

# ASEER

URBAN DESIGN CODE  
FOR PRIVATE DEVELOPMENT



## Client

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## Date

July 2021  
Frankfurt am Main / Germany

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# ASEER

## URBAN DESIGN CODE

# FOR PRIVATE DEVELOPMENT

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An architectural rendering of a modern building courtyard. The scene is set in a narrow, paved walkway between two buildings. On the left, a building features a dark, textured facade with a grid of small, square elements. On the right, a building has a light-colored, smooth facade with a large, vertical, decorative screen featuring a geometric pattern. In the foreground, a woman wearing a brown hijab and a white thobe is walking towards the camera. Behind her, a man in a white thobe is walking away. The background shows a lush, green landscape with trees and a clear sky. The overall atmosphere is bright and modern.

A

# INTRODUCTION

## Purpose of this Urban Design Code

The main purpose of the Aseer Urban Design Code (hence referred to as AUDC) is to raise the overall urban design quality of Aseer, while also helping to mitigate the most critical and recurring visual pollution issues in the region.

The standards and guidelines described in the urban code are intended to promote a general excellence in urban planning, urban design, landscape design and architecture, respecting the identity of the place. Also, they

promote the development of an attractive, representative and inviting public realm, with a generous and lush landscape environment. The code is structured as a living document and intentionally leaves room for future chapters and sections. The AUDC should be viewed and interpreted as a positive framework to design open space and built-form, contributing to a harmonious, attractive, coherent urban-architectural aesthetic, and not as a set of onerous constraints.

## Guiding Principles

The Aseer Urban Design Code was developed on the base of 8 guiding principles that serve as the foundation to the different elements of the code. The guiding principles were derived from the study and analysis of international and regional best practices addressing visual pollution issues in natural and urban contexts. Particularly, the 8 principles focus on the importance of establishing a positive relationship between urban development and natural and cultural landscapes that are so characteristic to the region.

The 8 guiding principles are:

*1. Celebrate Aseer's diverse natural and cultural landscapes, a foundation of unique identity for the region and its people.*

*2. Preserve the remarkable setting of the topography, open space, productive landscapes and the scenic qualities of Aseer's roadways, countryside and communities.*

*3. Safeguard the urban and architectural heritage interrelated with the cultural landscape and enhance their relationship.*

*4. Create lasting connections between people and places with new development that respects and fosters the special character and heritage of Abha and Aseer.*

*5. Foster a sustainable mobility system that is well integrated within the urban fabric and respects aesthetic values as well.*

*6. Provide a welcoming and pleasing visual experience by reducing visual clutter over built form and by preventing mass marketing and outdoor advertising intruding on the landscape or community appearance.*

*7. Enhance legibility through built form, branding and way-finding strategy for the region.*

*8. Support the vitality of the region by enhancing the links between business and tourism development.*



## The Unique Character of the Aseer Region

One of the AUDC primary objectives is to protect and enhance Aseer's image and sense of place. The Aseer region's natural environment is extremely diverse compared to the rest of the Kingdom, featuring the Red sea shoreline, coastal plains, mountain valleys, high mountains and plateaus that include the Kingdom's highest peak Mount Sawdah at almost 3000m, to the inland desert.

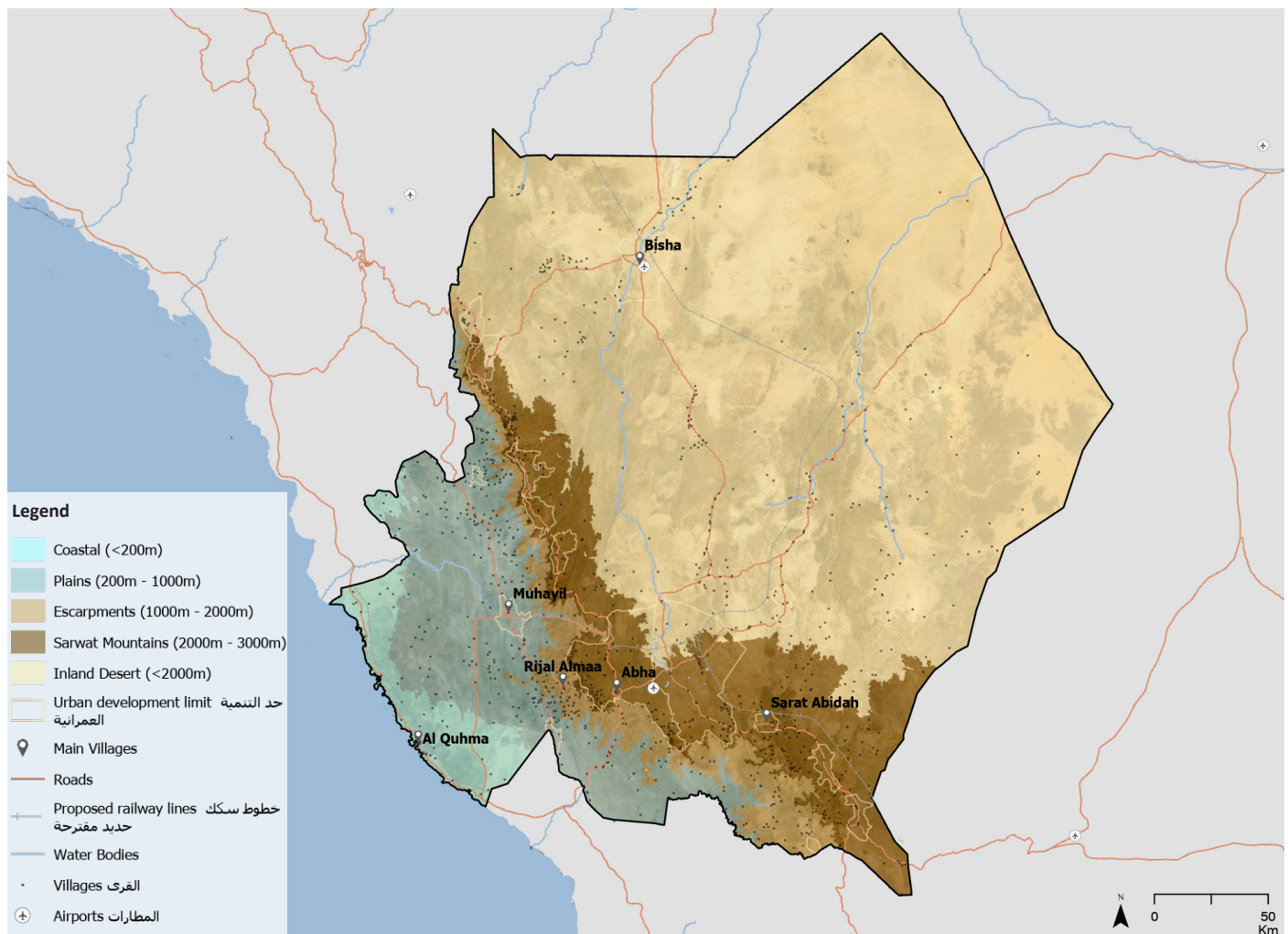
The AUDC recognizes that the image of an urban area is not defined by its architecture alone, rather it is formed by a comprehensive set of layers comprising:

- Natural environment.
- Infrastructure.
- Built form.

In this direction, defining the key elements that contribute to Aseer's spatial character is necessary to understand the unique attributes of the area that need protection and development control.

Furthermore, to promote new built form that is more contextual to the Aseer Region, the AUDC offer additional guidance in the insert: *Aseer Contextual Architecture Guidelines*.

In fact, new architecture when inspired by the heritage and culture of the place can lend a unique and distinct character, reinforcing the identity of that place and of its people.



