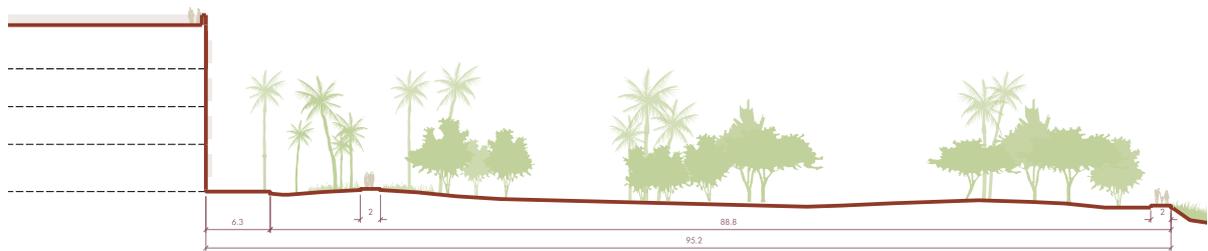
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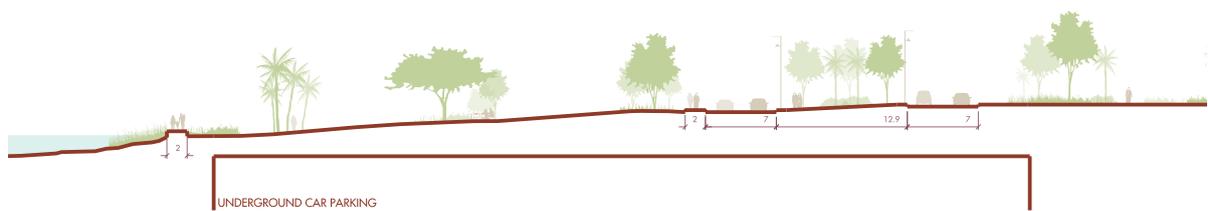
Section D



Section E



Section F



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5 ROUTES TYPOLOGIES

The following section establishes the three routes typologies and sub-types defined for Al Balad and the Jeddah Historical District. The purpose of this section is to further define each typology and set out explicitly how one should begin to design for different routes.

INTRODUCTION

The routes typologies section outlines the three types of routes and route sub-types within the public realm. These typologies and sub-types have been defined by historic classifications and the existing scale, character and relationship to predominant land use.

The purpose of this section is to further define each typology and set out explicitly how one should begin to design for different routes. Each typology has illustrative plans, a typical material and a list of requirements for elements such as vegetation, lighting and materiality to demonstrate potential approaches.

Zuqaqs



Zuqaqs are alleys that have no clear direction, narrowing and widening according to the location of buildings. Zuqaqs exist across Al Balad and can be defined as both residential and commercial in character

Souqs



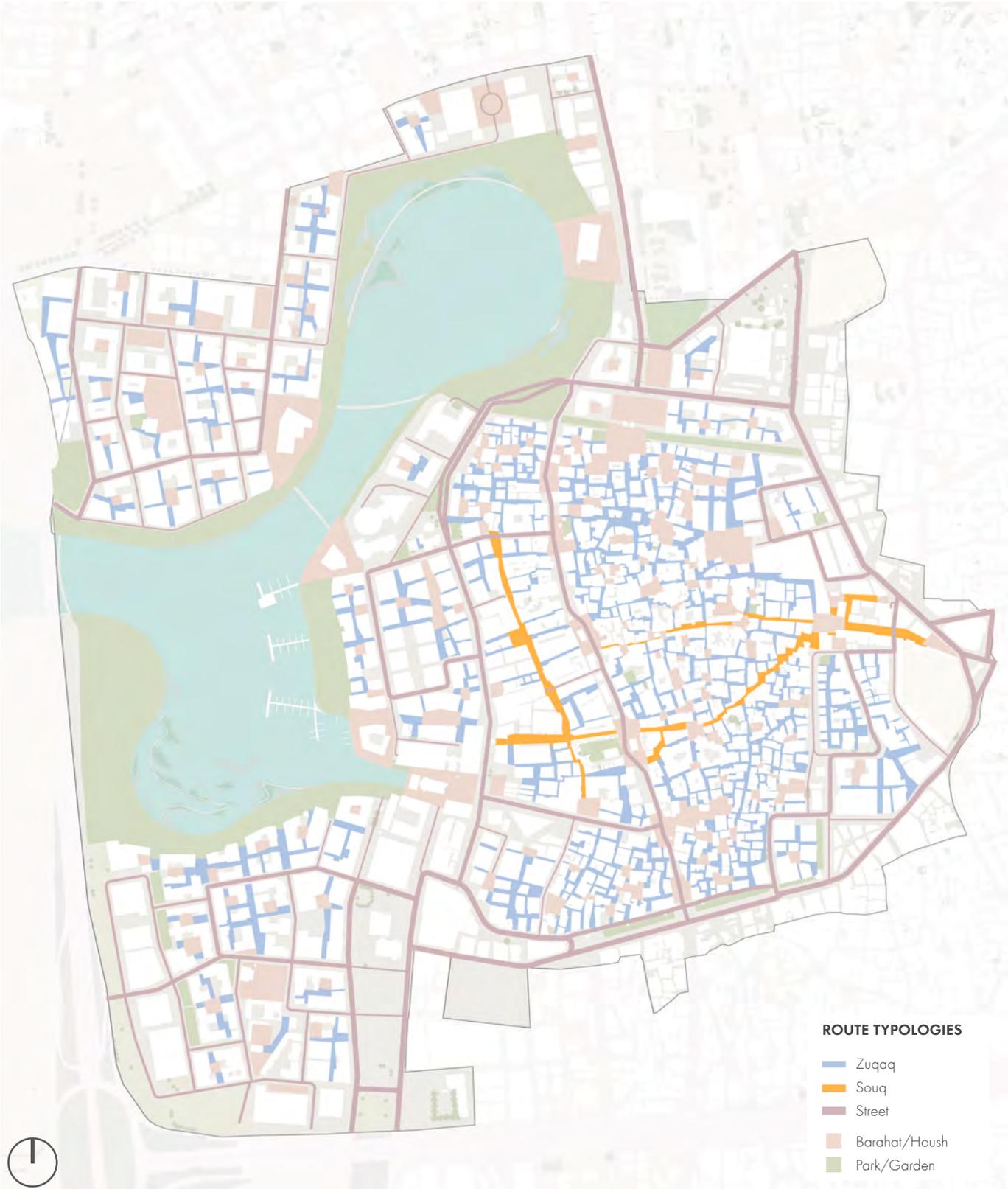
Souqs are the heart of trading activities in the city and act as significant connectors across Al Balad. They are a major part of Jeddah's history and each has a distinct character that should be reflected in the public realm

Streets



Streets are a relatively modern urban type in Al Balad with both large-scale and small-scale street conditions and varying levels of traffic.

ROUTE TYPOLOGIES



5.1 APPROACH TO ROUTES

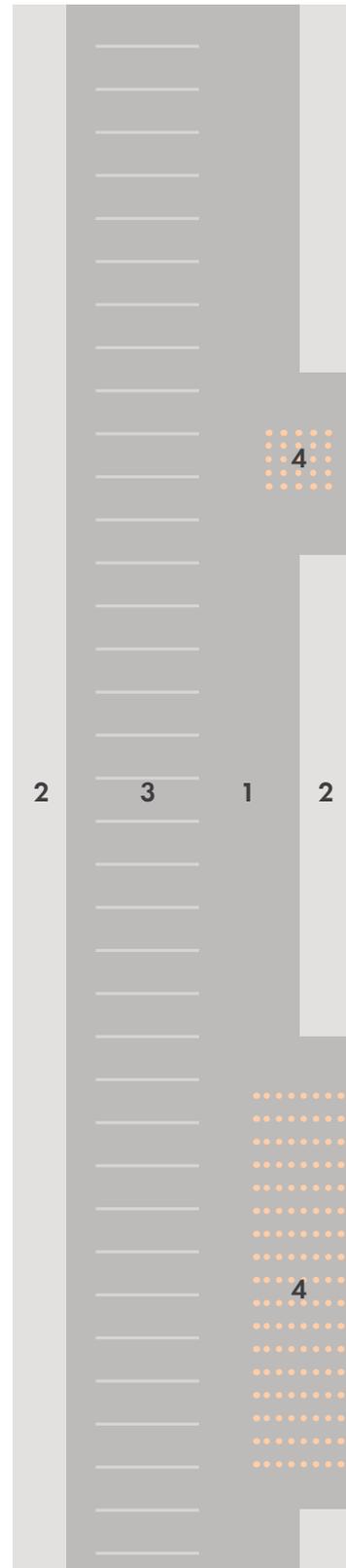
Toolkit for routes

The approach to paving across the Jeddah Historical District should be consistent to ensure the public realm forms a simple, high quality backdrop to public life and architecture.

To achieve this a simple toolkit should be employed that considers:

1. Field
2. Edges
3. Traffic
4. Specials

The definition and key approaches for these tools are explained in the following pages.



5.1.1 FIELD

'Field' refers to the baseline surface condition of all routes before any details (e.g. doorways, thresholds, carriageways, utilities or street furniture) are added.

Across Al Balad the field condition is currently inconsistent. Different sized paving units, varied materials, discordant paving finishes and incidental patterns are applied sporadically. In many cases, simply upgrading the field condition and applying a consistent approach would significantly improve the public realm. The field condition should consider the following.

Key approaches

- Use a consistent streetscape palette: the field should be formed of Saudi basalt, acting as a singular backdrop to public life and activities
- Improve, don't remove: make good existing streetscapes and consider replacement when paving has reached the end of its useful life
- Texture rather than pattern: use texture and levels of wear to reflect the use and footfall of different routes
- Vary size according to prominence: use a larger paving field to emphasise more prominent routes



The difference between a honed finish (left) and hammered finish with 'ticked' edges could be used to emphasise contrast between routes

WEARING



5.1.2 EDGES

Edges refers to paving that is directly adjacent to buildings and thresholds.

Edges already exist in various forms in Al Balad but they are often poor quality and inconsistent. Introducing edges could help to unify and rationalise the public realm.

Key approaches

- Use edges where necessary: edges are not required in all instances. Designs should respond to individual streetscape conditions and the need to tidy or rationalise using an edge
- Edges where width permits: Edges should not be used on narrow routes (typically <5 metres) to ensure paving is not over complicated
- Rationalise: use edges to tidy and rationalise steps, street furniture, utilities and to display shop merchandise
- Capture water: in some instances, edges should incorporate a drainage channel to capture and direct water to planting
- Depave: in some conditions, edges could be depaved to reveal sand and improve microclimate



Paving edge in Berlin is used for street furniture and utilities



Dished drainage channel
 May be used in conjunction with other edge conditions



Depaved edge
 Residential zuqaqs



Fractured setts edge
 Residential zuqaqs



Large format edge
 Commercial zuqaqs, souqs and Al Balad streets



Small cubes edge
 Lagoon zuqaqs, lagoon streets

5.1.3 TRAFFIC

Traffic refers to the way in which trafficked paths are articulated within routes.

At present, vehicles dominate many parts of Al Balad with priority given to vehicle movement over pedestrian movement. Approaches to traffic should consider the following

Key approaches

- Minimise space for vehicles: where possible, minimise the trafficked path to give sufficient space to pedestrians.
- Prioritise pedestrians: designs could use a paved traffic zone to reinforce pedestrian priority on certain routes or in localised instances.
- Manage access: on narrow pedestrian routes in Al Balad, vehicle access should be restricted and kerb upstands removed from the streetscape
- Design for safety: The level of separation/demarcation between the pedestrians and vehicles should vary according to vehicle speeds (e.g. kerb upstand height or material contrast)



Subtle demarcation of trafficked zone through drainage channels Viking Triangle, Waterford (Ireland)

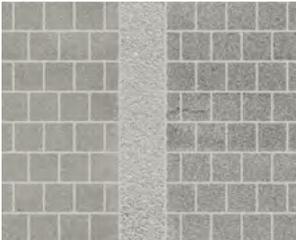


Small kerb upstand and paved carriageway reinforce pedestrian priority and enable streetscape activities



Pedestrian routes

- Managed vehicle access
- Field condition only - no trafficked zone



Local access routes

- Flush kerb to demarcate trafficked zone
- Change in texture between footway and carriageway



Local streets and raised tables

- Flush kerb to demarcate trafficked zone
- Change in paving size between footway and carriageway



Major streets

- Kerb with upstand to demarcate trafficked zone
- Change in paving material between footway and carriageway

5.1.4 SPECIALS

Specials refers to feature paving that could be used to highlight particular spatial moments, or sub-spaces. These include places of shade and rest and significant routes or spaces (e.g. Souq Al Alawi or Souq Qabel. Such moments of decorative paving should be defined by three principles: permeability, balance and layering.

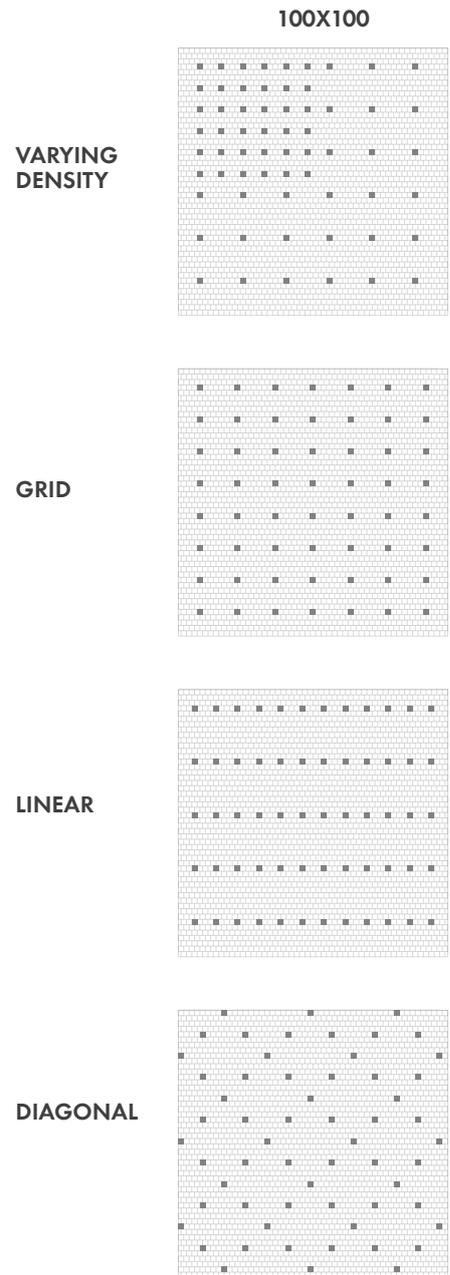
Key approaches

- Permeability: special paving should always be 'woven' into the field condition and should avoid a hard border
- Variation and consistency: Specials should be formed of different materials, textures and unit sizes to emphasise unique qualities of different places. However, within an area of a singular route, special paving should not be overly-varied as this can lead to an ad-hoc appearance.
- Balance: the pattern, layout, contrast and size of feature paving should always be balanced with the surrounding streetscape condition and any historic sensitivities.



Larger format paving as special insert into the field condition
Banyoles Old Town, Banyoles (Spain)

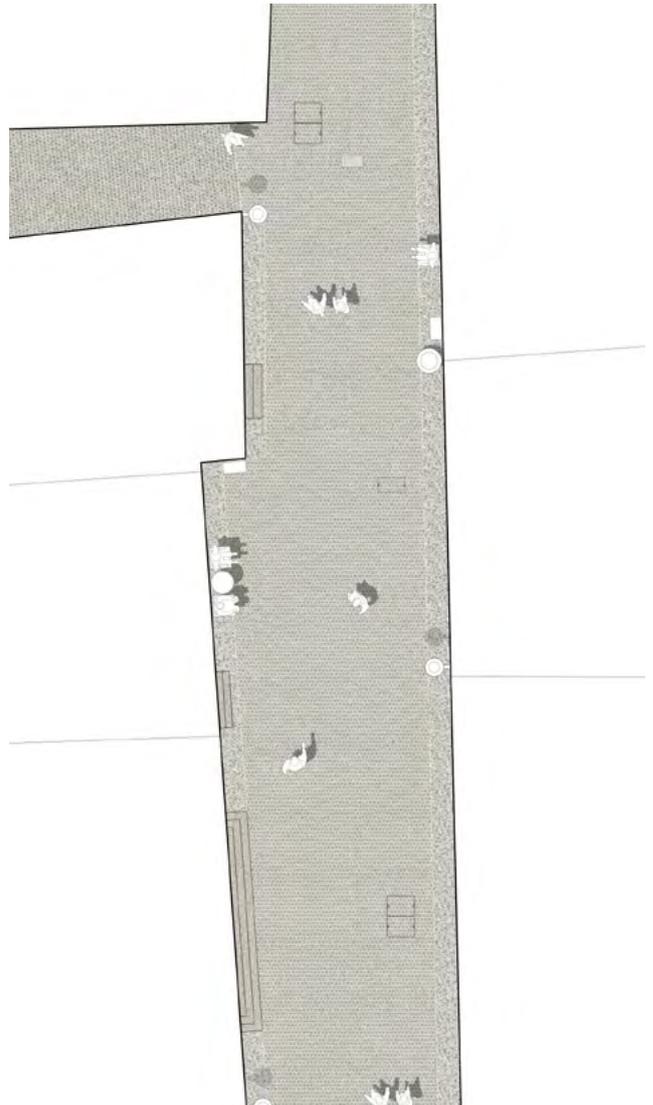
EXAMPLE SPECIALS PATTERNS



5.1.5 TYPOLOGIES

The three main route typologies have been designed to reinforce the routes hierarchy through a change of scale and grain. The hierarchy is enforced throughout all streetscape elements i.e. furniture, softscape and hardscape.

A hierarchy between primary and secondary routes has also been established and this should be reflected in the wearing and texture of the field condition.



Zuqaqs

- Field: smaller paving units and typically rougher texture to paving
- Edges: Type varied by condition. Not applicable in smaller zuqaq conditions where an edge would over complicate the streetscape
- Traffic: Not applicable
- Specials: At curated moments only



Souqs

- Field: typically larger paving format across all souqs to reinforce hierarchy
- Edges: large format basalt edge. Consistent across all souqs to display merchandise
- Traffic: Should be demarcated only on Souq Bab Mekkah
- Specials: To emphasise existing functions and unique qualities of each souq



Streets

- Field: typically larger format paving to mitigate the larger scale of streets
- Edges: large format basalt edge. Consistent across all streets
- Traffic: clearly demarcated from footway. Asphalt or paved carriageway
- Specials: To bring variety to streetscape and curated moments

5.2 ZUQAQS

Zuqaqs are alleys that have no clear direction, narrowing and widening according to the location of buildings. Zuqaqs exist across Al Balad and can be defined as both residential and commercial in character. They also exist at a range of scales and have varying levels of footfall.

In response to these characteristics, there are two zuqaq types proposed for Al Balad (residential zuqaqs and commercial zuqaqs) and one type within the north and south lagoons (lagoon zuqaqs). The key characteristics and variations of each zuqaq sub-type are explained overleaf. The following examples illustrate design intent and typical approaches to these zuqaq types.

Given the proliferation of zuqaqs across the site the approach to public realm should be straightforward, with the aim to raise the overall public realm quality through simple intervention.

Paving in zuqaqs should be generally use a consistent field with smoother and rougher finish to emphasise primary and secondary routes respectively. Street furniture, utilities and other objects in the public realm should similarly be simple and rationalised and located within a paving edge zone.

Planting should be curated to provide moments of rest and shade, with preference for low level planting or climbers where space is restricted

Traffic should be restricted wherever possible, with all zuqaqs avoiding use of kerbs and kerb upstands to demarcate carriageways



Activities

- Residential or commercial focus
- Pitches for market stalls in commercial zuqaqs
- Potential for play space in lagoon zuqaqs



Materials

- Field: varies by type
- Edge: varies by type. Not required in all instances, particularly narrow routes
- Traffic: no requirements for traffic demarcation



Lighting

- Illuminance: varies by sub-type. Typically medium/low
- Colour: varies by sub-type
- Mounting: 4-6m height typically wall mounted
- Other lighting: light columns in edge zone where lights cannot be mounted on historic buildings



Planting

- Trees: where 1800mm clear width can be achieved
- Character: Informal
- Irrigation: Low water planting. Water harvested from nearby mosques, cisterns or surface water runoff



Street furniture

- Seating and drinking fountains in selected locations
- Bins located in paving edge zone
- Shop merchandise in paving edge zone

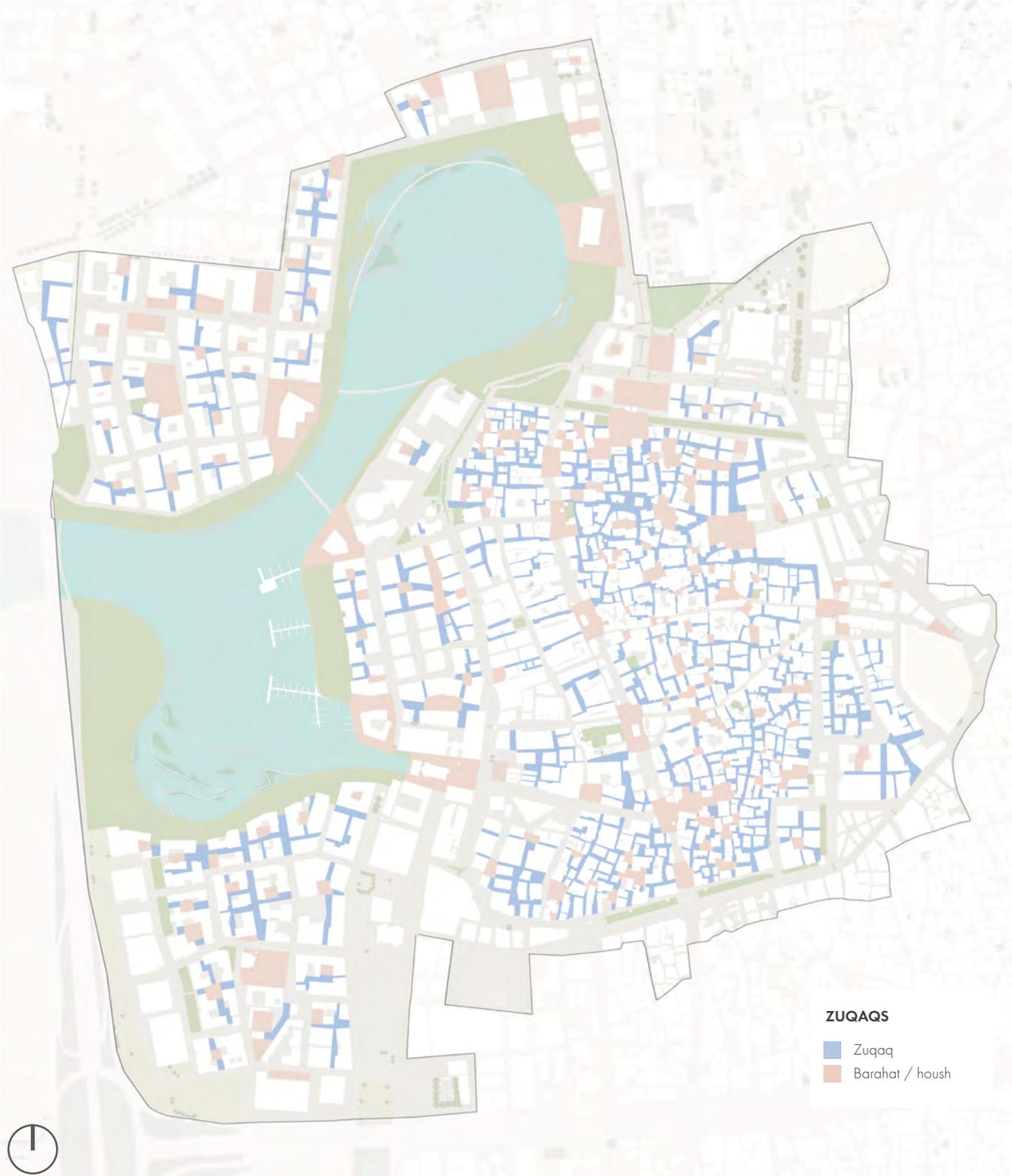


Utilities

- Inset utility covers with paving infill to be flush with surrounding paving
- Slot drains and subtle drainage gullies integrated with paving designs



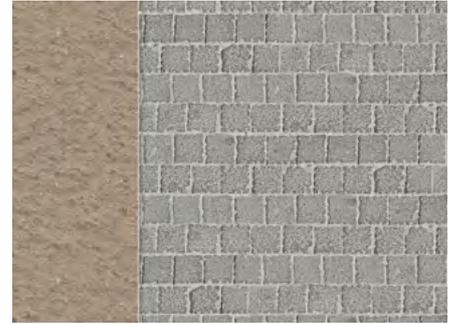
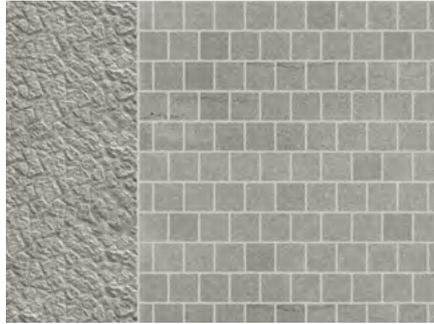
ZUQAQS



ZUQAQ SUB-TYPES

Residential zuqaqs

- 100x100 basalt setts field - honed or hammered dependent on primary or secondary route
- Fractured setts edge or sand edge (dependent on conditions)



Commercial zuqaqs

- 100x100 basalt setts field - honed or hammered dependent on primary or secondary route
- 300x900 sawn basalt paving edge

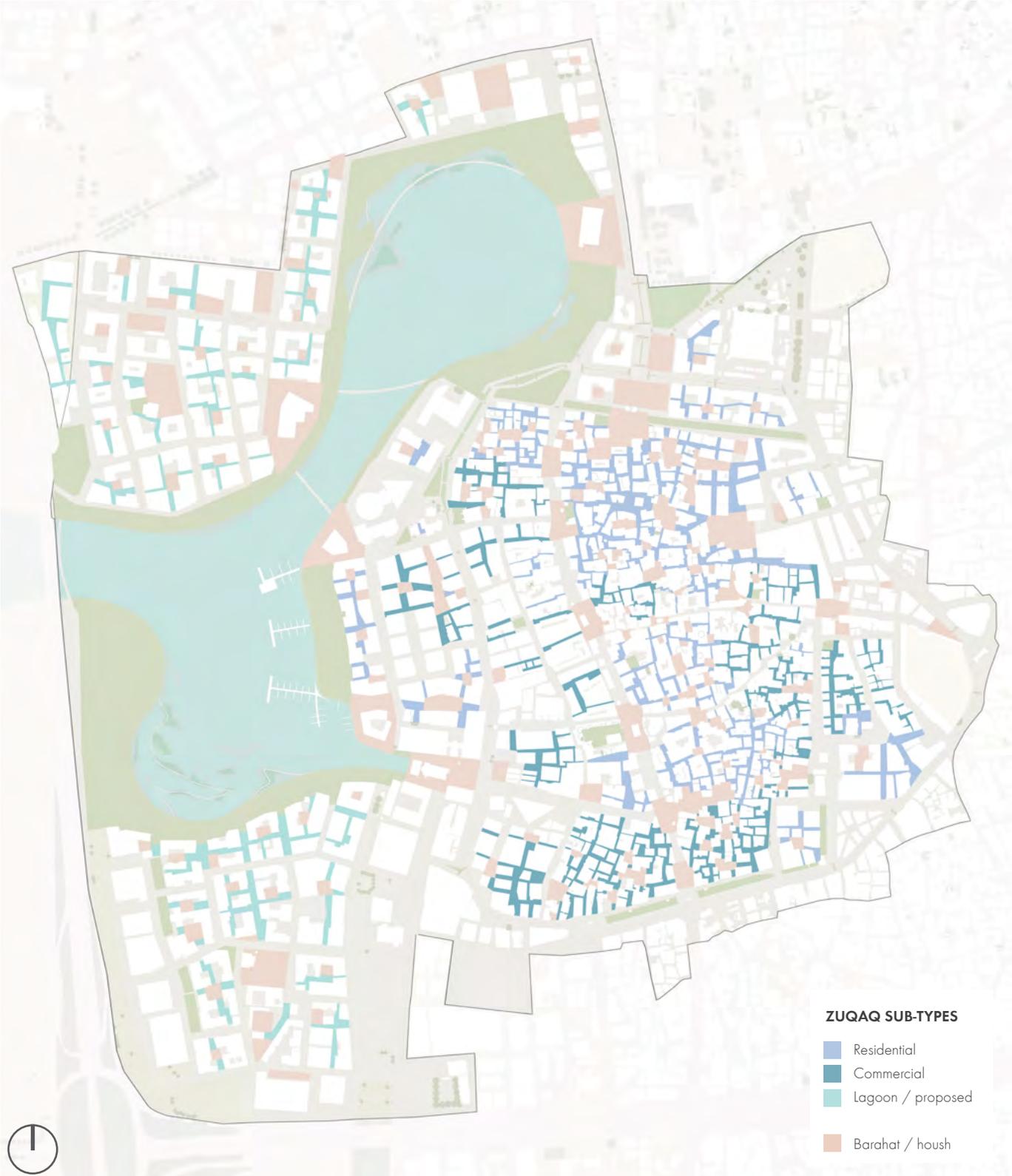


Lagoon zuqaqs

- 200x200 basalt setts field
- 50x50 basalt cubes paving edge



ZUQAQ SUB TYPES



5.2.1 RESIDENTIAL ZUQAQ

Large residential zuqaq in Al Balad

6000 - 10000mm
 (approximate - varies)

Lighting

Pedestrian-level LED light columns aligned to one side of the zuqaq

Wall mounted LED lights on narrow routes. Typically 4000 - 6000mm mounting height

Refuse

Bins at rationalised locations and located within edge paving zone

Utilities

Pedestrian-friendly drainage gully at regular intervals along the zuqaq

Cast iron utility covers (or similar) required where heavy vehicle overrun is anticipated

Slot drain and dished channels to catch and direct surface water runoff to trees

Street furniture

Public seating and drinking fountains provided at regular intervals and within open spaces

Cycle racks to be located in shaded positions and rationalised to minimise obstruction





 **Paving**

Domestic bins with timber screening at rationalised locations

 **Paving**

100x100 basalt setts with rougher finish for secondary routes

100x100 basalt setts
Paving pattern adaptable to street conditions and aligned perpendicular to zuqaq centreline

Fractured basalt edges with dished channel along zuqaq to help rationalise street furniture and irregular building frontages

Potential paving directional change between zuqaq and open space. Change is mitigated by slot drain

Special paving inserts to demarcate a place to rest and socialise within the open space

 **Planting**

Planting to provide shade and improve microclimate

 **Lighting**

Low-level lighting to be provided adjacent to public seating to enable use during the evening



RESIDENTIAL ZUQAQ

Medium-scale residential zuqaq in Al Balad

Accessibility

Utilities and street furniture to be minimised in narrow spaces to safeguard a 1800mm clear pedestrian zone

Paving

100x100 basalt setts with rougher finish for secondary routes

Paving edges should typically not be used where the route width is less than 4000mm

100x100 basalt setts
 Paving pattern adaptable to street conditions and aligned perpendicular to zuqaq centreline

Fractured basalt edges or sand along zuqaq to help rationalise street furniture and irregular building frontages

Basalt steps with rationalised levels and consistent materiality

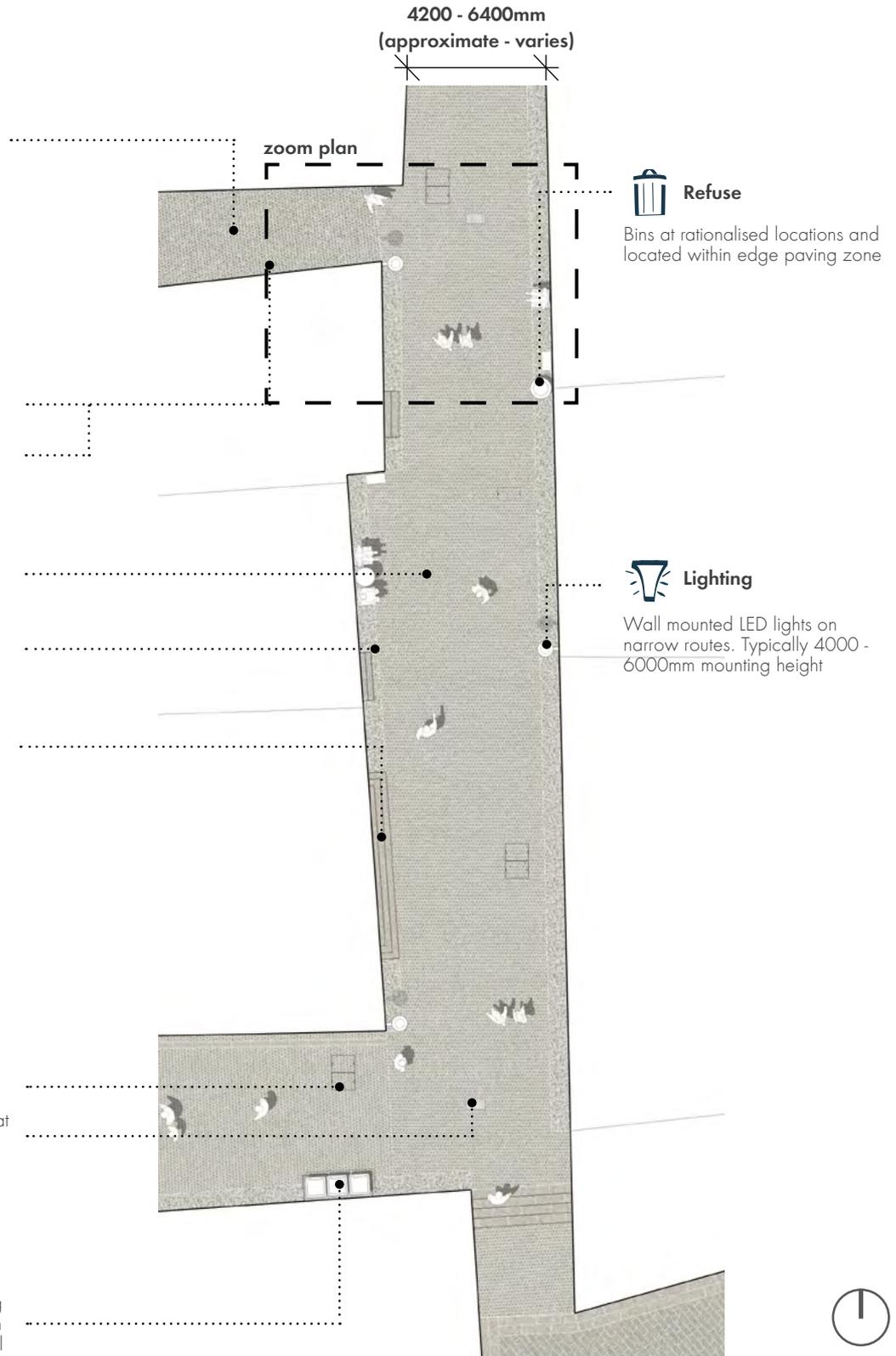
Utilities

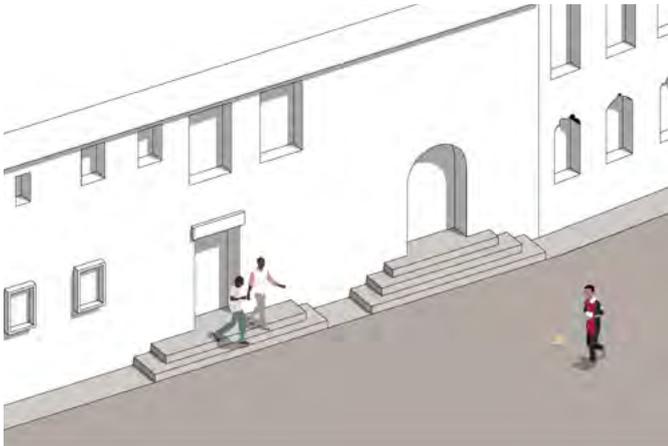
Inset utilities cover with paving infill

Pedestrian-friendly drainage gully at regular intervals along the zuqaq

Refuse

Domestic bins with timber screening at rationalised locations - ideally on routes with lower pedestrian footfall

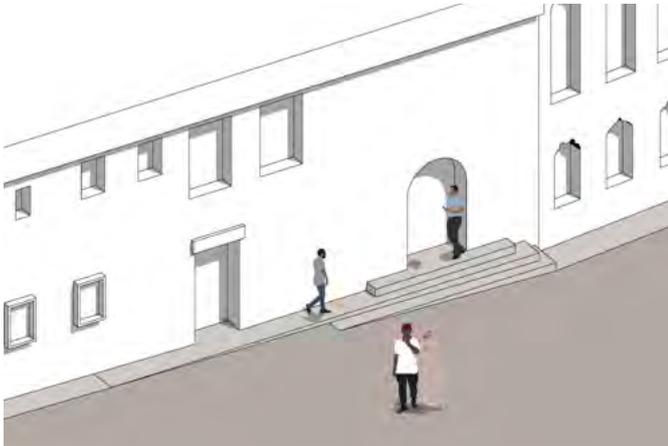




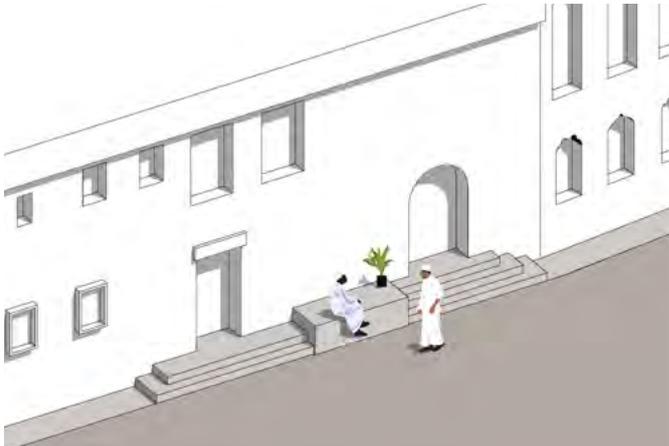
Steps separated and rationalised to entrances



Steps combined to a common plinth



Steps combined to mitigate level changes



Steps separated with a mercaz seat / in situ seat

RESIDENTIAL ZUQAQ

Small residential zuqaq in Al Balad



1500 - 2600mm
 (approximate - varies)

Accessibility

No street furniture should be located where the zuqaq narrows to ensure a clear pathway for pedestrians

Paving

Depaved sand edge typically used for predominantly residential zuqaqs

100x100 basalt setts with rougher finish for secondary routes

100x100 basalt setts
 Paving pattern adaptable to street conditions and aligned perpendicular to zuqaq centreline

Fractured basalt edges or sand along zuqaq to help rationalise street furniture and irregular building frontages. Edges should not be used where the route width is less than 4000mm

Lighting

Wall mounted LED lights on narrow routes. Typically 4000 - 6000mm mounting height

Utilities

Recessed utility covers with paving infill

Drainage at rationalised locations. Potential to use slot drains (or similar) on small zuqaqs

Utility cabinets to be located next to buildings and within the edge paving zone

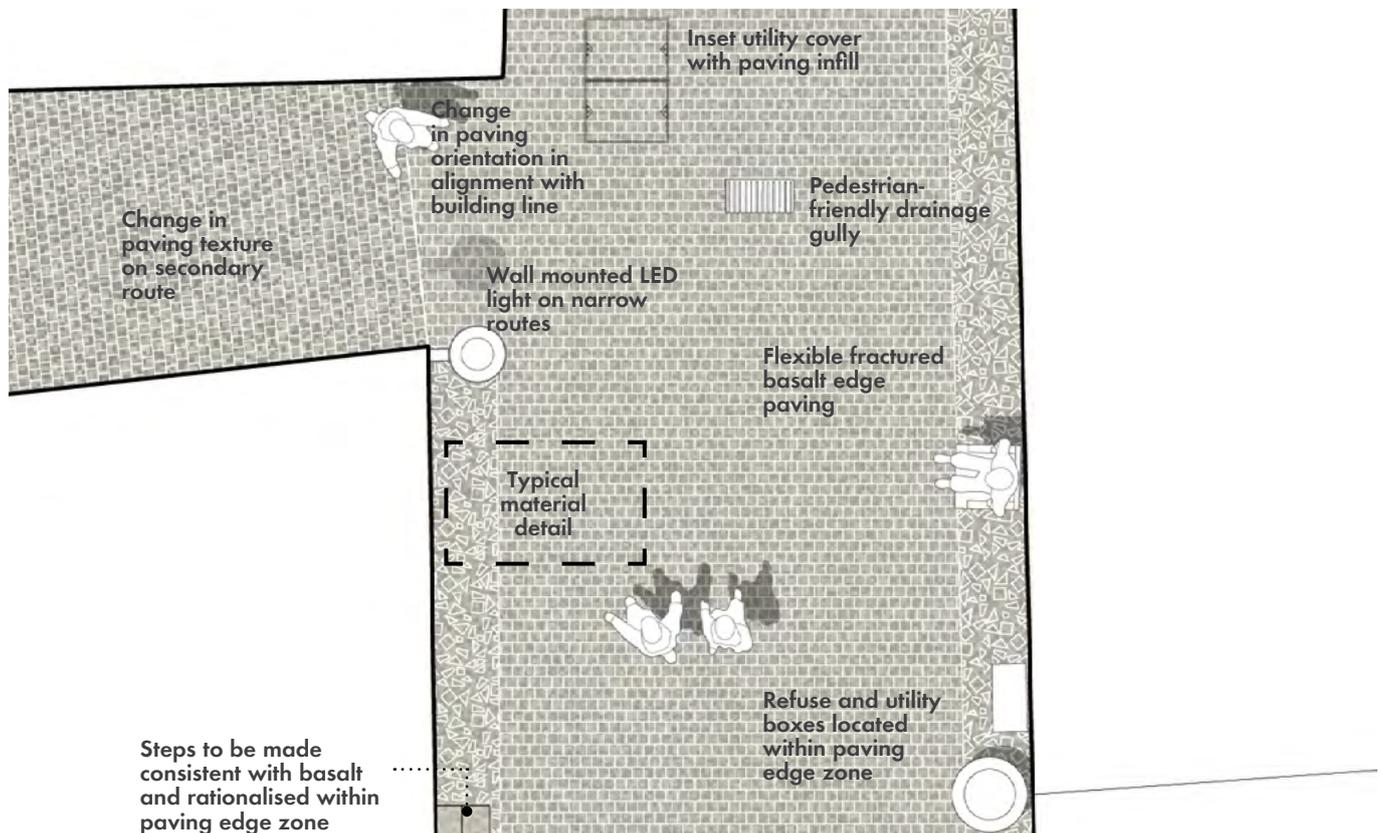
Refuse

Domestic bins with timber screening at rationalised locations and within paving edge zone

Bins at rationalised locations adjacent to buildings within paving edge zone



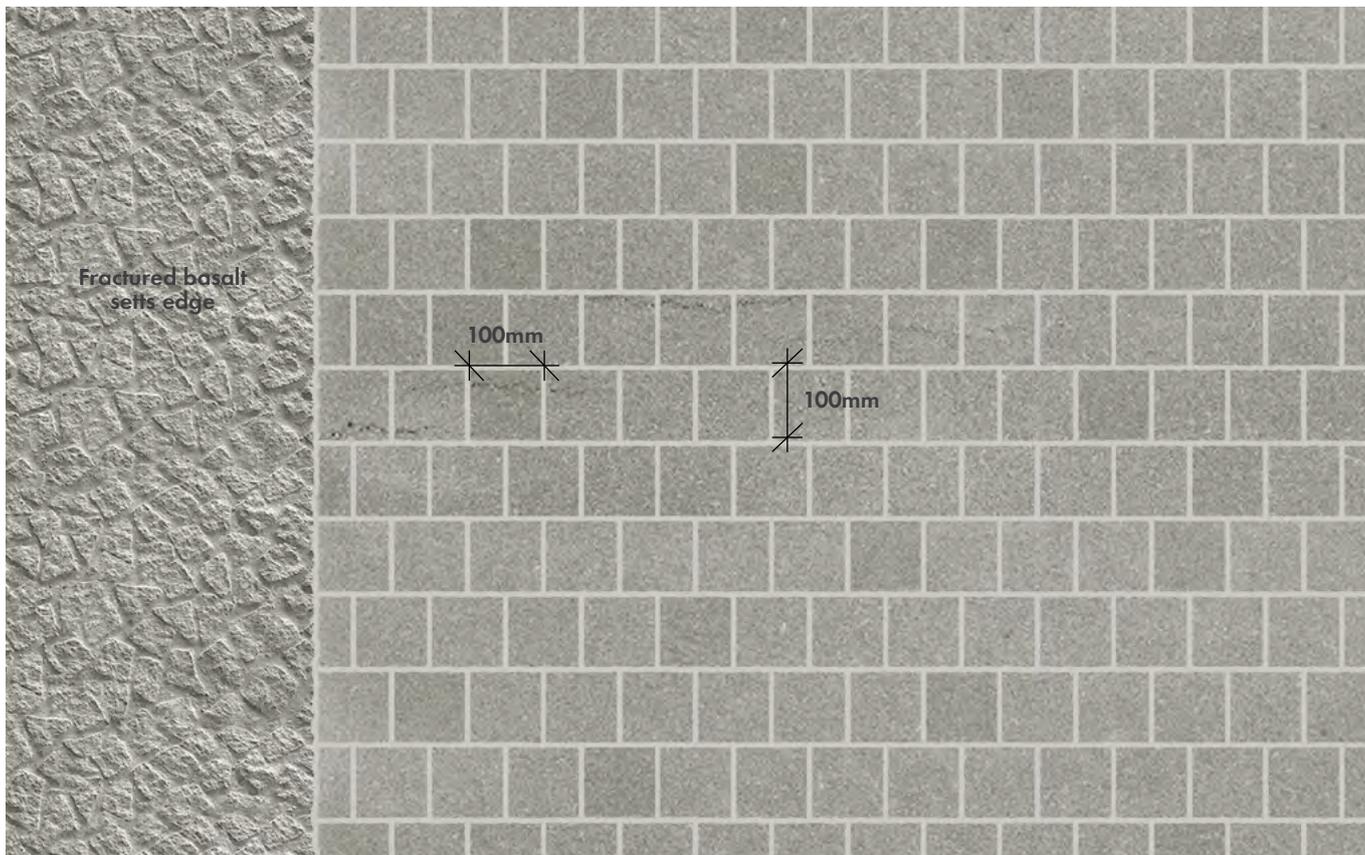
RESIDENTIAL ZUQAQ ZOOM PLAN



- Field – Where possible, 1800mm clear width to be maintained for pedestrians or 1500mm in localised instances
- Edge – Typically 600-800mm width to mitigate irregular building lines and rationalise street furniture
- Traffic – All zuqaqs should avoid using kerbs with upstands to demarcate service routes. Where vehicle access is required paving and sub-base specification should be designed to meet anticipated vehicle loading
- Accessibility – Where possible, single steps and shallow steps to be graded into ramps. Utilities must also be flush with surrounding paving.
- Planting – Placement of trees should ensure a 1800mm clear width is maintained. Climbers and low level planting are preferable and could be used in selected locations
- Microclimate – planting and shading devices should be used to improve walkability and microclimate in zuqaqs. Where possible, more shaded parts of each zuqaq should be clear from obstructions
- Lighting – wall mounted LED lights typically 4000-6000mm mounting height. Light columns may be preferable in larger zuqaq conditions
- Street furniture – Street furniture to be minimised and rationalised, particularly in narrow zuqaq conditions
- Refuse – All bins to be located within paving edge zone and ideally located on quieter routes. Domestic bins should have timber screening to minimise visual impact on the streetscape
- Drainage – Where relevant, dished drainage channels and slot drains should be used to capture and direct surface water runoff to planting. General drainage should typically be centred along zuqaqs and should be appropriate to the scale of the route
- Utilities – Typically recessed utility covers with paving infill to match surrounding surfacing. Cast iron utility covers (or similar) to be used where vehicle overrun is anticipated