**Figure 1** Map of the five natural environments in Aseer region



An architectural rendering of a modern urban courtyard. The scene features a building facade with a prominent vertical window and a decorative lattice screen. A walkway leads through the courtyard, where two women in traditional attire are walking. The background shows a large, leafy tree and a clear sky. The overall style is clean and contemporary, with a focus on architectural details and human scale.

**B**

# HOW TO USE THIS URBAN DESIGN CODE

## Introduction

The AUDC is conceived as a regulatory tool and an approach to delivering improved quality development, and as a supplementary planning document that add further details to existing policies and regulatory documents like local plans. It is informed by urban design considerations which relate to place-making, supporting the transition to a spatial approach to planning.

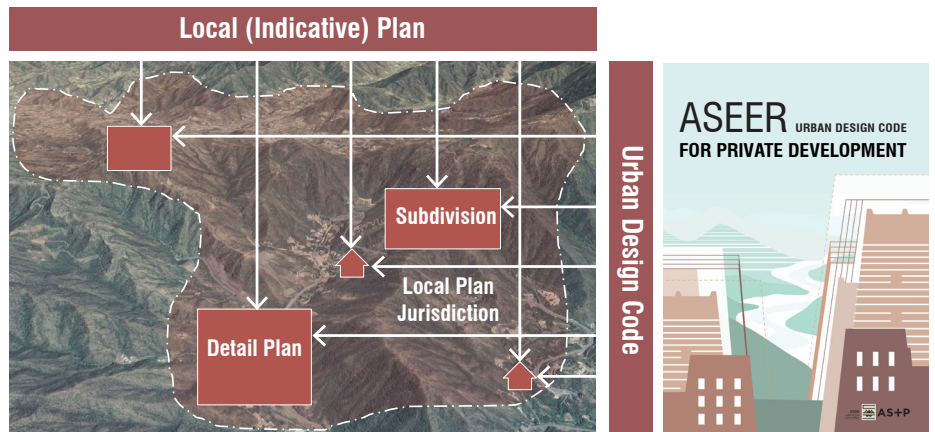


Figure 2 Relationship between local plan and AUDC

## Wider Planning Framework

The AUDC provides supplementary development control regulations and guidance for urban areas throughout Aseer, supporting both the Regional Plan, generally, and the Local (Indicative) Plans more specifically at the Municipality/ Governorate (the “Municipal”) level.

The AUDC provides a range of specific planning and urban design parameters, from individual sites, through to considerations for larger sites and subdivisions. This encompasses building design parameters and architectural considerations, street and block parameters, as well as landscape considerations.

Figure 2 shows the relationship between the Local (Indicative) Plan and the AUDC, where the combination of Local Plan and AUDC will provide the general planning regulations for most situations across the region.

At the time of preparation, Municipalities in Aseer are yet to adopt Local (Indicative) Plans, however, it is understood that these will be prepared shortly.

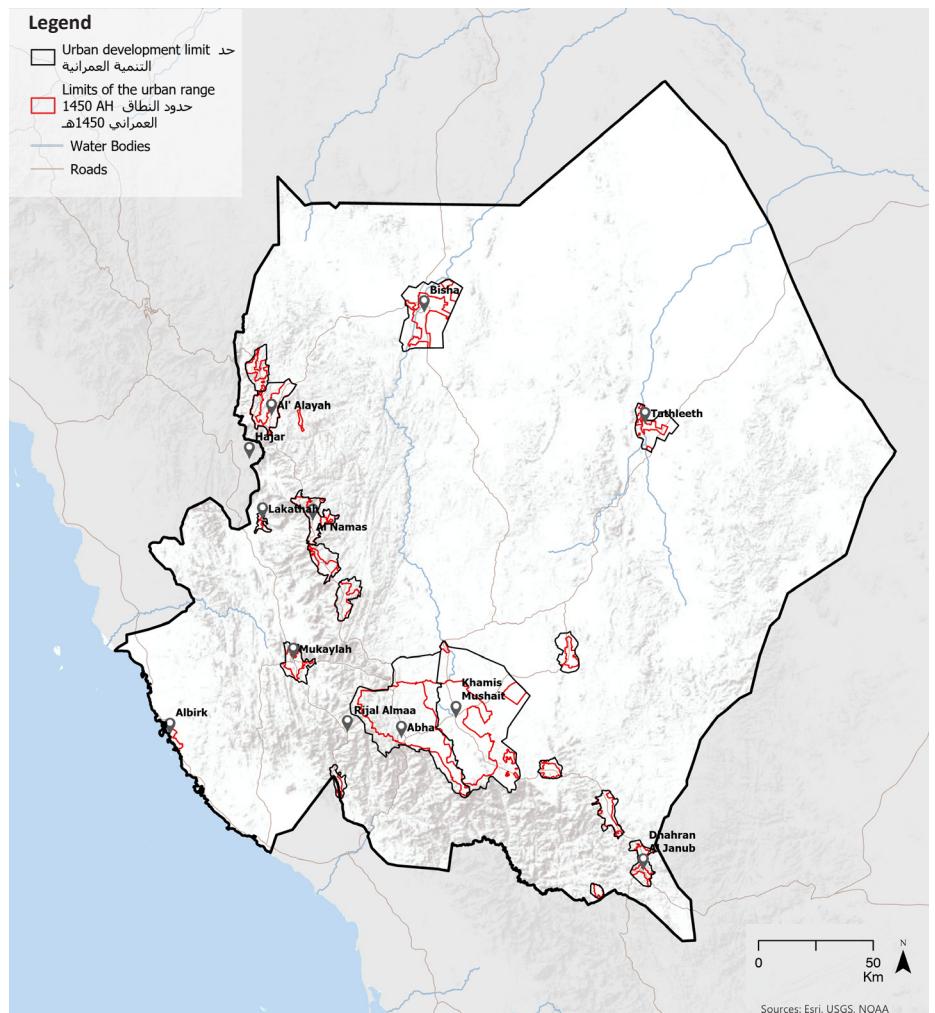


Figure 3 Established Urban Grown Boundaries in Aseer region

## Jurisdiction and Applicability

The AUDC applies to all land within the 1450 urban growth boundaries across Aseer, as shown in Figure 3, and specifically any development or land subdivision project currently requiring a permit from Aseer Amanah.

## Relationship to Key Authority Regulations

The AUDC is used as a regulatory, assessment and delivery tool by the Aseer Development Authority (ASDA) and Aseer Amanah.

### ASDA

ASDA oversees development throughout Aseer, within its mandate, and specifically is empowered to approve subdivision proposals. ASDA seeks to improve the visual context, as well as, protect the unique landscape and character that makes Aseer special. In the review of any applicant's subdivision proposals, the ASDA (& Amanah) can set conditions based on AUDC requirements that must be complied with before construction starts.

### Aseer Amanah

Aseer Amanah has the legal mandate to issue building permits. The AUDC is a critical consideration that the Amanah must take into account when assessing any application for a building permit, before issuing a determination on that application. In the review of any applicant's design proposals, the Amanah (& ASDA) can set conditions based on AUDC requirements that must be complied with before construction start.

## Relationship to Other Authorities

Other authorities, such as utilities and service provider agencies, have important roles that contribute to Aseer's unique visual and urban qualities. Each application for a new subdivision or building permit will be forwarded to the necessary sectorial authority or utility agency, who in turn will review that in light of their requirements, but also must take into account AUDC standards and guidelines to positively contribute to improving visual and urban qualities on their part.