RESIDENTIAL ZUQAQ PRIMARY ROUTES

ILLUSTRATIVE MATERIAL DETAIL



Edge

Field

Edge

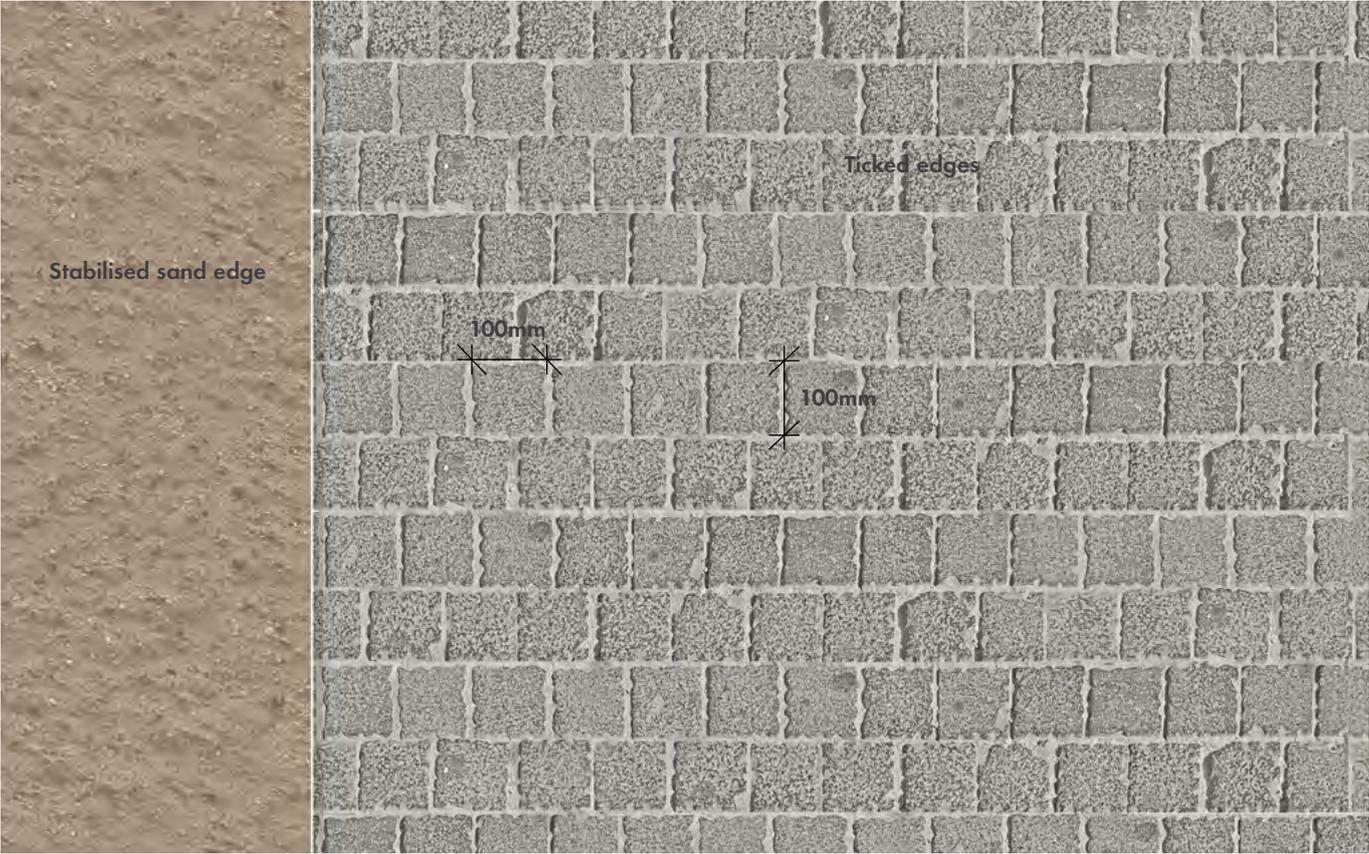
Material	Saudi Basalt
Colour	Grey
Finish	Hammered
Size	100x100mm fractured units
Joints	Open jointing (5-7mm typical)

Field

Material	Saudi Basalt
Colour	Grey
Finish	Honed
Size	100x100mm
Joints	Open jointing (5-7mm typical)
Bond	Staggered

RESIDENTIAL ZUQAQ SECONDARY ROUTES

ILLUSTRATIVE MATERIAL DETAIL



Edge

Field

Edge

Material Stabilised sand
 Colour Buff
 Size Fine aggregates

Field

Material Saudi Basalt
 Colour Grey
 Finish Hammered with ticked edges
 Size 100x100mm
 Joints Open jointing (5-7mm typical)
 Bond Staggered

5.2.2 COMMERCIAL ZUQAQ

Medium-scale commercial Zuqaq in Al Balad



5000 - 9400mm
 (approximate - varies)



Lighting

Wall mounted LED lights on narrow routes. Typically 4000 - 6000mm mounting height



Paving

100x100 basalt sets
 Paving pattern adaptable to street conditions and aligned perpendicular to zuqaq centreline

300x900 basalt paving edge to rationalise street furniture and irregular building frontages



Utilities

Utility cabinets to be located next to buildings and within the paving edge zone



Street furniture

Potential to market stalls ensuring an 1800mm clear width is maintained for pedestrian movement



Refuse

Bins at rationalised locations adjacent to buildings and within paving edge zone

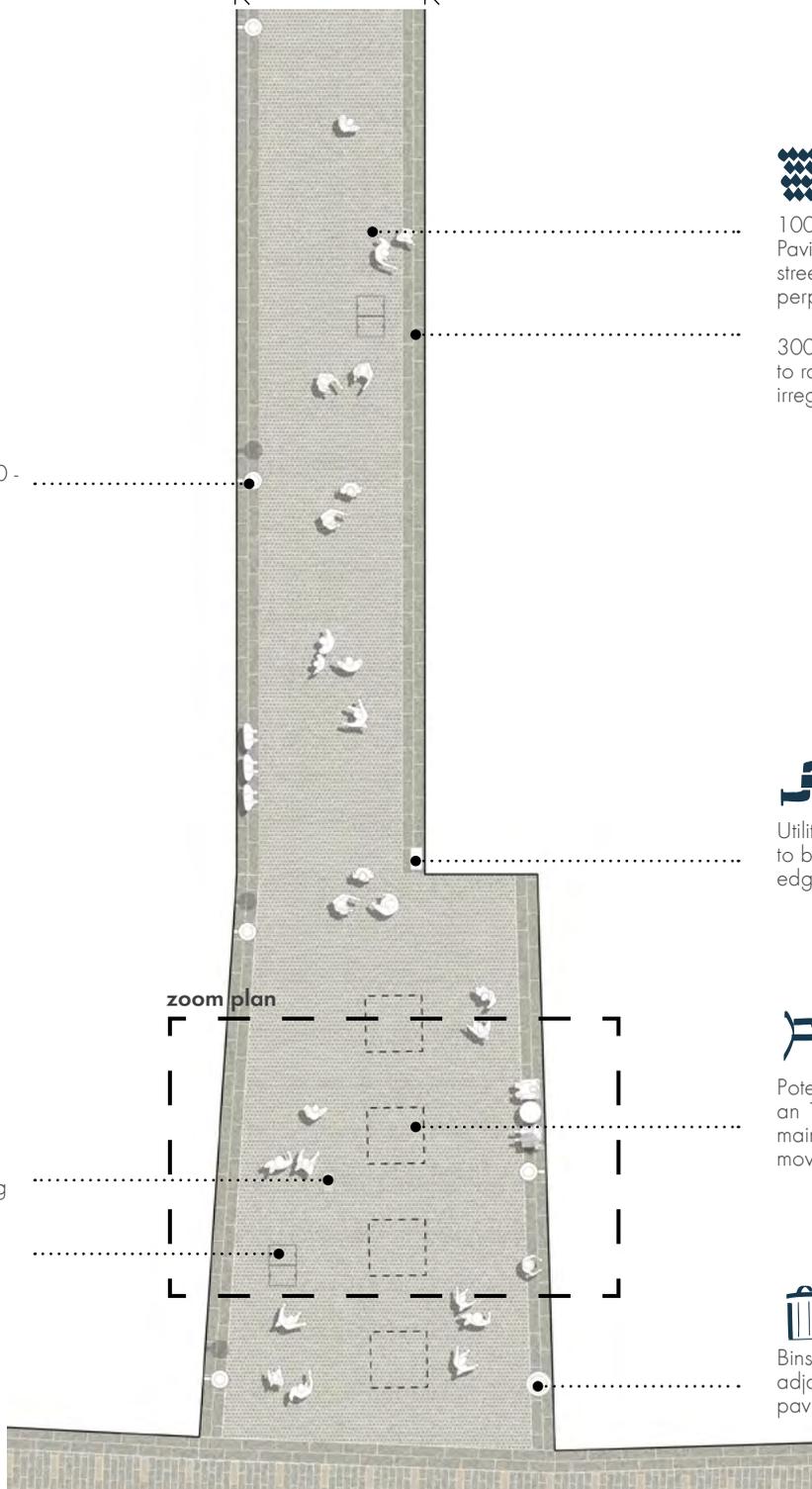


Utilities

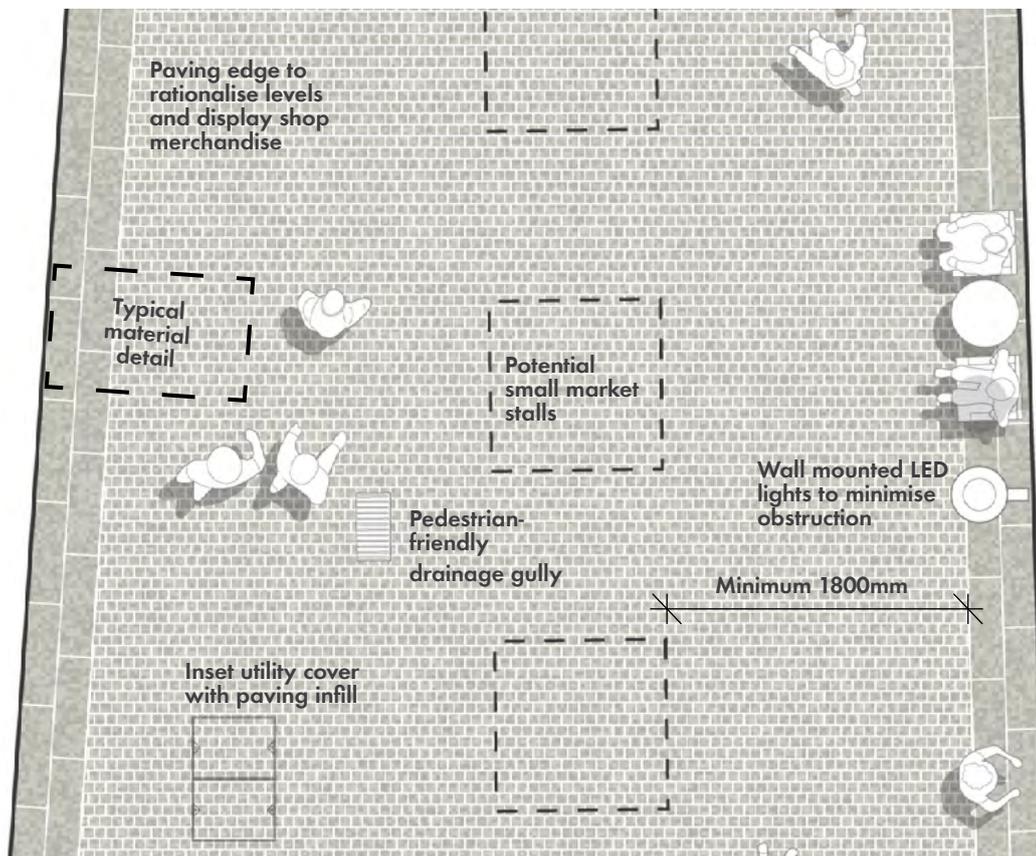
Pedestrian-friendly drainage gully at regular intervals along the zuqaq

Inset utility cover with paving infill

zoom plan



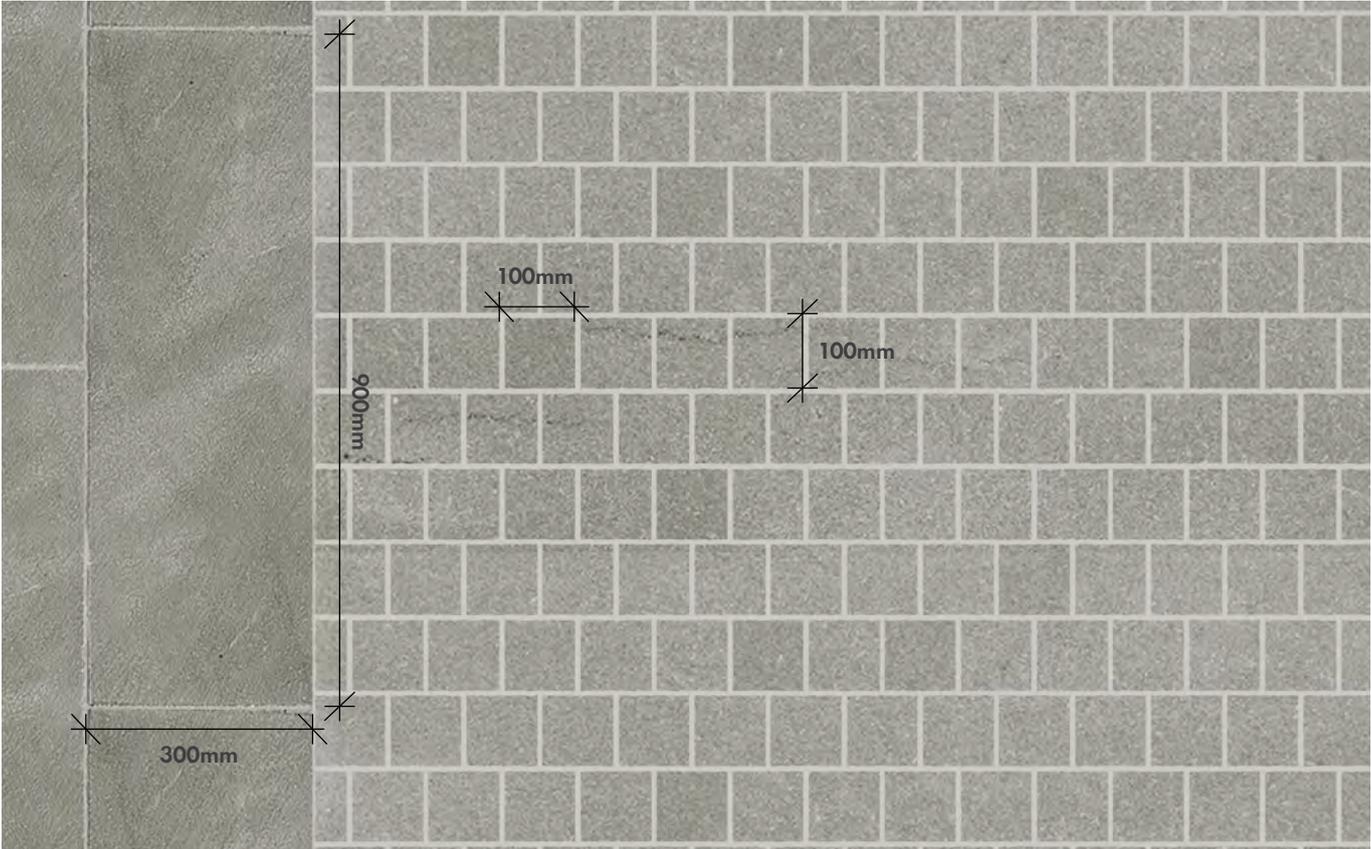
COMMERCIAL ZUQAQ ZOOM PLAN



- Field – Where possible, 1800mm clear width to be maintained for pedestrians or 1500mm in localised instances
- Edge – Typically 600-800mm width to mitigate irregular building lines and rationalise street furniture
- Traffic – All zuqaqs should avoid using kerbs with upstands to demarcate service routes. Where vehicle access is required paving and sub-base specification should be designed to meet anticipated vehicle loading
- Accessibility – Where possible, single steps and shallow steps to be graded into ramps. Utilities must also be flush with surrounding paving.
- Planting – Placement of trees should ensure a 1800mm clear width is maintained. Climbers and low level planting are preferable and could be used in selected locations
- Microclimate – planting and shading devices should be used to improve microclimate and walkability in zuqaqs. Where possible, more shaded parts of each zuqaq should be clear from obstructions
- Lighting – wall mounted LED lights typically 4000-6000mm mounting height. Light columns may be preferable in larger zuqaq conditions
- Street furniture – Street furniture to be minimised and rationalised, particularly in narrow zuqaq conditions
- Refuse – All bins to be located within paving edge zone and ideally located on quieter routes. Domestic bins should have timber screening to minimise visual impact on the streetscape
- Drainage – Where relevant, dished drainage channels and slot drains should be used to capture and direct surface water runoff to planting. General drainage should typically be centred along zuqaqs and should be appropriate to the scale of the route
- Utilities – Typically recessed utility covers with paving infill to match surrounding surfacing. Cast iron utility covers (or similar) to be used where vehicle overrun is anticipated

COMMERCIAL ZUQAQ PRIMARY ROUTES

ILLUSTRATIVE MATERIAL DETAIL



Edge		Field	
Material	Saudi Basalt	Material	Saudi Basalt
Colour	Grey	Colour	Grey
Finish	Sawn	Finish	Honed
Size	300x900mm	Size	100x100mm
Bond	Staggered	Joints	Open jointing (5-7mm typical)
Joints	Open jointing (5-7mm typical)	Bond	Staggered

COMMERCIAL ZUQAQ SECONDARY ROUTES

ILLUSTRATIVE MATERIAL DETAIL



Edge

Field

Edge

Material	Saudi Basalt
Colour	Grey
Finish	Sawn
Size	300x900mm
Bond	Staggered
Joints	Open jointing (5-7mm typical)

Field

Material	Saudi Basalt
Colour	Grey
Finish	Hammered with ticked edges
Size	100x100mm
Joints	Open jointing (5-7mm typical)
Bond	Staggered

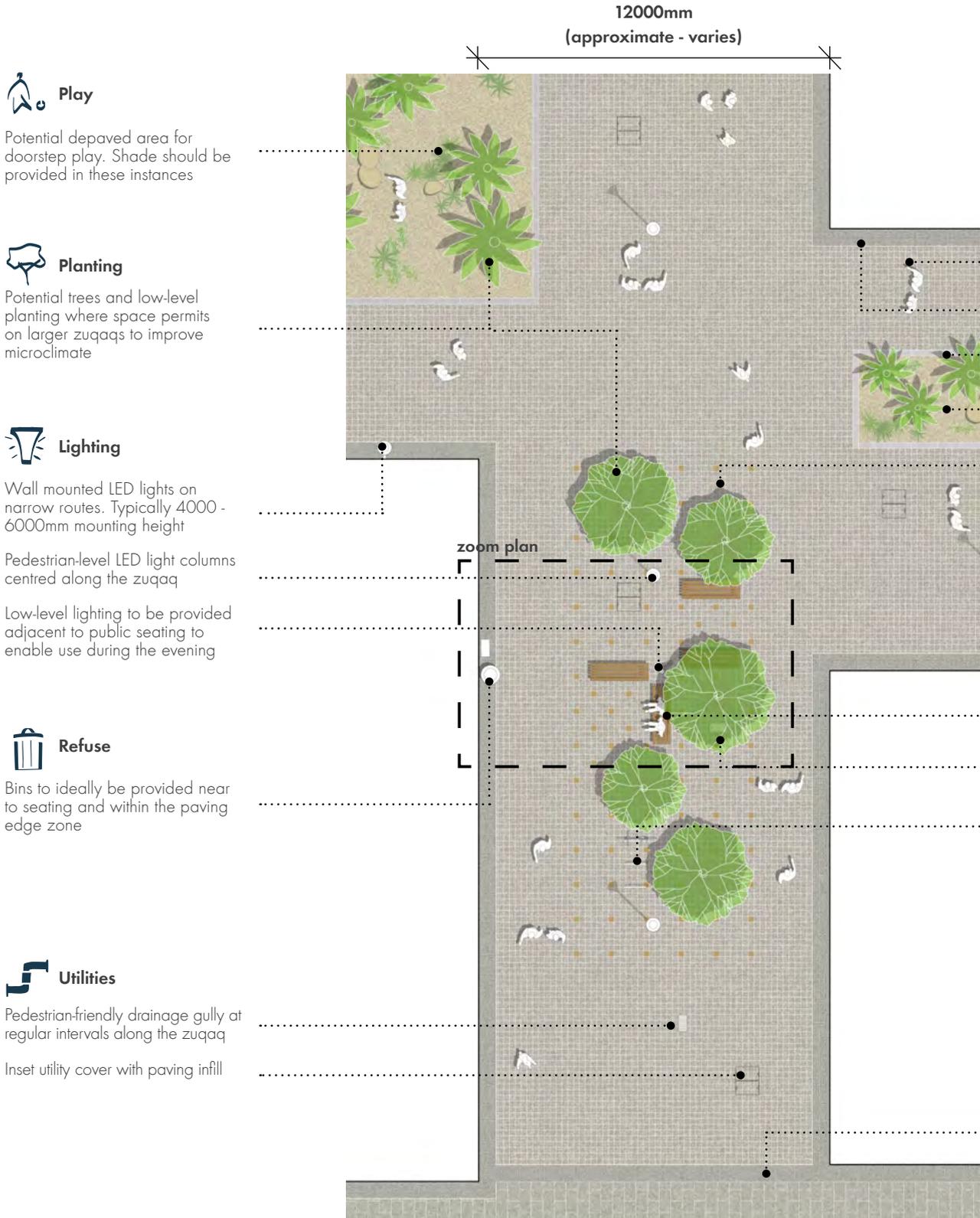


Illustrative view of Lagoon zuqaq type



5.2.3 LAGOON ZUQAQ

Large zuqaq in North and South Lagoon areas





 **Paving**

200x200 basalt setts. Paving pattern adaptable to street conditions and aligned perpendicular to zuqaq centreline

50x50 basalt setts edge to rationalise utilities and street furniture

300x900 basalt surround to depaved area

Potential depaved area to increase planting along zuqaqs to improve localised microclimate

Special paving pattern or paving inserts to demarcate a moment within the zuqaq

 **Street furniture**

Public seating at regular intervals and in shaded locations

Drinking fountains in shaded locations and ideally provided near to seating areas

Cycle stands to be located in shaded positions and grouped with other objects in the public realm to minimise obstruction

 **Paving**

Potential for paving edge to mitigate transition between different paving orientation and sizes



LAGOON ZUQAQ

Medium-scale zuqaq in North and South Lagoon areas

7900 - 9600mm
 (approximate - varies)

 **Accessibility**

Minimum 1800mm clear pedestrian zone

 **Street furniture**

Cycle stands to be ideally located in shaded locations and positioned to minimise obstruction

 **Utilities**

Pedestrian-friendly drainage gully at regular intervals along the zuqaq

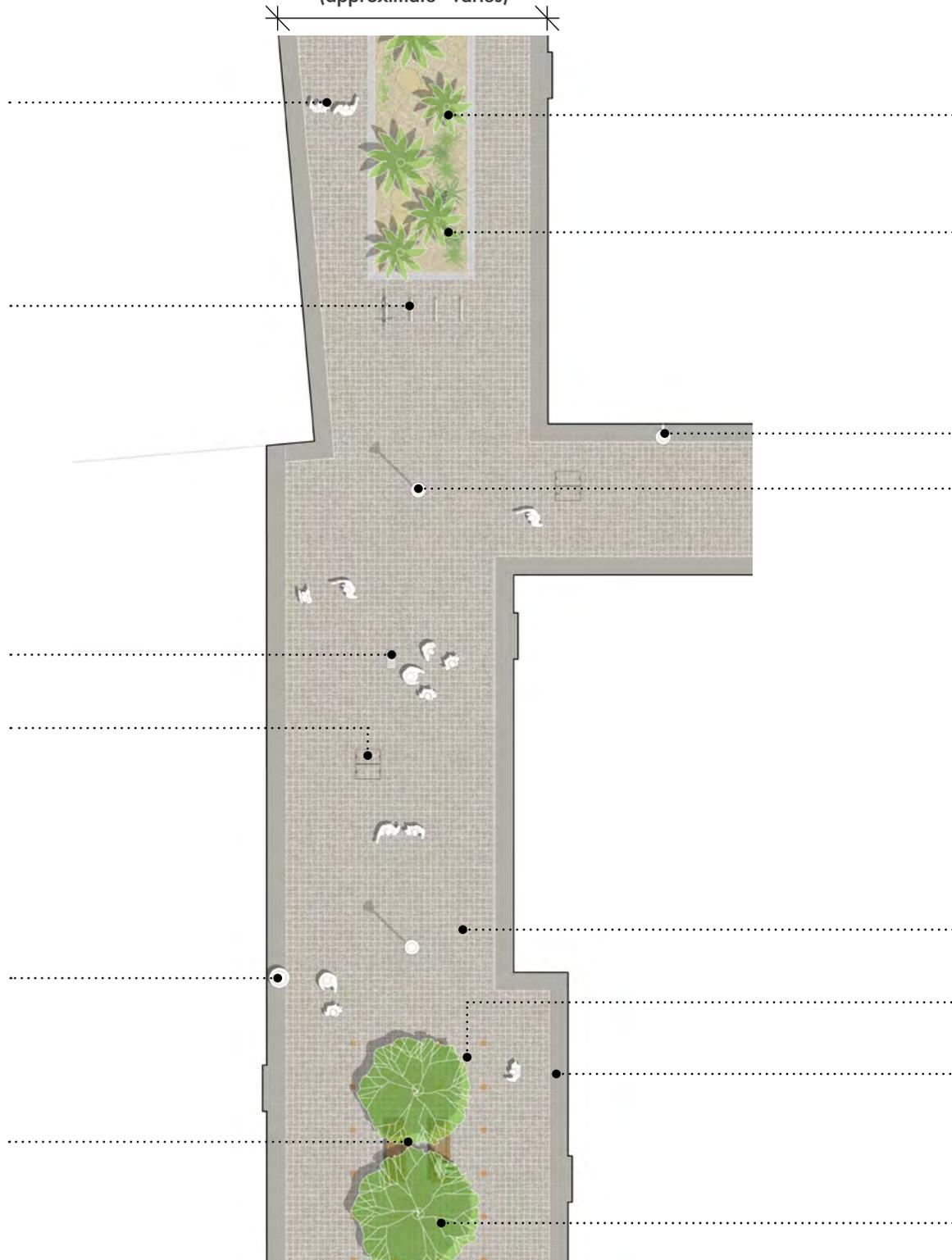
Recessed utility cover with paving infill

 **Refuse**

Bins to be located adjacent to buildings within paving edge zone. Ideally, bins should also be located near to public seating

 **Street furniture**

Public seating to be provided at regular intervals where width permits. Seating should ideally be shaded





 **Play**

Potential depaved area for doorstep play.
Shade should be provided in these instances

 **Paving**

Potential to de-pave and increase planting
along zuqaqs to improve localised microclimate

 **Lighting**

Wall mounted LED lights on narrow routes.
Typically 4000 - 6000mm mounting height

Pedestrian-level LED light columns aligned to the
zuqaq centreline

 **Paving**

200x200 basalt setts
Paving pattern adaptable to street conditions
and aligned perpendicular to zuqaq centreline

Special paving pattern or paving inserts to
demarcate a moment within the zuqaq

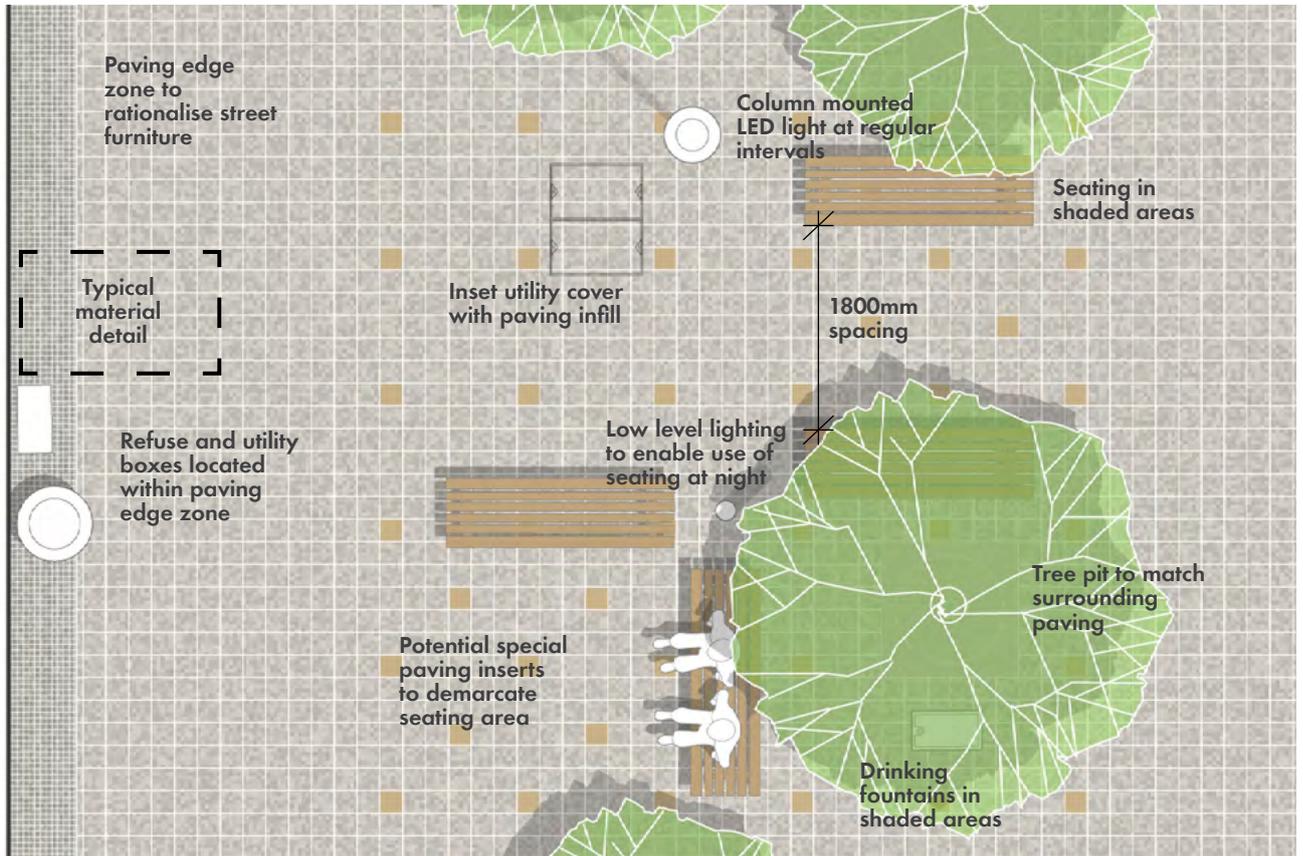
50x50 basalt setts edge to rationalise utilities
and street furniture. At building entrances, the
edge condition should continue to the doorway

 **Planting**

Planting to be provided for shade
and to improve the microclimate

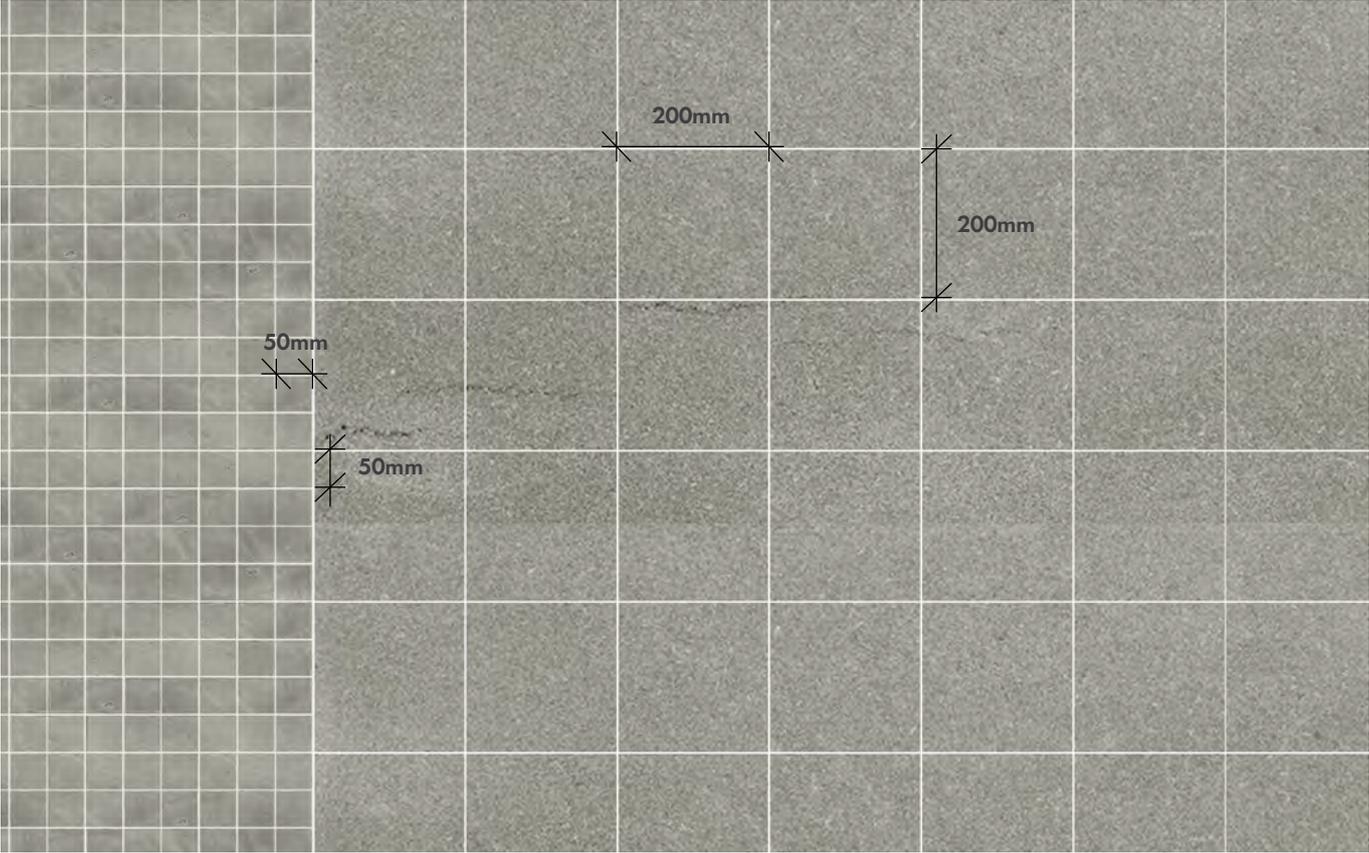


LAGOON ZUQAQ ZOOM PLAN



- Field – 1800mm clear width to be maintained for pedestrians
- Edge – Typically 600-800mm width to mitigate irregular building lines and rationalise street furniture
- Traffic – All zuqaqs should avoid using kerbs with upstands to demarcate service routes. Where vehicle access is required paving and sub-base specification should be designed to meet anticipated vehicle loading
- Specials – Special paving inserts could be used in conjunction with seating and planting to highlight key destinations or mark moments within zuqaqs
- Accessibility – Designs should use ramps to mitigate level changes. Utilities must also be flush with surrounding paving
- Play – Informal play could be integrated within larger zuqaqs. Designs should ensure play areas are adequately shaded by planting or buildings
- Planting – Trees, low level planting and climbers should be used in conjunction to improve microclimate, provide shade and emphasise special moments along zuqaqs
- Microclimate – planting, shading devices and depaved areas should be used to improve microclimate and walkability in zuqaqs
- Lighting – wall mounted LED lights typically 4000-6000mm mounting height. Light columns may be preferable in larger zuqaq conditions
- Street furniture – Seating, drinking fountains and other amenities should be provided at regular intervals.
- Refuse – All bins to be located within paving edge zone and ideally located on quieter routes.
- Drainage – General drainage should typically be centred along zuqaqs and should be appropriate to the scale of the route
- Utilities – Typically recessed utility covers with paving infill to match surrounding surfacing. Cast iron utility covers (or similar) to be used where vehicle overrun is anticipated

LAGOON ZUQAQ ILLUSTRATIVE MATERIAL DETAIL



Edge

Field

Edge

Material	Saudi Basalt
Colour	Grey
Finish	honed
Size	50x50mm
Bond	Stacked or staggered
Joints	Open jointing (5-7mm typical)

Field

Material	Saudi Basalt
Colour	Grey
Finish	Sawn
Size	200x200mm
Joints	Close jointing (2-3mm typical)
Bond	Stacked

5.3 SOUQS

Souqs are the heart of trading activities in the city and act as significant connectors across Al Balad. They are a major part of Jeddah's history and each has a distinct character that should be reflected in the public realm. The following examples illustrate typical approaches to different sizes and types of souq. In all instances, typical approaches are illustrated using named souqs. These reflect the varied conditions and uses in souqs.

Paving in souqs should be generally larger than surrounding zuqaqs and should be level to ensure accessibility. In some instances, feature paving could be used to emphasise particular moments along souqs.

Planting should be curated to provide moments of rest and shade. Canopies may also be suitable as an alternative. Herbaceous and perennial planting should relate to the history of the place where possible - for example planting jasmine where perfume was sold or planting Schinus molle - Pepper Tree where spices were sold.

Street furniture on souqs should be minimised to avoid clutter. For instance, lighting should be wall mounted and market stall locations could be managed to ensure clear pedestrian paths.



Activities

- Commercial focus
- Shaded seating areas
- Pitches for market stalls



Materials

- Field: varies by souq
- Edge: 300x900 basalt paving edge
- Traffic: managed / service vehicles only
- Specials/feature paving: varies by souq



Lighting

- Colour: 3500k
- Illuminance: 4-9 lux
- Mounting: 4-6 metres
- Other lighting: subtle architectural lighting and high-quality shopfront lighting



Planting

- Trees: varies by souq
- Character: Informal
- Irrigation: Low water planting. Water harvested from nearby mosques, cisterns or surface water runoff



Street furniture

- Seating and drinking fountains in selected locations
- Bins located in paving edge zone
- Shop merchandise in paving edge zone



Utilities

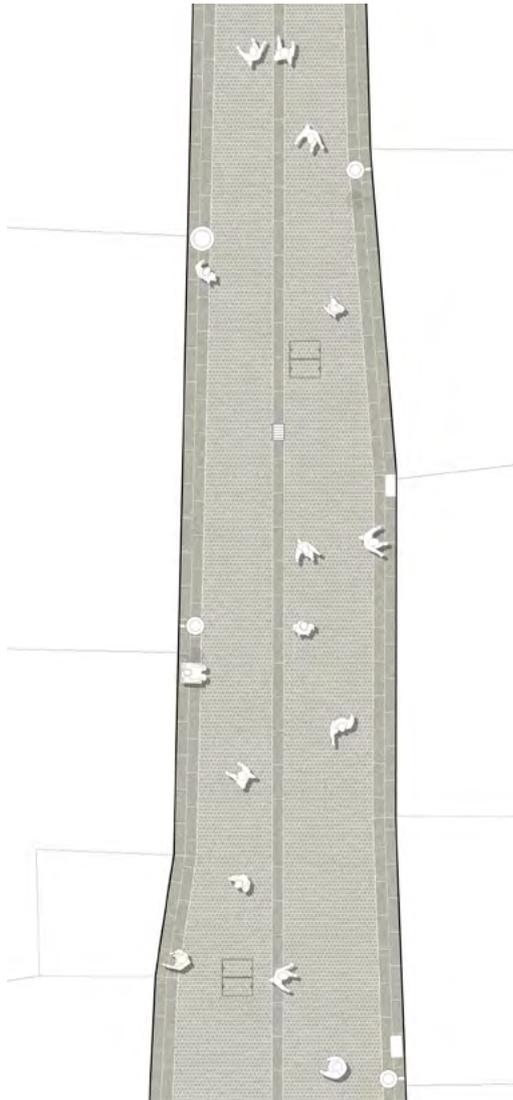
- Inset utility covers with paving infill to be flush with surrounding paving
- Pedestrian friendly, subtle drainage gullies integrated into paving designs



SOUQS

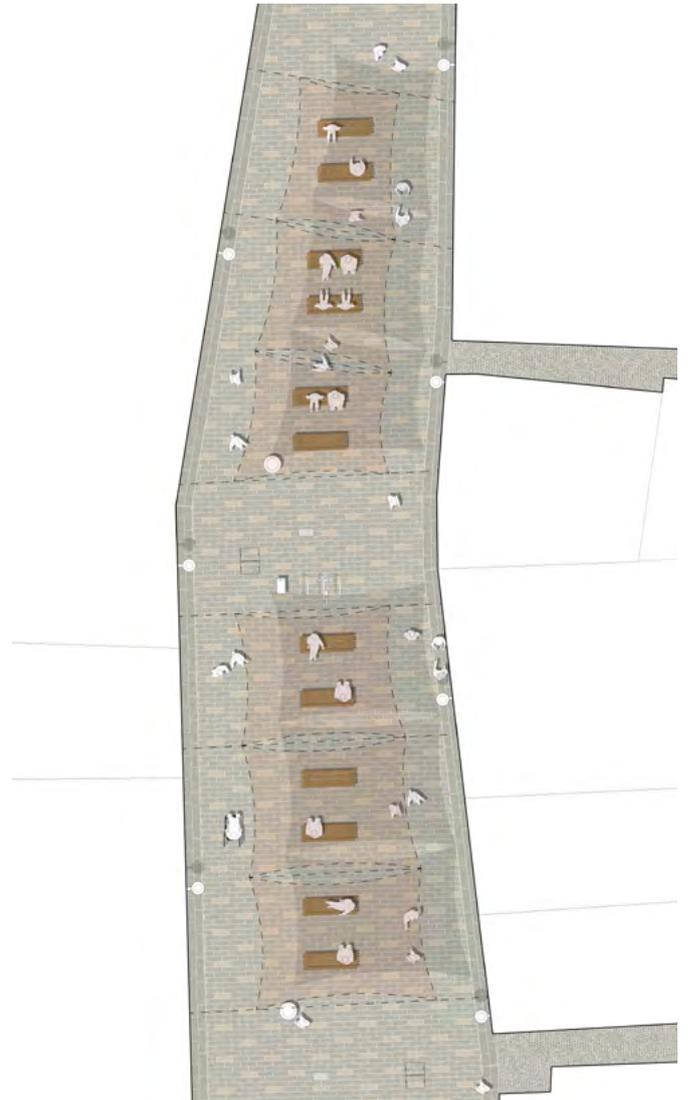


SOUQS OVERVIEW



Souq Al Jami

- Feature paving and planting at key gathering spaces along the souq's length
- Small souq typically 4-7 metres wide
- Simple and high-quality paving



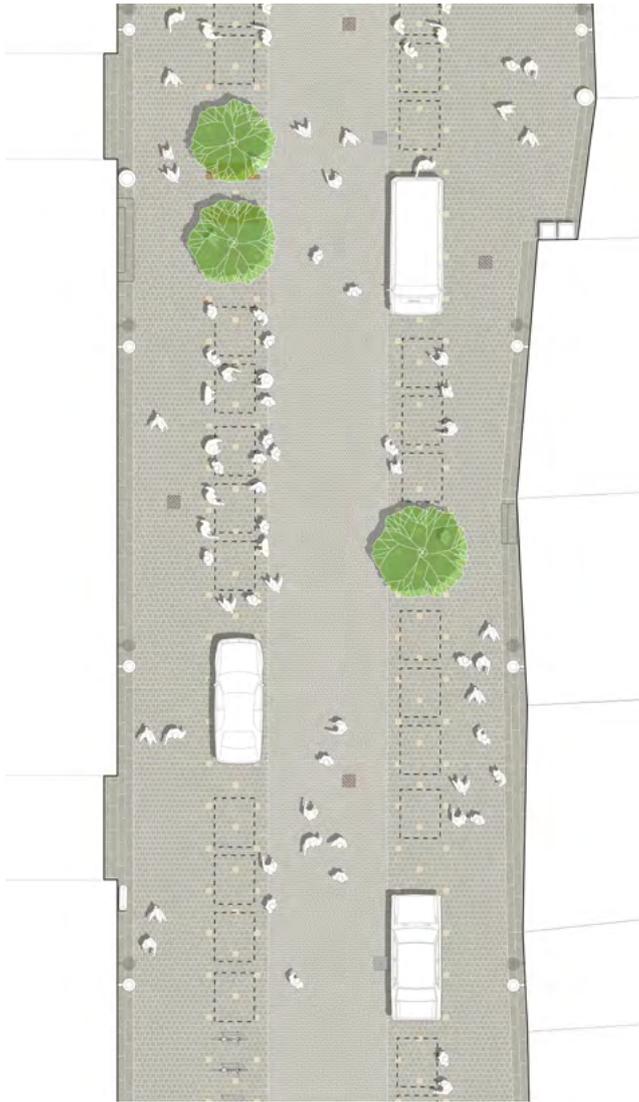
Souq Al Nada

- A varied field condition with contrasting paving inserts
- Varied form, character and uses
- Use of canopies and planting for shade and wayfinding



Souq Al Alawi

- A souq with six public spaces along its length
- Changes in paving direction and feature paving to emphasise the varied souq form
- Souq edge rationalises levels and shop merchandise



Souq Bab Makkah

- A souq characterised by the good market
- Feature paving to demarcate market stalls and parking area`
- A central service lane for vehicle access

5.3.1 SOUQ AL JAMI

Existing character and function

Souq Al Jami is a narrow east-west pedestrian route that runs between Talah Al Aidarus and Al Dahab Street (including Souq Al-Badou). It is located in the Nominated Property boundary and contains many well preserved historic buildings. The souq itself gets its name from the historic Imam Shafi'i Mosque at its centre, originally built c.1251 and believed to be Jeddah's oldest mosque. Buildings along the souq are well occupied by shops specialising in different types of fabrics.