## Approval Process for Development

### Requirements for Specific Development Types

A design review process has been integrated into the standard permitting process, which is summarized in fig 4. ASDA plays a critical role in the review of particular types of development. All development projects within Aseer UGBs, under the following conditions will be reviewed by ASDA for compliance with the AUDC:

- Any land subdivision (as per ASDA Mandate).
- Any development with an area or development program over 10,000 sqm / 1 hectare.
- Any development with a development program larger than 40,000sqm.
- Any development within a mapped Priority Districts and Corridors (first plot or 100m on each side).
- Any development or infrastructure project of strategic importance.
- Any development within designated, known or potential archaeological / heritage sites, cultural landscapes, heritage buffer, or transition zones.
- Any development within designated or known areas of natural beauty or near natural assets (i.e. wadi development zone, ridge lines, steep slopes).
- Designated / mapped scenic corridors (first 100m on each side minimum) outside the UGBs.

**For small development projects -** smaller than 10,000 sqm / 1 hectare; or not in the above category list- ASDA's review is not required.

### Pre-Application Advice

It is strongly recommended that any applicant for the afore mentioned projects, pre-application advice should be sought by applicants with ASDA as this can provide an opportunity for developer / owner to receive guidance on the proposed development and on what type of information / study may be required to obtain permitting in accordance with the AUDC.

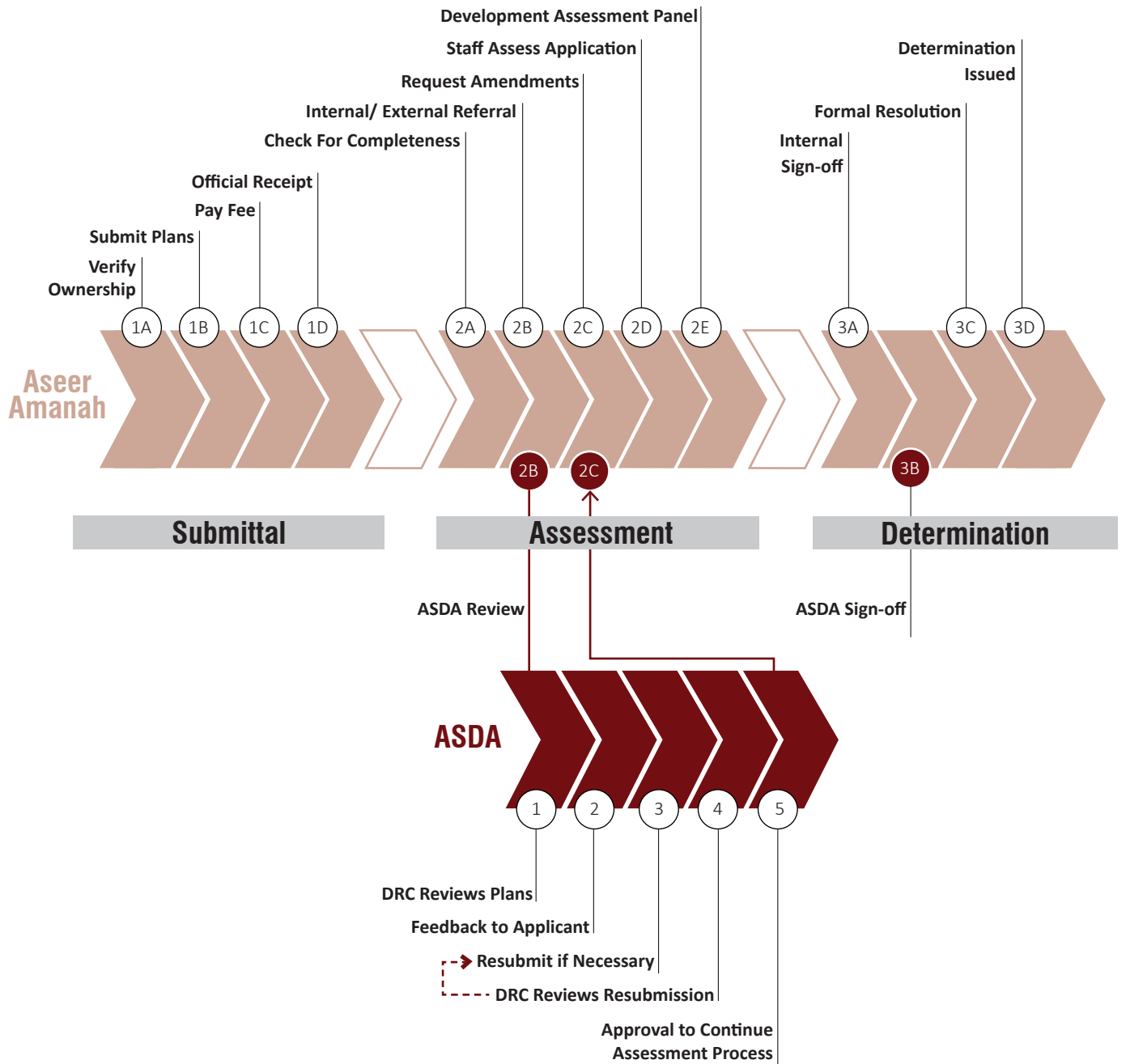


Figure 4 ASDA development application review

## ASDA Development Application Submission Requirements

This section presents the list of minimum submittal materials, or checklists for applicants, required by ASDA for the evaluation of:

- Building Permit
- Land Subdivision Permit

### Building Permit

Required Information for Building Permit Application	PROVIDED		AUDC SECTION
	Yes <input checked="" type="checkbox"/>	No <input checked="" type="checkbox"/>	
<b>1. Vision and Placemaking Concept</b>			
<ul style="list-style-type: none"> <li>• Minimum 1-page report summarizing project design intent and architectural vision.</li> </ul>			
<b>2. Urban Context</b> A summary of site context at indicative scale 1:10,000 featuring as a minimum:			
<ul style="list-style-type: none"> <li>• Location map of the subject-building project or site improvement in relation to the urban area and surrounding context showing relevant zones, overlays, districts, corridors, important landmarks (including heritage) on and surrounding the site.</li> </ul>			
<ul style="list-style-type: none"> <li>• Location of the plot on the land use system of the urban area.</li> </ul>			
<ul style="list-style-type: none"> <li>• Minimum 1-page report response of how the project comply with the AUDC design elements and other applicable urban planning and design provisions.</li> </ul>			C
<ul style="list-style-type: none"> <li>• A Landscape Character Assessment of the broader area for developments larger than 10ha, or as required by ASDA.</li> </ul>			
<b>3. Heritage Context</b> If the project / site is a listed heritage site, or a new potential heritage site, or the project is located in an heritage buffer / transition zone / visual buffer zone, additional consultation with competent authorities is required (SCTH, MoMRA, ASDA, MEWA). A summary of consultation must be provided including:			
<ul style="list-style-type: none"> <li>• Outcome report and design response to the feedback of competent authorities.</li> </ul>			
<ul style="list-style-type: none"> <li>• Minimum 1-page report response to how the proposed subdivision responds to guidelines in AUDC Chapter C. Element. 2.5</li> </ul>			C.2.5
<b>4. Neighborhood Context</b> Site master plan in context and its relationship with adjacent neighborhoods and corridors - indicative scale 1: to 5,000 to 1:2,000 featuring as a minimum:			
<ul style="list-style-type: none"> <li>• Natural features - topography, ridge lines, landscape, open spaces, vegetation, watercourses / wadis.</li> </ul>			C.1
<ul style="list-style-type: none"> <li>• Subdivision land uses and setbacks at the parcel level.</li> </ul>			C.4
<ul style="list-style-type: none"> <li>• Movement and access plan - showing vehicular, pedestrian, cycling and possible future transit circulation including transit stops location.</li> </ul>			C.3