The main issues on this route relate to; inconsistent paving quality, street clutter (particularly bins and refuse) and vehicles using the souq as a through route. The souq also lacks amenity for shade and rest.

Key considerations

- Incorporate designs that are sensitive to the historic condition
- Utilise high quality Saudi basalt
- Reduce street clutter, in particular bins and refuse
- Manage vehicular access for private vehicles
- Upgrade surfacing and street furniture to be high quality, using a consistent palette of materials
- Replace cast iron covers with inset utility covers
- Rationalise a paving edge zone to display shop merchandise and rationalise utilities
- Rationalise drainage locations
- Upgrade public spaces adjacent to provide places for shade and rest.



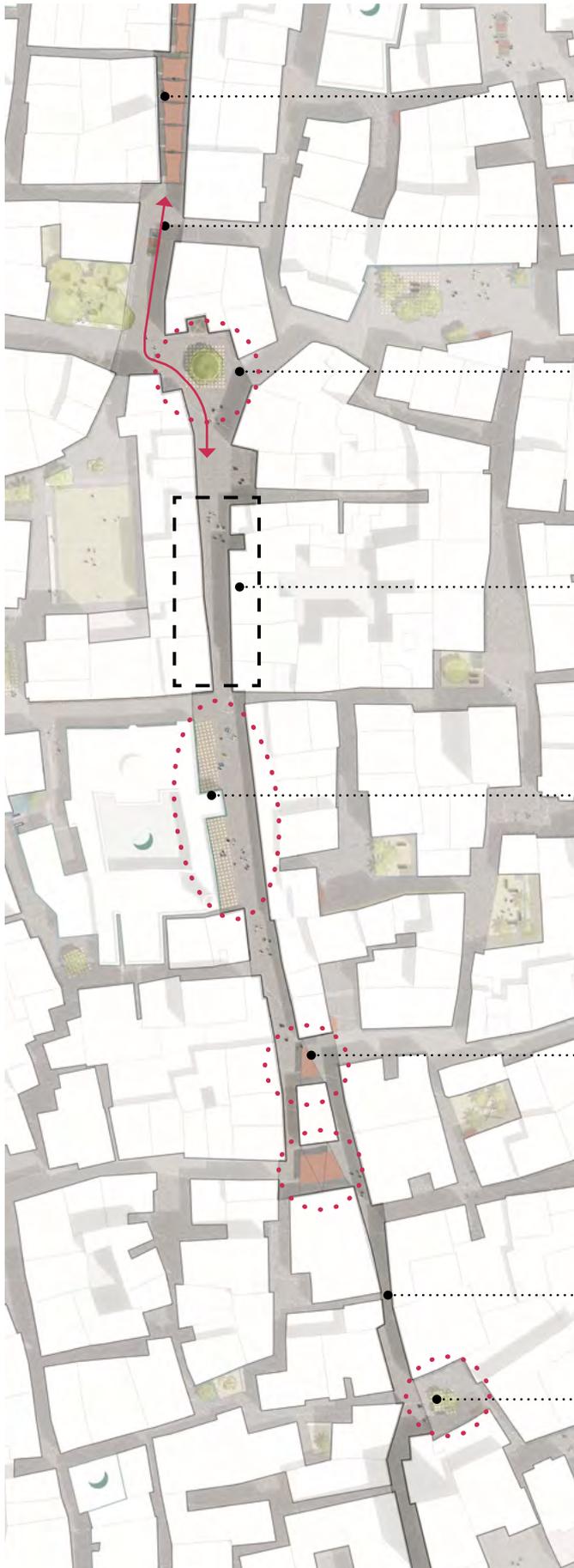
View looking west with Imam Shafi'i Mosque (right). The public realm setting of the mosque could be greatly improved given its historic significance



Private vehicles often use the souq for access, sometimes causing sub-surface failure to the souq paving



Commercial refuse in Barahat Ubayd could be tidied to provide a better terminating view to the souq



Potential to replace the Souq Al Badou market metal roof with a lightweight canopy covering

Souq joins to covered market

Open space with planting acts as meeting place and key node for wayfinding

Souq Al Jami typical plan

Mosque is highlighted as central meeting place on the souq through special paving

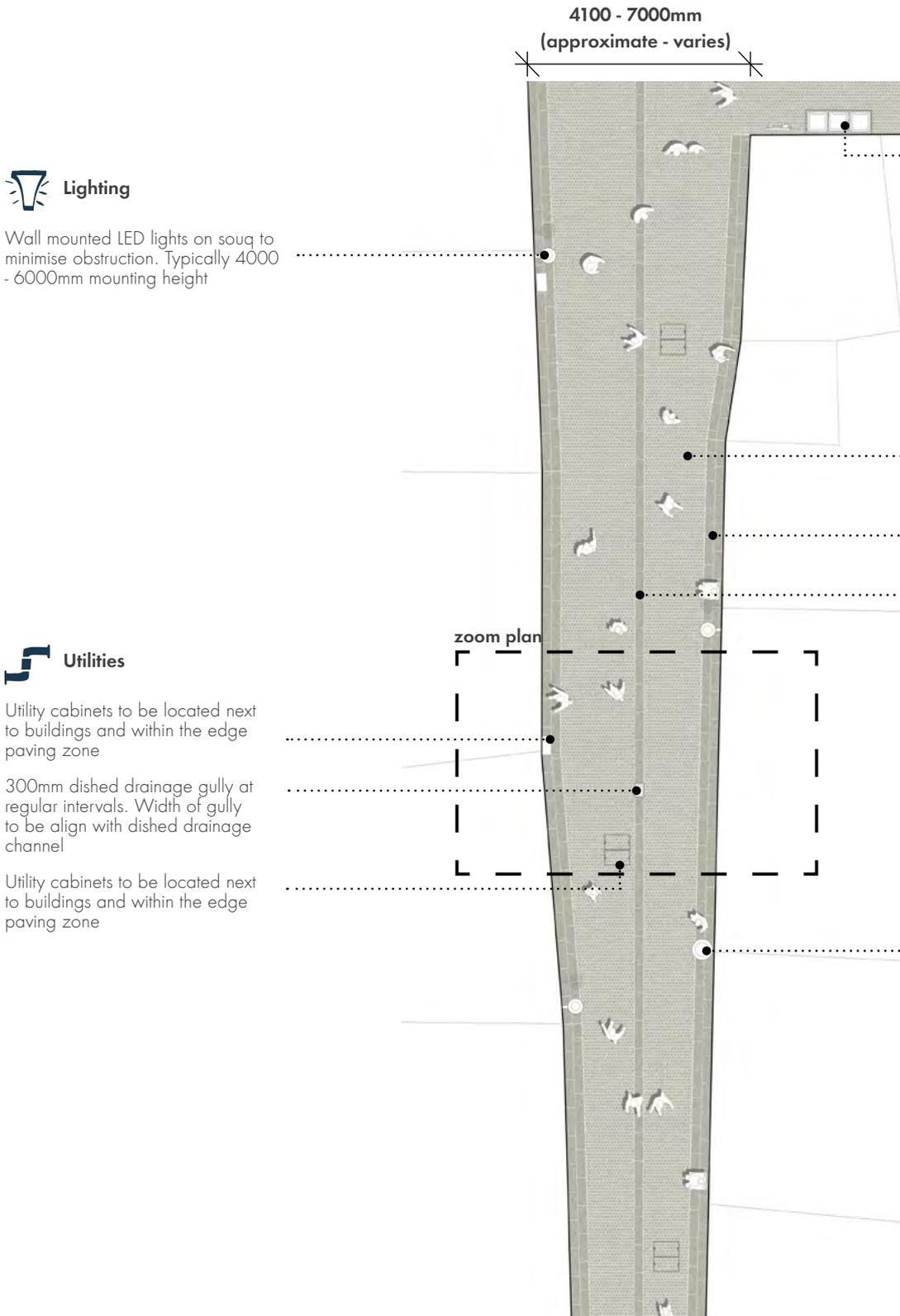
Potential shading and special paving designs in small open spaces

Surface treatment extends to meet with Al Dahab Street

Open space with planting to provide moment to rest and socialise



SOUQ AL JAMI TYPICAL PLAN





Refuse

Domestic bins with timber screening on side street against blank wall



Paving

200x200 basalt setts
Paving pattern adaptable to street conditions and aligned perpendicular to souq centreline

300x900 basalt edge to rationalise street furniture and mitigate level changes

Dished channel to direct surface water runoff to drainage gullies

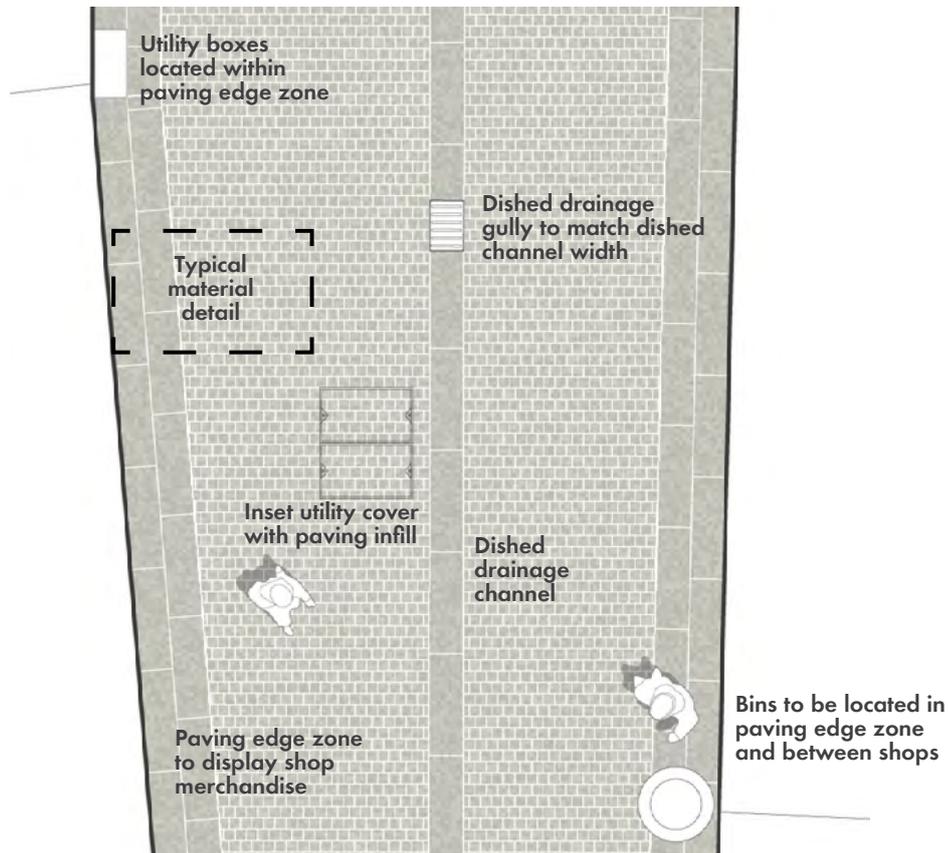


Refuse

Bins at rationalised locations and located within edge paving zone

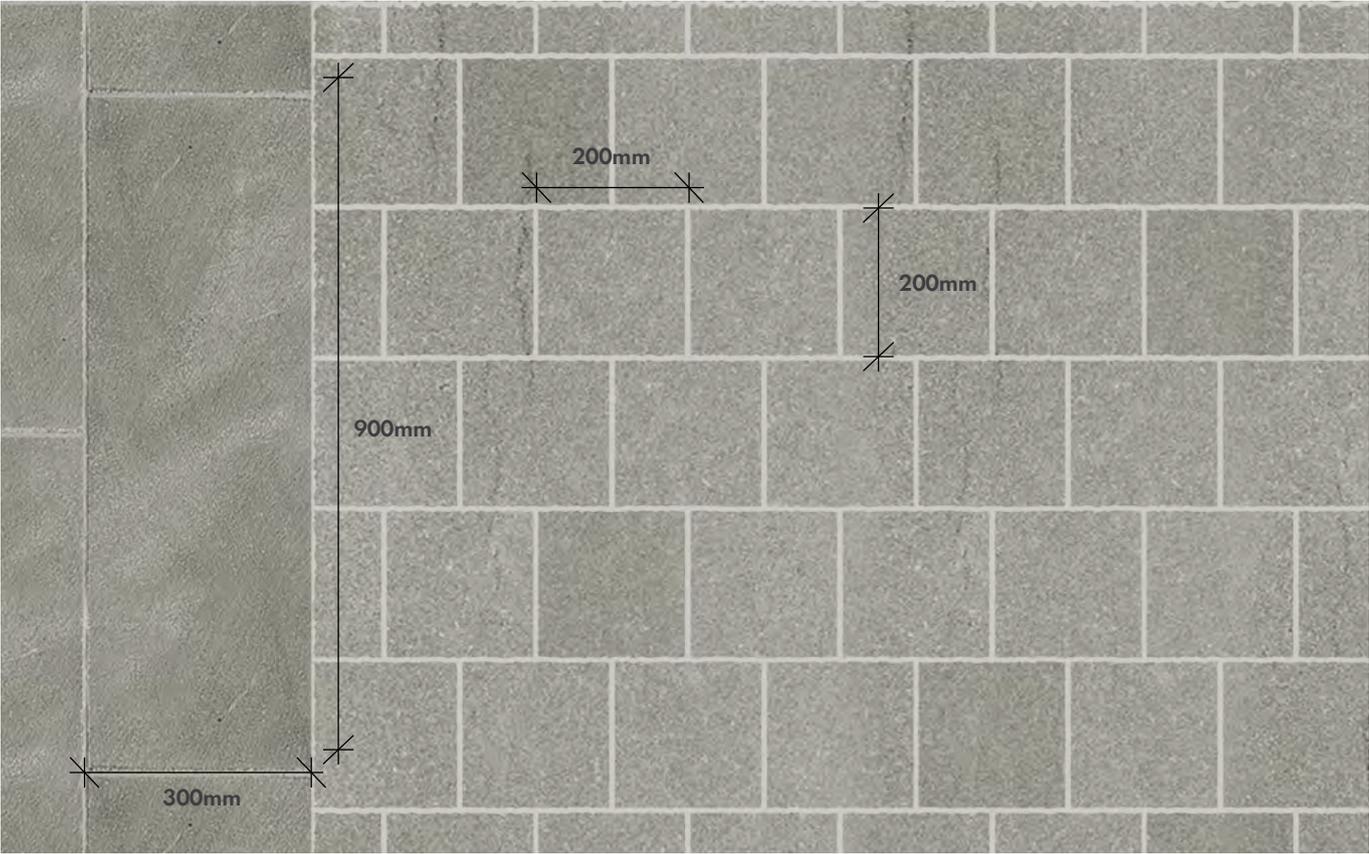


SOUQ AL JAMI ZOOM PLAN



- Field – Where possible, 1800mm clear width to be maintained for pedestrians or 1500mm in localised instances
- Edge – Typically 600mm width to mitigate irregular building lines and rationalise street furniture
- Traffic – The souq should avoid using kerbs with upstands to demarcate service routes. Where vehicle access is required paving and sub-base specification should be designed to meet anticipated vehicle loading
- Accessibility – Where possible, single steps and shallow steps to be graded into ramps. Utilities must also be flush with surrounding paving.
- Microclimate – Planting and shading devices should be used to improve walkability and microclimate along the souq
- Lighting – wall mounted LED lights typically 4000-6000mm mounting height
- Street furniture – Street furniture to be minimised and rationalised
- Refuse – All bins to be located within paving edge zone and ideally located on quieter routes. Domestic bins should have timber screening to minimise visual impact on the streetscape
- Drainage – Drainage gullies should align with central dished channel along the souq
- Utilities – Typically recessed utility covers with paving infill to match surrounding surfacing. Cast iron utility covers (or similar) to be used where vehicle overrun is anticipated

SOUQ AL JAMI ILLUSTRATIVE MATERIAL DETAIL



Edge

Field

Edge

Material	Saudi Basalt
Colour	Grey
Finish	Sawn
Size	300x900mm
Bond	Staggered
Joints	Open jointing (5-7mm typical)

Field

Material	Saudi Basalt
Colour	Grey
Finish	Honed
Size	200x200mm
Joints	Open jointing (5-7mm typical)
Bond	Staggered

5.3.2 SOUQ AL NADA

Character and function

Souq Al Nada is a long north-south pedestrian route intersecting different districts within Al Balad. It is a place of exchange between the port, residential areas and city gateways to the overland trading routes. The souq is not within the Nominated Property boundary and is characterised by numerous C20th building types with heritage buildings at key moments.

Along the souq, ground floor uses vary greatly including: food and drink, jewellery and clothes. The souq width also widens and narrows changing the character and available shade. Designs for this Souq Al Nada should be flexible, responding to its different character and conditions.

Key considerations

- Utilise a limited palette of materials to bring variety and unify the souq along its length
- Utilise high quality Saudi materials
- Reduce street clutter, in particular bins and refuse
- Manage vehicular access for private vehicles
- Upgrade surfacing and street furniture to be high quality, using a consistent palette of materials
- Incorporate planting and canopies to provide shade where necessary.
- Integrate seating, drinking fountains and bins at regular intervals.
- Replace cast iron covers with inset utility covers
- Rationalise a paving edge zone to display shop merchandise and rationalise utilities
- Rationalise drainage locations and upgrade storm-water drainage, to eliminate ponding, and flooding
- Upgrade public spaces at entry points to the souq to provide places to meet



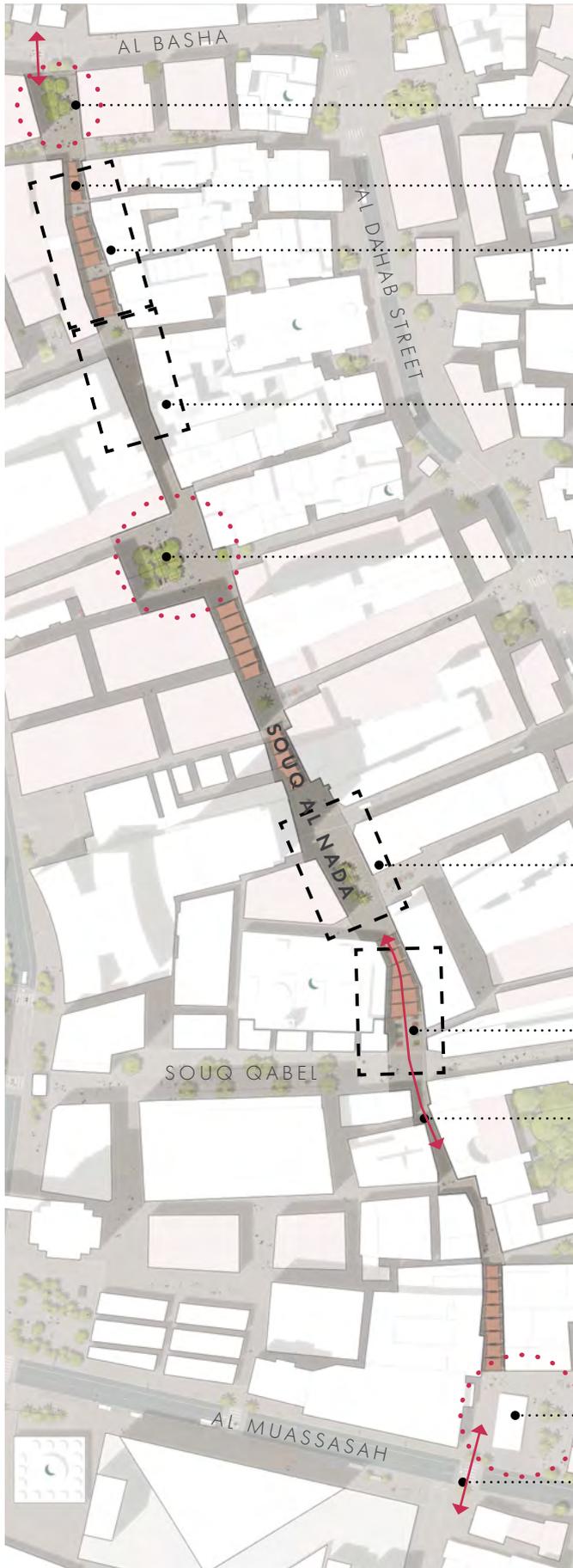
View looking north onto Souq Al Nada from Souq Qabel showing a concentration of market stalls



Group of men sitting on a shop step at the northern end of Souq Al Nada. The souq currently lacks seating and public amenity



View looking north towards Al Basha street. There is potential to improve lighting and to rationalise street furniture here



Planting to mark souq threshold

Shading devices at considered locations

Souq Al Nada - Condition A: Food and drink shaded area

Souq Al Nada - Condition B: Heritage-focused area

Shaded open space as moment of rest at the midpoint of Souq Al Nada

Souq Al Nada - Condition C: Planted condition

Souq Al Nada - Condition D: Market stalls condition

Paving treatment carries across to link the souq

Potential covered market structure in open space

Pedestrian crossing at end of the souq



SOUQ AL NADA

Condition A: food and drink shaded area

7400 - 11500mm
 (approximate - varies)



Lighting

Wall mounted LED lights staggered along the souq to minimise pedestrian obstruction. Typically 4000 - 6000mm mounting height



Refuse

Refuse to be located near to seating and positioned with other street furniture to minimise obstruction

Microclimate

Canopy to increase shade along the souq and improve microclimate and walkability



Utilities

Inset utility cover with paving infill
 Pedestrian-friendly drainage gully at regular intervals along the souq



Paving

200x600 basalt sets with contrasting paving inserts. Paving pattern adaptable to street conditions and aligned perpendicular to souq centreline

300x900 basalt edge to rationalise street furniture and mitigate level changes

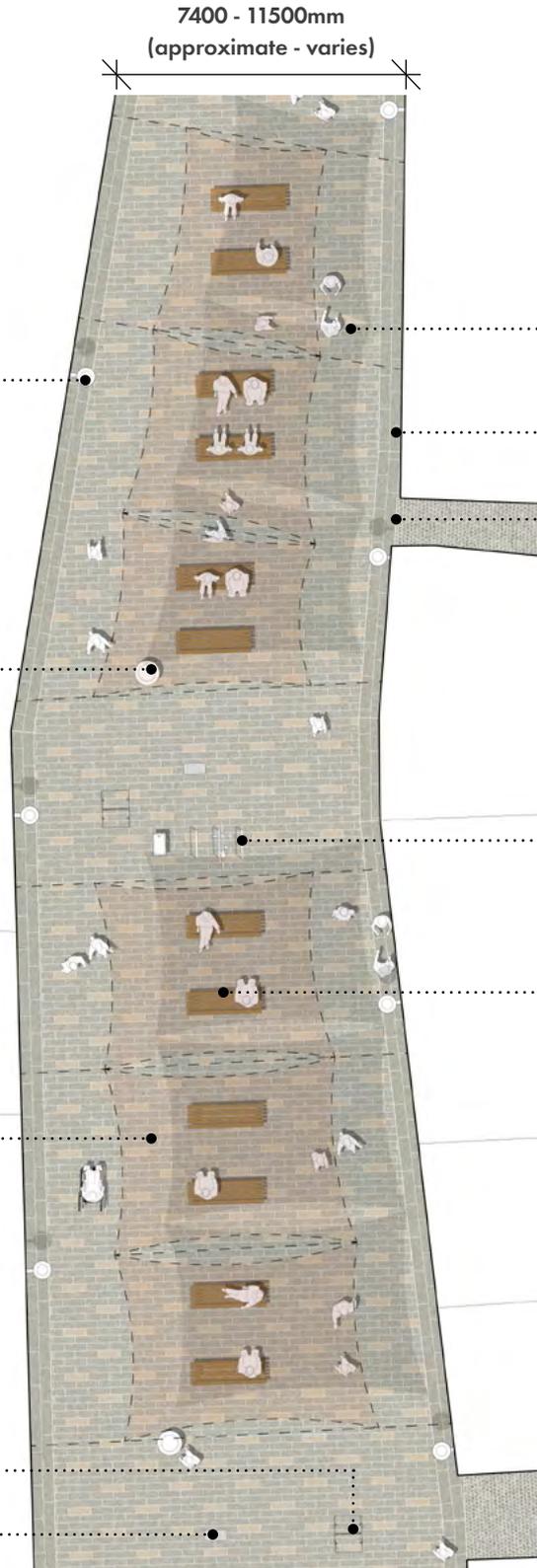
Potential to use paving edge to mitigate change of paving size and orientation



Street furniture

Cycle stands and drinking fountains to be located in shaded areas and grouped with other street furniture to minimise obstruction

Public seating concentrated around adjacent food and beverage uses. Minimum 1800mm clear path between seating clusters



SOUQ AL NADA

Condition B: Heritage-focused condition



7000 - 11000mm
(approximate - varies)

Planting

Planting to provide a moment of shade and for orientation/wayfinding. The positioning of the planting should not obstruct views to the adjacent heritage buildings

Transport and streetscape

Bollards to restrict private vehicle access to the souq

Paving

200x600 basalt sets with contrasting paving inserts. Paving pattern adaptable to street conditions and aligned perpendicular to souq centreline

300x900 basalt edge to rationalise street furniture and mitigate level changes

Special paving inserts to compliment the surrounding paving condition and highlight the adjacent heritage buildings

Utilities

Pedestrian-friendly drainage gully at regular intervals along the souq

Inset utility cover with paving infill

Street furniture

Drinking fountains to be located in shaded locations and grouped with other street objects to minimise obstruction

Refuse

Commercial waste bins with timber screening. Ideally located on side routes off Souq Al Nada

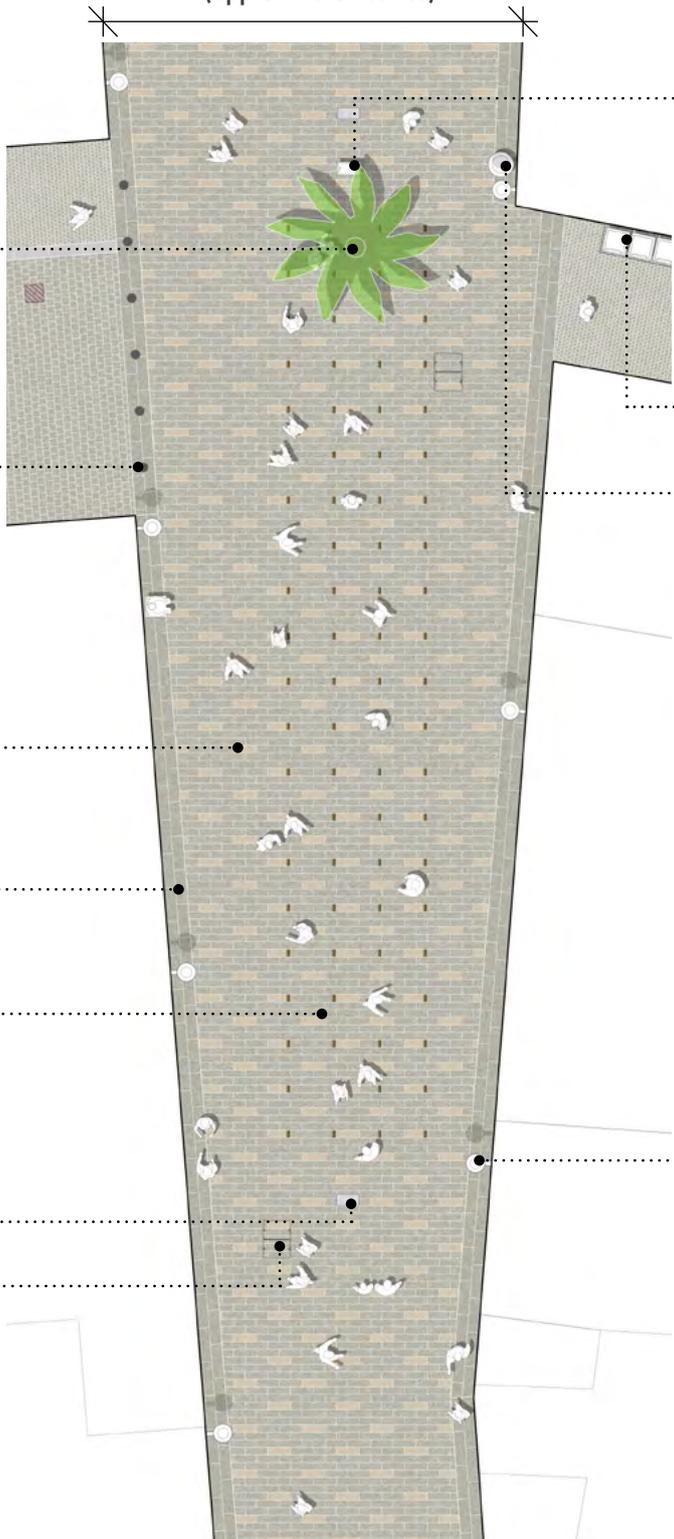
Bins to be positioned in the paving edge zone in rationalised locations

Heritage

Public realm in front of restored heritage buildings should express the special quality of the architecture and should be free from street clutter

Lighting

Wall mounted LED lights staggered along the souq to minimise pedestrian obstruction. Typically 4000 - 6000mm mounting height



SOUQ AL NADA

Condition C: planted condition

14500 - 21800mm
 (approximate - varies)



Paving

Potential to use paving edge to mitigate change of paving size and orientation

200x600 basalt setts with contrasting paving inserts. Paving pattern adaptable to street conditions and aligned perpendicular to souq centreline

300x900 basalt edge to rationalise street furniture and mitigate level changes

Special paving inserts to compliment the surrounding paving condition and demarcate the planted area



Utilities

Slot drain (or similar) to catch and direct surface water runoff to planting

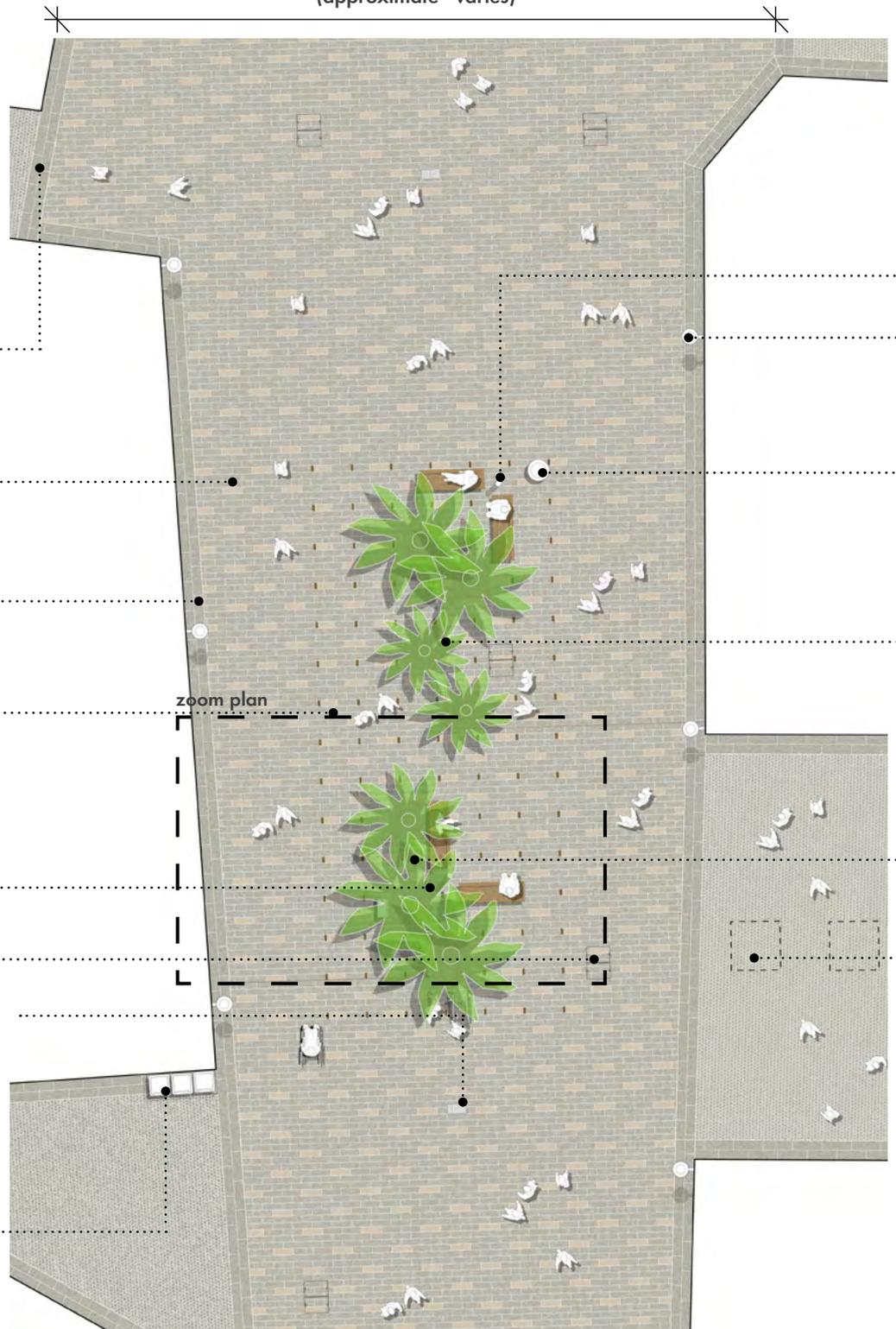
Inset utility cover with paving infill

Pedestrian-friendly drainage gully at regular intervals along the souq



Refuse

Commercial waste bins with timber screening. Ideally located on side routes off Souq Al Nada





 **Lighting**

Low-level lighting to be provided adjacent to public seating to enable use during the evening

Wall mounted LED lights staggered along the souq to minimise pedestrian obstruction. Typically 4000 - 6000mm mounting height

 **Refuse**

Refuse to be located near to seating or next to buildings on paving edge zone

 **Planting**

Planting to provide shade, improve microclimate and provide a marker for wayfinding

 **Street furniture**

Drinking fountains and public seating to be located in shaded locations and only where the souq width permits. Objects should be grouped with to minimise obstruction

Potential to introduce market stalls ensuring a 1800mm clear width is maintained for pedestrian movement



SOUQ AL NADA

Condition D: market stalls condition

7400 - 14900mm
 (approximate - varies)



Paving

200x600 basalt setts with contrasting paving inserts. Paving pattern adaptable to street conditions and aligned perpendicular to souq centreline

300x900 basalt edge to rationalise street furniture and mitigate level changes

Potential to use paving edge to mitigate change of paving size and orientation



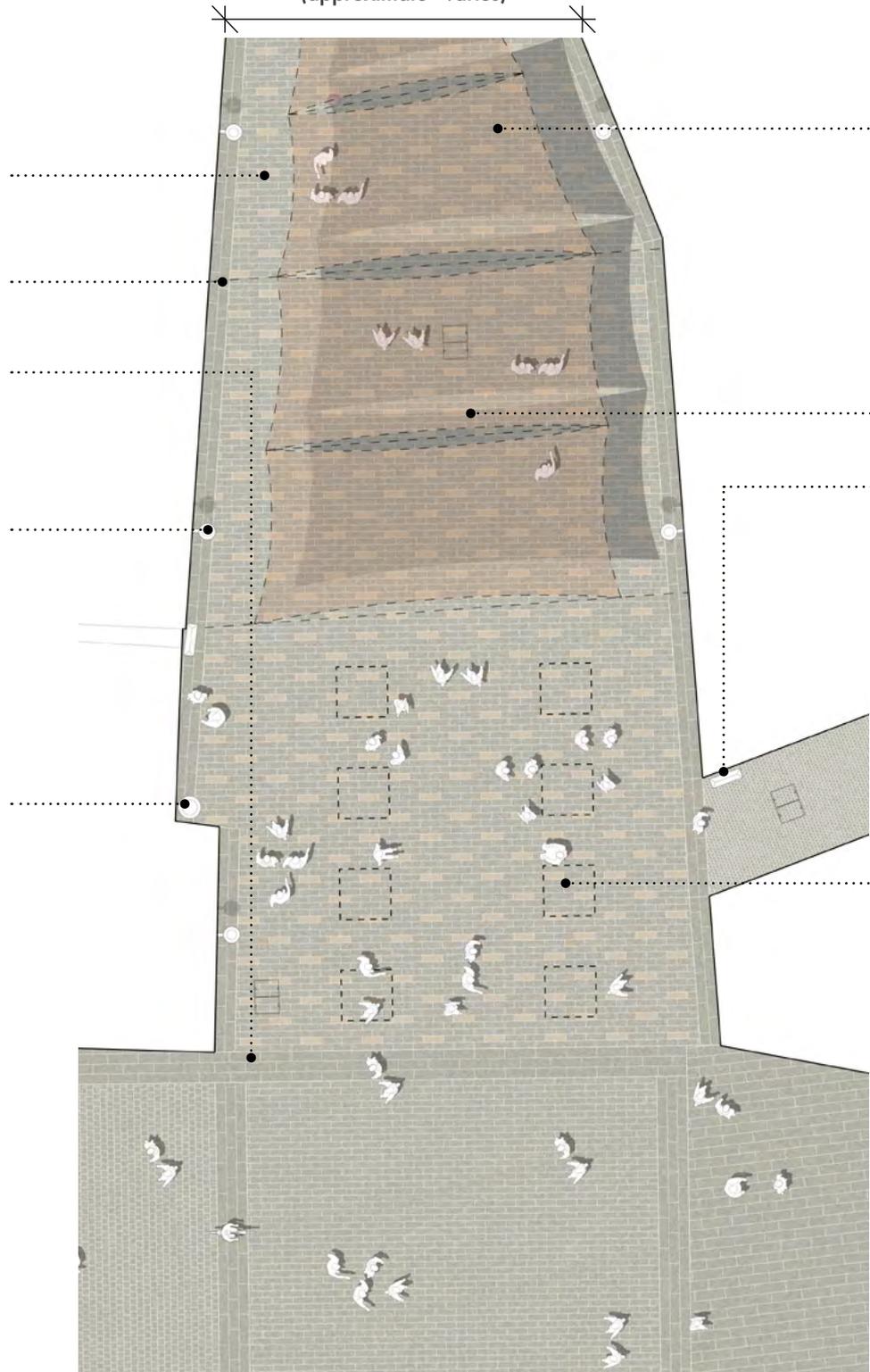
Lighting

Wall mounted LED lights staggered along the souq to minimise pedestrian obstruction. Typically 4000 - 6000mm mounting height



Refuse

Refuse to be located next to buildings on paving edge zone. Bins should not obstruct any building entrances





Microclimate

..... Canopy to increase shade along the souq and improve microclimate and walkability

 **Utilities**

..... Inset utility cover with paving infill

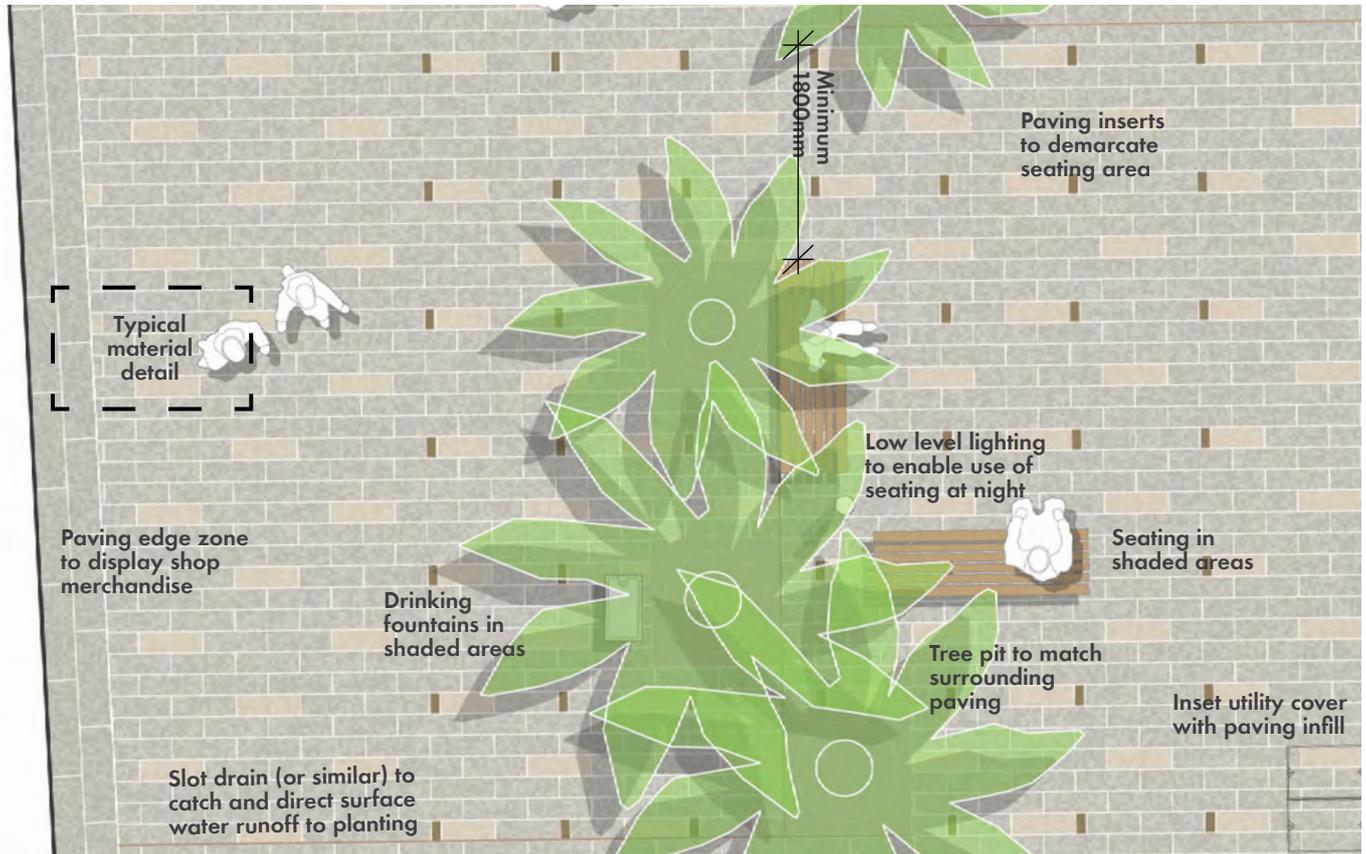
..... Utility boxes and other functional street furniture should ideally be located on side streets to minimise obstruction on Souq Al Nada

 **Street furniture**

..... Market stalls. Spacing to ensure minimum 1800mm clear width for pedestrian movement

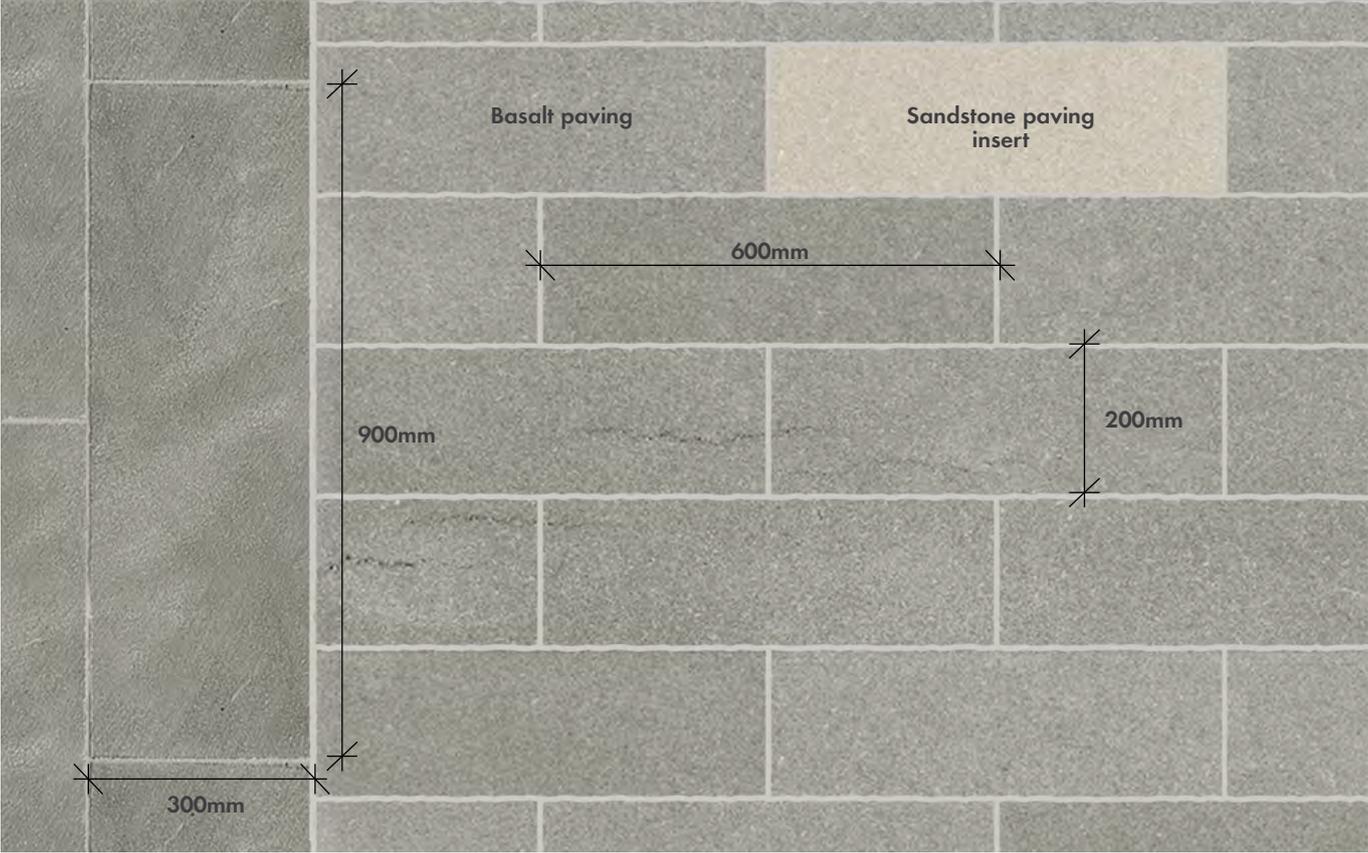


SOUQ AL NADA ZOOM PLAN



- Field – 1800mm clear width to be maintained for pedestrians or 1500mm in localised instances. Paving to align to souq centreline with managed shifts in paving orientation
- Edge – Typically 600mm width to mitigate irregular building lines and rationalise street furniture
- Traffic – The souq should avoid using kerbs with upstands to demarcate service routes. Where vehicle access is required paving and sub-base specification should be designed to meet anticipated vehicle loading
- Accessibility – Where possible, single steps and shallow steps to be graded into ramps. Utilities must also be flush with surrounding paving.
- Microclimate – Planting and shading devices at key destinations and to support food and drink uses.
- Lighting – wall mounted LED lights typically 4000-6000mm mounting height
- Street furniture – Street furniture to be minimised and rationalised to provide rest at key intervals
- Refuse – All bins to be located within paving edge zone and ideally located on quieter routes. Commercial bins should have timber screening to minimise visual impact on the streetscape
- Drainage – Pedestrian-friendly drainage gullies at regular intervals along the souq
- Utilities – Typically recessed utility covers with paving infill to match surrounding surfacing. Cast iron utility covers (or similar) to be used where vehicle overrun is anticipated

SOUQ AL NADA ILLUSTRATIVE MATERIAL DETAIL



Edge

Field

Edge

Material	Saudi Basalt
Colour	Grey
Finish	Sawn
Size	300x900mm
Bond	Staggered
Joints	Open jointing (5-7mm typical)

Field

Material	Saudi Basalt and Saudi sandstone
Colour	Grey and buff
Finish	Honed
Size	200x600mm
Joints	Open jointing (5-7mm typical)
Bond	Staggered

5.3.3 SOUQ AL ALAWI

Character and function

Souq Al Alawi forms one of the most significant routes in Al Balad and forms part of the traditional Hajj route. The form of the souq is unique – opening and closing as the route travels north-east uphill. It is located within the Nominated Property boundary and links significant landmarks including Nassief House and the Al Ma'amar Mosque.