<ul style="list-style-type: none"> <li>Public realm plan – showing proposed linkages to wider open space network, pedestrian and cycling linkages to adjacent neighborhoods.</li> </ul>			C.1; C.4.3
<ul style="list-style-type: none"> <li>Context land uses, proximity to community facilities and local retail/commercial centers.</li> </ul>			C.1, C.4.4
<b>5. Site Plan</b> Site master plan - indicative scale of 1: to 500 featuring as a minimum:			
<ul style="list-style-type: none"> <li>Boundaries, general site dimensions and north point.</li> </ul>			
<ul style="list-style-type: none"> <li>0.5m topographic survey, grading plan and slope analysis with layout for proposed development. Plan should highlight &gt;30% slopes as areas of limited development for large structures.</li> </ul>			C.1.5
<ul style="list-style-type: none"> <li>Hydrological and storm water survey and plans – existing and proposed design including wadi interfaces and buffers, clearly illustrating design intent in relation to wadi interface.</li> </ul>			C.1.7
<ul style="list-style-type: none"> <li>Mobility plan showing vehicular, pedestrian and cycling entrances and movement to and within the site and location of parking areas with number of parking spaces.</li> </ul>			C.3, C.5.2.4
<ul style="list-style-type: none"> <li>Utilities and infrastructure plan including lighting design clearly illustrating design intent.</li> </ul>			
<b>6. Development Details</b> Proposal development details featuring as a minimum:			
<ul style="list-style-type: none"> <li>Total site area and breakdown of areas by uses and activities.</li> </ul>			
<ul style="list-style-type: none"> <li>Uses and activities by plot.</li> </ul>			
<ul style="list-style-type: none"> <li>LAC and FAR by building.</li> </ul>			
<ul style="list-style-type: none"> <li>Floor areas by building.</li> </ul>			
<ul style="list-style-type: none"> <li>Individual building height in meters and number of floors.</li> </ul>			
<ul style="list-style-type: none"> <li>Parking area, showing number of parking vehicles and cycle parking spaces.</li> </ul>			C.3.4.2; C.5.2.4
<b>7. Architectural Design</b> Architectural plans and drawing - indicative scale of 1:200 featuring as a minimum:			
<ul style="list-style-type: none"> <li>Basement, ground floor, and typical upper floors as needed to explain design intent.</li> </ul>			C.5
<ul style="list-style-type: none"> <li>Typical architectural sections as required to explain design intent and relationship with open space and context – # 2 minimum.</li> </ul>			C.5
<ul style="list-style-type: none"> <li>All publicly visible architectural facades elevations with heights, massing and specification regarding material treatments and colors in 2D and 3D drawings.</li> </ul>			C.5
<ul style="list-style-type: none"> <li>Details design architectural facades and features as required to explain design intent – indicative scale of 1:50.</li> </ul>			C.5.3
<ul style="list-style-type: none"> <li>Exhibit(s) clearly illustrating design references and ideas inspired by local architecture and contextual analysis as given in 'Aseer Contextual Architecture Guidelines'.</li> </ul>			C.5
<ul style="list-style-type: none"> <li>Exhibit(s) clearly illustrating materials and colors palette for all public frontages.</li> </ul>			C.5.3.3; C.5.3.4
<ul style="list-style-type: none"> <li>Eye level architectural prospective renderings focusing particularly on the public frontages of the property and the main road frontage – minimum 1 per public frontage.</li> </ul>			

<b>8. Landscape Design</b> Landscape plans and drawings - indicative scale of 1:200 featuring as a minimum:			
• Exhibit(s) clearly illustrating landscape design details and coordination of the general site, indicating concept, program, and specification of materials and treatments.			C.1
• Exhibit(s) clearly illustrating landscape design specification of hardscape and softscape treatment, materials, and planting palette.			C.1.8
• Site furniture details and materials.			C.3.4.3
• Stormwater management plan.			
• An informal 2 Point Study (2PS) for development on slopes over 15%, adjacent to protected areas or views, within or adjacent to wadi corridors, or as requested by ASDA.			
• For greenfield development sites over 1ha: <ul style="list-style-type: none"> <li>○ Flora study and arboricultural report, including mapping of existing trees and recommended protection measures.</li> <li>○ Revegetation / compensation plans, including management strategy for up to 2 years after completion, for any natural vegetation areas that will be removed as part of the development.</li> </ul>			C.1.8
<b>9. Signage Design</b> Signage plans and drawings to clearly illustrate:			
• Comprehensive plan and program for all site signage -way findings and advertisement features and locations.			C.6.7 - C.6.11
• Appropriately scaled elevations and renderings to clearly illustrate the impact on public frontages.			C.6.7 - C.6.11
• Exhibits as needed to clearly illustrate placement, proportion, form, logo/text size, colors and materials, and their integration in architectural design.			C.6.7 - C.6.11

**Figure 5** Required information by ASDA for building permit application

## Land Subdivision Permit

Required Information for Land Subdivision Permit Application	PROVIDED		AUDC SECTION
	Yes <input checked="" type="checkbox"/>	No <input checked="" type="checkbox"/>	
<b>1. Vision and Placemaking Concept</b>			
<ul style="list-style-type: none"> <li>Minimum 1-page report summarizing project design intent and urban design vision.</li> </ul>			
<b>2. Urban Context</b> A summary of site context at indicative scale 1:10,000 featuring as a minimum:			
<ul style="list-style-type: none"> <li>Location map of the subject-building project or site improvement in relation to Urban Area and surrounding context showing relevant zones, overlays, districts, corridors, important landmarks (including heritage) on and surrounding the site.</li> </ul>			
<ul style="list-style-type: none"> <li>Location of the plot on the land use system of Urban Area.</li> </ul>			
<ul style="list-style-type: none"> <li>Minimum 1-page report response of how the project comply with the AUDC design elements and other applicable urban planning and design provisions.</li> </ul>			C
<ul style="list-style-type: none"> <li>Mapping of heritage and cultural landscapes in the area.</li> </ul>			
<ul style="list-style-type: none"> <li>A Landscape Character Assessment for land subdivisions larger than 10ha, or as required by ASDA.</li> </ul>			
<b>3. Heritage Context</b> If the project / site is a listed heritage site, or a new potential heritage site, or the project is located in an heritage buffer / transition zone / visual buffer zone, additional consultation with competent authorities is required (SCTH, MoMRA, ASDA, MEWA). A summary of consultation must be provided including:			
<ul style="list-style-type: none"> <li>Outcome report and design response to the feedback of competent authorities.</li> </ul>			
<ul style="list-style-type: none"> <li>Minimum 1-page report response to how the proposed subdivision responds to guidelines in AUDC Chapter C. Element. 2.5</li> </ul>			C.2.5
<b>4. Neighborhood Context</b> Site master plan in context and its relationship with adjacent neighborhoods and corridors - indicative scale 1: to 5,000 to 1:2,000 featuring as a minimum:			
<ul style="list-style-type: none"> <li>Natural features - topography, ridge lines, landscape, open spaces, vegetation, watercourses / wadis.</li> </ul>			C.1
<ul style="list-style-type: none"> <li>Surrounding land uses and easements.</li> </ul>			
<ul style="list-style-type: none"> <li>Movement and access plan - showing vehicular, pedestrian, cycling and possible future transit circulation including transit stops location.</li> </ul>			C.3
<ul style="list-style-type: none"> <li>Public realm plan – showing proposed linkages to wider open space network, pedestrian and cycling linkages to adjacent neighborhoods.</li> </ul>			C.1, C.4.4
<ul style="list-style-type: none"> <li>Context land uses, proximity to community facilities and local retail/commercial centers.</li> </ul>			

5. Streetscape / Corridor Assessment			
2D and 3D drawings /CGI of the site in relation to the streetscape on both sides of the public streets within 100m of the subdivision as required to clearly illustrate:			
• Street classification and layout.			
• Public realm plan and proposed design elements for all public streets' frontages.			
• Proposed building heights, massing, and setbacks along public streets frontages.			C.5 C.5, C.4.3
• A formal Landscape and Visual Impact Assessment (LVIA) may be required for subdivision plans or developments that exceed 10ha, or as requested by ASDA. This shall illustrate the proposal's setting within the landscape from publicly accessible open spaces and major roads.			
6. Site Plan			
Site master plan - at an indicative scale 1: to 2,000 featuring as a minimum:			
• Boundaries, general site dimensions and north point.			
• Ecological surveys of existing conditions and proposed planting plans and other mitigation measures.			C.1
• 0.5m topographic survey, grading plan and slope analysis with layout for proposed development. Plan should highlight >30% slopes as areas of limited development for large structures.			C.1.5
• Hydrological and storm water survey and plans – existing and proposed design including wadi interfaces and buffers, clearly illustrating design intent in relation to wadi interface.			C.1.7
• Open space network plan featuring concept, program, and hierarchy.			C.1.9
Mobility plan showing <ul style="list-style-type: none"> <li>• Street hierarchy and classification</li> <li>• Vehicular circulation and access plan</li> <li>• Parking plan</li> <li>• Pedestrian and cycling connectivity</li> <li>• Public transport route and stops (if any)</li> </ul>			C.3; C.3.4.2; C.5.2.4
• A traffic impact analysis may be required by ASDA for subdivision plans or development that exceed 10ha.			
Utilities and infrastructure plan showing: <ul style="list-style-type: none"> <li>• Location and layout of water supply</li> <li>• Location and layout of power supply</li> <li>• Sewage network plan</li> <li>• Storm water management &amp; network plan</li> <li>• Lighting plan and design clearly illustrating design intent</li> <li>• Visual pollution mitigation measures</li> </ul>			C.6; C.6.4 C.6.2-C.6.6
• Subdivision plan (plot layout).			C.4.4
• Land use plan illustrating all land uses and activities at the plot level.			C.4.4
• Height plan illustrating development heights distribution within the subdivision at the block level.			C.4.4
• Plan illustrating densities distribution within the subdivision.			C.4.4
• Plan illustrating easements and setbacks within the subdivision.			C.4.4

<b>7. Development Details</b> Proposal development details featuring as a minimum:			
• Total site area and breakdown of areas by uses and activities.			
• Uses and activities by plot.			
• LAC and FAR by plot.			
• Floor areas by plot.			
• Indicative height in meters and number of floors by plot.			
• Parking area, showing number of parking vehicles and cycle parking spaces by parcel.			C.3.4.2; C.5.2.4
<b>8. Architectural Design</b> Architectural plans and drawing - indicative scale of 1:200 featuring as a minimum:			
• Intended treatment of all public frontages by types.			C.5
• Heights and massing by types and in aggregate.			C.5
• Exhibit(s) clearly illustrating design references and ideas inspired by local architecture and contextual analysis.			C.5
• Eye level architectural prospective renderings focusing particularly on the public frontages of the property and the main road frontage – minimum 1 per public frontage.			
• Exhibit(s) clearly illustrating intended materials and colors palette for all public frontages by types.			C.5.3.3, C.5.3.4
<b>9. Landscape Design</b> Landscape plans and drawings featuring as a minimum:			
• Exhibit(s) clearly illustrating landscape design details and coordination of the general site, indicating concept, program, and specification of materials and treatments.			C.1
• Landscape design showing specification of hardscape and softscape treatment, materials, and planting palette.			C.1
• Site furniture details and materials.			C.3.4.3
• Environmental compliance and sustainability measures.			
• For greenfield development sites over 1ha: <ul style="list-style-type: none"> <li>○ Flora study and arboricultural report, including mapping of exiting trees and recommended protection measures.</li> <li>○ Revegetation / compensation plans, including management strategy for up to 2 years after completion, for any natural vegetation areas that will be removed as part of the development.</li> </ul>			C.1.8
<b>10. Signage Design</b> Signage plans and drawings to clearly illustrate:			
• Comprehensive plan and program for all site signage -way findings and advertisement features and locations.			C.6
• Appropriately scaled elevations and renderings to clearly illustrate the impact on all public frontages.			C.6
• Exhibits as needed to clearly illustrate placement, proportion, form, logo/text size, colors and materials and their integration in master plan vision.			C.6

**Figure 6** Required information by ASDA for land subdivision permit application

## **Small Development Projects**

For small development projects- smaller than 10,000 sqm / 1 hectare; or with development program smaller than 40,000 sqm; or not in ASDA's priority category list, ASDA's application review is not required. Applicants for small development projects should adhere to the AUDC standards and guidelines and follow the building permit submission requirement and checklist in figure 6. Permitting shall be seek directly with Aseer Amanah.

## Small Development Permit

<b>Required Information by ASDA for Small Development Projects - Building Permit Application</b>	
<b>1. Site context plan at indicative scale 1:10,000</b>	<ul style="list-style-type: none"> <li>Featuring as a minimum location map of the subject-building project or site improvement in relation to the urban area and surrounding context showing relevant zones, overlays, districts, corridors, important landmarks (including heritage) on and surrounding the site.</li> </ul>
<b>2. A summary of consultation outcome for heritage assets</b>	<ul style="list-style-type: none"> <li>If the project / site is a listed heritage site, or a new potential heritage site, or the project is located in a heritage buffer / transition zone / visual buffer zone, additional consultation with competent authorities is required (SCTH, MoMRA, ASDA, MEWA).</li> </ul>
<b>3. Site master plan - indicative scale of 1: 500 featuring as a minimum:</b>	<ul style="list-style-type: none"> <li>Boundaries, general site dimensions and north point.</li> <li>Grading plan and slope analysis with layout for proposed development.</li> <li>Mobility plan showing vehicular, pedestrian and cycling entrances and movement to and within the site, location of parking areas with number of parking spaces.</li> <li>Utilities and infrastructure plan including lighting design clearly illustrating design intent.</li> </ul>
<b>4. Development details - proposal development details featuring as a minimum:</b>	<ul style="list-style-type: none"> <li>Total site area and breakdown of areas by uses and activities.</li> <li>Uses and activities by plot.</li> <li>LAC and FAR by building.</li> <li>Floor areas by building.</li> <li>Individual building height in meters and number of floors.</li> <li>Parking area, showing number of parking vehicles and cycle parking spaces</li> </ul>
<b>5. Architectural design - architectural plans and drawing - indicative scale of 1:200 featuring as a minimum:</b>	<ul style="list-style-type: none"> <li>Basement, ground floor, and typical upper floors as needed to explain design intent.</li> <li>Typical architectural sections as required to explain design intent and relationship with open space and context – # 2 minimum.</li> <li>All publicly visible architectural facades elevations with heights, massing and specification regarding material treatments and colors in 2D and 3D drawings.</li> <li>Details design architectural facades and features as required to explain design intent – indicative scale of 1:50.</li> <li>Exhibit(s) clearly illustrating materials and colors palette for all public frontages.</li> <li>Eye level architectural prospective renderings focusing particularly on the public frontages of the property and the main road frontage – minimum 1 per public frontage.</li> </ul>
<b>6. Landscape design</b>	<ul style="list-style-type: none"> <li>Landscape plans and drawings, indicative scale of 1:200 featuring as a minimum exhibit(s) clearly illustrating landscape design details and coordination of the general site, indicating concept, program, and specification of materials and treatments. Minimum 20% of remaining open space to be landscaped.</li> </ul>
<b>7. Signage design</b>	<ul style="list-style-type: none"> <li>Signage plans and drawings to clearly illustrate positioning and design intent</li> </ul>

**Figure 7** Required information by ASDA for building permit application





An architectural rendering of a modern building courtyard. The scene is viewed from a low angle, looking down a paved walkway. On the left, a building with a textured, dark facade rises. On the right, a white building with a large, decorative, perforated metal screen is visible. In the foreground, a woman wearing a brown hijab and a white and brown patterned dress is walking towards the viewer. In the background, another woman in a white hijab and dress is walking away. The overall atmosphere is bright and clean, with soft shadows and a clear sky.