Within the public realm there are opportunities to accentuate the public spaces that open up within the souq. There are also opportunities to uplift the overall public realm quality, including improvements to paving, lighting and drainage

Key considerations

- Highlight and accentuate public spaces along the souq, using elements such as feature paving and planting to improve these spaces
- Utilise high quality Saudi materials to improve the public realm
- Upgrade surfacing and street furniture to be high quality, using a consistent palette of materials
- Rationalise a paving edge zone to display shop merchandise and rationalise levels
- Reduce street clutter, in particular bins and refuse
- Replace cast iron covers with inset utility covers
- Rationalise drainage locations to capture and direct surface water runoff to planting
- Improve the quality of public and private lighting to reduce over-illumination.
- Reposition street furniture to ensure clear vistas along the souq



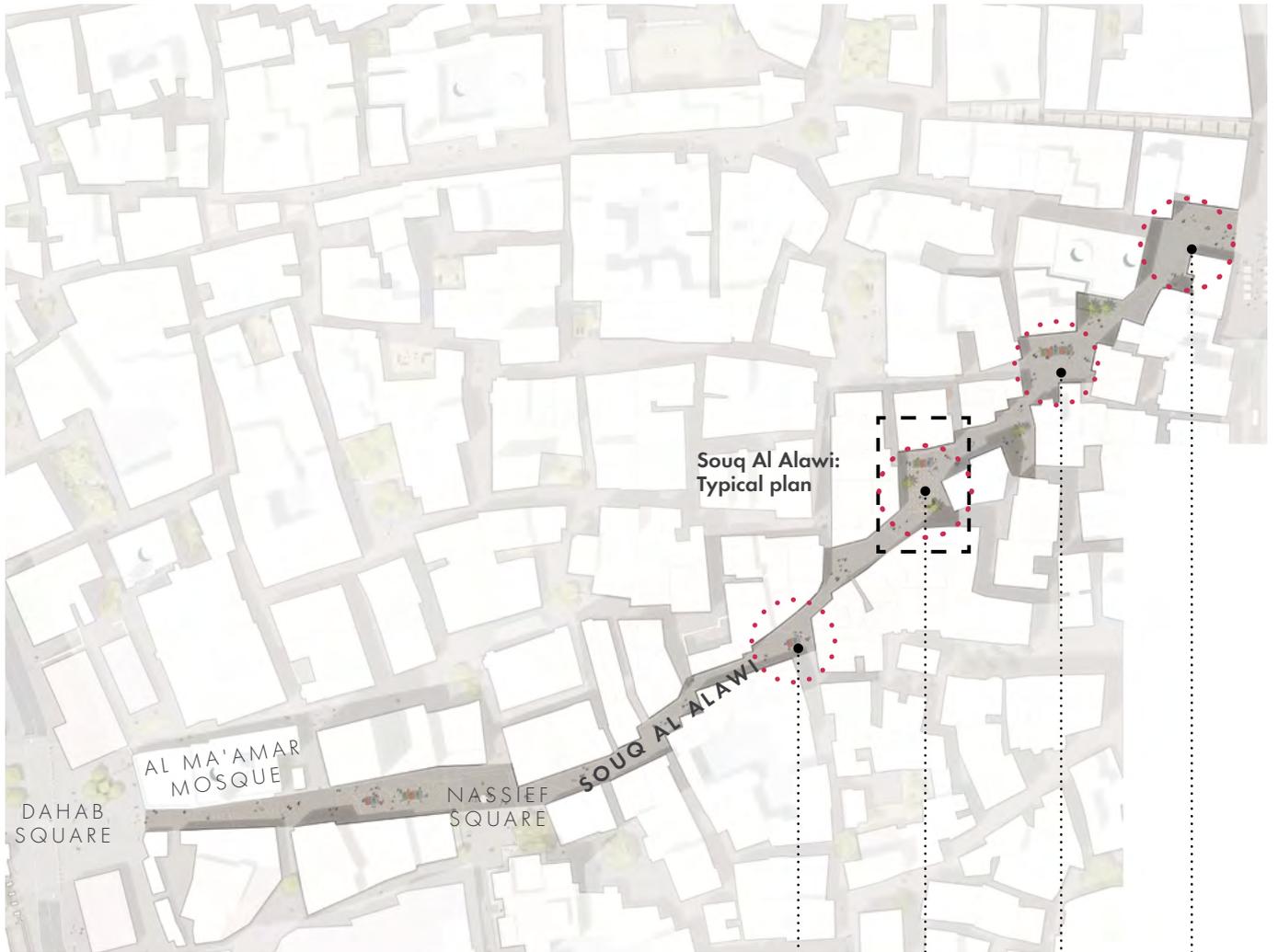
View within one of the 'open spaces' in Souq Al Alawi. Street objects here could be better located and levels could be resolved to remove singular steps



View showing the irregular form of Souq Al Alawi. Paving along the souq can be inconsistent and light columns often interrupt this vista



Souq Al Alawi at night showing overly-bright shop lighting, poor quality signage and surface water runoff that could be captured



'Public spaces' at intervals along the souq accentuated within the public realm e.g. special paving treatment, planting and market stalls



Illustrative view of Souq Al Alawi with sensitive public realm upgrades



SOUQ AL ALAWI TYPICAL PLAN



Paving

300x900 basalt edge for street furniture and shop merchandise. Where steps occur the material condition should continue and tie into the edge paving zone

Potential to use paving edge to mitigate change of size and orientation between souq and zuqaq

100x600 basalt setts. Paving pattern adaptable to souq conditions. Paving orientation switches along as width widens and narrows



Paving

Special paving inserts to highlight opening up of the souq at moments along its length

Paving directional change mitigated by slot drain



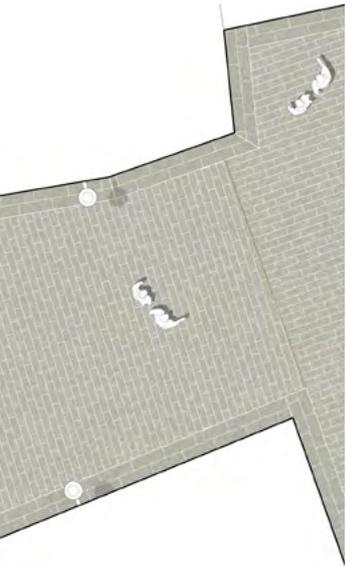
Utilities

Slot drain to capture surface water runoff and mitigate paving direction change

Cast iron utility covers (or similar) required where heavy vehicle overrun is anticipated

Drainage channel to catch and direct surface water runoff to planting and drainage gullies





 **Street furniture**

Potential formalised market stalls. Spacing to ensure minimum 1800mm clear width for pedestrian movement

Public seating and drinking fountain in shaded locations and where souq widths permit

 **Planting**

Planting to provide shade, improve microclimate and provide a marker for wayfinding

 **Accessibility**

Existing single step to be graded out to improve accessibility within the souq

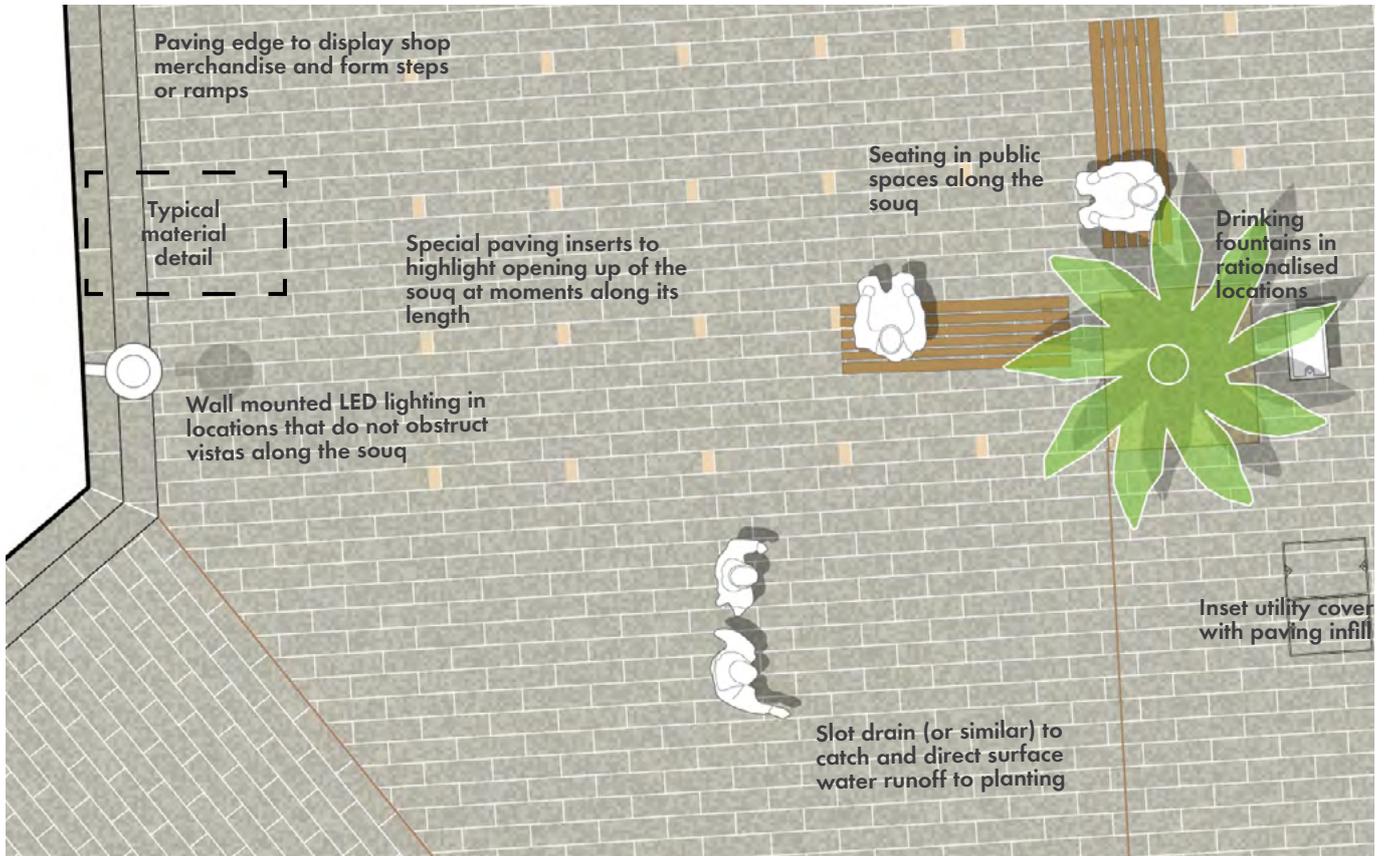
 **Lighting**

Pedestrian-level LED lighting column to provide lighting to seating area. All columns should not obstruct vistas or pedestrian movement along the souq

Pedestrian-level LED lighting column to provide lighting to seating area. All columns should not obstruct vistas or pedestrian movement along the souq



SOUQ AL ALAWI ZOOM PLAN



- Field – 1800mm clear width to be maintained for pedestrians or 1500mm in localised instances. Paving to align to souq centreline with switched orientation at open spaces along the souq
- Edge – Typically 600-900mm width to mitigate irregular building lines and rationalise street furniture/ shop merchandise. Where level changes occur, steps and ramps should be formed of the same paving edge material
- Traffic – The souq could enable timed traffic for servicing and deliveries but should otherwise restrict vehicle access. Where vehicle access is required paving and sub-base specification should be designed to meet anticipated vehicle loading
- Accessibility – Where possible, single steps and shallow steps to be graded into ramps. Utilities must also be flush with surrounding paving.
- Microclimate – Planting and shading devices within open spaces along the souq.
- Lighting – wall mounted LED lights typically 4000-6000mm mounting height. In specific instances, light columns may be preferable to mounting on historic buildings. Low level lighting should also be used by seating areas to enable use at night.
- Street furniture – Street furniture to be minimised and rationalised to provide rest at key intervals
- Refuse – All bins to be located within paving edge zone and ideally located on quieter side routes. Commercial bins should have timber screening to minimise visual impact on the streetscape
- Drainage – Drainage channels and slot drain to catch and direct surface water runoff to planting. For general sensitively integrated, pedestrian-friendly drainage gullies should be at regular intervals along the souq.
- Utilities – Typically recessed utility covers with paving infill to match surrounding surfacing. Cast iron utility covers (or similar) to be used where vehicle overrun is anticipated

SOUQ AL ALAWI ILLUSTRATIVE MATERIAL DETAIL



Edge

Field

Edge

Material	Saudi Basalt
Colour	Grey
Finish	Sawn
Size	300x900mm
Bond	Staggered
Joints	Open jointing (5-7mm typical)

Field

Material	Saudi Basalt
Colour	Grey
Finish	Honed
Size	200x600mm
Joints	Open jointing (5-7mm typical)
Bond	Staggered

5.3.4 SOUQ BAB MAKKAH

Character and function

Souq Bab Makkah is located to the east of the former city wall and currently exists as a busy fruit and vegetable market. Bab Makkah is the oldest marketplace outside of the old city walls and was the key trading place between the city merchants, visiting pilgrims and Bedouin traders. The area can be seen as an organic extension of the old city urban fabric and commercial activities despite being located outside of the historic wall.

Despite its historic significance, the architectural and public realm quality of the souq is generally poor. For example, during busy market times, vehicles are permitted access through crowds and the street layout could function more efficiently to deal with the number of people.

Key considerations

- Rationalise and restrict vehicle access during busy market times
- Manage market stall and parking locations to enable easier pedestrian movement
- Utilise high quality Saudi basalt
- Reduce street clutter, in particular bins and refuse
- Upgrade surfacing and street furniture to be high quality, using a consistent palette of materials
- Rationalise a paving edge zone to display shop merchandise and rationalise levels
- Integrated trees and seating in selected locations



Poor quality shop thresholds can create awkward levels along the street. Light columns also currently obstruct pedestrian movement



The current layout of parking and market stalls make the street difficult to navigate, particularly when busy



Even when the market is full with people, cars use the street for access



Souq continues across Al Asad Street

**Souq Bab Makkah:
Typical condition**

Planting in selected locations to provide shade

Proposed service lane for managed servicing and deliveries

Proposed public open space



SOUQ BAB MAKKAH TYPICAL PLAN

15400 - 17800mm
 (approximate - varies)

 **Planting**

Planting in selected locations between market stalls to provide shade, improve microclimate and provide a marker for wayfinding

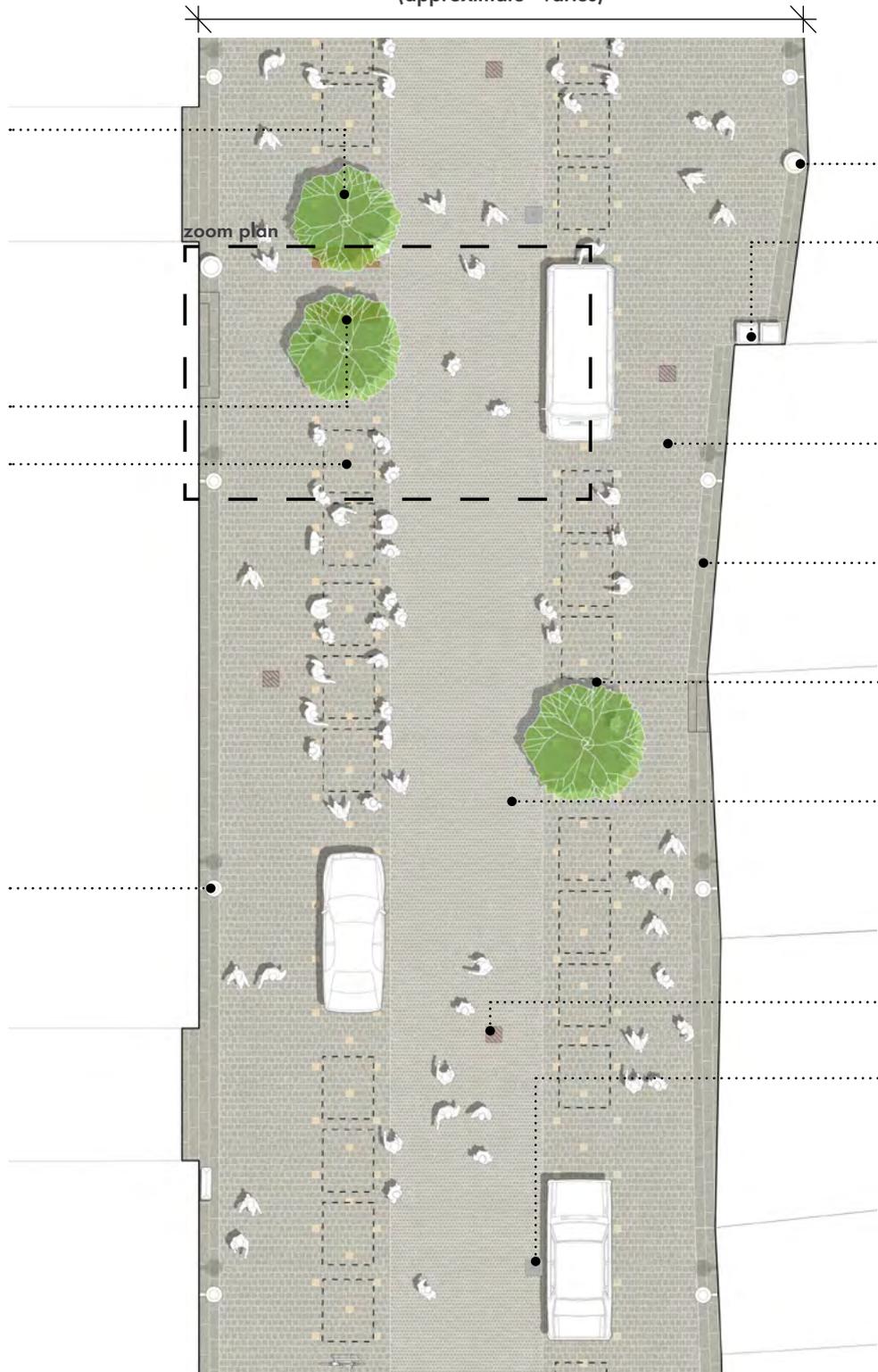
 **Street furniture**

Public seating to be provided where space permits

Market stalls to be grouped with a minimum 1800mm clear width between market stall groups for pedestrian movement

 **Lighting**

Wall mounted LED lights staggered along the souq to minimise pedestrian obstruction. Typically 4000 - 6000mm mounting height





 **Refuse**

Bins to be located by buildings within the paving edge zone to minimise obstruction

Commercial bins with timber screening at rationalised locations

 **Paving**

200x200 basalt setts footway. Paving pattern adaptable to souq conditions. Paving orientation to be laid perpendicular to service lane edge

300x900 basalt edge to mitigate irregular building lines, setbacks in buildings and to rationalise street furniture

Special paving inserts to demarcate market stalls and parking zone. Paving specification and sub-base to meet vehicle loading requirements

100x100 basalt paving on service lane for servicing and delivery vehicles

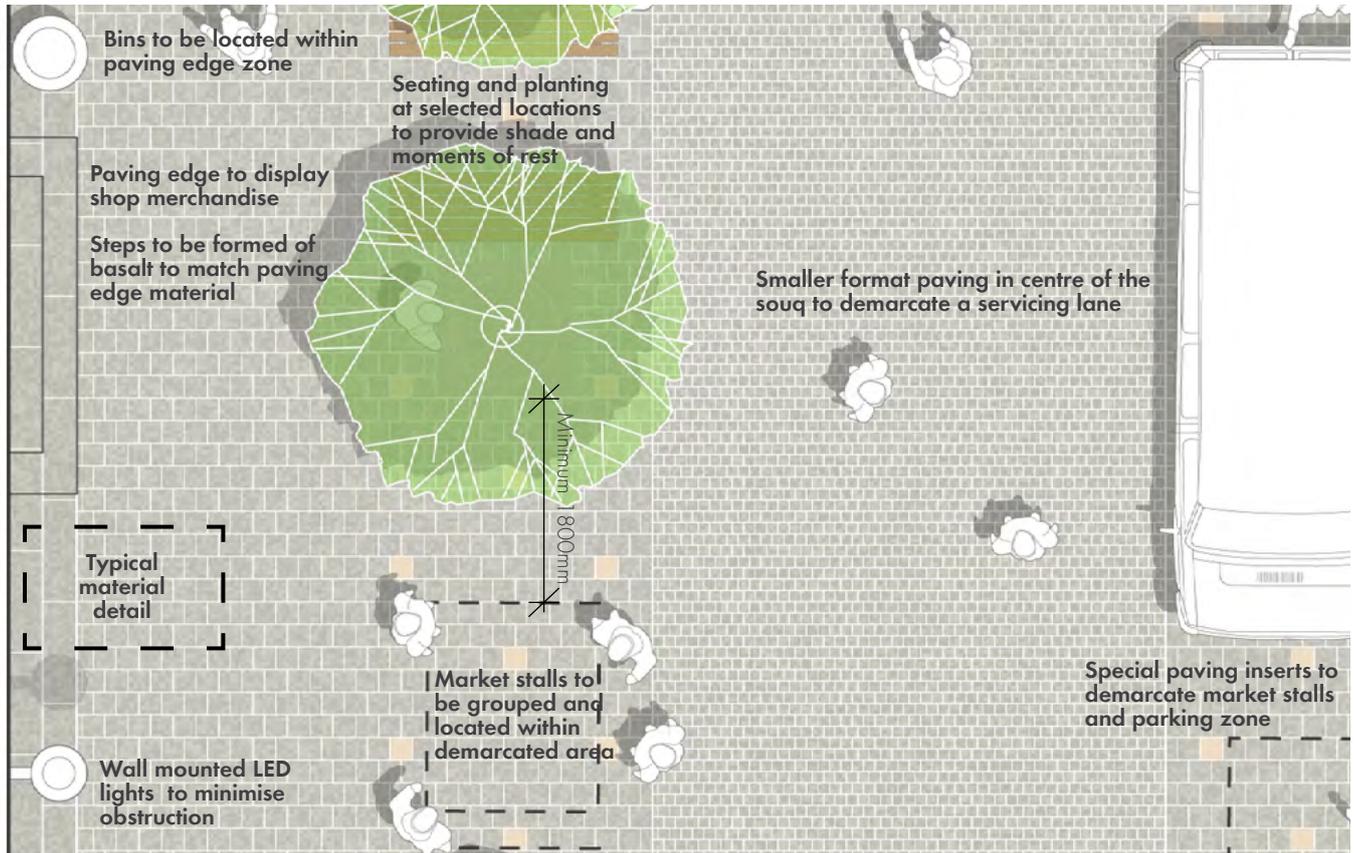
 **Utilities**

Cast iron utilities cover (or similar) where vehicle overrun is anticipated

Pedestrian-friendly drainage gully in rationalised locations along the souq

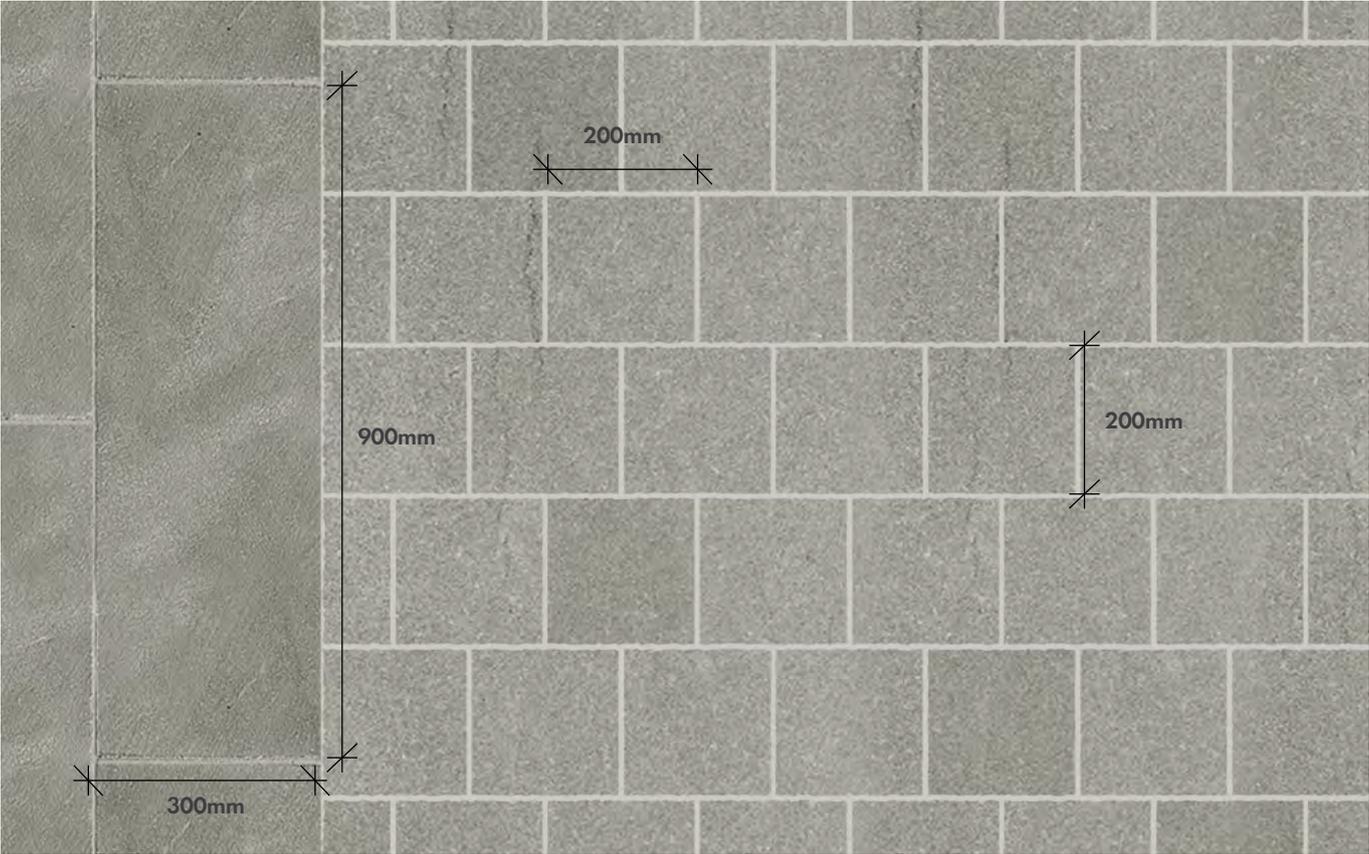


SOUQ BAB MAKKAH ZOOM PLAN



- Field – 1800mm clear width to be maintained for pedestrians or 1500mm in localised instances. Paving to be perpendicular to service lane edge
- Edge – Typically 600-900mm width to mitigate irregular building lines and rationalise street furniture/ shop merchandise. Where level changes occur, steps and ramps should be formed of the same paving edge material
- Traffic – A service lane for timed vehicle access should be demarcated through a change of paving finish. Where vehicle access is required paving and sub-base specification should be designed to meet anticipated vehicle loading
- Accessibility – Where possible, single steps and shallow steps to be graded into ramps. Utilities must also be flush with surrounding paving.
- Microclimate – Planting and shading devices in selected locations along the souq
- Lighting – wall mounted LED lights typically 4000-6000mm mounting height
- Street furniture – Street furniture to be minimised and rationalised to provide rest at key intervals. Market stalls to be pitched within demarcated areas to maintain sufficient clearance for pedestrian movement
- Refuse – All bins to be located within paving edge zone and ideally located on quieter side routes. Commercial bins should have timber screening to minimise visual impact on the streetscape
- Drainage – Pedestrian-friendly drainage gullies at regular intervals along the street with surface runoff directed to planting
- Utilities – Typically recessed utility covers with paving infill to match surrounding surfacing. Cast iron utility covers (or similar) to be used where vehicle overrun is anticipated

SOUQ BAB MAKKAH ILLUSTRATIVE MATERIAL DETAIL



Edge

Field

Edge

Material	Saudi Basalt
Colour	Grey
Finish	Sawn
Size	300x900mm
Bond	Staggered
Joints	Open jointing (5-7mm typical)

Field

Material	Saudi Basalt
Colour	Grey
Finish	Honed
Size	200x200mm
Joints	Open jointing (5-7mm typical)
Bond	Staggered

Traffic

Material	Saudi Basalt
Colour	Grey
Finish	Hammered
Size	200x200mm
Bond	Staggered
Joints	Open jointing (5-7mm typical)

5.4 STREETS

Streets are a relatively modern urban type in Al Balad, mostly introduced following the demolition of the city walls in 1947. Both large-scale (three-four lane) and small-scale (one lane) streets exist in Al Balad. Across all streets, there are recurring issues such as; lack of space for pedestrians, under-provision of pedestrian crossings, dangerous traffic speeds, obstructive parking and poor quality lighting.

The transport and streetscape strategy proposes a major transformation of streets across Al Balad to rebalance them in favour of pedestrians. Streets should consider ways to narrow carriageways and rationalise parking and introduce more pedestrian crossings to improve walkability. In general, the quality of footways should be improved to align with materials elsewhere in Al Balad. Planting should also be curated to provide moments of rest and shade and depaving should help to improve microclimate.

Street furniture, such as seating, drinking fountains and bins, should be upgraded and increased to provide greater amenity for pedestrians. Lighting should also be improved with an approach that is consistent with other typologies in Al Balad.



Activities

- Commercial focus
- Shaded seating areas
- Bus stop waiting areas



Materials

- Field: varies by condition. Typically large-format basalt
- Edge: typically 300x900 basalt paving edge
- Traffic: HRA or paved carriageway
- Feature paving: varies by condition
- Other paving: basalt or granite kerb (upstand height varies) and tactile paving at controlled crossings



Lighting

- Colour: 4000k
- Illuminance: Varies by condition. Typically high
- Mounting: Varies - typically 6-8m with both high-level carriageway lighting and low-level pedestrian lighting



Planting

- Trees: Concentrated by crossings and selected locations
- Character: Informal
- Irrigation: Low water planting and shrubs. Water harvested from nearby mosques, cisterns or surface water runoff



Street furniture

- Seating and drinking fountains in selected locations
- Bins located in paving edge zone or near to kerb edge
- Shop merchandise in paving edge zone



Utilities

- Inset utility covers with paving infill on footways
- Cast iron utility covers (or similar) where vehicle overrun is anticipated
- Pedestrian and cycle friendly drainage gullies in carriageway



Precedent: Marylebone Lane, London (UK)

STREET TYPOLOGIES



5.4.1 STREETS HIERARCHY

Arterial Streets

- Three/four lane trafficked street
- Public transport provision
- Kerb upstands and clear demarcation between footway and carriageway



Link Streets

- Two/three lane trafficked street speed restriction
- Public transport provision
- Kerb upstands and clear demarcation between footway and carriageway
- Paved raised tables and crossings



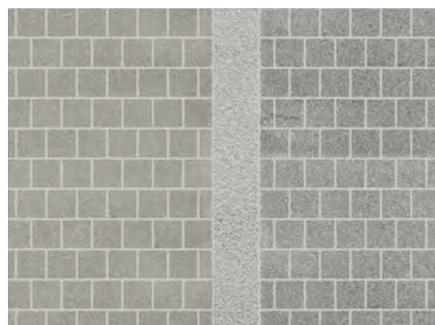
Local streets

- One/two lane trafficked street
- Reduced kerb height
- Paved/asphalt carriageway
- Paved raised tables and crossings

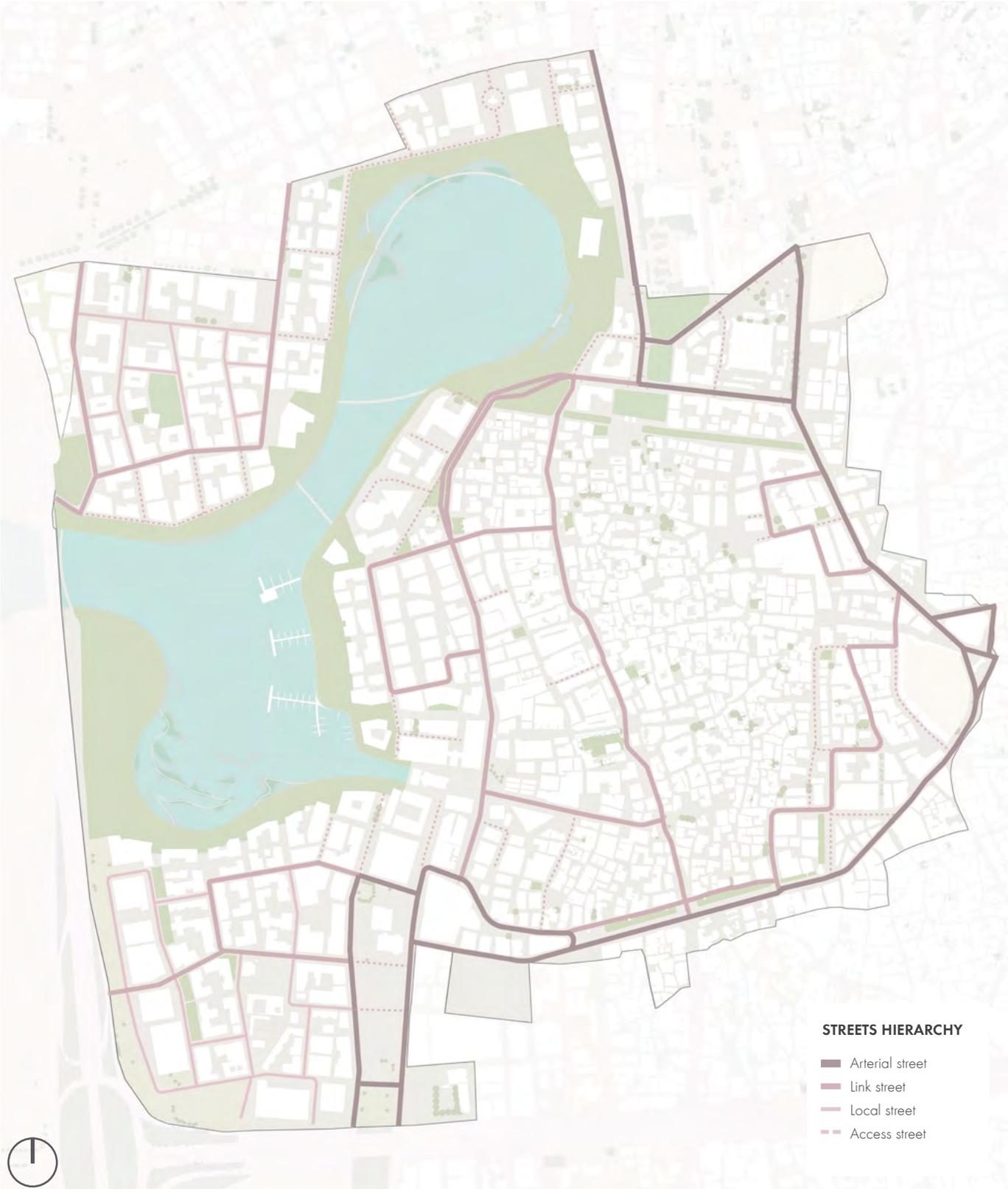


Access streets

- Occasional vehicle access
- Flush kerb/minimal kerb height
- Paved carriageway



STREETS HIERARCHY



5.4.2 LINK STREETS - KING ABDUL AZIZ

Existing character and function

King Abdul Aziz street is currently a heavily trafficked three lane, one-way street that runs north-south through Al Balad. The street currently forms a severance between parts of Al Balad, in part due to the lack of safe pedestrian crossings.

On the street there are opportunities to improve the planting to provide more shade, improve public seating and upgrade surface materials.