C

DESIGN  
ELEMENTS  
GUIDANCE &  
STANDARDS

## Design Strategies

The AUDC promotes 6 practical strategies to guide a clear design attitude towards the different aspects of urban development. The 6 strategies correspond to the 6 design elements forming parts of the urban code. These are:

### 1. Manage the Landscape Setting

Aseer's natural landscape is an expression of the diversity of its heritage and a foundation of its identity. This strategy aims to protect natural features, open space and its scenic qualities along with controlling landscape settings for existing and new development sites, thereby enhancing its identity, preserving its past and planning for a more desirable future.

### 2. Enhance Heritage & Cultural Landscape

The architectural heritage is interwoven with its natural and productive landscape within the different environments of Aseer. The strategy lays out a clear path towards safeguarding this rich heritage and cultural landscape from disappearing, preserving the identity of Aseer and connecting people to places.

### 3. Complete Streets & Movement Network

Right-of way design in Aseer urban areas is over dominated by automobile related considerations resulting in generic spaces that are detrimental to its urban aesthetic. Complete streets strategy guides roads to become streets in urban settings, contribute to placemaking and beautification of places while properly interfacing with adjacent uses.

### 4. Placemaking & Land Subdivision

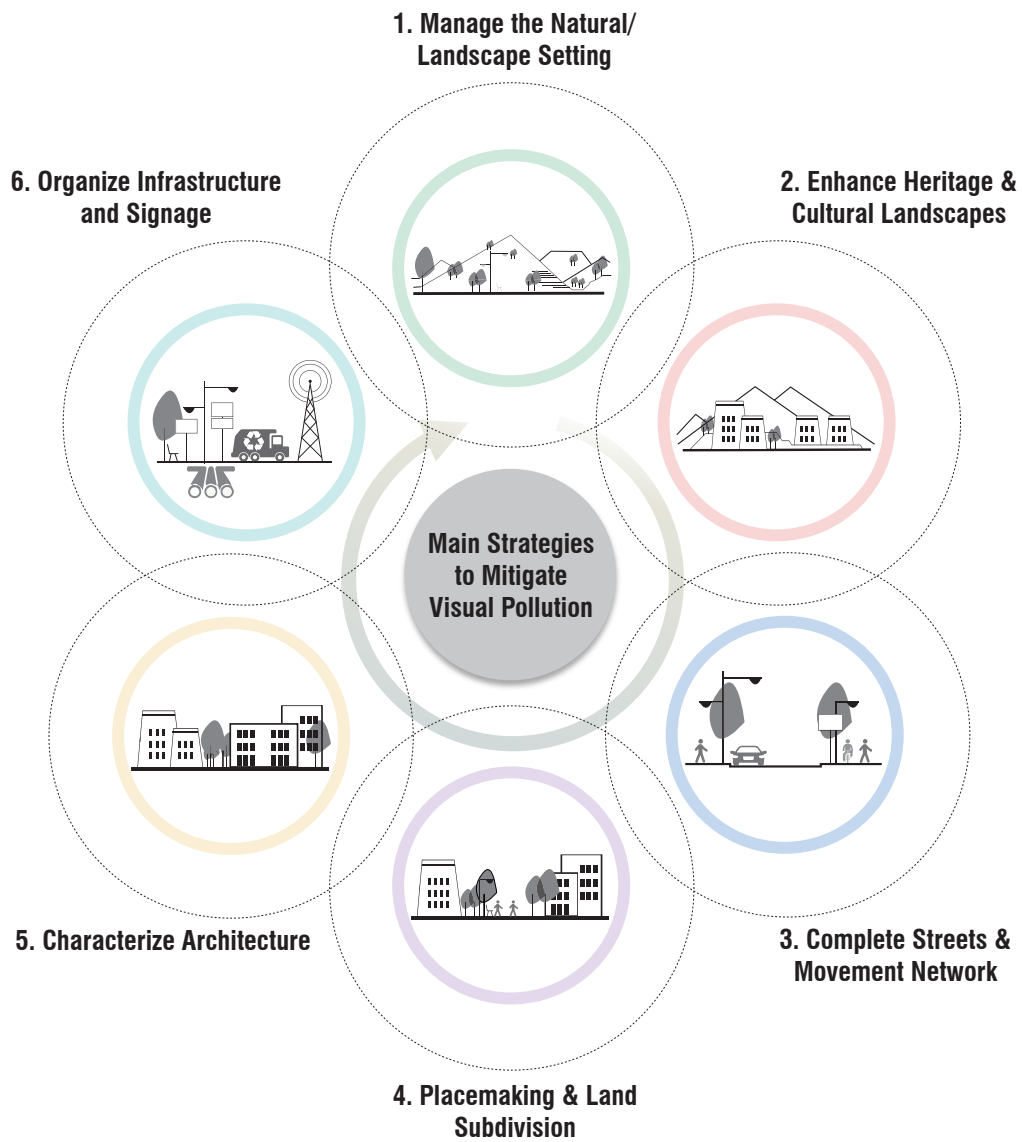
Control of uses and building placement characterizes well designed, people-oriented places. Placemaking reinforces the aspects of a city that make it distinctive and functionally unique. This strategy incorporates the identity of Aseer, its cultural values, uses, levels of activities and physical scale and forms, into the uses and pattern of development.

### 5. Characterize Architecture

Substandard and dull architecture, with use of typologies, materials, and finishes that are alien to the richness of the Aseer context, contribute significantly to visual pollution and to Aseer's progressive loss of identity. New architecture needs to be more contextual, designed more for people and less for cars, looking at the future while acknowledging the past, and empowering the sense of place.

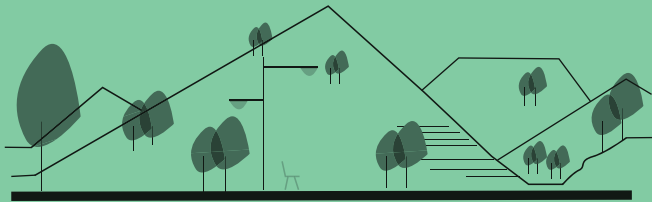
### 6. Organize Infrastructure and Signage

Poorly designed infrastructural elements, utilities, city services, public and private signage and their misplacement contribute significantly to visual pollution, and too often result in a messy overall composition of Aseer's landscapes and townscapes. Infrastructure and signage elements must be restricted where not appropriate while positively contributing to create a collective visual impression and a contextual theme.



**Figure 1** The six design strategies of AUDC





# 1 | MANAGE THE LANDSCAPE SETTING

# 1 Manage the Landscape Setting

## 1.1 Overall Objectives

- Protect the natural and cultural landscape character, including traditional farming practices to preserve the unique character of Aseer and the environment for future generations.
- Preserve and enhance the wadi network to establish green, blue and recreational open space infrastructure; an integrated functioning open space network.
- Protect, enhance and promote ecology in the urban, rural and natural contexts. Ensure habitat connectivity using stepping stones, corridors, and buffers to connect large high quality patches and limit fragmentation.
- Protect & use natural vegetation to preserve the unique character of Aseer and the environment, for future generations.
- Design high quality open spaces to improve visual amenity, connected pedestrian priority and social areas and create healthy livable cities.



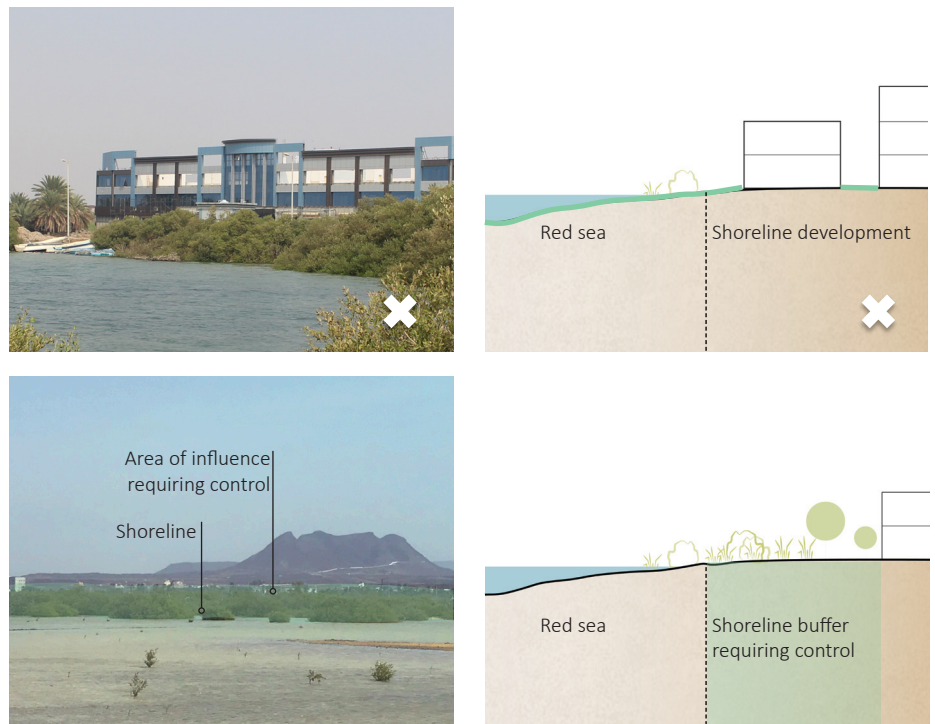
**Figure 2** Photomontage illustrating possible improvements to the landscape setting in urban areas

- |  |  |
|--|--|
| 1. <i>Manage slopes with appropriate retaining</i> | 4. <i>Pedestrian friendly roads &amp; streets</i>    |
| 2. <i>Protect ridge line</i>                       | 5. <i>Access to open spaces</i>                      |
| 3. <i>Buffer and limit building on slopes</i>      | 6. <i>Natural vegetation buffers to unused plots</i> |

## 1.2 Protect the Sea Shoreline

### 1.2.1 Guidance:

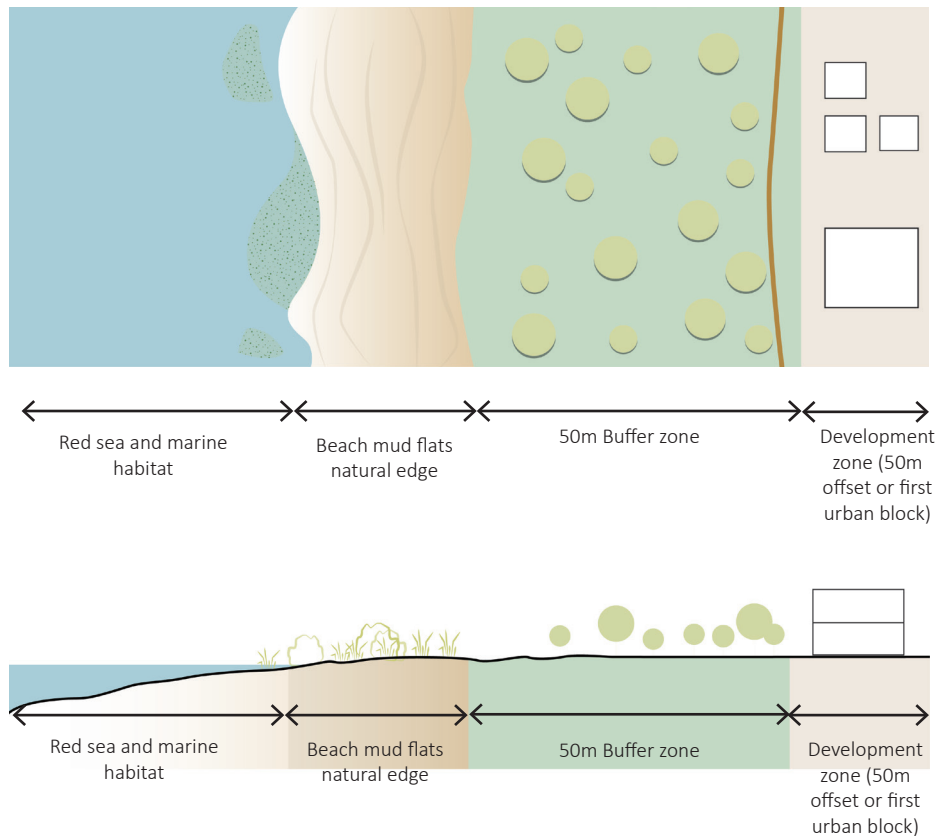
- a.** Generally, development directly interfacing with the shoreline should not be permitted to minimize environmental and visual impact.
- b.** The natural edge includes, but is not limited to beaches, mud flats, wadi fans and mangrove habitat.



**Figure 3** Diagrams illustrating appropriate siting of building in shoreline zone

### 1.2.2 Standards:

- a.** A 50m minimum buffer shall be established from the natural edge. Development shall be prohibited within the buffer area.
- b.** All new development adjacent to and within a 50m offset, or the first urban block from the shoreline buffer, shall be subject to additional scrutiny and adhere to shoreline guidance.