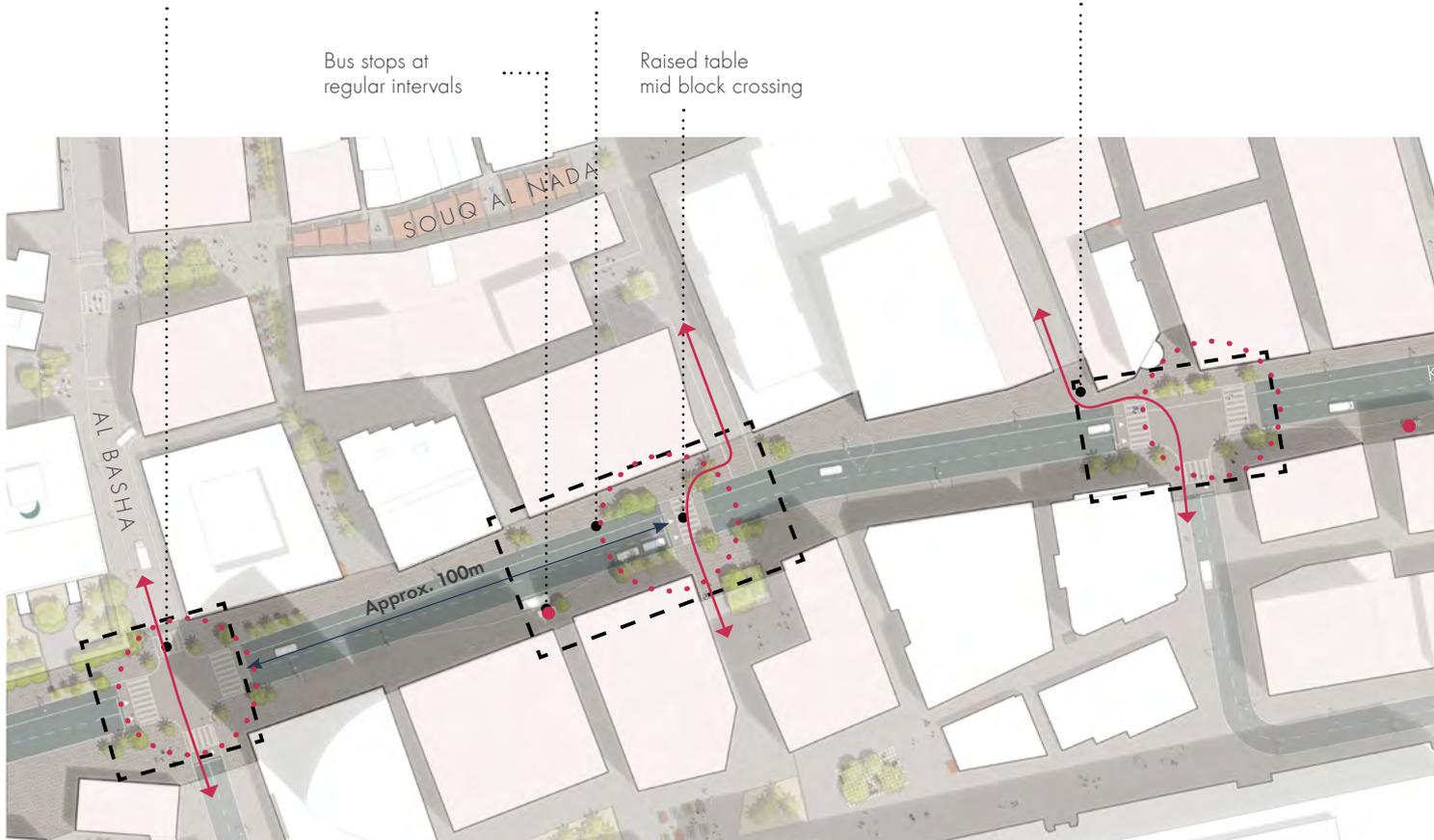
Key considerations

- Narrow the carriageway to naturally slow the movement of vehicles
- Incorporate safe street crossings at regular intervals
- Improve lighting quality and colour
- Incorporate planting and de-paved areas to improve the street's microclimate
- Increase amenity of seating, drinking fountains and cycle stands
- Upgrade surfacing and street furniture to be high quality, using a consistent palette of materials

**King Abdul Aziz – Condition 2:
 Controlled 4-way crossing**

**King Abdul Aziz Condition 1:
 Typical condition**

**King Abdul Aziz – Condition 3:
 3-way controlled crossing**





Existing crossings are not safe for pedestrians and lack crossing controls

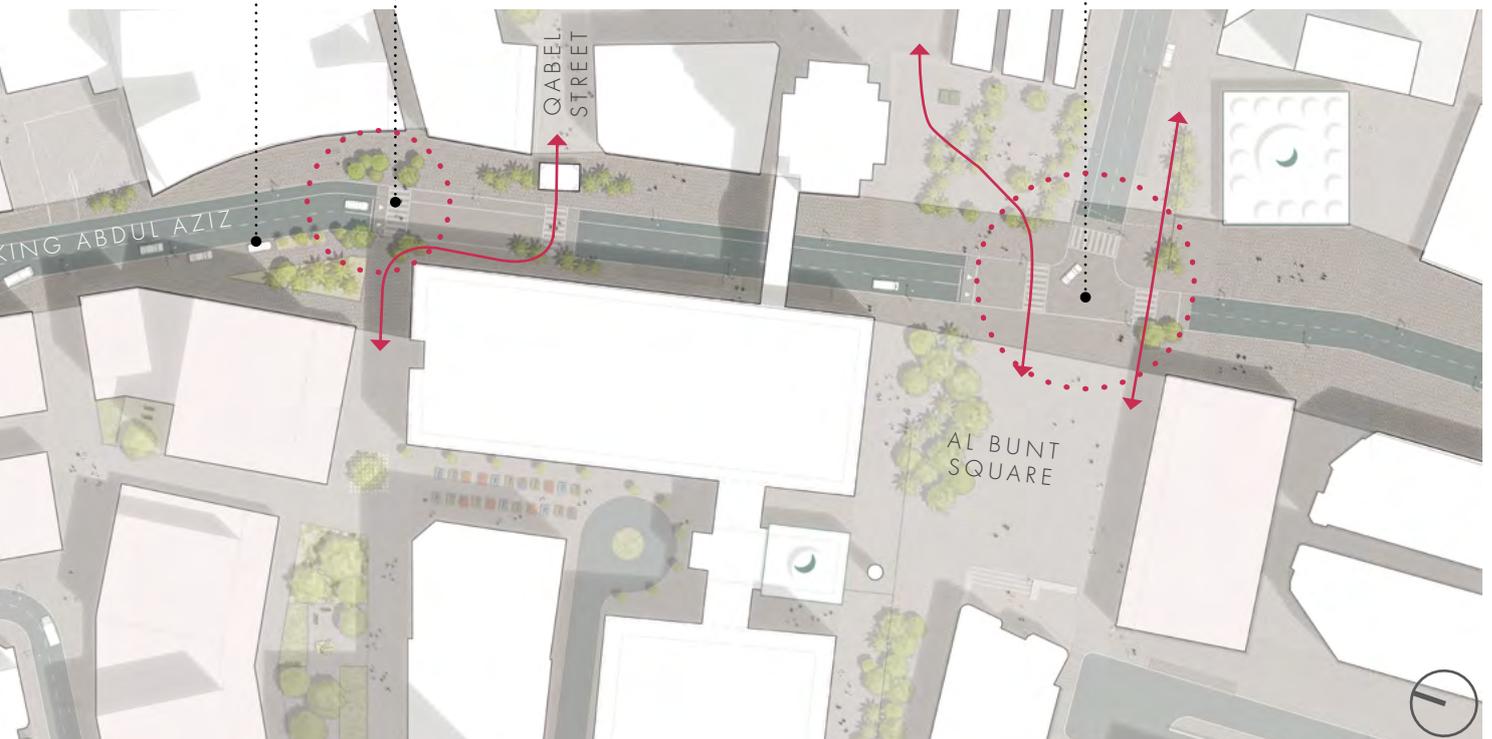


The existing planting and street furniture is poor quality

Parking bays and de-paved areas at regular intervals

Planting concentrated around crossings

Raised table junction crossing





Illustrative view of King Abdul Aziz with public realm upgrades



LINK STREETS - KING ABDUL AZIZ

Typical condition

Paving

Potential to use paving edge to mitigate change of paving size and orientation

300x900 basalt edge to mitigate irregular building lines and rationalise street furniture

200x400 basalt setts footway. Paving pattern adaptable to street conditions and aligned perpendicular to kerb line

200x400 basalt setts footway. Pattern adaptable to street conditions

100mm basalt kerb (or similar) between cycle lane and footway

200x400 basalt setts footway with paving inserts. Pattern adaptable to street conditions

300mm basalt kerb (or similar) with 125mm upstand to carriageway

High quality HRA (or similar) carriageway

300mm flush kerb between bus lay-by and carriageway

100x100 basalt setts carriageway. Finish to match footway materials

Transport and streetscape

Bus lay-by. Length and width in abeyance to Municipality standards

Bus shelter minimum 600mm from front of kerb edge

Accessibility

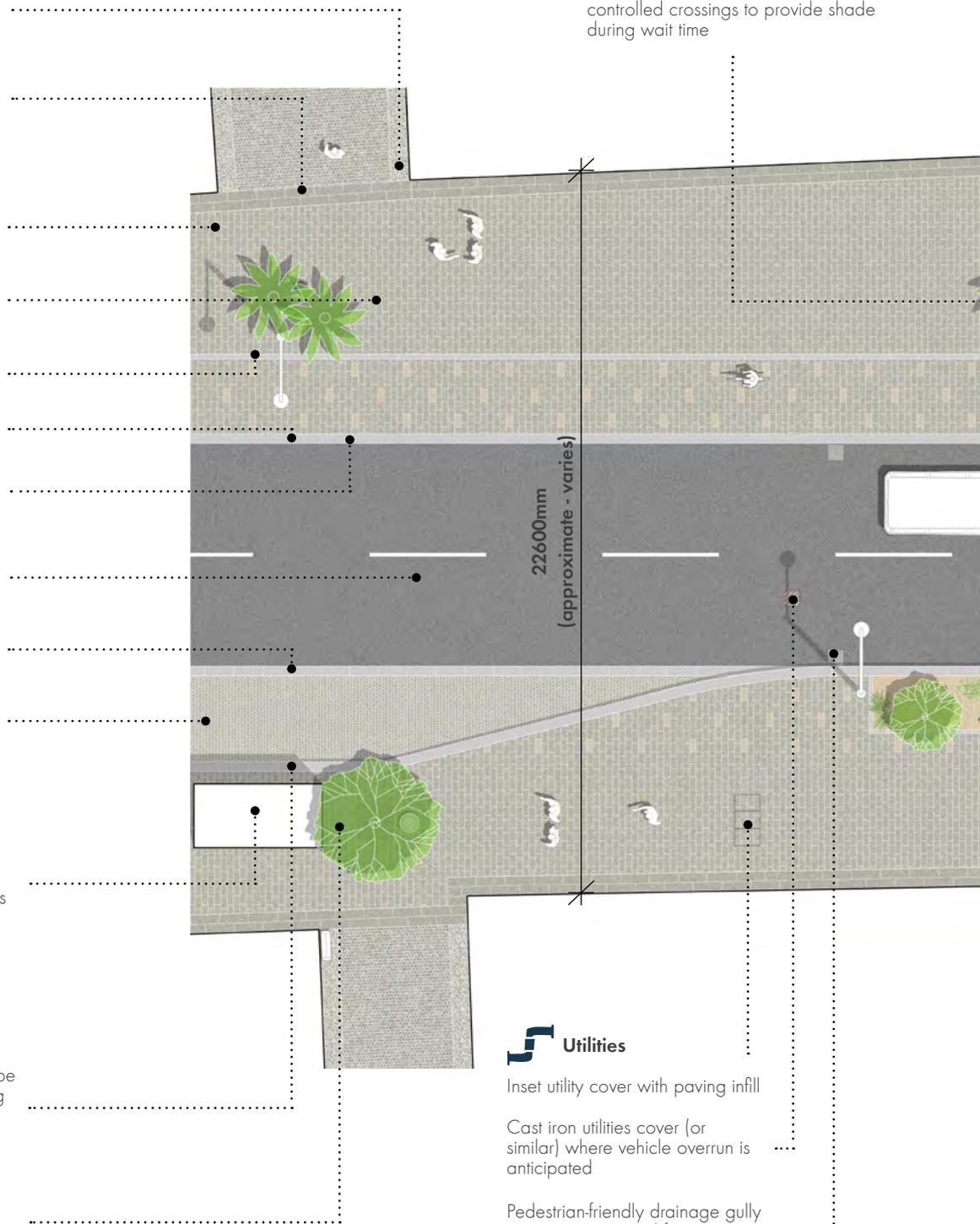
Localised raise in kerb height may be required to provide easier boarding to buses

Planting

Planting to provide shade to bus shelter

Planting

Planting to be concentrated around controlled crossings to provide shade during wait time



Utilities

Inset utility cover with paving infill

Cast iron utilities cover (or similar) where vehicle overrun is anticipated

Pedestrian-friendly drainage gully grate. Location and frequency dependent on street conditions



Transport and streetscape

Raised table controlled crossing with ramps each side (maximum 1:12 fall)

Accessibility

400x400mm tactile blister paving with visual contrast to surrounding materials
300mm flush basalt kerb (or similar) at controlled crossing

Paving

Transition kerb between carriageway and footway level to ensure a continuous footway level
100x100 basalt sets carriageway for street crossover



Microclimate

Depaved area with planting to improve microclimate and shade

Refuse

Domestic bins with timber screening at rationalised locations

Street furniture

Drinking fountains, seating and seating cycle stands to be located in shaded locations with a minimum 600mm offset from front kerb edge

Lighting

Lighting columns with 8-10m mounted LED lights. Location and frequency dependent on street conditions. Traffic signals and signage should be mounted on light columns to reduce street clutter



LINK STREETS - KING ABDUL AZIZ

4-way controlled crossing

 **Transport and streetscape**

Kerb radius to vary according to street function and vehicle speeds

 **Paving**

Existing mosque gardens paving edge and railings should be improved to increase permeability

Depaved areas to improve microclimate and enable informal low-level planting and trees

100mm/300mm flush basalt kerb (or similar)

200x400 basalt setts footway with paving inserts. Pattern adaptable to street conditions

300mm basalt kerb (or similar) with 125mm upstand to carriageway

HRA (or similar) carriageway

300mm basalt kerb (or similar) with 125mm upstand

200x400 basalt setts footway with paving inserts. Paving pattern adaptable to street conditions and aligned perpendicular to kerb line

300x900 basalt edge to mitigate irregular building lines and rationalise street furniture

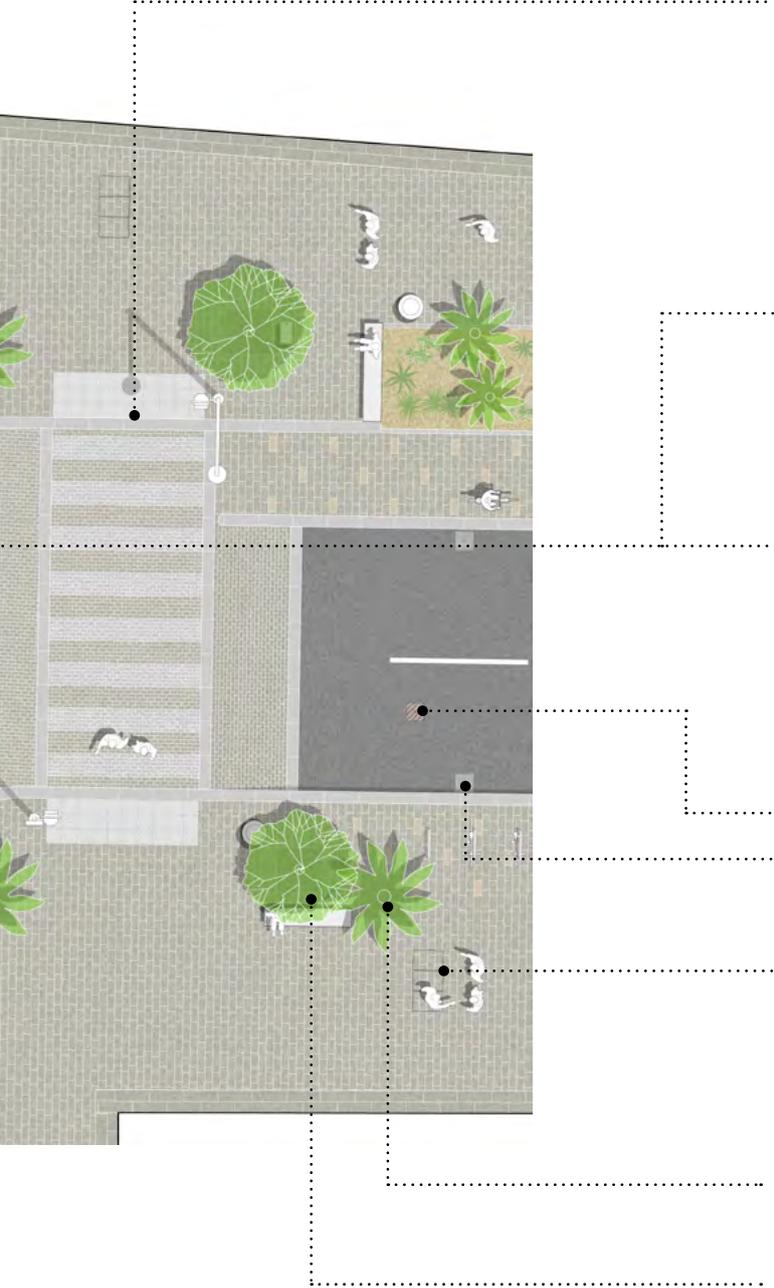


 **Refuse**

Bins to be positioned minimum 600mm from kerb edge in rationalised locations along the street

 **Lighting**

Light columns with LED light, attached traffic signals, pushbutton and pedestrian signal. Minimum 600mm offset front kerb edge



 **Accessibility**

400x400mm tactile blister paving with visual contrast to surrounding materials

300mm flush basalt kerb (or similar) at controlled crossing

 **Paving**

100x200 basalt paving (or similar) on raised table. Material specification and substructure to meet anticipated vehicle loading

 **Transport and streetscape**

Raised table flush with adjacent footway. Preference for raised table crossing with ramps on all crossing arms. Non-raised table junctions must incorporate dropped kerbs for level access at crossings

Potential for diagonal crossing paths - requires additional tactile paving at corner positions

 **Utilities**

Cast iron utilities cover (or similar) where vehicle overrun is anticipated

Pedestrian-friendly drainage gully grate. Location and frequency dependent on street conditions

Inset utility cover with paving infill

 **Planting**

Planting to be concentrated around controlled crossings to provide shade during wait time. Placement of planting should ensure good vehicle sightlines are maintained at junctions

 **Street furniture**

Drinking fountains, seating and cycle stands to be located in shaded locations and grouped with other street objects to minimise obstruction



LINK STREETS - KING ABDUL AZIZ

3-way controlled crossing

Street furniture

Bins to be located adjacent to buildings within paving edge zone

Paving

100mm flush basalt kerb (or similar)

200x400 basalt setts footway with paving inserts. Pattern adaptable to street conditions

300mm basalt kerb (or similar) with 125mm upstand to carriageway

High quality HRA (or similar)

300mm basalt kerb (or similar) with 125mm upstand

200x400 basalt setts footway with paving inserts. Pattern adaptable to street conditions

200x400 basalt setts footway. Paving pattern adaptable to street conditions and aligned perpendicular to kerb line

300x900 basalt edge to mitigate irregular building lines and rationalise street furniture

Utilities

Pedestrian-friendly drainage gully grate. Location and frequency dependent on street conditions

Cast iron utilities cover (or similar) where vehicle overrun is anticipated

Inset utility cover with paving infill

Microclimate

De-paved areas to improve microclimate and enable informal low-level planting

Street furniture

Seating in shade forms edge of de-paved area



Planting

Planting to be concentrated around controlled crossings to provide shade during wait time. Placement of planting should ensure good vehicle sightlines are maintained at junctions

Street furniture

Drinking fountains, seating and cycle stands to be located in shaded locations and grouped with other street objects to minimise obstruction



 **Paving**

300mm flush kerb on raised table to delineate carriageway and cycle lane

Contrasting paving insets preferable to paint to create controlled crossing strips

 **Accessibility**

400x400mm tactile blister paving with visual contrast to surrounding materials

300mm flush basalt kerb (or similar) at controlled crossing

 **Paving**

100x200 basalt paving (or similar) on raised table. Material specification and substructure to meet anticipated vehicle loading

 **Transport and streetscape**

Raised table flush with adjacent footway. Preference for raised table crossing with ramps on all crossing arms. Non-raised table junctions must incorporate dropped kerbs for level access at crossings

Kerb radius to vary according to street function and vehicle speeds

 **Refuse**

Bins to be positioned minimum 600mm from kerb edge in rationalised locations along the street

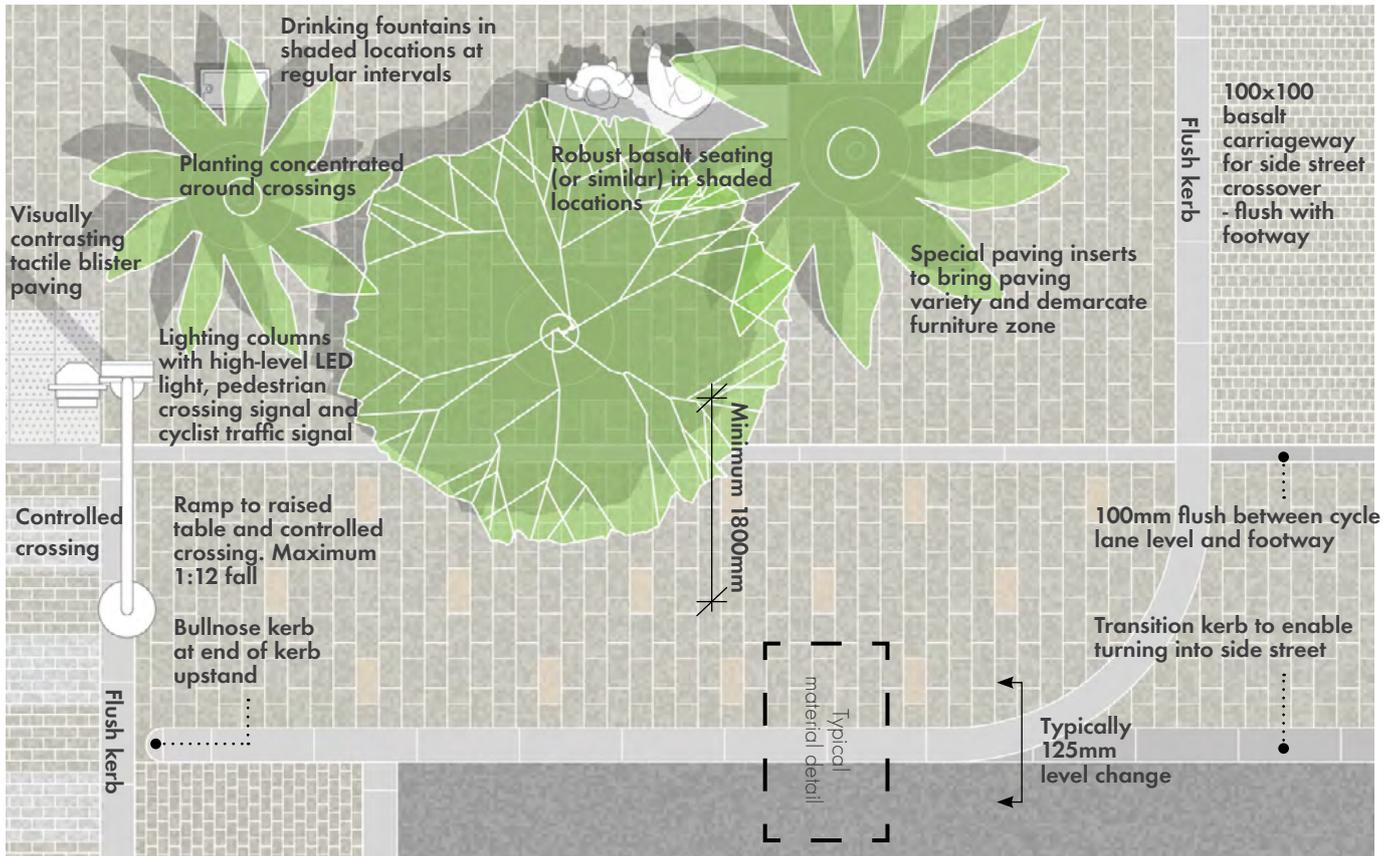
 **Lighting**

Light columns with LED light, attached traffic signals, push button and pedestrian signal. Minimum 600mm offset front kerb edge



LINK STREETS - KING ABDUL AZIZ

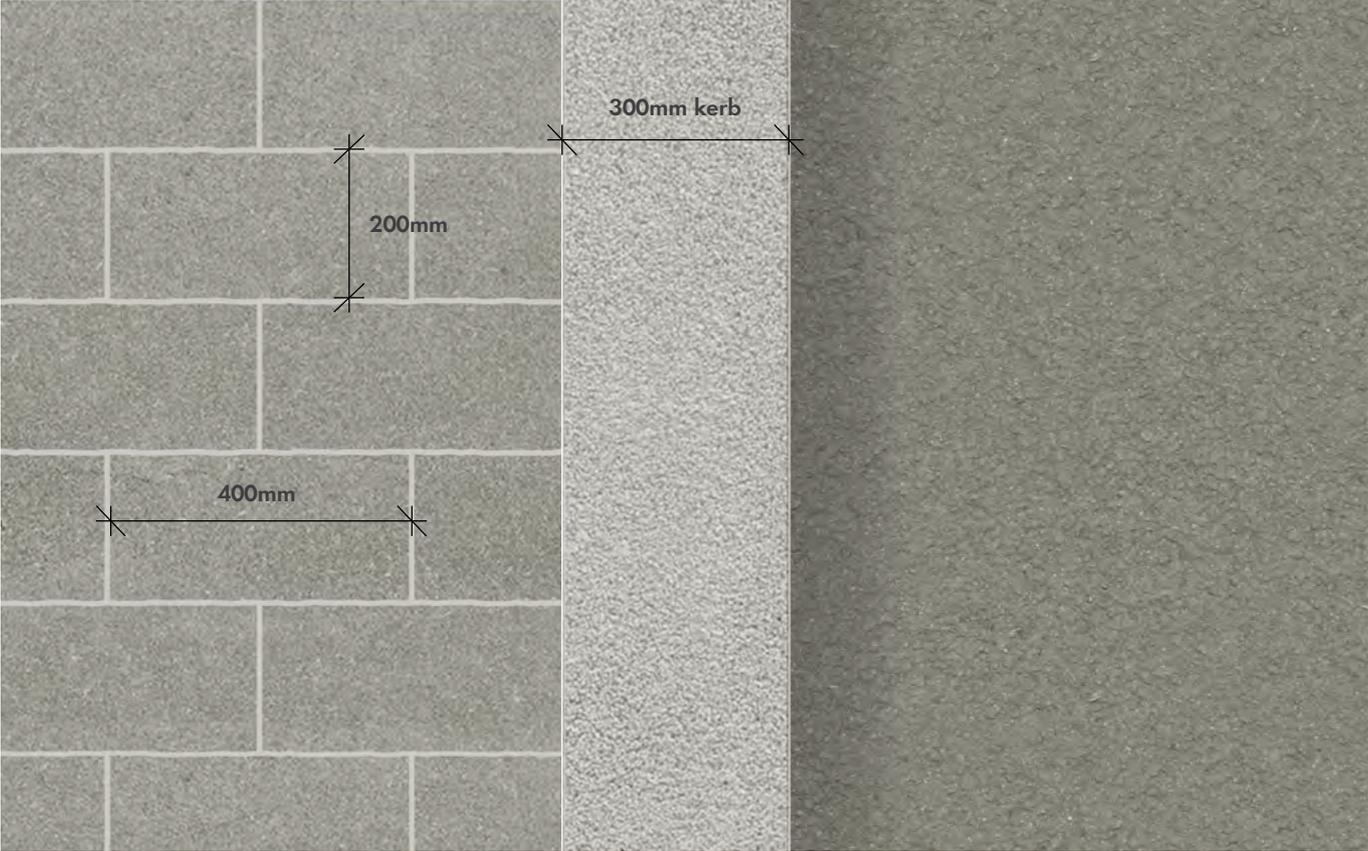
ZOOM PLAN



- Field – 1800mm clear width to be maintained for pedestrians or 1500mm in localised instances
- Edge – Typically 600-900mm width to mitigate irregular building lines and rationalise street furniture
- Traffic – One way, two lane carriageway and two lane, two-way cycle lane
- Accessibility – Raised table and tactile paving to be provided at pedestrian crossings
- Planting – Trees to be integrated at selected locations to provide shade and concentrated around controlled crossings to shade pedestrian
- Microclimate – planting, shading devices and depaved areas should be used to improve microclimate and walkability along streets
- Lighting – High-level light columns with LED light. Where possible columns to be used for traffic signage, traffic signals, pushbutton and pedestrian signal.
- Street furniture – Street furniture to be provided in shaded areas at regular intervals along the street
- Refuse – Bins to be located in paving edge zone or min. 600mm front kerb edge. Domestic bins should have timber screening to minimise visual impact on the streetscape
- Drainage – Drainage gullies in carriageways at regular intervals. Gullies should direct surface water runoff to planting
- Utilities – Recessed utility covers with paving infill to match surrounding surfacing in footways. Cast iron utility covers (or similar) to be used on carriageways and parking bays

LINK STREETS - KING ABDUL AZIZ

ILLUSTRATIVE MATERIAL DETAIL



Footway

Kerb

Carriageway

Field

Material	Saudi Basalt
Colour	Grey
Finish	Honed
Size	200x400mm
Joints	Open jointing (5-7mm typical)
Bond	Staggered

Edge

Material	Saudi Basalt
Colour	Grey
Finish	Sawn
Size	300x900mm
Joints	Open jointing (5-7mm typical)
Bond	Staggered

Carriageway

Material	HRA to IS EN 13108-4
Finish	5-10mm coated chippings

Parking bays and lay-bys

Material	Saudi Basalt
Colour	Grey
Finish	Honed
Size	100x200mm
Joints	Open jointing (5-7mm typical)
Bond	Staggered

Kerbs

Material	Saudi Basalt
Colour	Silver grey
Finish	Hammered
Size	300x900mm
Height	125mm upstand (carriageway) 60mm upstand (cycle lane)

LINK STREETS - AL DAHAB STREET

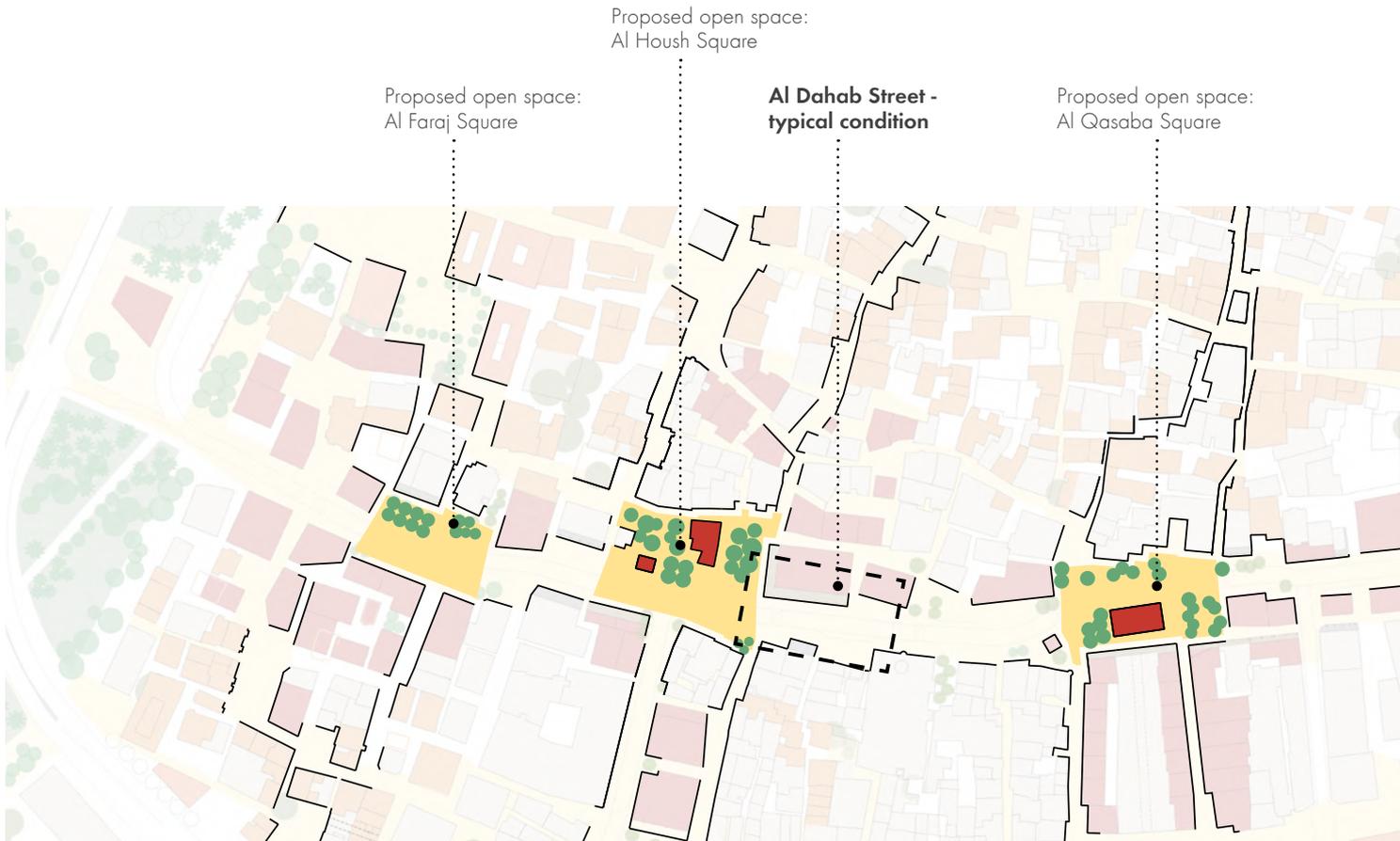
Character and function

Al Dahab Street is one of the key thoroughfares through Al Balad, providing a largely uninterrupted, northward-flowing, three-lane road. Currently Al Dahab Street prioritises vehicles over pedestrians and in doing so severs many historic east-west routes, including the Hajj route.

The paving materials used for the street are typically concrete blocks and there is an opportunity to use basalt paving to match other areas of Al Balad.

Key considerations

- Reestablish east-west links across the street utilising raised tables and by creating new public spaces at key intersections
- Rationalise and reduce parking to improve the streetscape and ability to informally cross the street
- Integrate raised tables and controlled crossings to make safe connections across the street
- Improve lighting quality and consistency
- Incorporate planting to create markers for wayfinding and moments of shade
- Increase amenity of seating, drinking fountains and cycle stands
- Upgrade surfacing and street furniture to be high quality, using a consistent palette of materials
- Rationalise levels to avoid overly tall kerb upstands between carriageways and footways

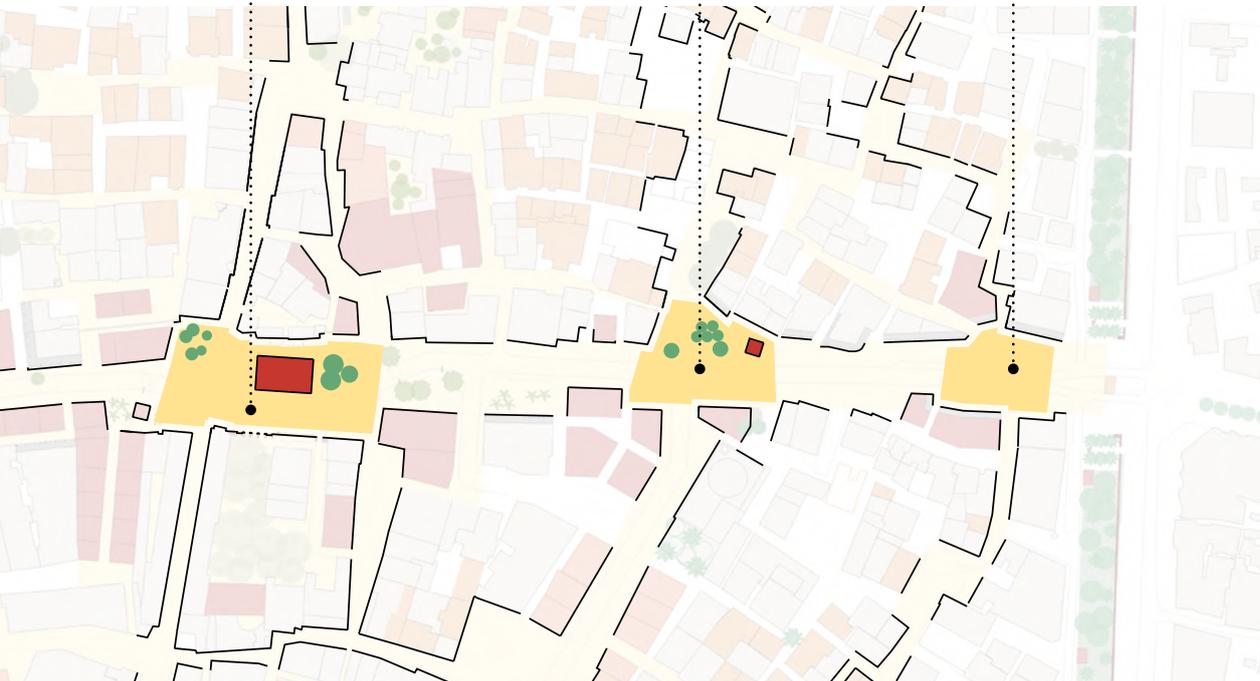




Proposed open space:
Al Dahab Square

Proposed open space:
Al Shajarah Square

Proposed open space:
Shareef Square



LINK STREETS - AL DAHAB STREET

TYPICAL CONDITION

Accessibility

400x400mm tactile blister paving with visual contrast to surrounding materials
 300mm flush basalt kerb (or similar) at controlled crossing

Transport and streetscape

Raised table controlled crossing with ramps each side (maximum 1:12 fall)

Utilities

Pedestrian-friendly drainage gully grate. Location and frequency dependent on street conditions
 Cast iron utilities cover (or similar) where vehicle overrun is anticipated

Paving

200x200 basalt footway paving. Adaptable to street conditions
 300mm basalt kerb (or similar) flush between footway and carriageway
 Contrasting paving insets preferable to paint to create controlled crossing strips
 200x200 basalt paving (or similar) carriageway. Material specification and sub-base must be designed to meet vehicle loading requirements
 300mm flush kerb to mark stop line for controlled crossing

Lighting

Light columns with LED light, attached traffic signals, pushbutton and pedestrian signal. Minimum 600mm offset front kerb edge



Paving

300x900 basalt edge to mitigate irregular building lines and rationalise street furniture

Refuse

Domestic bins with timber screening at rationalised locations

Paving

Paving in colonnades should be level with the surrounding footway.

Materials might be consistent with surrounding surfaces or unique to the colonnade



Paving

300mm basalt kerb (or similar) with 100mm kerb upstand
 200 x 200-600 random lengths basalt footway paving. Pattern adaptable to street conditions

Paving

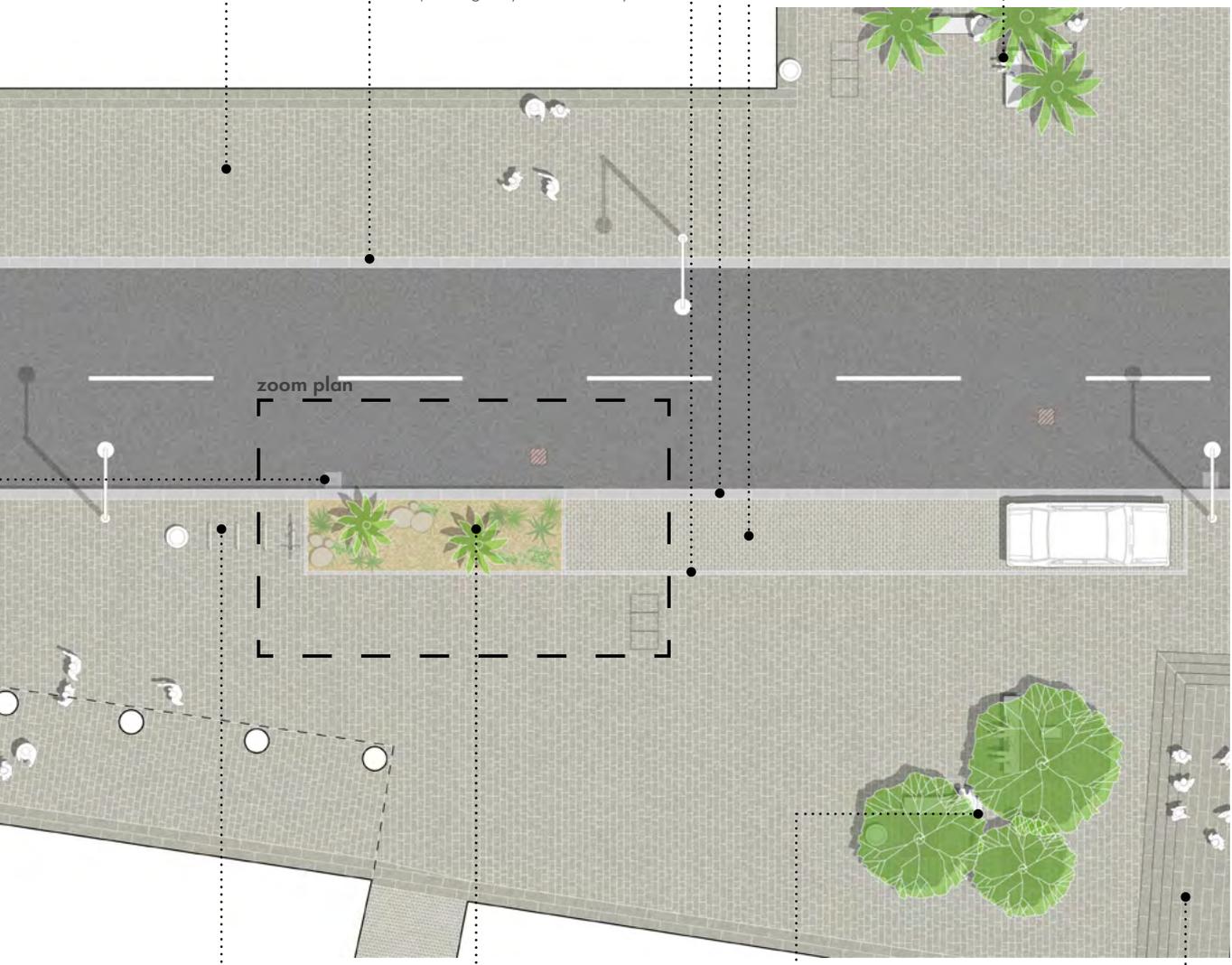
100x200 basalt sets (or similar) in parking bay to match footway paving finish
 300mm flush kerb to delineate parking bay and carriageway
 100mm flush kerb to delineate parking bay and footway

Planting

Planting should be introduced at selected locations to provide shade

Street furniture

Drinking fountains and seating should be located in shaded locations and grouped with other street objects to minimise obstruction



Footway - varies minimum 1800mm
 Carriageway 6500mm
 Footway - varies minimum 1800mm

Microclimate

Depaved areas to improve microclimate and enable informal low-level planting and trees

Planting

Planting could be incorporated next to mosque entrance to provide a shaded place for rest and socialising

Paving

Steps and platform to the mosque entrance should be consistent with the paving edge material

Street furniture

Cycle stands ideally located in shaded areas along the street

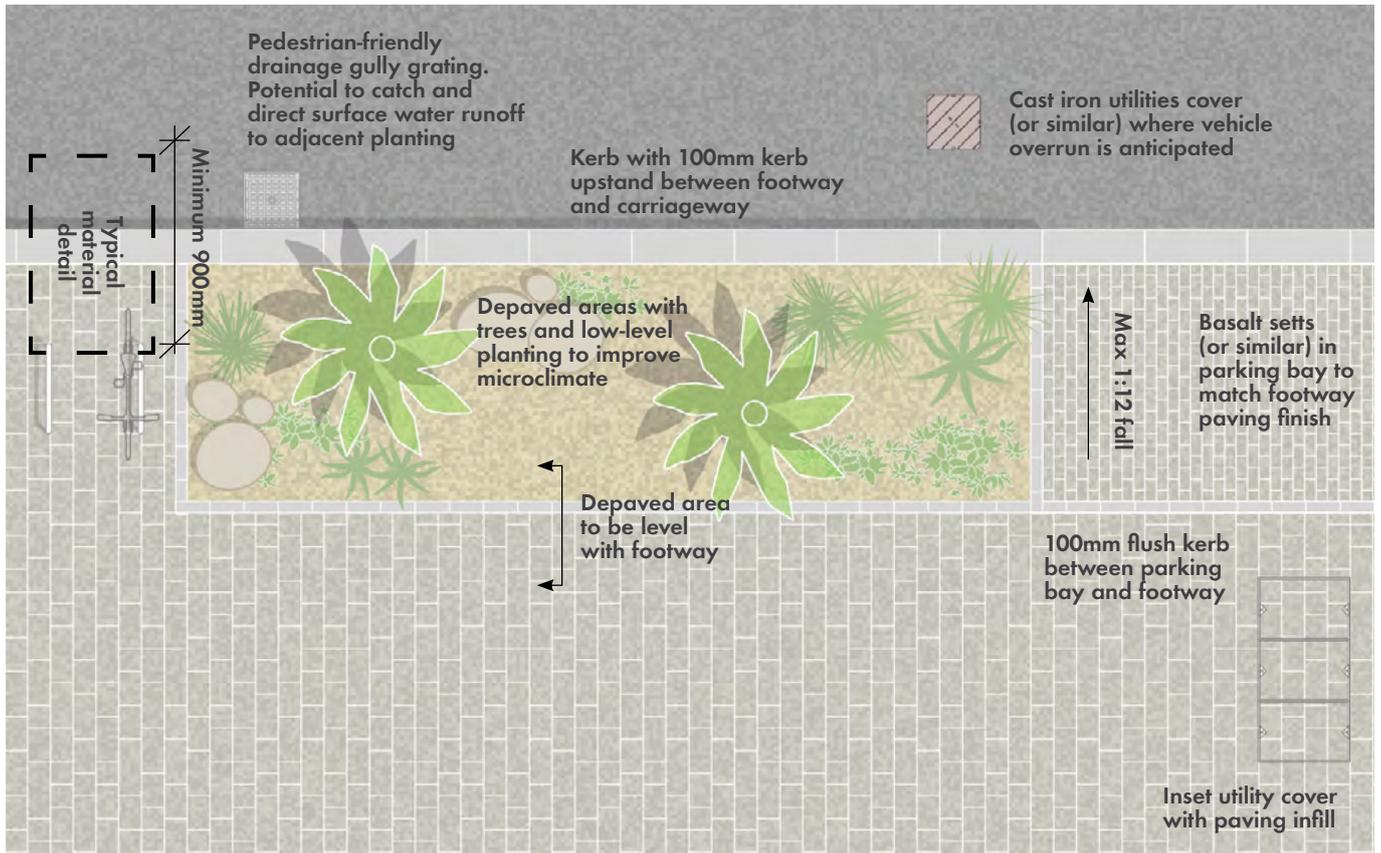
Utilities

Greywater from the adjacent mosque ablutions should be used for planting irrigation next to the mosque



LINK STREETS - AL DAHAB STREET

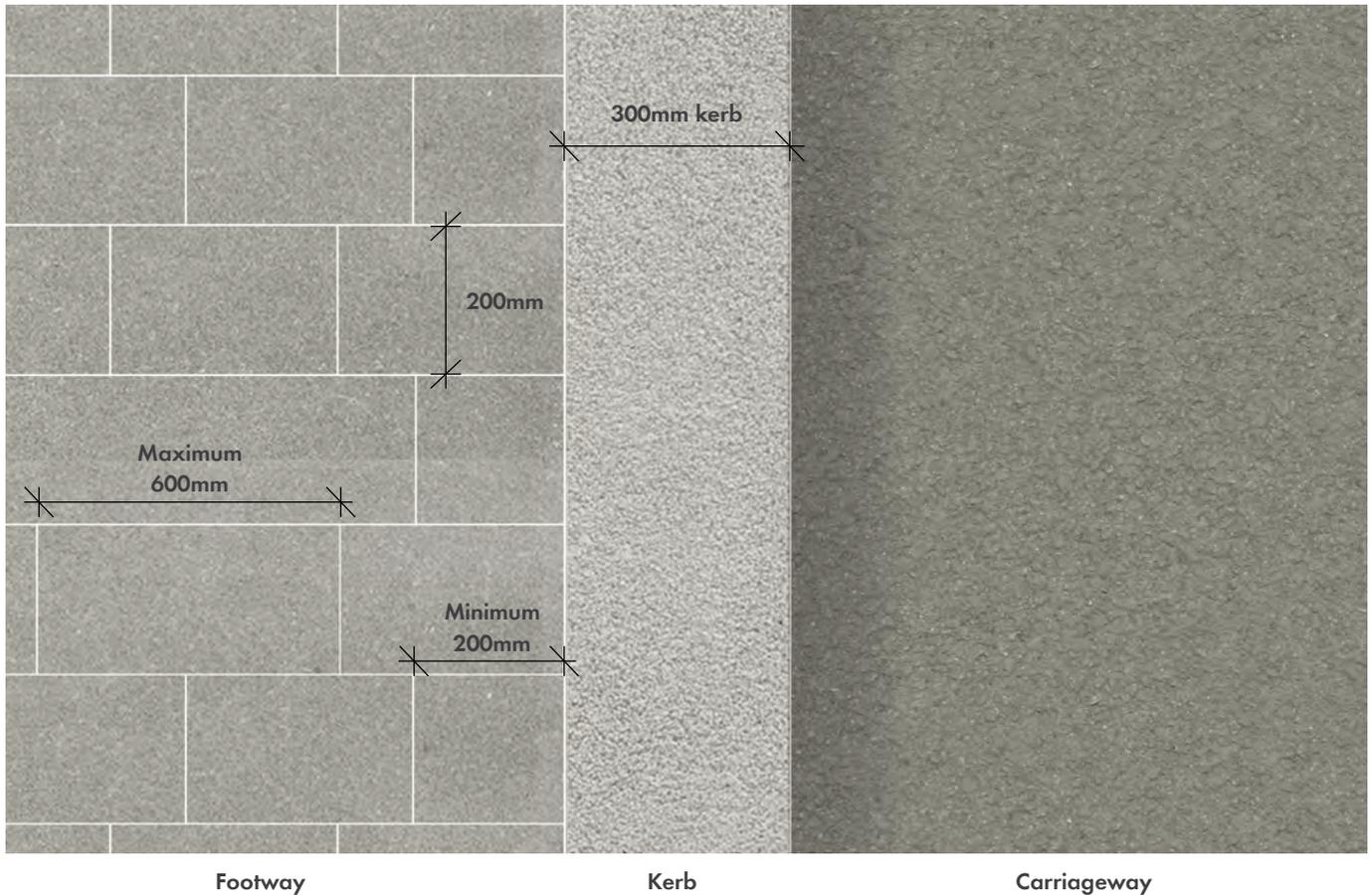
ZOOM PLAN



- Field – 1800mm clear width to be maintained for pedestrians or 1500mm in localised instances
- Edge – Typically 600-900mm width to mitigate irregular building lines and rationalise street furniture
- Traffic – One way, two lane carriageway and two lane, two-way cycle lane
- Accessibility – Raised table and tactile paving to be provided at pedestrian crossings
- Planting – Trees to be integrated at selected locations to provide shade and concentrated around controlled crossings to shade pedestrian
- Microclimate – planting, shading devices and depaved areas should be used to improve microclimate and walkability along streets
- Lighting – High-level light columns with LED light. Where possible columns to be used for traffic signage, traffic signals, pushbutton and pedestrian signal.
- Street furniture – Street furniture to be provided in shaded areas at regular intervals along the street
- Refuse – Bins to be located in paving edge zone or min. 600mm front kerb edge. Domestic bins should have timber screening to minimise visual impact on the streetscape
- Drainage – Drainage gullies in carriageways at regular intervals. Gullies should direct surface water runoff to planting
- Utilities – Recessed utility covers with paving infill to match surrounding surfacing in footways. Cast iron utility covers (or similar) to be used on carriageways and parking bays

LINK STREETS - AL DAHAB STREET

ILLUSTRATIVE MATERIAL DETAIL



Field

Material	Saudi Basalt
Colour	Grey
Finish	Honed
Size	200x 200-600mm (random lengths)
Joints	Open jointing (5-7mm typical)
Bond	Broken bond / 1/3 running bond

Edge

Material	Saudi Basalt
Colour	Grey
Finish	Sawn
Size	300x900mm
Joints	Open jointing (5-7mm typical)
Bond	Staggered

Carriageway

Material	HRA to IS EN 13108-4
Finish	5-10mm coated chippings

Parking bays and lay-bys

Material	Saudi Basalt
Colour	Grey
Finish	Honed
Size	100x200mm
Joints	Open jointing (5-7mm typical)
Bond	Staggered

Kerbs

Material	Saudi Basalt
Colour	Silver grey
Finish	Hammered
Size	300x900mm
Height	125mm upstand

LINK STREETS - AL BASHA

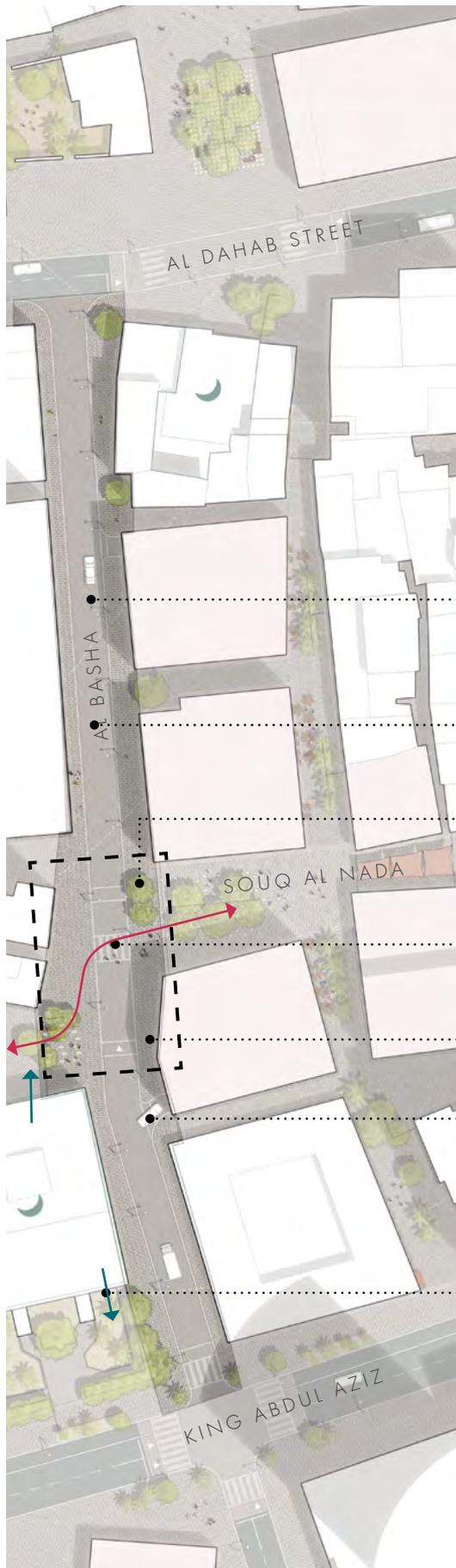
Character and function

Al Basha today is a busy one way street in Al Balad. Although the carriageway is two lanes only, the pedestrian experience is blighted by a combination of on-street parallel, echelon and perpendicular car parking that increase the perceived roadway. Where Al Basha meets Souq Al Nada, no crossing facilities are provided and a level change make it difficult to move between the two.

Key considerations

- Rationalise and reduce parking to improve the streetscape and ability to informally cross the street
- Utilise a raised table (or similar) to reinforce a connection across Al Basha
- Improve lighting quality and consistency
- Incorporate planting to create markers for wayfinding and moments of shade
- Increase amenity of seating, drinking fountains and cycle stands
- Upgrade surfacing and street furniture to be high quality, using a consistent palette of materials





Paved carriageway throughout to reinforce pedestrian priority

Carriageway width allows informal pick-up and drop-off

Planting provides meeting place at threshold to Souq Al Nada

Controlled crossing and raised table links with Souq Al Nada

Al Basha typical condition

Car parking access paving treatment gives pedestrians priority

Mosque irrigation of adjacent planting



LINK STREETS - AL BASHA

TYPICAL CONDITION



Paving

100x200 basalt paving (or similar) on shared carriageway and cycle lane

200x400 basalt paving. Pattern adaptable to street conditions

300x900 basalt edge to mitigate irregular building lines and rationalise street furniture



Accessibility

300mm flush basalt kerb (or similar) at controlled crossing

400x400mm tactile blister paving with visual contrast to surrounding materials



Paving

Contrasting paving insets preferable to paint to create controlled crossing strips

300mm flush kerb between footway and carriageway

300mm flush kerb stop line for controlled crossing

Special paving inserts to demarcate planting and seating area



Refuse

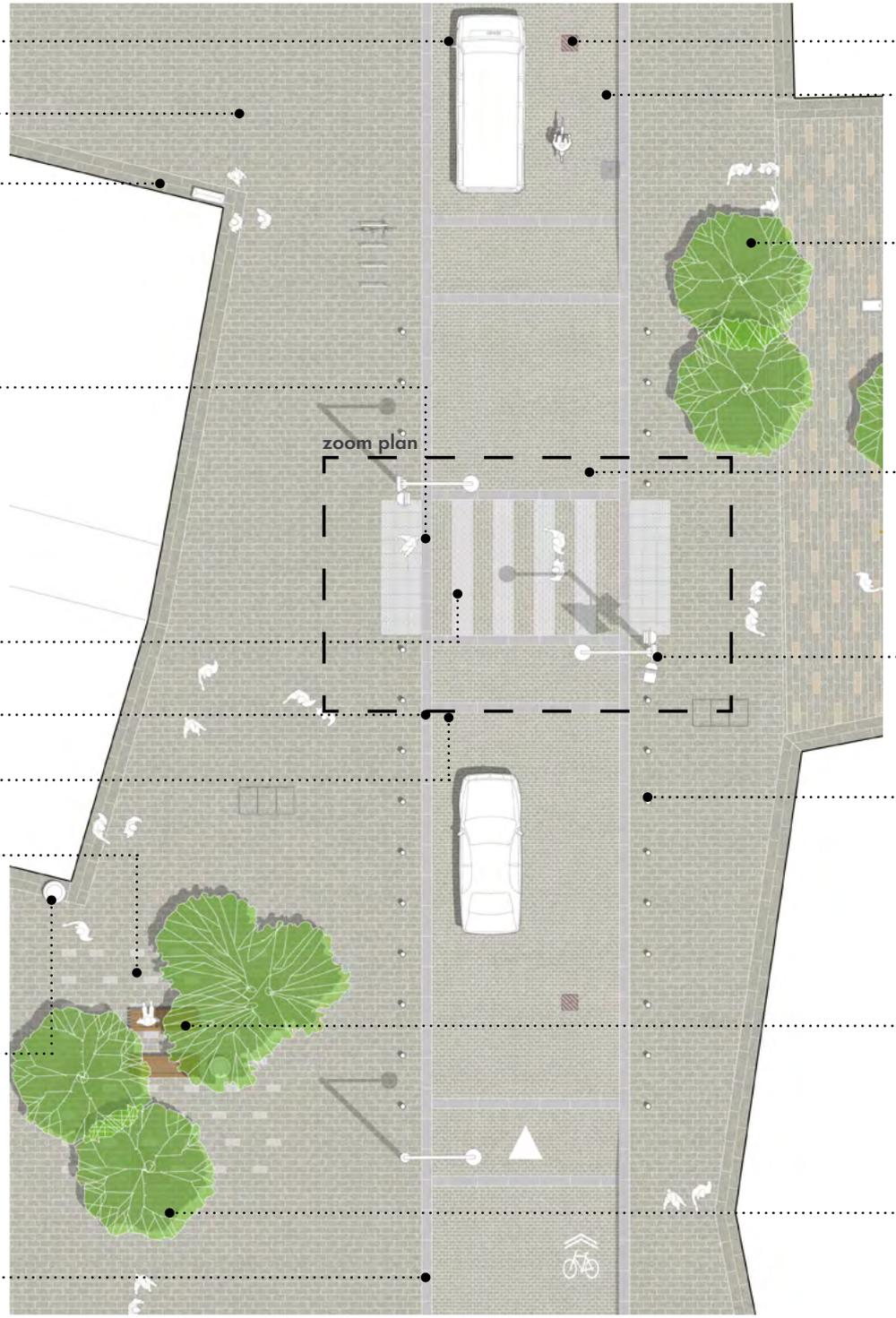
Where possible, bins should be provided adjacent to seating and located in the paving edge zone



Paving

300mm basalt kerb (or similar) with minimum 60mm kerb upstand

16700 - 20800mm
(approximate - varies)



Footway - varies
minimum 1800mm

Carriageway and cycle lane
6500mm

Footway - varies
minimum 1800mm



Utilities

Cast iron utilities cover (or similar) where vehicle overrun is anticipated

Pedestrian-friendly drainage gully grate. Location and frequency dependent on street conditions



Planting

Planting could be located at the end of Souq Al Nada to provide shade and a wayfinding marker for the souq. The size of tree and spacing should aim to minimise obstruction to pedestrian movement



Transport and streetscape

Raised table controlled crossing with ramps each side (maximum 1:12 fall)



Lighting

Light columns with LED light, attached traffic signals, pushbutton and pedestrian signal. Minimum 600mm offset front kerb edge



Traffic management

Bollards at 2000 - 3000mm centres along raised table



Street furniture

Seating should be located in shaded locations and grouped with other street objects to minimise obstruction



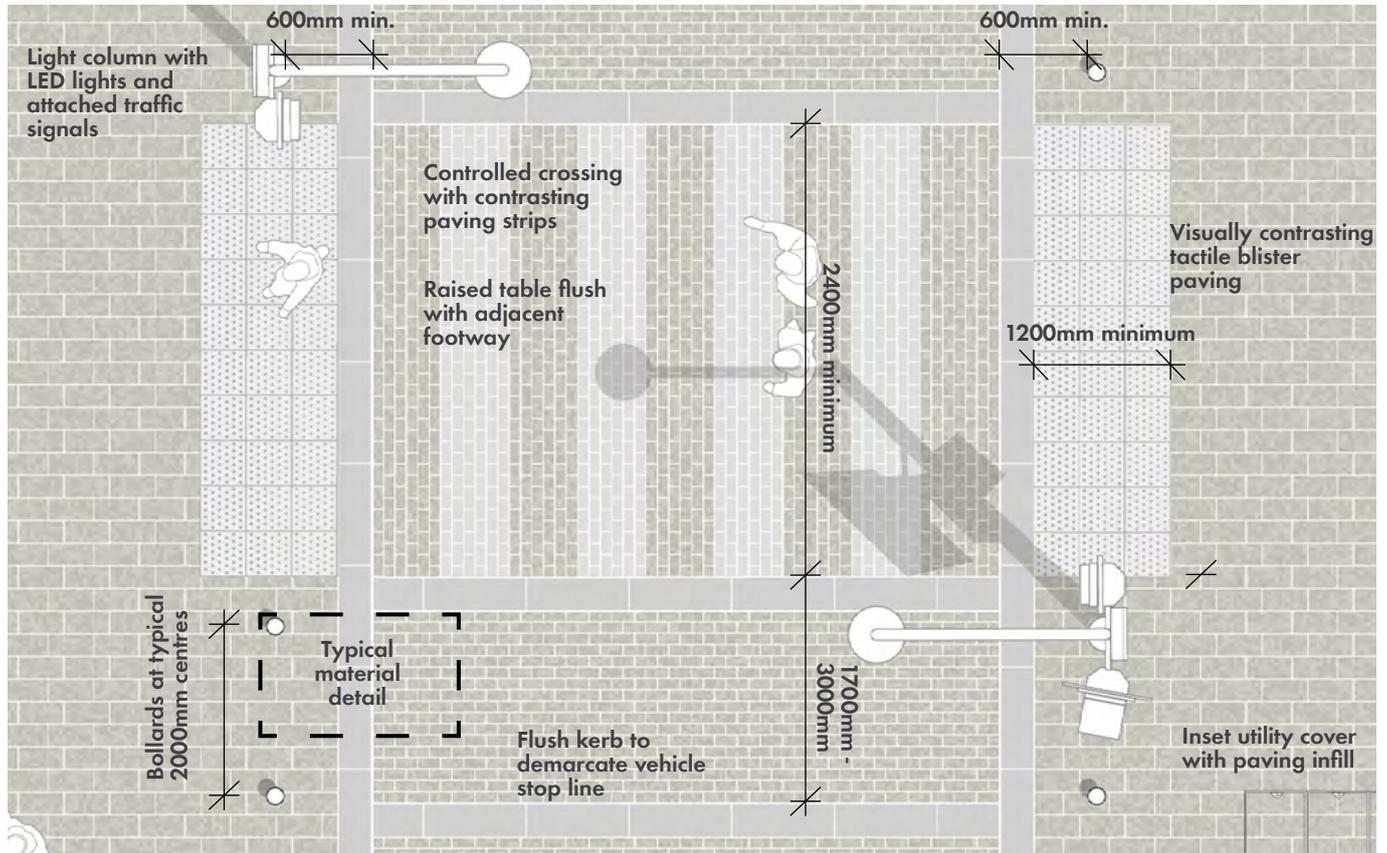
Planting

Planting should be introduced at selected locations to provide shade



LINK STREETS - AL BASHA

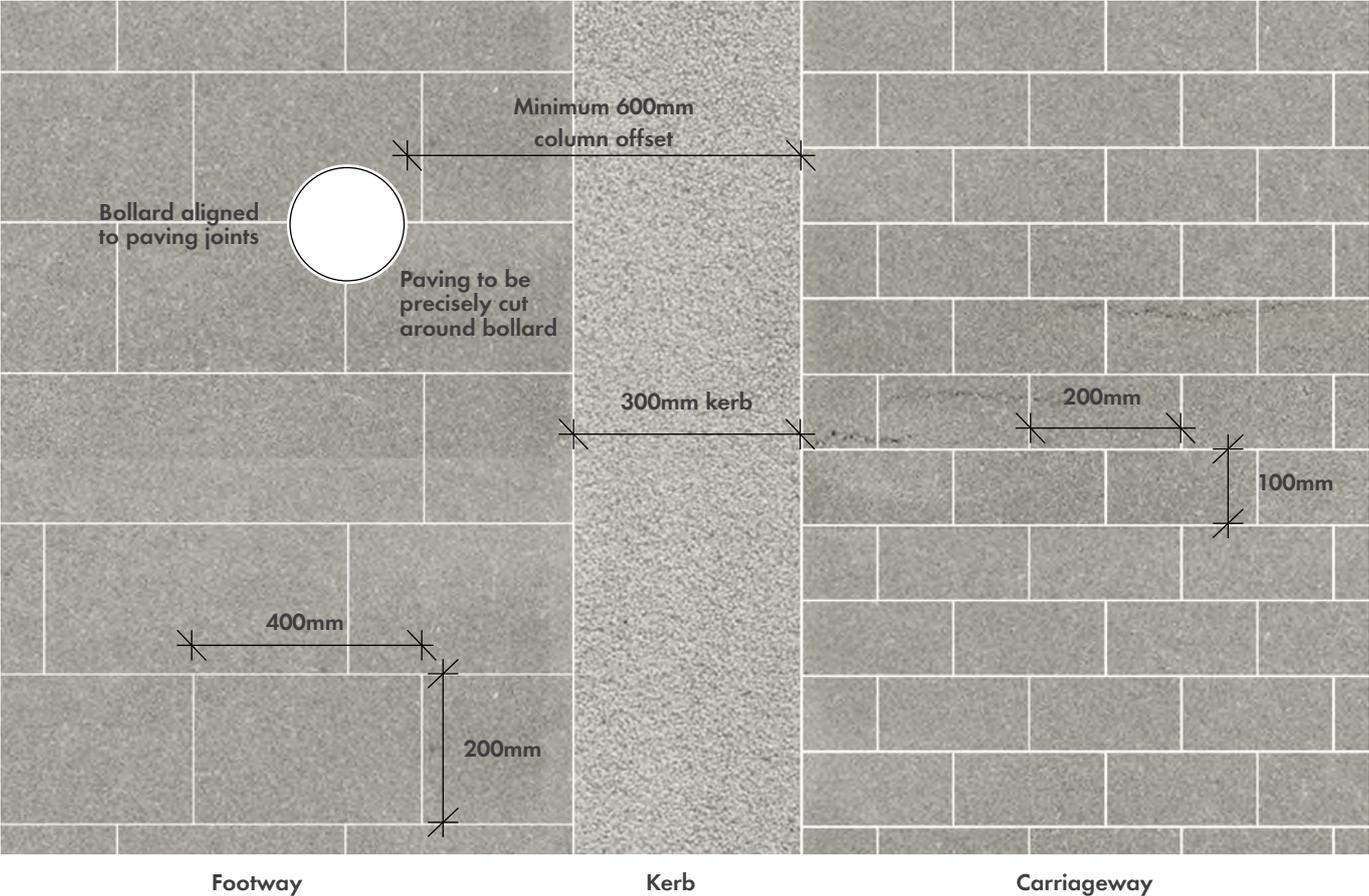
ZOOM PLAN



- Field – 1800mm clear width to be maintained for pedestrians or 1500mm in localised instances
- Edge – Typically 600-900mm width to mitigate irregular building lines and rationalise street furniture
- Traffic – Paved and HRA covered one way shared carriageway and one way cycle lane
- Accessibility – Raised table and tactile paving to be provided at pedestrian crossings
- Planting – Trees to be integrated at selected locations to provide shade and concentrated around controlled crossings to shade pedestrian
- Microclimate – planting and shading devices should be used to improve microclimate and walkability along streets
- Lighting – High-level light columns with LED light. Where possible columns to be used for traffic signage, traffic signals, pushbutton and pedestrian signal.
- Street furniture – Street furniture to be provided in shaded areas at regular intervals along the street
- Refuse – Bins to be located in paving edge zone or min. 600mm front kerb edge. Domestic bins should have timber screening to minimise visual impact on the streetscape
- Drainage – Drainage gullies in carriageways at regular intervals. Gullies should direct surface water runoff to planting
- Utilities – Recessed utility covers with paving infill to match surrounding surfacing in footways. Cast iron utility covers (or similar) to be used on carriageways and parking bays

LINK STREETS - AL BASHA

ILLUSTRATIVE MATERIAL DETAIL



Field

Material	Saudi Basalt
Colour	Grey
Finish	Honed
Size	200x400mm
Joints	Open jointing (5-7mm typical)
Bond	Staggered

Edge

Material	Saudi Basalt
Colour	Grey
Finish	Sawn
Size	300x900mm
Joints	Open jointing (5-7mm typical)
Bond	Staggered

Carriageway

Material	Saudi Basalt
Colour	Grey
Finish	Honed
Size	100x200mm
Joints	Open jointing (5-7mm typical)
Bond	Staggered

Kerbs

Material	Saudi Basalt
Colour	Silver grey
Finish	Hammered
Size	300x900mm
Height	100mm upstand

LINK STREETS - NORTH AND SOUTH LAGOON





 **Street furniture**

Seating in shade forms edge of de-paved area

 **Transport and streetscape**

Raised table controlled crossing with ramps each side (maximum 1:12 fall)

 **Lighting**

Light columns with LED light, attached traffic signals, pushbutton and pedestrian signal. Minimum 600mm offset front kerb edge

 **Refuse**

Bins to be located adjacent to buildings and within paving edge zone or a minimum 600mm from front kerb edge

 **Street furniture**

Drinking fountains, seating and cycle stands to be located in shaded locations and grouped with other street objects to minimise obstruction

 **Utilities**

Pedestrian-friendly drainage gully grate. Location and frequency dependent on street conditions

Inset utility cover with paving infill



LINK STREETS - NORTH AND SOUTH LAGOON

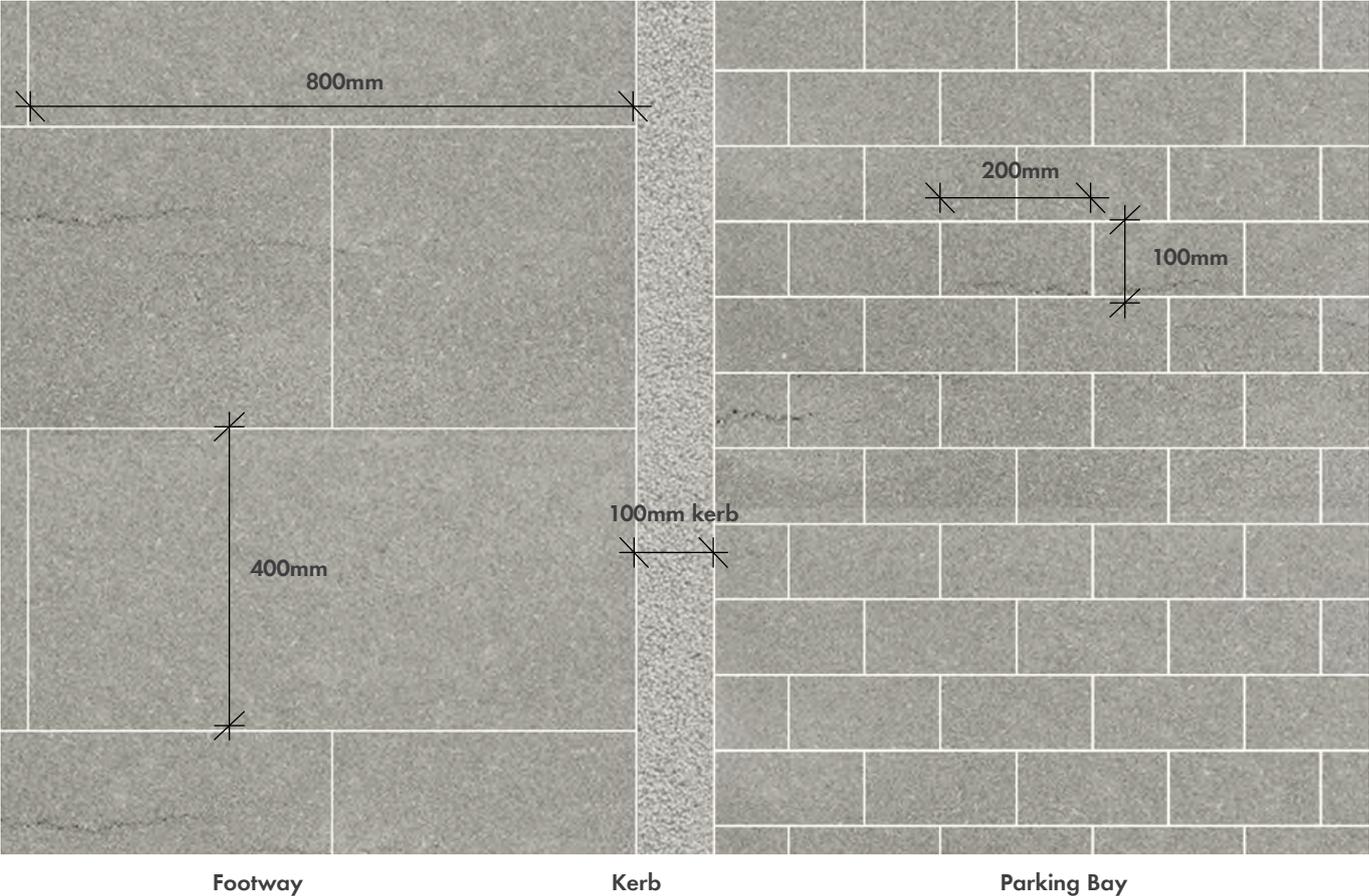
ZOOM PLAN



- Field – 1800mm clear width to be maintained for pedestrians or 1500mm in localised instances
- Edge – Typically 600mm width to mitigate irregular building lines, rationalise street furniture and shop merchandise.
- Traffic – Two-lane carriageway. Width varies according to vehicle function
- Accessibility – Raised table and tactile paving to be provided at pedestrian crossings
- Planting – Trees to be integrated at selected locations to provide shade and concentrated around controlled crossings to shade pedestrian
- Microclimate – planting, shading devices and depaved areas should be used to improve microclimate and walkability along streets
- Lighting – High-level light columns with LED light. Where possible columns to be used for traffic signage, traffic signals, pushbutton and pedestrian signal.
- Street furniture – Street furniture to be provided in shaded areas at regular intervals along the street
- Refuse – Bins to be located in paving edge zone or min. 600mm front front kerb edge. Domestic bins should have timber screening to minimise visual impact on the streetscape
- Drainage – Drainage gullies in carriageways at regular intervals. Gullies should direct surface water runoff to planting
- Utilities – Recessed utility covers with paving infill to match surrounding surfacing in footways. Cast iron utility covers (or similar) to be used on carriageways and parking bays

LINK STREETS - NORTH AND SOUTH LAGOON

ILLUSTRATIVE MATERIAL DETAIL



Field

Material	Saudi Basalt
Colour	Grey
Finish	Honed
Size	200x400mm
Joints	Open jointing (5-7mm typical)
Bond	Staggered

Edge

Material	Saudi Basalt
Colour	Grey
Finish	Sawn
Size	300x900mm
Joints	Open jointing (5-7mm typical)
Bond	Staggered

Carriageway

Material	HRA to IS EN 13108-4
Finish	5-10mm coated chippings

Parking bays and lay-bys

Material	Saudi Basalt
Colour	Grey
Finish	Honed
Size	100x200mm
Joints	Open jointing (5-7mm typical)
Bond	Staggered

Kerbs

Material	Saudi Basalt
Colour	Silver grey
Finish	Hammered
Size	300x900mm
Height	125mm upstand (carriageway) 60mm upstand (cycle lane)

5.4.3 LOCAL STREETS

North and South Lagoon

Utilities

Cast iron utilities cover (or similar) where vehicle overrun is anticipated

Inset utility cover with paving infill

Pedestrian-friendly drainage gully grate. Location and frequency dependent on street conditions

Refuse

Bins to be located adjacent to buildings and within paving edge zone or a minimum 600mm from front kerb edge. Bins should ideally be located near to public seating

Street furniture

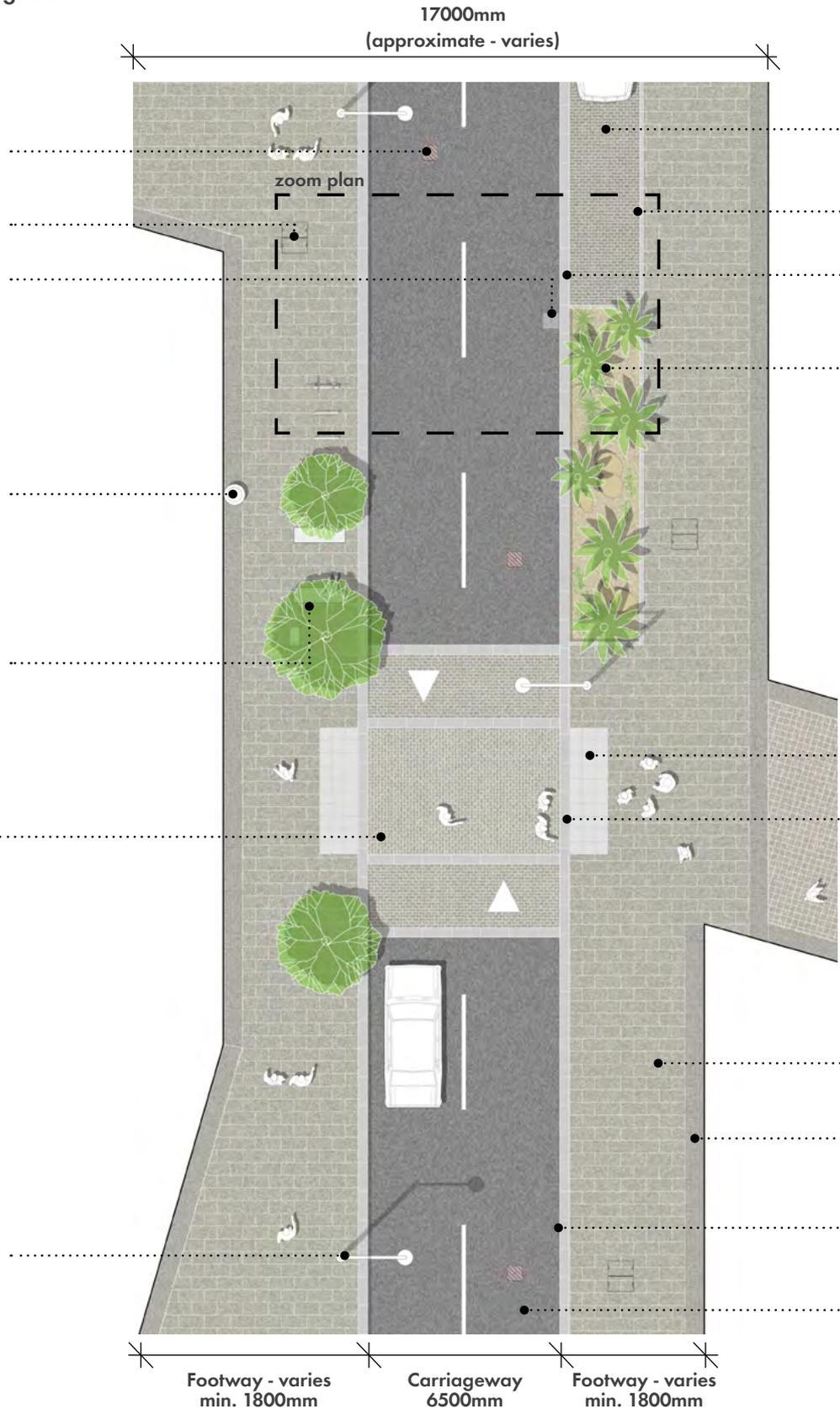
Drinking fountains, seating and cycle stands to be located in shaded locations and grouped with other street objects to minimise obstruction

Transport and streetscape

Raised table uncontrolled crossing with ramps each side (maximum 1:12 fall)

Lighting

Light columns with LED light and attached traffic signals. Minimum 600mm offset front kerb edge





 **Paving**

100x200 basalt paving (or similar) parking bay. Finish to match footway

100mm flush kerb to delineate footway and parking bay

300mm flush kerb to delineate carriageway and parking bay

Depaved areas to improve microclimate and enable informal low-level planting and trees

 **Accessibility**

400x400mm tactile blister paving with visual contrast to surrounding materials

300mm flush basalt kerb (or similar) at uncontrolled crossing

 **Paving**

400x800 basalt paving. Pattern adaptable to street conditions

50x50 basalt setts edge to mitigate irregular building lines and rationalise street furniture

300mm basalt kerb (or similar) with 125mm upstand to delineate carriageway and footway

High quality HRA (or similar) carriageway

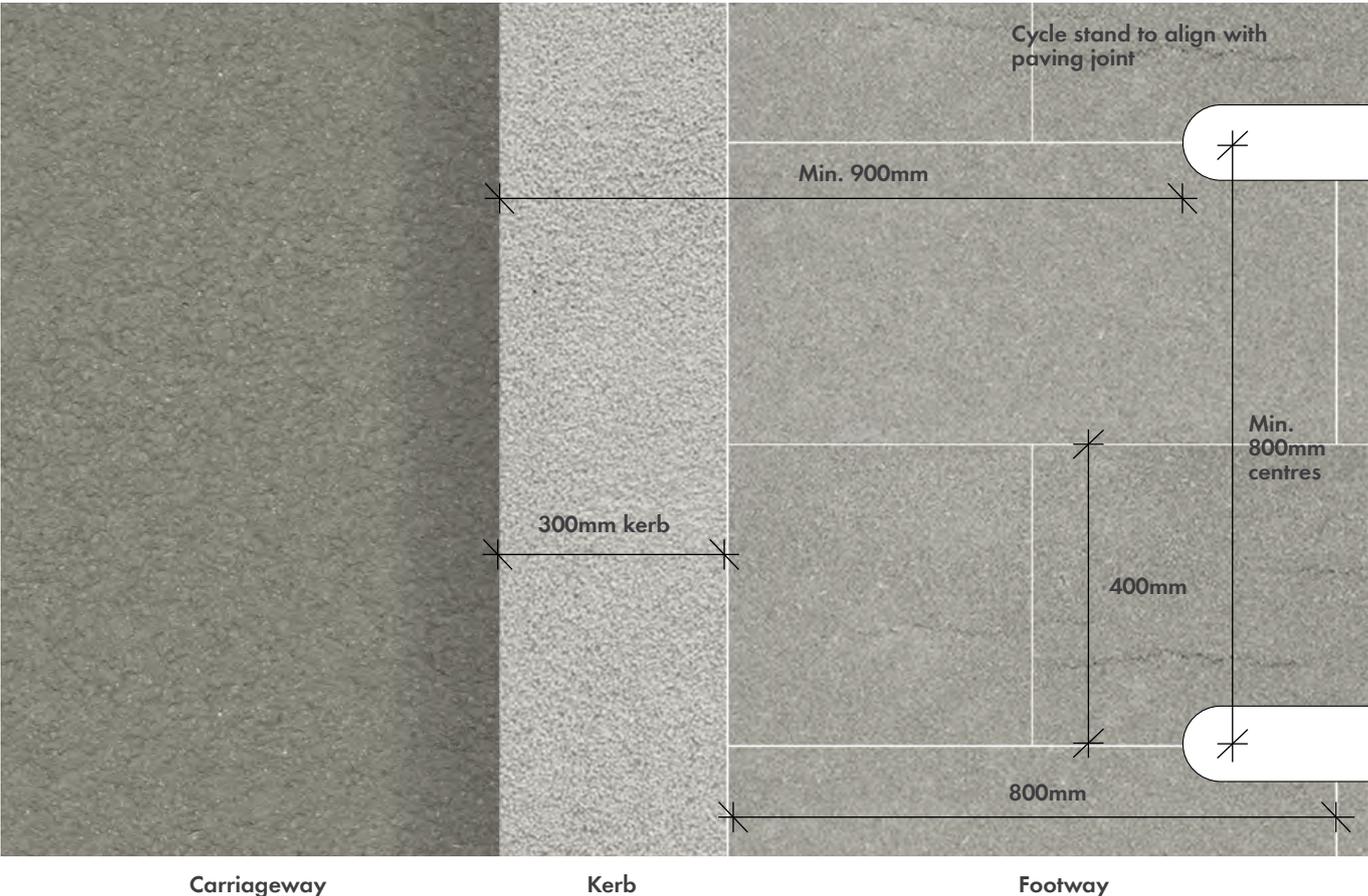


LOCAL STREETS ZOOM PLAN



- Field – 1800mm clear width to be maintained for pedestrians or 1500mm in localised instances
- Edge – Typically 600mm width to mitigate irregular building lines, rationalise street furniture and shop merchandise.
- Traffic – Two-lane carriageway. Width varies according to vehicle function
- Accessibility – Raised table and tactile paving to be provided at pedestrian crossings
- Planting – Trees to be integrated at selected locations to provide shade and concentrated around controlled crossings to shade pedestrian
- Microclimate – planting, shading devices and depaved areas should be used to improve microclimate and walkability along streets
- Lighting – High-level light columns with LED light. Where possible columns to be used for traffic signage, traffic signals, pushbutton and pedestrian signal.
- Street furniture – Street furniture to be provided in shaded areas at regular intervals along the street
- Refuse – Bins to be located in paving edge zone or min. 600mm front kerb edge. Domestic bins should have timber screening to minimise visual impact on the streetscape
- Drainage – Drainage gullies in carriageways at regular intervals. Gullies should direct surface water runoff to planting
- Utilities – Recessed utility covers with paving infill to match surrounding surfacing in footways. Cast iron utility covers (or similar) to be used on carriageways and parking bays

LOCAL STREETS ILLUSTRATIVE MATERIAL DETAIL



Field

Material	Saudi Basalt
Colour	Grey
Finish	Honed
Size	200x400mm
Joints	Open jointing (5-7mm typical)
Bond	Staggered

Edge

Material	Saudi Basalt
Colour	Grey
Finish	Sawn
Size	300x900mm
Joints	Open jointing (5-7mm typical)
Bond	Staggered

Carriageway

Material	HRA to IS EN 13108-4
Finish	5-10mm coated chippings

Parking bays and lay-bys

Material	Saudi Basalt
Colour	Grey
Finish	Honed
Size	100x200mm
Joints	Open jointing (5-7mm typical)
Bond	Staggered

Kerbs

Material	Saudi Basalt
Colour	Silver grey
Finish	Hammered
Size	300x900mm
Height	125mm upstand (carriageway) 60mm upstand (cycle lane)

5.4.4 ACCESS STREETS - AL BALAD

 **Paving**

300x900 basalt edge to mitigate irregular building lines and rationalise street furniture

 **Planting**

Potential to enhance proposed hotel entrance using informal planters. The planters should be located on the paving edge zone

 **Paving**

150 or 300mm wide flush basalt kerb (or similar)

100x100 basalt paving (or similar) on footway. Pattern adaptable to street conditions

100x100 basalt paving with textured finish for carriageway. To be laid perpendicular to kerb edge

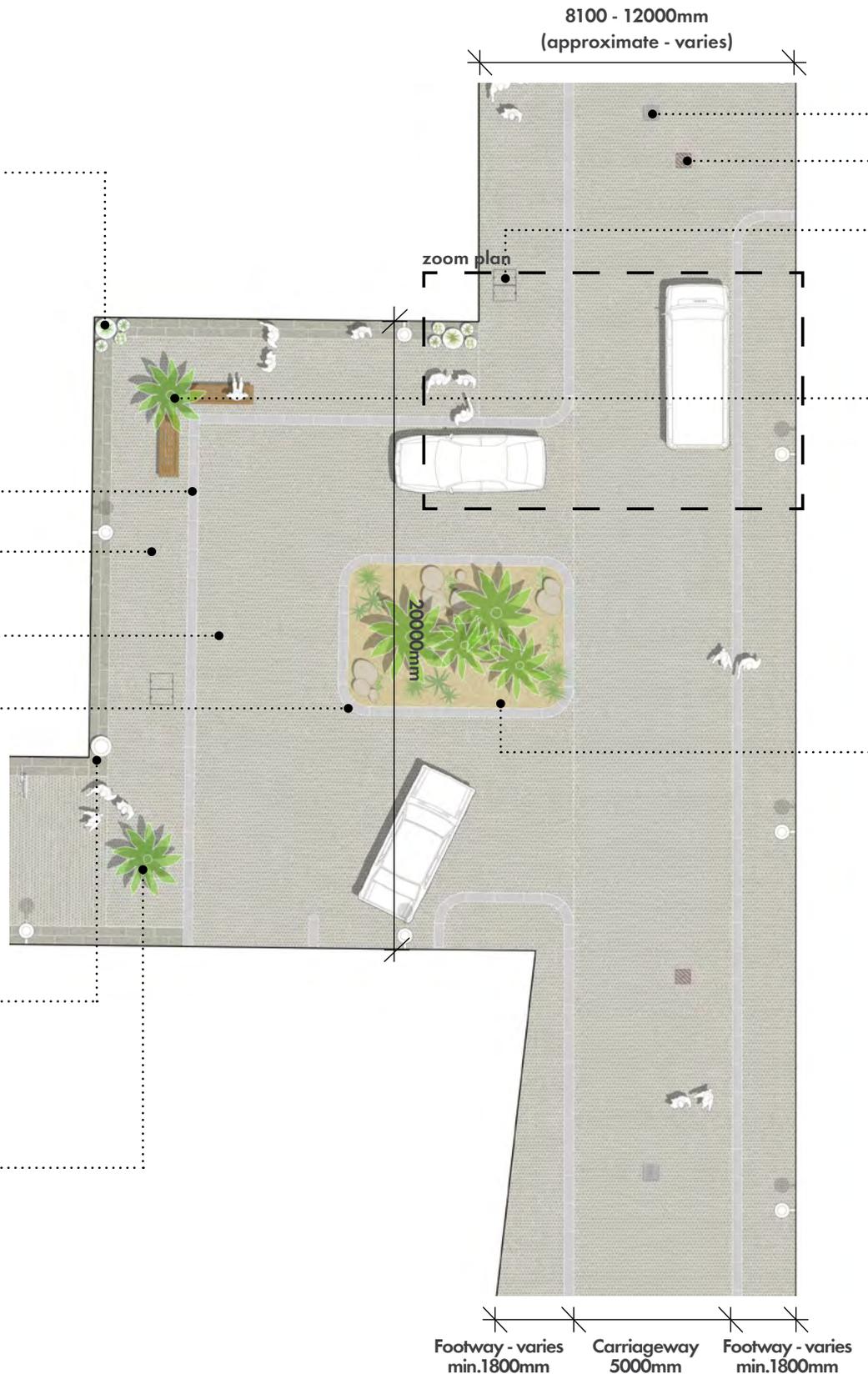
150mm or 300mm wide flush radiused basalt kerb (or similar)

 **Refuse**

Bins should be located adjacent to buildings within paving edge zone

 **Planting**

Tree to provide visual marker at end of zuqaq and provide shade





 **Utilities**

Pedestrian-friendly drainage gully grate.
Location and frequency dependent on street conditions

Cast iron utilities cover (or similar) where vehicle overrun is anticipated

Inset utility cover with paving infill

 **Planting**

Planting should be introduced by proposed hotel entrance to provide shade and improve microclimate

 **Street furniture**

Seating to be located in shaded location and positioned in unobstructive positions

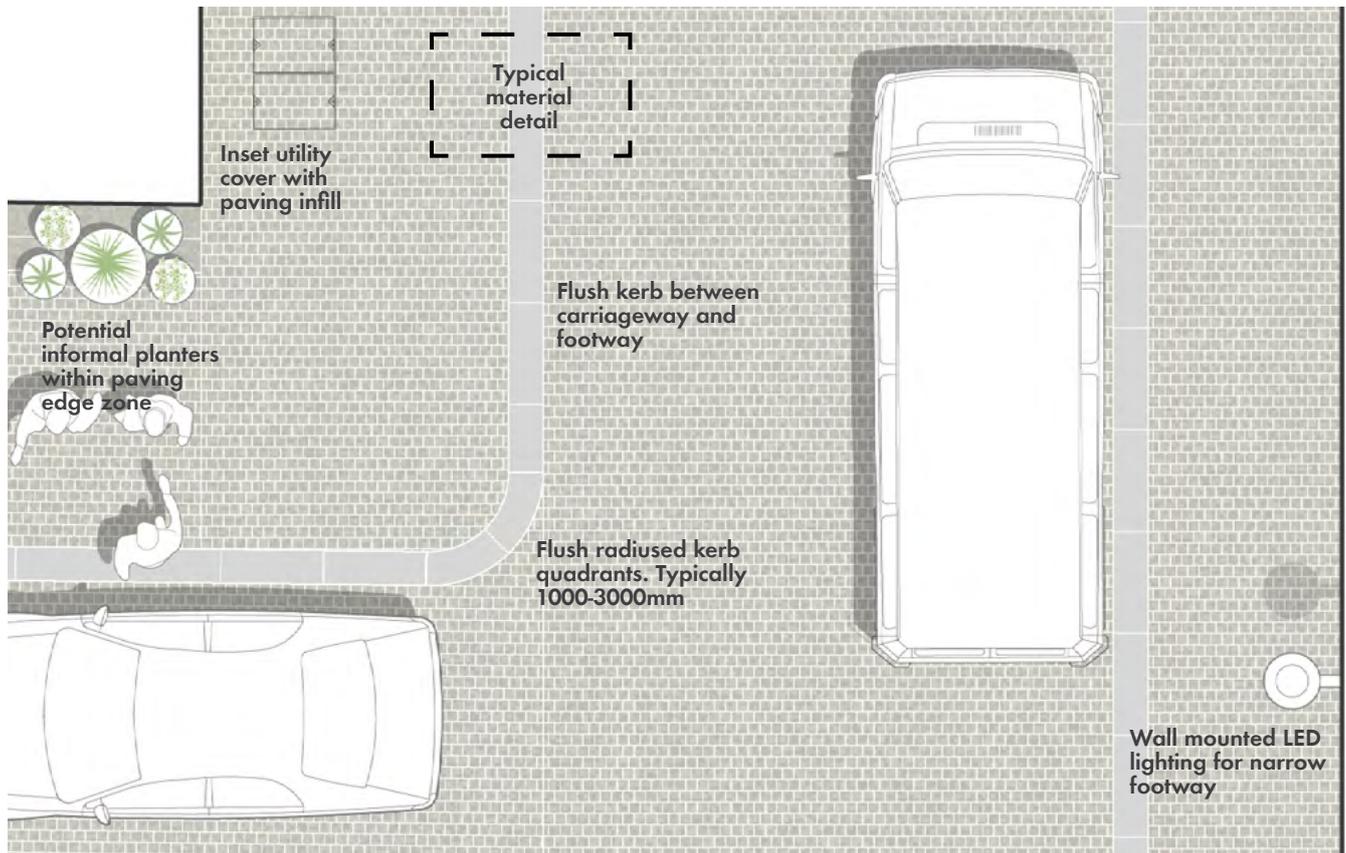
 **Microclimate**

Depaved area to improve microclimate and enable informal low-level planting and trees



ACCESS STREETS - AL BALAD

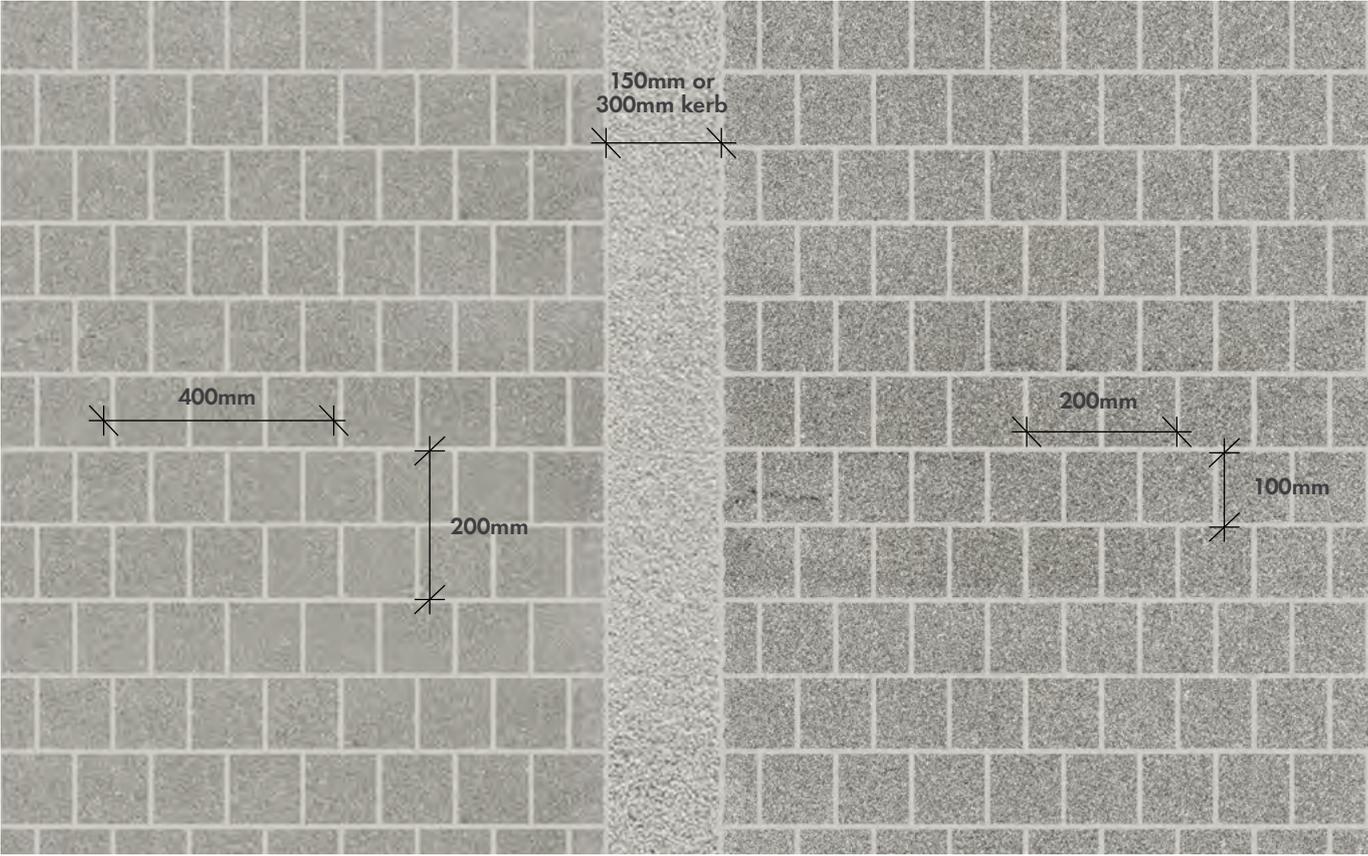
ZOOM PLAN



- Field – 1800mm clear width to be maintained for pedestrians or 1500mm in localised instances
- Edge – Typically 600-900mm width to mitigate irregular building lines and rationalise street furniture. Generally not required where footway widths are below 2500mm
- Traffic – Paved two-way access lane
- Planting – Trees to be integrated at selected locations to provide shade and concentrated around controlled crossings to shade pedestrian
- Microclimate – planting, shading devices and depaved areas should be used to improve microclimate and walkability along streets
- Lighting – wall mounted LED lights typically 4000-6000mm mounting height
- Street furniture – Street furniture to be provided in shaded areas at regular intervals along the street
- Refuse – Bins to be located in paving edge zone or min. 600mm front kerb edge. Domestic bins should have timber screening to minimise visual impact on the streetscape
- Drainage – Drainage gullies in carriageways at regular intervals. Gullies should direct surface water runoff to planting
- Utilities – Recessed utility covers with paving infill to match surrounding surfacing in footways. Cast iron utility covers (or similar) to be used on carriageways and parking bays

ACCESS STREETS - AL BALAD

ILLUSTRATIVE MATERIAL DETAIL



Footway

Kerb

Carriageway

Field

Material	Saudi Basalt
Colour	Grey
Finish	Honed
Size	100x100mm
Joints	Open jointing (5-7mm typical)
Bond	Staggered

Edge

Material	Saudi Basalt
Colour	Grey
Finish	Sawn
Size	300x900mm
Joints	Open jointing (5-7mm typical)
Bond	Staggered

Carriageway

Material	Saudi Basalt
Colour	Grey
Finish	Hammered
Size	100x100mm
Joints	Open jointing (5-7mm typical)
Bond	Staggered

Kerbs

Material	Saudi Basalt
Colour	Silver grey
Finish	Hammered
Size	300x900mm
Height	flush

ACCESS STREETS - NORTH AND SOUTH LAGOON

Utilities

- Inset utility cover with paving infill
- Pedestrian-friendly drainage gully grate. Location and frequency dependent on street conditions
- Cast iron utilities cover (or similar) where vehicle overrun is anticipated

Street furniture

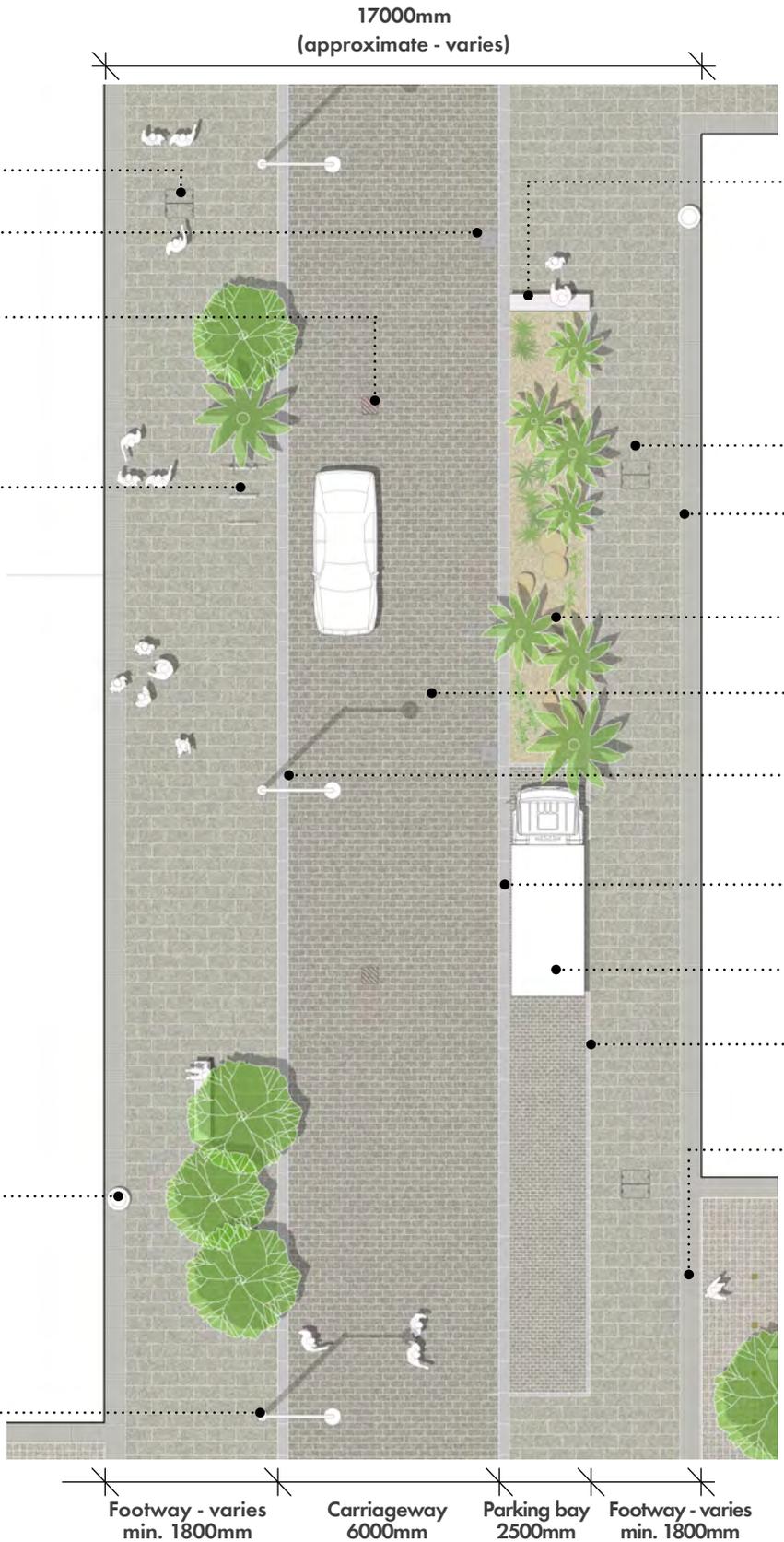
- Drinking fountains, seating and cycle stands to be located in shaded locations and grouped with other street objects to minimise obstruction

Refuse

- Bins to be located adjacent to buildings and within paving edge zone or a minimum 600mm from front kerb edge. Bins should ideally be located near to public seating

Lighting

- Light columns with LED light and attached traffic signals. Minimum 600mm offset front kerb edge





 **Street furniture**

Seating in shade forms edge of de-paved area

 **Paving**

400x800 basalt paving. Pattern adaptable to street conditions

50x50 basalt setts edge to mitigate irregular building lines and rationalise street furniture

Depaved areas to improve microclimate and enable informal low-level planting and trees

100x200 basalt paving (or similar) carriageway

150mm or 300mm basalt kerb (or similar) with 60mm upstand to delineate carriageway and footway

150 or 300mm flush kerb to delineate carriageway and parking bay

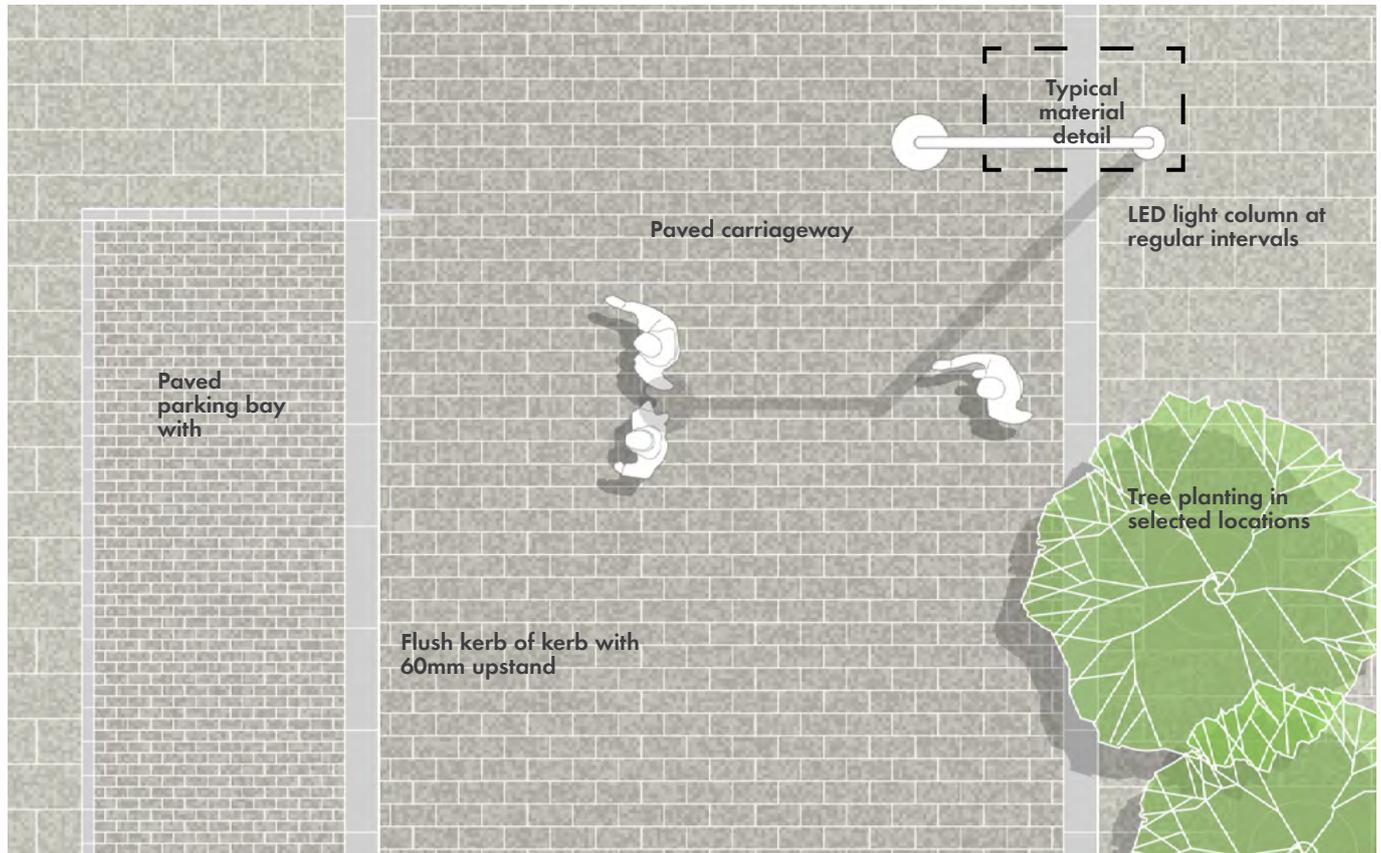
100x200 basalt paving (or similar) parking bay. Finish to match footway

100mm flush kerb to delineate footway and parking bay

Potential to use paving edge to mitigate change of paving size and orientation between typologies



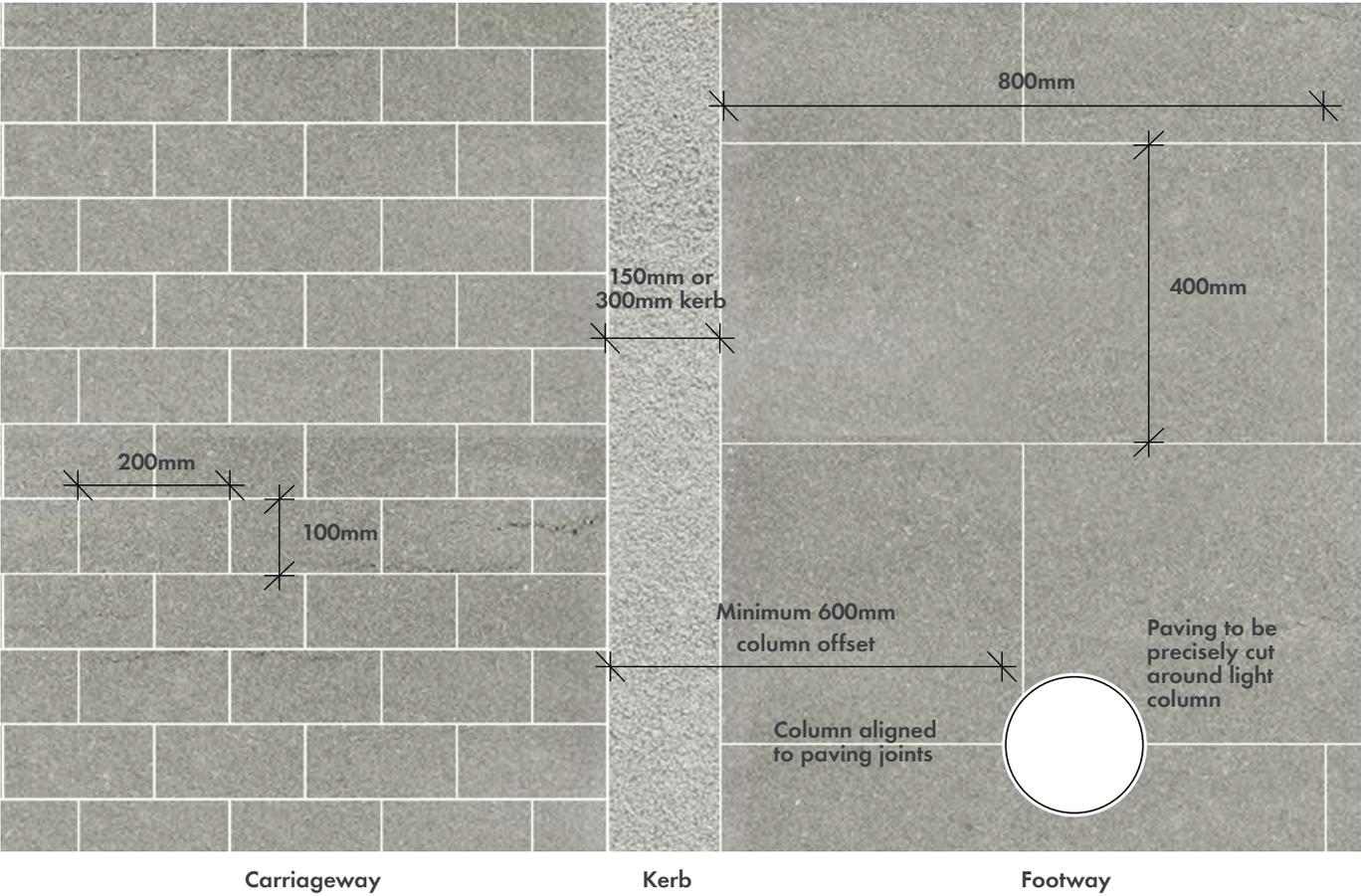
ACCESS STREETS - NORTH AND SOUTH LAGOON ZOOM PLAN



- Field – 1800mm clear width to be maintained for pedestrians or 1500mm in localised instances
- Edge – Typically 600-900mm width to mitigate irregular building lines and rationalise street furniture. Generally not required where footway widths are below 2500mm
- Traffic – Paved two-way access lane
- Planting – Trees to be integrated at selected locations to provide shade and concentrated around controlled crossings to shade pedestrian
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- Drainage – Drainage gullies in carriageways at regular intervals. Gullies should direct surface water runoff to planting
- Utilities – Recessed utility covers with paving infill to match surrounding surfacing in footways. Cast iron utility covers (or similar) to be used on carriageways and parking bays

ACCESS STREETS - NORTH AND SOUTH LAGOON

ILLUSTRATIVE MATERIAL DETAIL



Field

Material	Saudi Basalt
Colour	Grey
Finish	Honed
Size	100x100mm
Joints	Open jointing (5-7mm typical)
Bond	Staggered

Edge

Material	Saudi Basalt
Colour	Grey
Finish	Sawn
Size	300x900mm
Joints	Open jointing (5-7mm typical)
Bond	Staggered

Carriageway

Material	Saudi Basalt
Colour	Grey
Finish	Hammered
Size	100x100mm
Joints	Open jointing (5-7mm typical)
Bond	Staggered

Kerbs

Material	Saudi Basalt
Colour	Silver grey
Finish	Hammered
Size	300x900mm
Height	flush

6 HARD LANDSCAPE

The following section sets out an overview of paving approaches, a materials palette and considerations for hard landscape elements. The aim of this section is to provide guidance on ways to achieve high-quality hard landscape.

6.1 HARD LANDSCAPE

The hardscape palette for the Jeddah Historical District has been designed to be simple and sensitive to Al Balad's character. Basalt is proposed as the predominant material as it is already extensive throughout the site. Basalt is true to Al Balad's origins – as a collection of buildings sat within a common ground plane material condition. For this reason, and to minimise material waste, the public realm hardscape palette uses basalt throughout the site.

The approach to materials varies by typology with minor variation between types. Variety in paving is expressed through differences in finish, unit size, tone, and pattern (in isolated conditions) which reflect the different conditions of streets and routes. Typically, higher footfall areas have a smoother paving while lesser-used routes and spaces have rougher materials to reflect the concept of wearing and use.

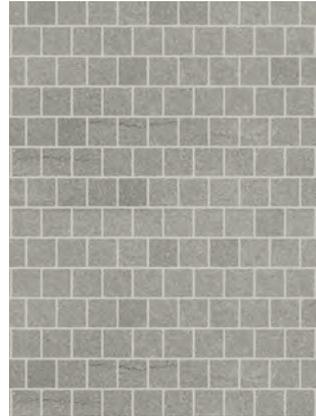
In general, typologies with higher footfall demand paving with a higher specification and materials that are durable, with proper detailing and sub-surface specification. The use of higher specification, durable materials, high standards of workmanship, utility upgrades and better control of servicing can reduce ongoing revenue costs.

Key considerations for materials:

- Select locally sourced Saudi materials with low embodied carbon and high content of reused or recycling aggregates (for non-natural materials)
- Re-used materials where possible e.g. the fractured basalt edge for residential zuqaqs could be formed from waste material
- Choose high-specification materials that will have longevity, durability and that minimise the need for regular repair and replacement
- Deliver materials to site using sustainable means of transport, where possible
- Select materials that have longevity and that can be easily cleaned, repaired and sourced – so high quality materials can be replaced like for like
- Depave where possible to improve the microclimate and use suitable sands or aggregates in place of paving



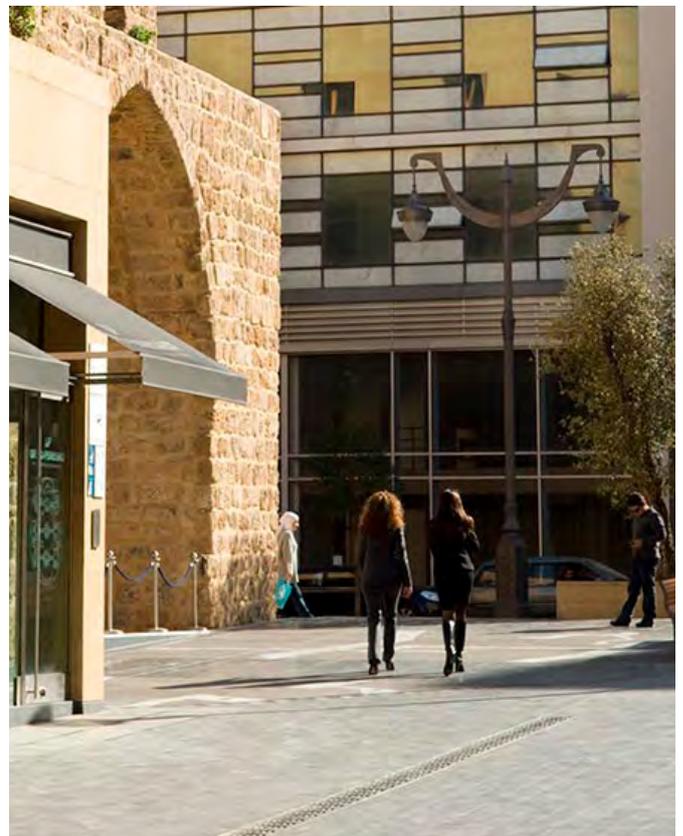
Souq Al Jami is a good example of paving as backdrop to life and architecture



Variation through paving texture, size and finish



Precedent of basalt used in a relatively new urban context

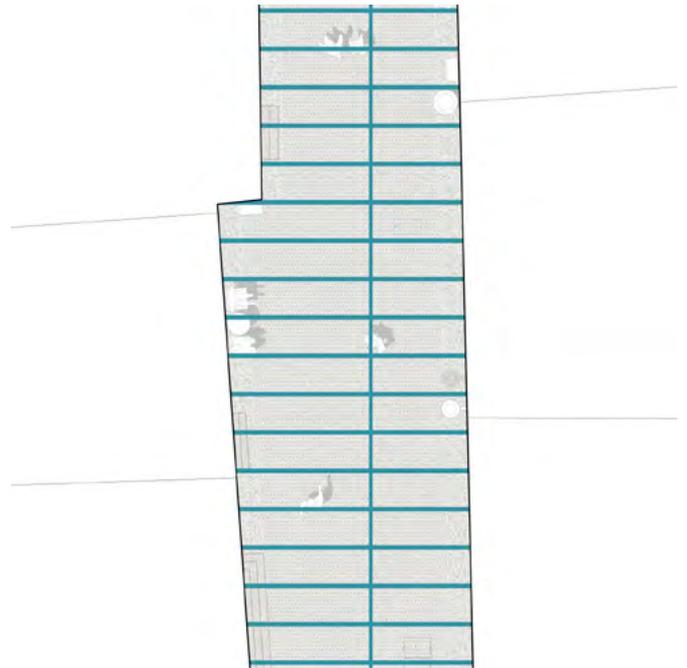


Precedent of basalt used in a relatively new urban context

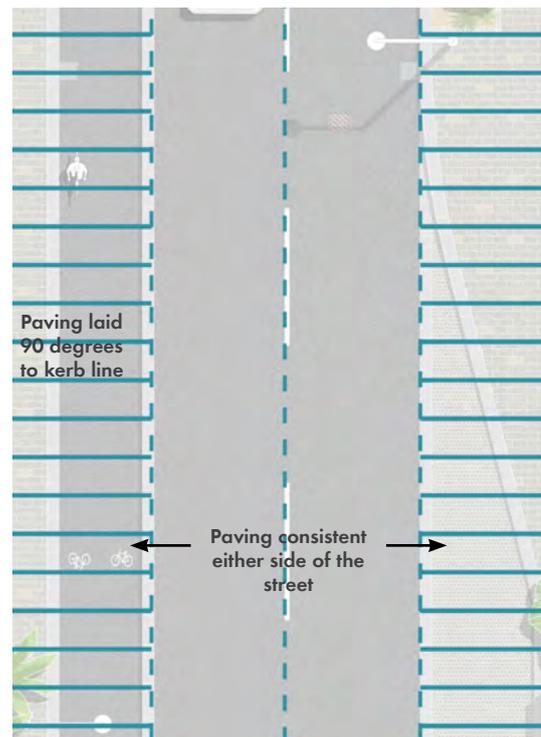
6.1.1 LAYING OF MATERIALS

Setting out: typical approaches

- To mitigate the non-rectilinear nature of zuqaqs and souqs in Al Balad, paving designs should establish a centreline for paving setting out to minimise directional shifts in paving
- For all routes, any paving should be consistent in size and quality. Where damaged paving is replaced, materials should be replaced like for like.
- For streets, paving should typically be laid at 90 degree angles to the kerb line, not the building line. On streets, the full width of the footway and materials should be consistent on either side of the carriageway to ensure visual consistency.
- Where possible, parking and loading bays should be integrated to increase the perceived footway width



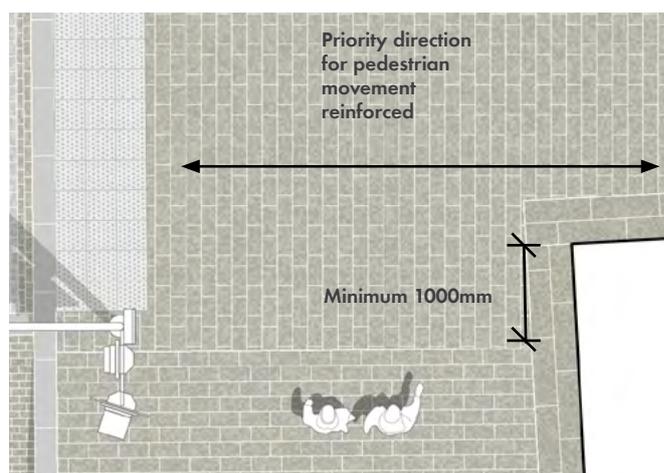
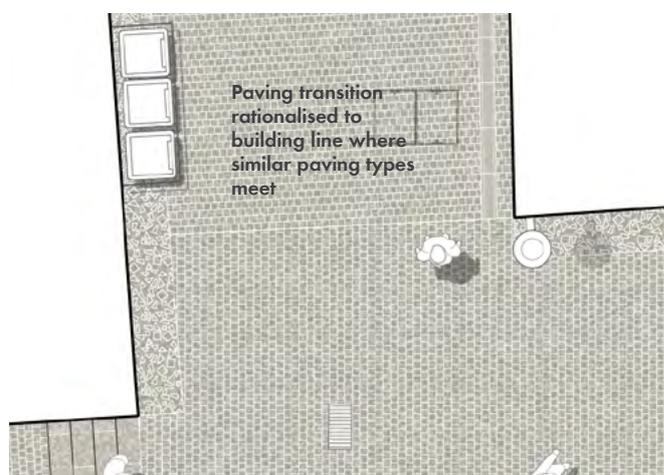
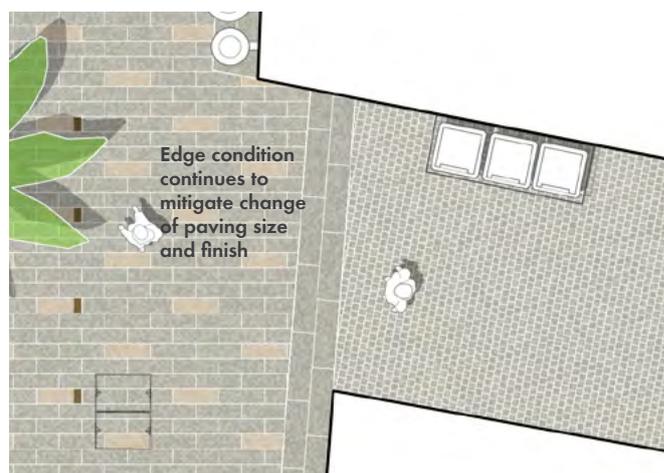
Zuqaqs and souqs paving should be laid perpendicular to the route centreline to avoid many changes in paving orientation



Streets: paving should typically be laid at 90 degree angles to the kerb line, not the building line.

Paving transitions: typical approaches

- Designs should carefully consider layout of materials at paving junctions to minimise cutting of paving and avoid small slivers
- At material transitions the priority direction for pedestrian movement should generally be reinforced
- In conditions where the same paving type meets, the transition of materials should be rationalised to the adjacent building line or a minimum of 1000mm offset
- In instances where different paving sizes meet, an edge separation could be integrated between to manage the transition.



6.1.2 PAVING QUALITY

Paving quality

Good design and high standards of delivery for paving must be maintained across the site to ensure a high-quality public realm. This includes rationalised detailing and minimised cutting of materials to avoid large areas of paving infill.

Material type, thickness, jointing and material sub-base should be considered where vehicle overrun is anticipated to avoid damage to paving materials. For footways, strengthened paving slabs are preferable to protective bollards, which can create streetscape clutter.

Where possible, subsurface issues should be technically resolved below ground to maintain consistent surface materials and levels.



High quality materials and workmanship can ensure the public realm is accessible and durable



Paving should be cut with precision to ensure high quality. Cuts should reduce large areas or infill and should avoid small slivers of paving

PAVING APPLICATION MATERIALS STRATEGY



PAVING APPLICATION TYPOLOGIES



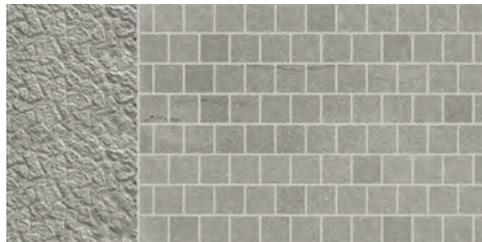
6.2 MATERIALS PALETTE

6.1.3 MATERIALS PALETTE ZUQAQS

PRIMARY ROUTES

SECONDARY ROUTES

AL BALAD: RESIDENTIAL ZUQAQS



Edge
 Fractured basalt units
 Hammered finish
 Staggered bond
 Open jointing (3-5mm)

Field
 100x100 basalt units
 Honed finish
 Staggered bond
 Open jointing (3-5mm)



Edge
 Stabilised sand
 Buff colour
 Fine aggregates
 Metal trim

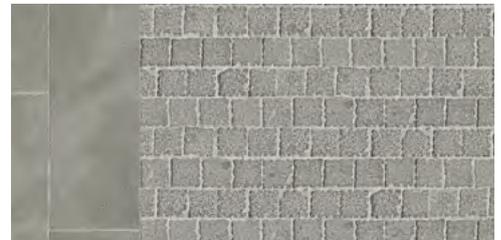
Field
 100x100 basalt units
 Hammered finish
 Staggered bond
 Open jointing (3-5mm)

AL BALAD: COMMERCIAL ZUQAQS



Edge
 300x900 basalt units
 Sawn finish
 Staggered bond
 Open jointing (3-5mm)

Field
 100x100 basalt units
 Honed finish
 Staggered bond
 Open jointing (3-5mm)



Edge
 300x900 basalt units
 Sawn finish
 Staggered bond
 Open jointing (3-5mm)

Field
 100x100 basalt units
 Hammered finish
 Staggered bond
 Open jointing (3-5mm)

NORTH AND SOUTH LAGOON: LAGOON ZUQAQS



Field
 200x200 basalt units
 Honed finish
 Stacked bond
 Close jointing (2-3mm)

Edge
 Saudi basalt
 Grey
 200x200mm format
 Honed finish
 3-5m open jointing

6.2.1 MATERIALS PALETTE SOUQS

Souq Al Jami

**Edge**

300x900 basalt units
Sawn finish
Staggered bond
Open jointing (3-5mm)

Field

200x200 basalt units
Honed finish
Staggered bond
Open jointing (3-5mm)

Souq Al Nada

**Edge**

300x900 basalt units
Sawn finish
Staggered bond
Open jointing (3-5mm)

Field

200x600 basalt and
sandstone units
Honed finish
Staggered bond
Open jointing (3-5mm)

Souq Al Alawi

**Edge**

300x900 basalt units
Sawn finish
Staggered bond
Open jointing (3-5mm)

Field

200x600 basalt units
Honed finish
Staggered bond
Open jointing (3-5mm)

Souq Bab Mekkah

**Edge**

300x900 basalt units
Sawn finish
Staggered bond
Open jointing (3-5mm)

Field

200x200 basalt units
Honed finish
Staggered bond
Open jointing (3-5mm)

6.2.2 MATERIALS PALETTE STREETS

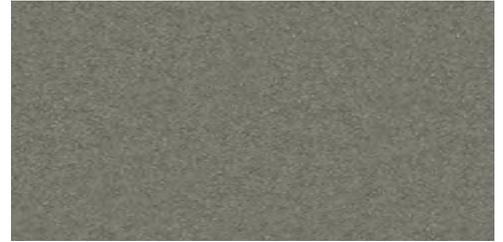
FOOTWAY

CARRIAGEWAY

AL BALAD: ARTERIAL, LINK AND LOCAL STREETS

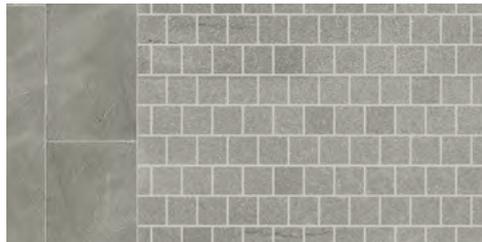


Edge	Field
300x900 basalt units	100x400 basalt units
Sawn finish	Honed finish
Staggered bond	Staggered bond
Open jointing (3-5mm)	Open jointing (3-5mm)

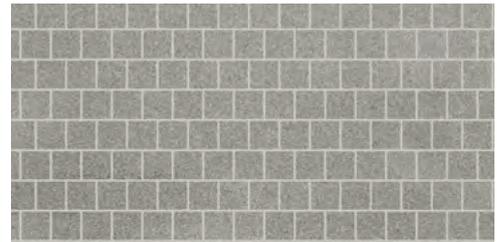


Traffic
 High quality hot rolled asphalt (HRA)

AL BALAD: LOCAL ACCESS STREETS



Edge	Field
300x900 basalt units	100x100 basalt units
Sawn finish	Honed finish
Staggered bond	Staggered bond
Open jointing (3-5mm)	Open jointing (3-5mm)

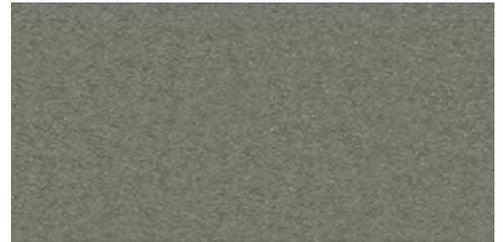


Field
 100x100 basalt units
 Hammered finish
 Staggered bond
 Open jointing (3-5mm)

NORTH AND SOUTH LAGOON: ARTERIAL, LINK AND LOCAL STREETS



Edge	Field
50x50 basalt units	400x800 basalt units
Honed finish	Sawn finish
Stack bond	Staggered bond
Close jointing (2-3mm)	Close jointing (2-3mm)



Traffic
 High quality hot rolled asphalt (HRA)

NORTH AND SOUTH LAGOON: LOCAL ACCESS STREETS



Edge	Field
50x50 basalt units	400x800 basalt units
Honed finish	Sawn finish
Stack bond	Staggered bond
Close jointing (2-3mm)	Close jointing (2-3mm)



Traffic
 High quality hot rolled asphalt (HRA)

PARKING/RAISED TABLE

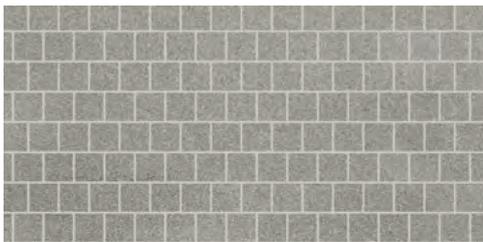
KERBS AND EDGES



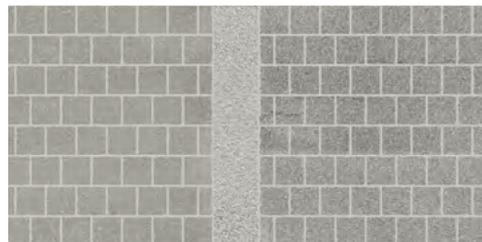
Traffic / Field
 100x200 basalt units
 Hammered finish
 Staggered bond
 Open jointing (3-5mm)



Kerb
 300mm x varies
 Hammered finish
 100-125mm upstand



Traffic / Field
 100x100 basalt units
 Hammered finish
 Staggered bond
 Open jointing (3-5mm)



Kerb
 150 or 300mm x varies
 Hammered finish
 Flush



Traffic / Field
 100x200 basalt units
 Hammered finish
 Staggered bond
 Open jointing (3-5mm)



Kerb
 300mm x varies
 Hammered finish
 100-125mm upstand



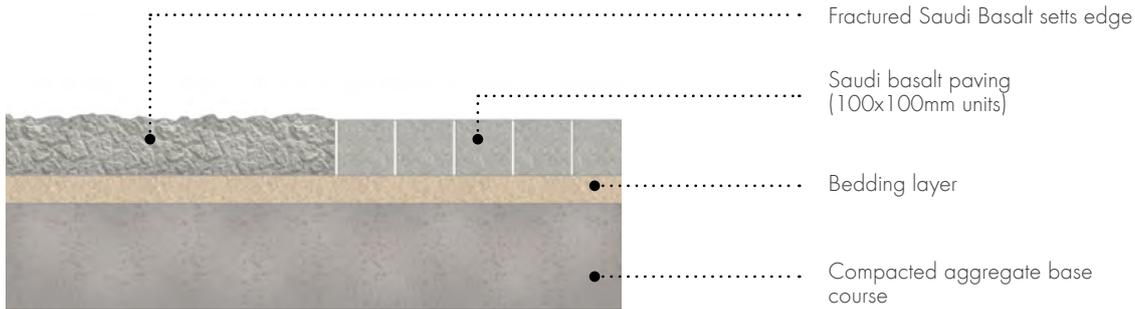
Field
 100x200 basalt units
 honed finish
 Staggered bond
 Close jointing (2-3mm)



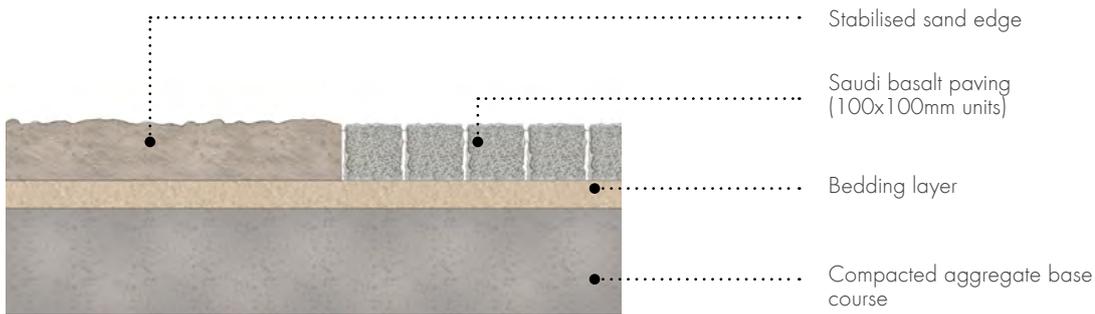
Kerb
 150 or 300mm x varies
 Hammered finish
 flush

6.3 STANDARD DETAILS

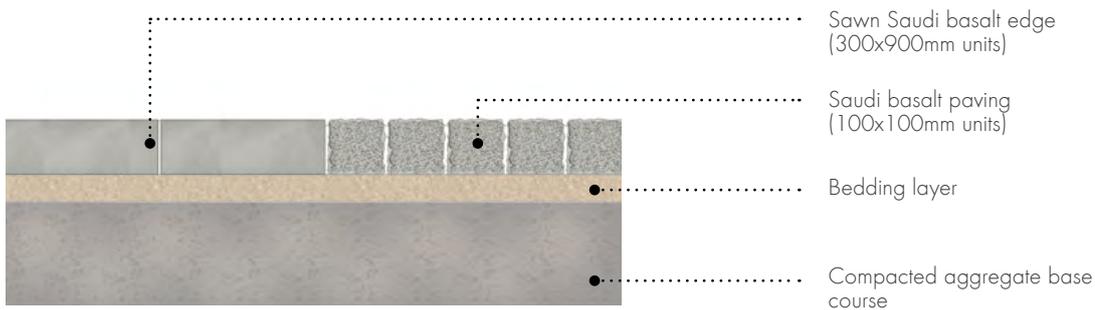
Residential Zuqaqs: Primary Routes



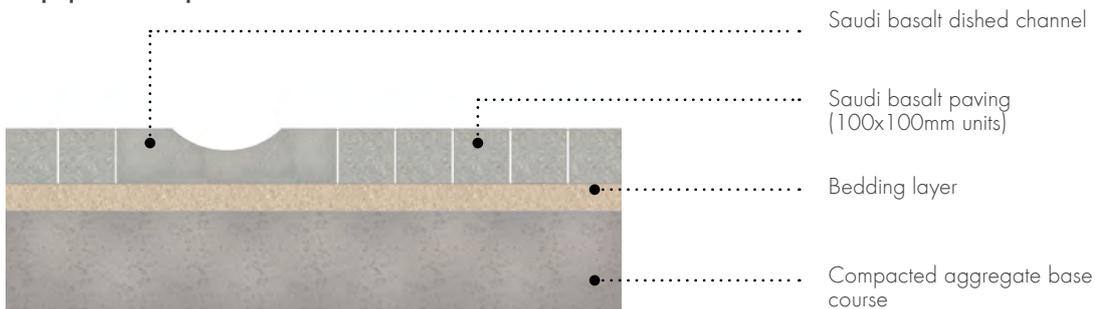
Residential Zuqaqs: Secondary Routes



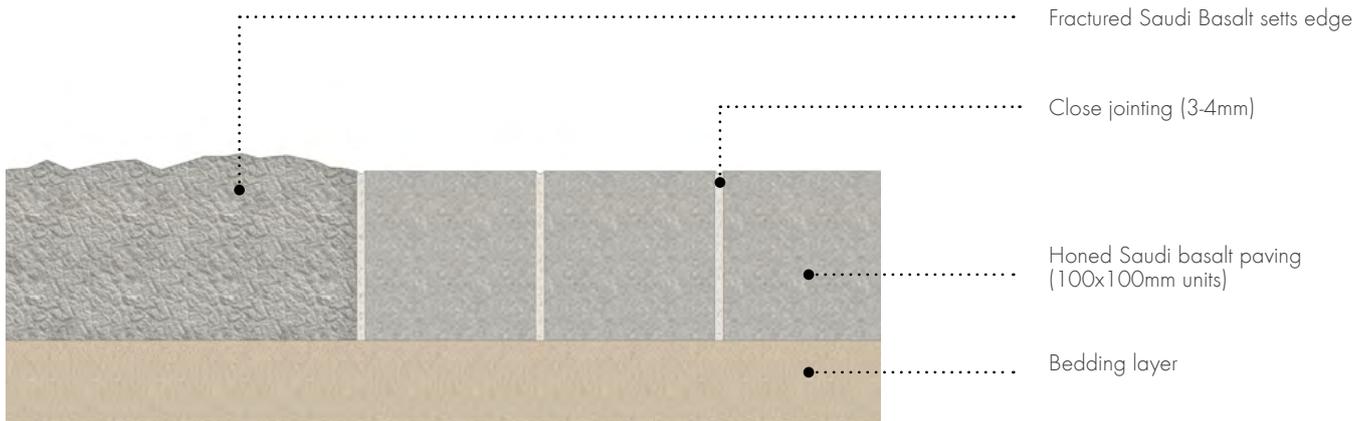
Commercial Zuqaqs and Souqs



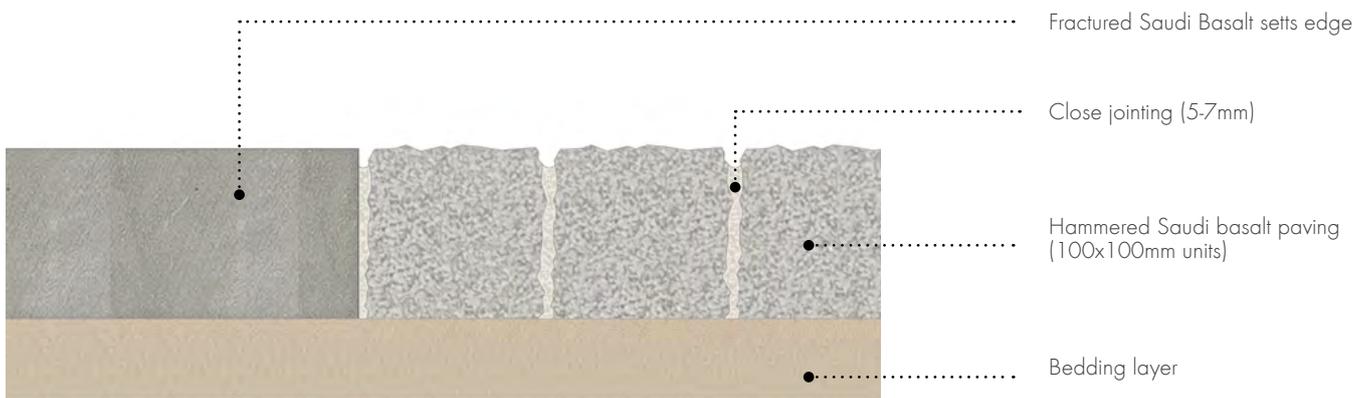
Zuqaqs and Souqs



Jointing - close jointed paving



Jointing - open jointed paving



Note: All sections are illustrative for design intent. Designers must form their own details and apply their own judgement when applying these guidelines

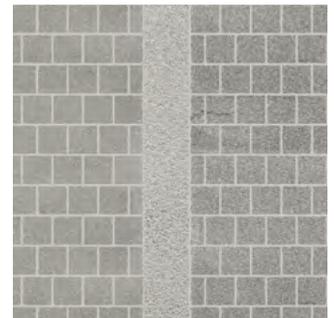
6.3.1 KERBS

Kerbs materials

- All kerbs to footways should be light grey, hammered basalt (or similar) at either 300mm or 150mm width.
- Kerbs between footways and parking bays should be 100mm width
- Any existing precast concrete kerbs should be replaced with basalt or granite when they are no longer fit for purpose.
- Kerbstone size, depth and specification to align with relevant Jeddah Municipality standards and international best practice



300mm kerb



150mm kerb

Kerb radius

- Kerbs should be constructed from radiused kerb quadrants, rather than straight sections to give a neater edge appearance
- Kerb radii should vary in size according to street function and anticipated vehicle speeds.
Typical radius values by street type:
 - Arterial streets: 5000-8000mm radius
 - Link streets: 3000-5000mm radius
 - Local streets: 2000-3000mm radius



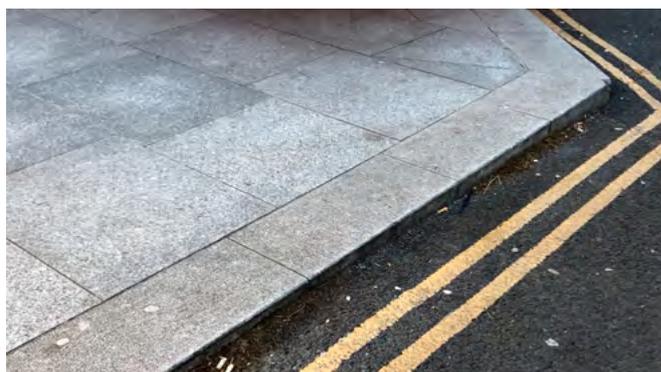
Kerb radius formed from radiused kerbstone

Kerb upstand

Kerb heights should vary according to streetscape function to ensure a balance of safety and accessibility within the public realm

Typical kerb upstand by application:

- Arterial and Link streets: 125mm
- Bus stops: 125-140mm
- Local streets: 60-125mm
- Local access streets: flush or 60mm
- Pedestrian crossings: flush (or max. 6mm)
- Parking dropped kerb: 25mm



60mm kerb upstand



Flush kerb at pedestrian crossing

6.3.2 UTILITY COVERS

Key considerations:

- In all instances, utility covers should be flush with surrounding surfaces to avoid accessibility issues
- Wherever possible, inspection covers should be recessed with paving infill to match the surrounding surfacing. Careful detailing should ensure the inset covers match the surrounding paving pattern.
- The design of recessed paving covers should ensure their strength is suitable for expected vehicle loading
- Paving surrounding cast iron covers should be designed to avoid reduce large areas or infill and/or small slivers of paving
- Paving should ideally be cut around utility covers, rather than emphasizing their location, to ensure visual continuity of paving
- The colour and finish of cast iron utility covers should be consistent



Recessed utility cover with paving infill matching the surrounding paving pattern



Cast iron cover integrated into paving design with minimal infill around the edges



Consistent colour and finish to metal utility covers

6.3.3 TACTILE PAVING

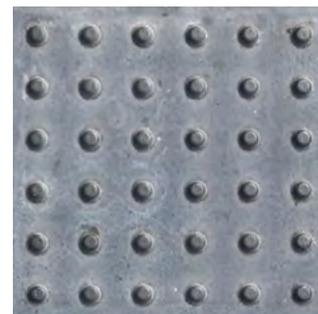
Key considerations

- The use of tactile paving should ensure pedestrians with visual impairments are able to navigate the streetscape confidently.
- Blister paving should be used at controlled crossings and uncontrolled crossings to warn users of the change in streetscape condition. Corduroy paving should be used at level changes, such as steps or ramps but may not be suitable in all instances.
- Standard tactile paving dimensions are 400x400mm. Paving should be laid in a stack bond and orientated to align with the direction of the crossing or level change.
- Tactile paving materials should be natural stone in grey or white. Coloured tactile paving should not be used.
- Tactile paving should be used with sensitivity to the heritage context, particularly within the Nominated Property boundary

Crossings

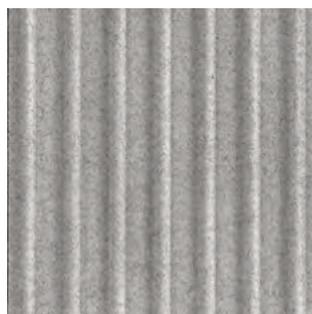


Silver grey granite (or similar)



Light grey basalt (or similar)

Steps and ramps



Silver grey granite (or similar)



Light grey basalt (or similar)

7 SOFT LANDSCAPE

The following section presents a summarised approach to soft landscape including a recommended planting palette and standard details. This is intended as reference for future public realm improvements.

7.1 CONCEPT AND APPROACH

Trees coverage in Al Balad is limited but the trees are magnificent. The palette is limited but species such as Neem and Washingtonia make significant contributions to the cityscape. The trees themselves have been loosely arranged and often naturalised. The trees are full of character collectively and individually and are as much a part of Al Balad's identity as the Architecture. Trees are the markers of place with special relationships with cafes, markets, and outdoor seating.

Prior to 1947, water was scarce and tree planting was minimal with only a few trees growing naturally. After 1947 water from Wadi Fatima became available and tree planting become more viable. The Ministry of Agriculture (established in 1953) encouraged tree planting but it was not until the 1970s that the Amanna launched a city parks and tree planting programme. In Al Balad public realm improvements as part of the Robert Mathews Masterplan in the early 1980s saw the most deliberate tree planting initiatives.

Trees are one of the most valuable assets in Al Balad but no sustainable system for irrigation currently exists; only desalinated water is supplied to Al Balad, which currently carries a high carbon footprint. Careful consideration must be given to the quantity and type of trees being proposed.

Species suggested have been chosen because of their historic contribution to Al Balad. A mix of native and introduced species are promoted based on their adaptability to the climate, contribution to microclimate, and low water uses

Tree protection is essential to maintaining the existing trees in Al Balad. Tree protection orders should be considered on all trees in Al Balad. Trees should be protected during construction and should be considered as significant constraints to new projects. Existing trees should be assessed by certified arboriculturalist and the existing planting conditioned improved to guarantee health and longevity.

The public realm strategy identifies opportunities to increase tree planting that; compliment the character of Al Balad and enable planting through sustainable means. Key measures of the strategy include:

- The character of planting in Al Balad is informal. Formal arrangements are incongruous with the character of the place and should be avoided
- Water use must be considered careful. Drought tolerant and water sensitive species only. In low lying areas, salinity tolerance is important.
- Trees should only be planted where shade can be best utilised or where shade is necessary to encourage using the public realm.
- Consider additional habitat value such as fruits for birds, etc.
- Trees should be characterful and contribute 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 in the wider public realm.
- Understory and decorative planting should be minimised. If under storey planting is necessary should be useful e.g., herbs or edible.
- Planting should have a narrative which relates to the place
- Planting palette aims to use both native plants and those that have locally adapted



Clusters of mixed species left to 'naturalise'.



Plant in clusters rather than grids or lines



Celebrate anomalies



Trees as markers of place and terminating long views



Relationship between trees and cafes - trees make places



Trees shaping spaces



Canopy of dappled shade

7.2 TREE PLANTER

Healthy trees require healthy growing conditions. Sufficient space, oxygen to the roots, water, nutrients, and high quality growing medium are essential. Investment in the growing conditions should be as significant as the cost of the tree itself.

Tree Surround

Where possible, trees should be planted in open aggregate which increases the air available to roots and minimises soil compaction. In areas of high footfall tree surrounds with removable rings can be used in conjunction with suitable tree pits and substructures.

Tree Substructure

Where possible trees should be encouraged to expand their rooting areas beyond the tree pit. Structural soil systems should be employed to support the load of adjacent paving areas. Proprietary structural soil or cellular systems should be utilised.

Soil

Suitable sandy loam, urban tree soils with suitable gravel drainage should be used when backfilling tree pits. Soil should be free of debris, and contaminants.



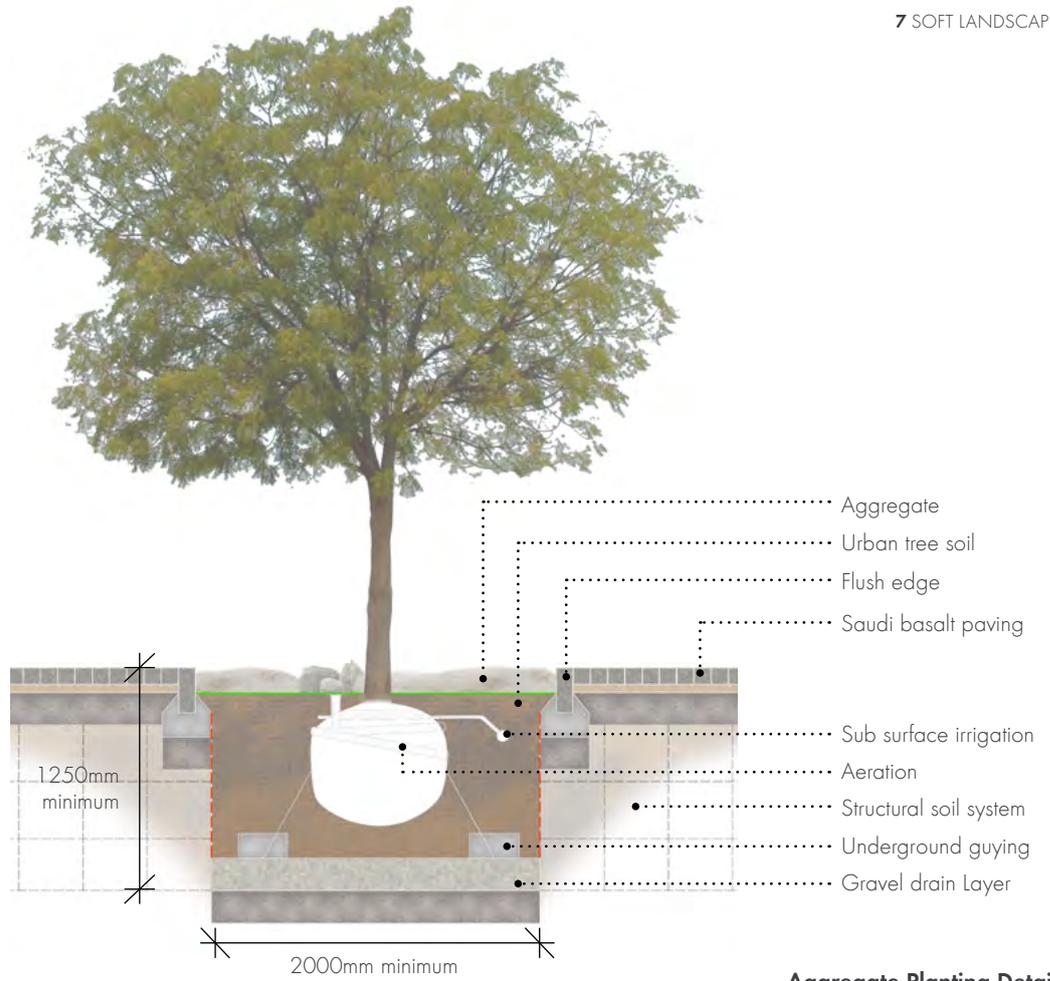
Tree planting in aggregate



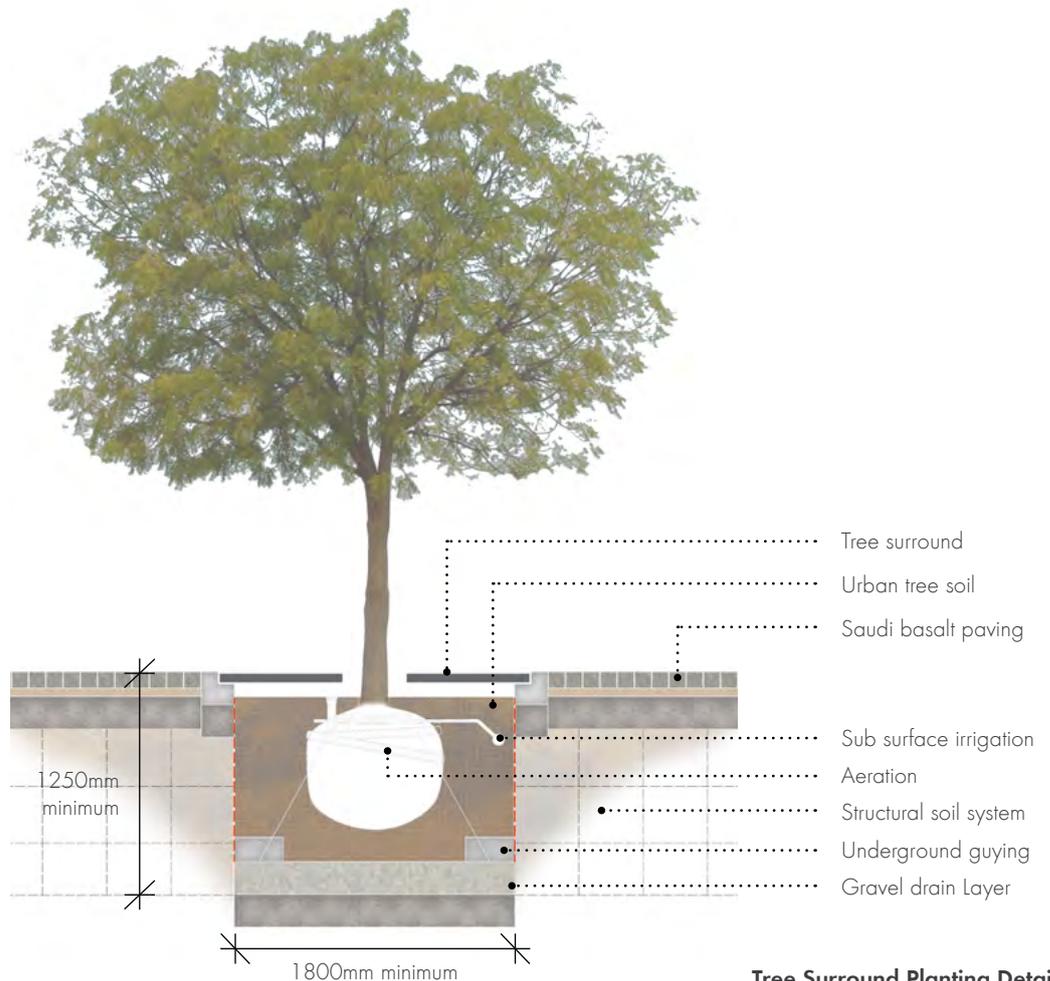
Simple tree surround to match adjacent paving material



Example of a cellular structural soil system



Aggregate Planting Detail



Tree Surround Planting Detail

Note: All sections are illustrative for design intent. Designers must form their own details and apply their own judgement when applying these guidelines

7.3 PLANTING PALETTE

7.2.1 SHADE TREES (LARGE)

ALBIZIA LEBBECK (LEBBECK)



Height: 20-30 metres
Water: high, medium - 22L/plant/day
Salinity: very high - 6000 ppm

AZADIRACHTA INDICA (NEEM TREE)



Height: 15-30 metres
Water: high, medium - 22L/plant/day
Salinity: very high - 10000 ppm

BOMBAX MALABARICUM



Height: 25-30 metres
Water: medium
Salinity: moderate - 1800 ppm

CASSIA FISTULA (GOLDEN SHOWER TREE)



Height: 10-20 metres
Water: medium - 5L/plant/day
Salinity: moderate - 1500 ppm

DELONIX REGIA (ROYAL POINCIANA)



Height: 15-18 metres
Water: high - 22L/plant/day
Salinity: high - 5000 ppm

FICUS BENGALENSIS (BANYAN TREE)



Height: 10-30 metres
Water: high - 22L/plant/day
Salinity: high - 5000 ppm

FICUS RELIGIOSA (BODHI TREE)



Height: 20-30 metres
Water: high - 25L/plant/day
Salinity: high - 4500 ppm

FICUS SYCOMORUS (MULBERRY FIG)



Height: 20 metres
Water: high - 22L/plant/day
Salinity: high - 3,500 ppm

JACARANDA MIMOSIFOLIA



Height: 10-20 metres
Spread: 8-10 metres
Water: medium
Salinity: low 600 ppm

SCHINUS MOLLE (PEPPERCORN TREE)

Height: 9-15 metres
 Water: high - 22L/plant/day
 Salinity: high - 4500 ppm

TAMARINDUS INDICA (TAMARIND TREE)

Height: 10-25 metres
 Water: high - 22L/plant/day
 Salinity: high - 4000 ppm

TERMINALIA CATAPPA (INDIAN ALMOND)

Height: 10-20 metres
 Water: medium, high - 22L/plant/day
 Salinity: low 600 ppm

7.3.1 PALM TREES

CHAMAEROPS HUMILIS (DWARF FAN PALM)

Height: 1-4 metres
 Water: medium - 15L/plant/day
 Salinity: moderate - 1800 ppm

HYPHAENE THEBAICA

Height: up to 17 metres
 Water: low
 Salinity: moderate - 1500ppm

PHOENIX DACTYLIFERA (DATE PALM)

Height: 15-18 metres
 Water: high
 Salinity: high - 5000 ppm

OREODOXA REGIA (CUBAN ROYAL PALM)

Height: 15-30 metres
 Water: high
 Salinity: moderate - 3000 ppm

WASHINGTONIA FILIFERA (DESERT FAN)

Height: 15-25 metres
 Water: low, medium - 22L/plant/day
 Salinity: very high - 25000 ppm

7.3.2 SHADE TREES (MEDIUM)

ACACIA ARABICA



Height: 6-9 metres
Water: very low - 2L/plant/day
Salinity: very high - 8000 ppm

ACACIA EHRENBURGIANA (SALAM)



Height: 7 metres
Water: low - 4L/plant/day
Salinity: moderate - 2500 ppm

ACACIA TORTILIS (UMBRELLA THORN)



Height: 12 metres
Water: very low - 2L/plant/day
Salinity: moderate - 2000 ppm

CALOTROPIS PROCERA (SODOM'S APPLE)



Height: 2-5 metres
Water: very low - 2L/plant/day
Salinity: very high - 6000 ppm

CASSIA NODOSA



Height: 12 metres
Water: medium, high - 5L/plant/day
Salinity: moderate - 1500 ppm

CAPPARIS DECIDUA (KARIR)



Height: up to 5 metres
Water: very low - 2L/plant/day
Salinity: moderate - 2000 ppm

CORDIA MYXA



Height: 3-10 metres
Water: high
Salinity: high - 5000 ppm

CITRUS MEDICA



Height: 3-5m
Water: medium
Salinity: low - 1000 ppm

FICUS RETUSA NITIDA



Height: Up to 10 metres
Water: medium
Salinity: moderate - 2000 ppm

PARKINSONIA ACULEATA (JERUSALEM THORN)

Height: 5-10 metres
 Water: low - 15L/plant/day
 Salinity: moderate - 1800 ppm

PLUMERIA ACUTIFOLIA (FRANGIPANI)

Height: 7 metres
 Water: high
 Salinity: Low - 600 ppm

PLUMERIA OBTUSA (SINGAPORE PLUMERIA)

Height: 4-8 metres
 Water: high
 Salinity: Low - 600 ppm

PROSOPIS CINERARIA (GHAF TREE)

Height: 3-5 metres
 Water: medium, high - 22L/plant/day
 Salinity: very high - 6000 ppm

PITHECELLOBIUM DULCE (MANILA TAMARIND)

Height: 8 metres
 Water: high, medium - 22L/plant/day
 Salinity: very high - 9000 ppm

SCHINUS TEREBINTHIFOLIUS

Height: 5-9 metres
 Water: high
 Salinity: high - 4500 ppm

TAMARIX NILOTICA (ATHEL PINE)

Height: 6-15 metres
 Water: low - 4L/plant/day
 Salinity: very high - 20000 ppm

SESBANIA SESBAN (EGYPTIAN RATTLE POD)

Height: 2-8 metres
 Water: low
 Salinity: low 600 ppm

ZIZIPHUS SPINA-CHRISTI (SIDIR)

Height: 7-14 metres
 Water: low - 15L/plant/day
 Salinity: very high - 8000 ppm

7.3.3 SHRUBS

CAESALPINIA PULCHERRIMA (POINCIANA)



Height: 3 metres
Water: low - 5L/plant/day
Salinity: very high - 5500 ppm

LAGERSTROEMIA INDICA



Height: 5-10 metres
Water: medium
Salinity: low - 700 ppm

LANTANA CAMARA (VERBENA)



Height: 1-1.8 metres
Water: medium
Salinity: moderate - 3000 ppm

NERIUM OLEANDER (OLEANDER)



Height: 2-3 metres
Water: medium
Salinity: very high - 9000 ppm

THEVETIA PERUVIANA



Height: 2-6 metres
Water: medium
Salinity: very high - 7000 ppm

7.3.4 HEDGING

DODONEA VISCOSA (HOP BUSH)



Height: 1-5 metres
 Water: low
 Salinity: very high - 7000 ppm

DURANTA REPENS (PIGEON BERRY)



Height: 1.5 - 6 metres
 Water: medium - 5L/plant/day
 Salinity: moderate - 1500 ppm

HIBISCUS SPP



Height: 2-5 metres
 Water: high
 Salinity: low - 600 ppm

LAWSONIA INERMIS (HENNA)



Height: 4-6 metres
 Water: medium
 Salinity: low - 1000 ppm

7.3.5 CLIMBERS

ANTIGONON LEPTOPUS CORALLITA



Height: 5-12 metres
Water: medium
Salinity: moderate - 1200 ppm

BIGNONIA SPP



Height: varies (10-30 metres)
Water: high
Salinity: moderate - 2000 ppm

BOUGAINVILLEA SPP



Height: varies (5-25 metres)
Water: medium
Salinity: low - 1000 ppm

IPOMOEA CAIRICA



Height: 0.2 - 0.5 metres
Water: medium
Salinity: very high - 9000 ppm

JACQUEMONTIA PENTANTHA



Height: 2 metres
Water: medium
Salinity: low - 700 ppm

JASMINUM OFFICINALE



Height: 5-8 metres
Water: high
Salinity: low - 600 ppm

QUISQUALIS INDICA



Height: 5-8m
Water: medium
Salinity: low - 1000 ppm

7.3.6 CACTI AND SUCCULENTS

AGAVE AMERICANA



Height: 0.8 - 2 metres
 Water: medium
 Salinity: moderate - 2000 ppm

AGAVE ANGUSTIFOLIA 'MARGINATA'



Height: 0.9 metres
 Water: medium
 Salinity: Moderate - 2000 ppm

ALOE ARBORESCENS



Height: 1-3 metres
 Water: low
 Salinity: high - 5000 ppm

ALOE VERA



Height: 0.6 - 0.9 metres
 Water: low
 Salinity: high - 5000 ppm

CARPOBROTUS ACINACIFORMIS



Height: 0.15 metres
 Water: low
 Salinity: very high - 8000 ppm

CARPOBROTUS EDULIS



Height: 0.15 - 0.2 metres
 Water: low
 Salinity: very high - 8000 ppm

EUPHORBIA TIRUCALLI



Height: 4-15 metres
 Water: low
 Salinity: moderate - 2500 ppm

OPUNTIA FICUS-INDICA



Height: 3-5 metres
 Water: low
 Salinity: high - 5000 ppm

YUCCA ALOIFOLIA



Height: 2 -6 metres
 Water: low
 Salinity: very high - 6000 ppm

8 PUBLIC REALM ELEMENTS

The following section present a catalogue of public realm elements proposed for Al Balad

8.1 PUBLIC REALM ELEMENTS

Public realm elements are the urban furnishings such as seating, lighting, bollards. etc. Within a sensitive setting such as Al Balad, the furnishing suite has been carefully selected to provide simple continuity. The colours are coordinated and have been chosen to blend into the context rather than stand out as features. Given the level of detail and craft within the traditional architects, an intentional decision has been made to keep the public realm elements simple so they do not compete or attempt to replicate architectural details.

Key considerations

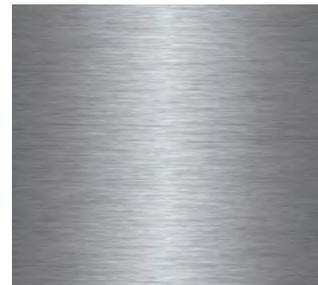
- Street furniture should be distributed evenly across the entirety of Al Balad and associated areas.
- This street furniture should not obstruct pedestrian movement nor clutter public open spaces.
- Consideration should be given to accessibility with seating distributed at a maximum of every 100 metres. Seating should be suitable height and have backs and/or armrests to improve accessibility.
- Traditionally there has been minimal furniture in the public realm and what did exist was moveable. Street furniture should feel ephemeral and informal, acknowledging the historic condition of street furniture in Al Balad.
- Colour and material consistency is essential
- Designs should aim to incorporate furniture that is; high quality, coherent, and rationalised to minimise street clutter. The appearance of street furniture should also be coordinated, with a consistent materials and colour palette that compliments Jeddah's unique character
- Minimise duplication of street furniture by rationalising and combining elements (e.g. attaching street signage to light columns)
- Use street furniture that is high quality and robust
- Ensure all street furniture can be easily maintained and repaired with replaceable components
- Retain and improve street furniture that has heritage value



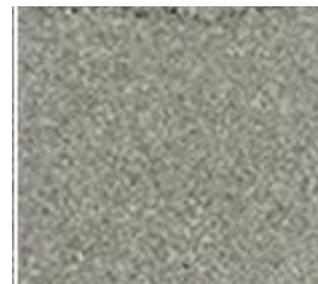
Metal: Powder coated RAL8017



Timber: FSC treated hardwood (or equivalent)



Metal (contrast): Brushed 316 Grade stainless steel



Natural stone: Saudi Basalt

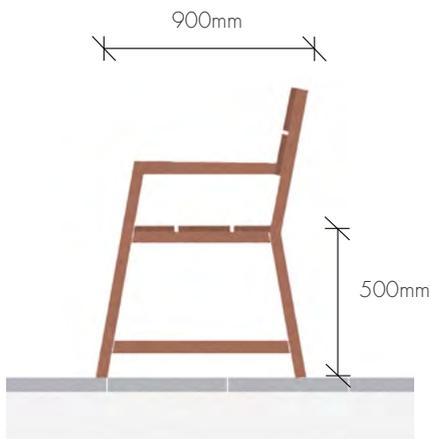


Coordinated materials, colour palette and finish and recommended to make the street furniture suite look and feel consistent

8.1.1 STREET FURNITURE

Seating

- The design and type of seating should be suitable to the context. For instance, seating on streets adjacent to traffic seating should be more robust and fixed.
- All seating should be cost effective and easy to maintain with easily replaceable components. This will help to ensure a longer product lifespan.
- All seating should use durable materials that are sustainably sourced. In all instances, the seating surface should be treated FSC hardwood timber (or similar).
- Where possible, seating should include a backrest and armrest for accessibility.
- In considered locations, site specific seating - such as mercaz or integrated seating around planting - might be acceptable.

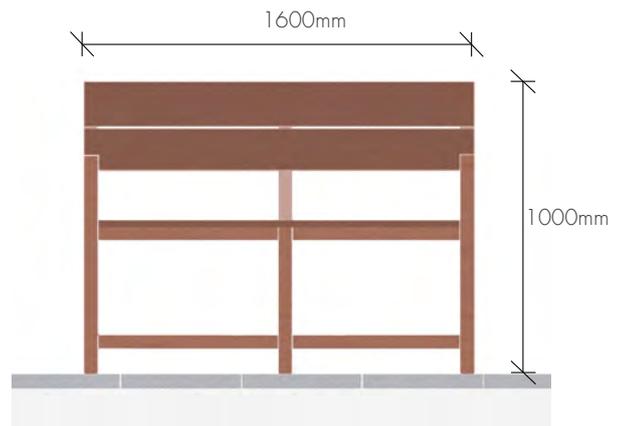
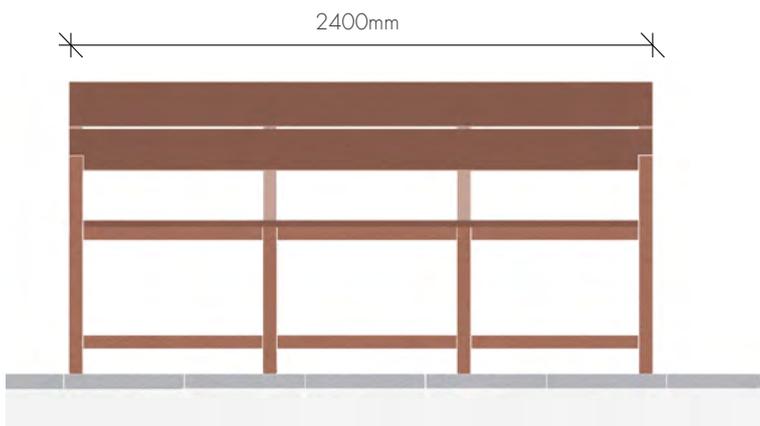


Seating: placement and fixing

- All seating should be shaded to ensure it is usable in the hot climate.
- Where possible, seating within Al Balad should be moveable – enabling it to be relocated into shade or reconfigured according to user needs.
- Public seating adjacent to trafficked streets must be fixed to ensure it remains clear from vehicles.
- Fixed seating should generally be facing (in pairs or more) to allow for social interaction.



Reference bench



Tables and Chairs

- Cafe and restaurant outdoor seating should be encouraged
- Robust, simple, stackable furniture such as Luxembourg tables and chairs should be used across Al Balad. Cafes should be discouraged from deviating from the standard.



Drinking Fountains

- Drinking fountains should be evenly distributed across Al Balad with focus on areas of high footfall and play/recreation spaces.
- Where possible, drinking fountains should be located adjacent to buildings, with sufficient space surrounding them to enable clear pedestrian movement when in use.
- The height of the drinking fountain should enable the fountain to be used by all - including wheelchair users and children.



STREET FURNITURE

Bollards

- The spacing of bollards will vary according to function and requirements. The placement and design should follow municipality standards. The following dimensions should be used as guidance
- For prevention of unlawful parking: standard bollards at 3000mm centres
- For restriction of vehicle access to pedestrianised areas: standard bollards at 1200mm centres
- For areas with servicing access requirement: retractable or removable bollards at 1000mm centres



Cycle stands

- Cycle parking provision should be considered to ensure there is a sufficient amount to meet user needs. Insufficient cycle parking can often lead to cycles being locked informally to street furniture and causing obstruction.
- Cycle stands should be located 900mm from the kerb edge with a minimum 450mm spacing between carriageway and any part of the cycle, when parked.
- On narrow streets, cycle parking should be parallel to the kerb edge, with 2500mm centres to ensure easy pedestrian movement between cycle stands.
- On wider streets, cycle stands can be placed perpendicular to the kerb with 900mm spacing from the kerb edge.



Utility Boxes

- The positioning of utility boxes should be adjacent to buildings within the paving edge zone.
- The colour and finish of utility boxes should be consistent with other street furniture. Logos and graphics should be avoided.
- Power supply points may be necessary for market stalls and open spaces. These should ideally be retractable, to minimise obstruction when not in use. Alternatively, power supply points might use other street furniture (e.g. light columns).



Litter bins

- Litter bins/recycling bins should be located in places that do not obstruct pedestrian movement or building entrances. Bins should be set back from the kerb at least 450mm or located 100mm from adjacent buildings.
- Bin design and placements should be sensitive to heritage features in Al Balad



8.1.2 SHADE CANOPIES

Key considerations

- Shade canopies should be simple and functional
- Canopies should not be coloured and should use natural materials
- Canopies should ideally have some transparency, allowing views to buildings above
- Canopies should ideally be wall-mounted, avoiding any damage to historic buildings.



8.1.3 ENCLOSURES

Key considerations

- Across Al Balad, the location of commercial bins and transformers should be rationalised to minimise obstruction to pedestrians.
- Where possible, commercial bins and transformers should be located within a building footprint with 24-hour servicing access.
- When located in the public realm bins and transformers should be located adjacent to blank or inactive building facades and screened with a timber enclosure.
- Bins and transformers should not be located: on high footfall or narrow routes, in sensitive heritage areas, or in the centre of open spaces.
- On Souqs, commercial bins should ideally be placed on parallel streets or adjacent secondary streets - to minimise pedestrian obstruction (see section 5.3 for further information)



8.1.4 **PLAY**

Designing for Children is a key objective for the Al Balad public realm improvements. Provision must be made for appropriate physical and creative play for boys and girls of all ages. Play is more than swings and slides, it should cater to the social needs of children and young people. Play can be loud or quiet - it is ultimately up to a child to decide and use their imagination as such a variety of play types and spaces should be provided.

Play areas should be designed for different ages accordingly but should not be isolated by age:

Ages 0-5

Informal but engaging play features with emphasis on balance and climbing. Should be located frequently and close to homes with seating for carers

Ages 5-12

Active play which encourages physical movement, imagination, and risk.

Ages 12+

Emphasis should be on social space where young people can congregate together, socialise or participate in informal recreation or physical activity.

Special consideration should be given to designing play and social spaces for girls and young women. A process of community engagement should be undertaken to understand the specific needs of girls and young women living in Al Balad.

Variety of Play

Play designs should provide stimulating and challenging play experiences including opportunities for; physical, social, dramatic play, play with natural materials, or ball games.

Microclimate

Play equipment should include provision of shade - either from timber canopy structures, trees or adjacent buildings. PVC tensile fabric structures (or similar) should not be used to shade play areas. Lightweight fabric canopies or timber structures are acceptable alternatives

Scale

The type and combination of play equipment should vary according to the play designations and size of space available

Sensitivity

The choice of play equipment and its appearance should suit the surrounding context and must be sensitive to heritage.

Materials

Natural materials such as stone, timber, and rope should be used. Bright colours and artificial materials should be avoided. If using metal it should be powder-coated metal painted to match the street furniture suite (RAL8017). Any accent colours should be complementary, muted and a maximum of two colours

Maintenance

All play equipment should be cost effective and easy to maintain with easily replaceable components to ensure a longer life-span.

Consistency

Play equipment should ideally be a product 'family' with common components that can be adapted into different configurations dependent on location



Multipurpose play and recreation structure constructed of timber



Designing for recreating and physical activity.



Opportunity for all ages play.



Creative use of natural materials to create social space.



Natural play with rocks, water, and planting.



Example of bespoke play structure with an emphasis on social space for young people



Stone slabs arranged in a sculptural manner utilised as climbing structure.



Small, informal play opportunities can have minimal impact on surroundings.



Creative interpretation of vernacular architecture expressed as a play area.



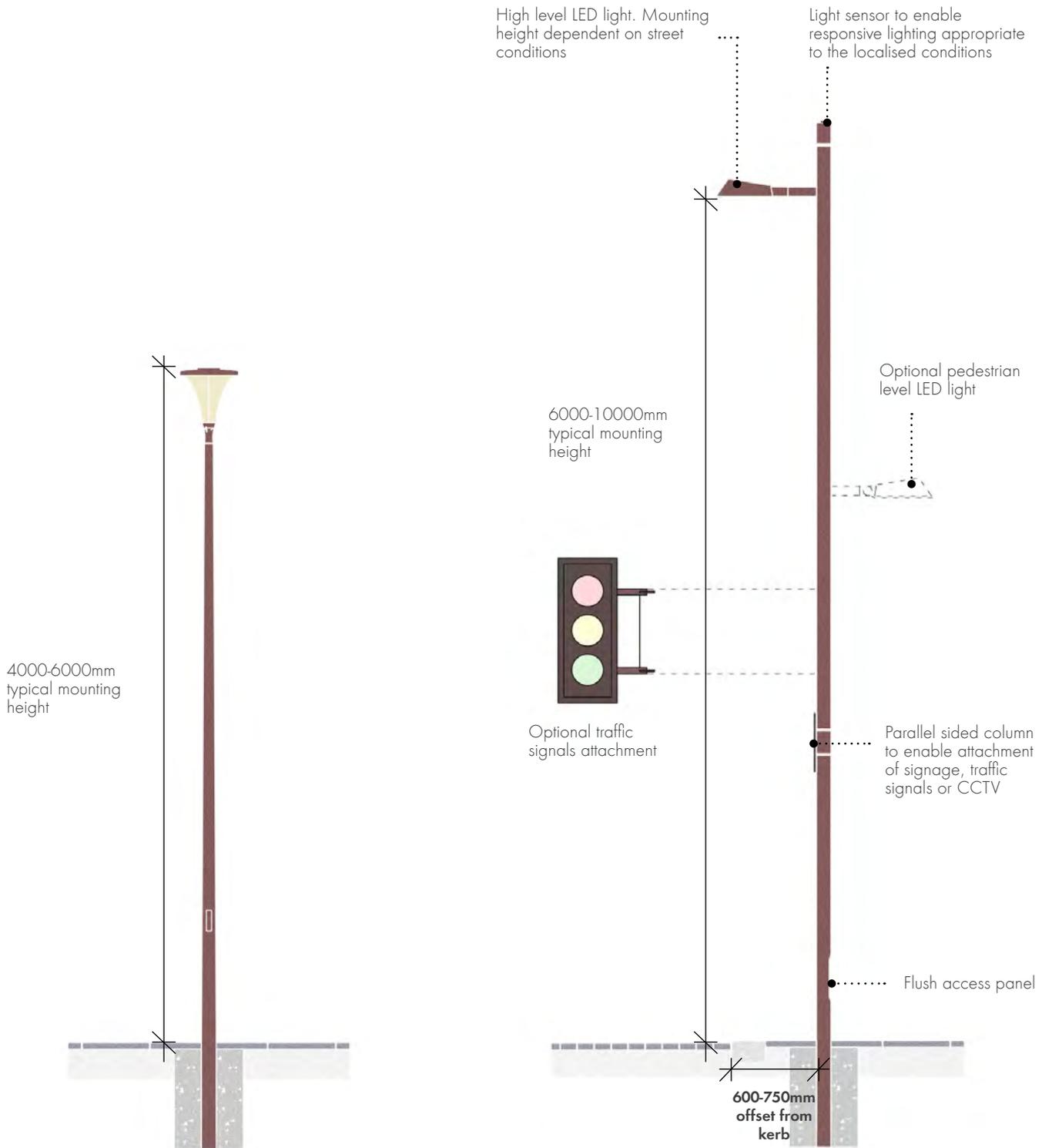
Example of timber climbing structure.

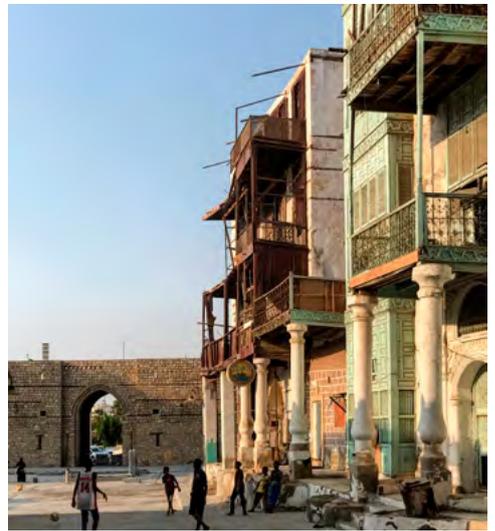
8.1.5 LIGHTING

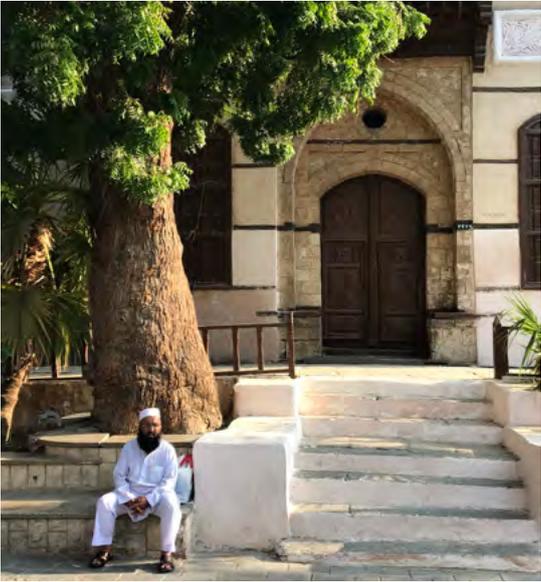
Key considerations

- The specification, type and mounting heights of lighting should adhere to Jeddah Municipality standards for lighting
- The type of lighting and mounting height of lamps will vary according to typology and use (refer to lighting strategy: section 2.7).
- To avoid duplication of posts and reduce street clutter, lighting columns should be used for road signage. To enable this, parallel sided light columns with flush access panels are preferred.
- Light columns adjacent to street junctions or pedestrian crossings should be a higher specification - to allow mounting of banners, signage, or traffic signals.
- In instances where footway widths are below 2000mm lights should be wall mounted with cabling chased into the adjacent building. This approach may not be appropriate for heritage building facades.
- Lighting columns should either be located 100mm from buildings or 750mm from the kerb edge to maximise the clear footway width.
- All lighting should incorporate a light sensor to enable responsive lighting appropriate to the localised conditions









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