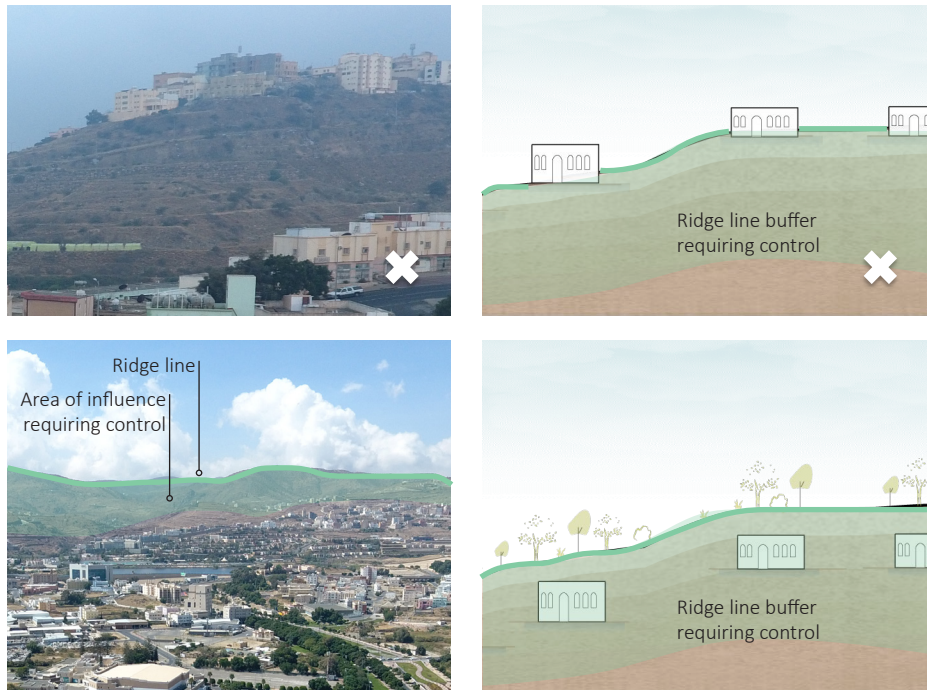


**Figure 4** Typical diagrammatic section of shoreline controls

### 1.3 Protect Ridge Lines and Plateau

#### 1.3.1 Guidance:

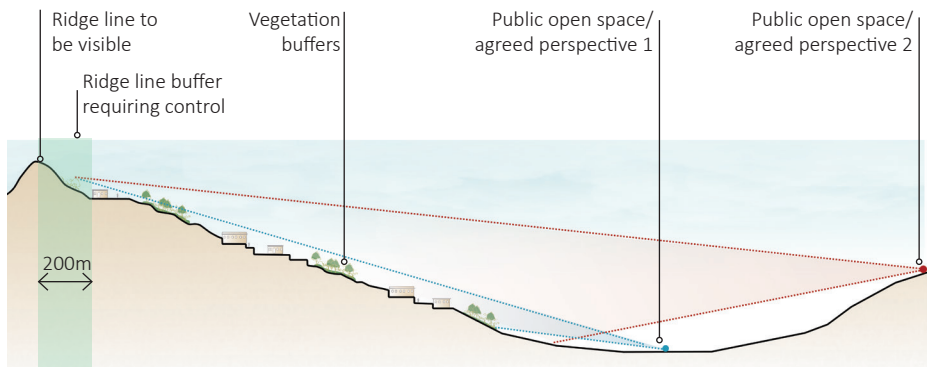
- a.** AUDC defines the ridge line as the natural line of the ridge against the sky and should take into account adjacent hill sides and general mountain setting.
- b.** Generally, ridge line development should not be permitted.
- c.** Generally, development along the ridge lines should not be permitted.
- d.** General views of ridge line from major road corridors and key public open spaces/civic spaces should be maintained up to 3km away.



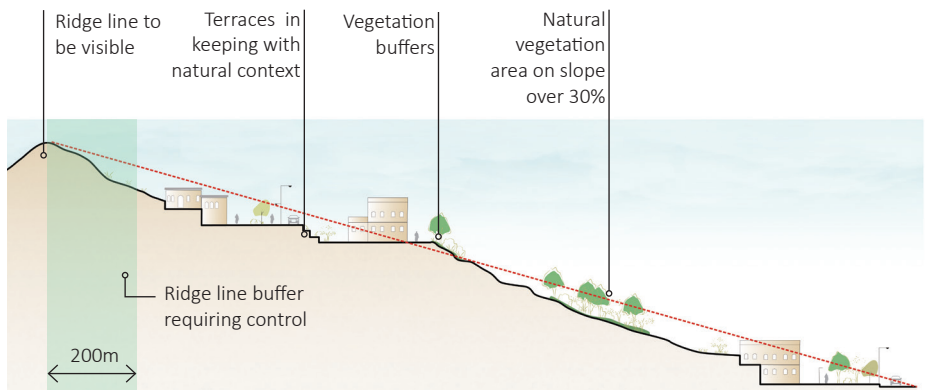
**Figure 5** Diagrams illustrating appropriate siting of building in ridge line zone

#### 1.3.2 Standards:

- a.** Plots containing a ridge line, or sited within 200m from a ridge line, or known important view line, shall be subject to additional scrutiny by the authority to ensure impact is avoided or mitigated.
- b.** A 2 Point Study or formal LVIA shall be required. The assessment points for the view shall be agreed with the permitting authority.



**Figure 6** Diagrams illustrating appropriate siting of building in ridge line zone



**Figure 7** Sections showing ridge line zone. Plots adjacent to the ridge line are subject to additional scrutiny and must provide a 2 Point Study or LVIA



## 1.4 Protect Views & Skyline

### 1.4.1 Guidance:

**a.** In general, established public views should be respected and maintained.

### 1.4.2 Standards:

**a.** Development within established views, adjacent to established view corridors, buffers zones or boundaries shall be subject to further assessment criteria and must submit an informal visual study such as a 2 Point Study to illustrate proposed development. A formal LVIA may be required in some cases for established views.

**b.** Natural heritage boundary - applied to hills side & cultural heritage.

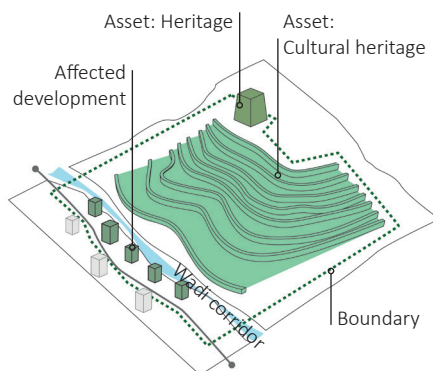
- Building height and set-back to be controlled within boundary.
- 2 Point Study visualizations must be provided for proposed developments.
- For cultural heritage sites a buffer from the boundary should be established as a min. 200m offset.

**c.** Boundary & buffer - applied to ridge line.

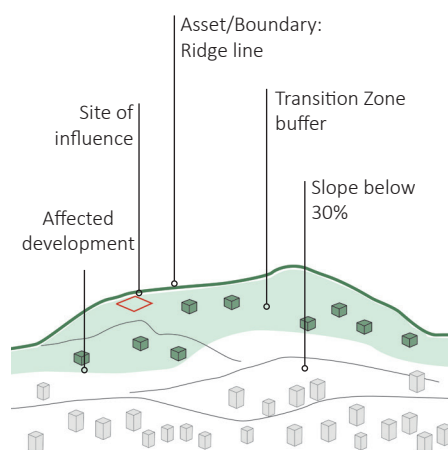
- In the case of ridge lines, the boundary shall be equal to the line of the ridge.
- Transition Zone Buffer is subject to protection and controls.
- Building height, set-back, setting of the building and access roads, lighting, material and color shall be subject to additional scrutiny.
- Infrastructure projects shall also be subject to the same controls.
- 2 Point Study visualizations must be provided for proposed developments within Transition Zone Buffer.

**d.** Viewsheds- applied to hillside and natural heritage.

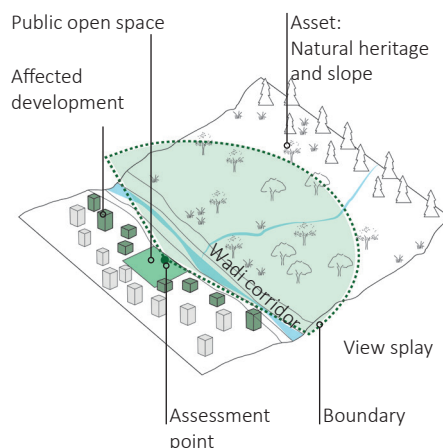
- Building height, massing, materials and color should be controlled within view shed.
- 2 Point Study visualizations must be provided for proposed developments within view shed.



**a & b.** Natural heritage boundary - applied to hills side & cultural heritage



**c.** Boundary and buffer - applied to ridge line



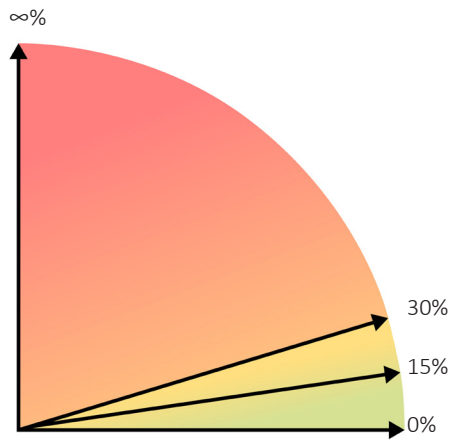
**d.** Viewsheds - applied to hillside and natural heritage

**Figure 8** Diagrams illustrating application of view protection guidance in different scenarios

## 1.5 Control Development on Hillside & Slopes

### 1.5.1 Guidance:

- a.** Development on Aseer’s hillside needs to be controlled and, in some cases, prohibited.
- b.** For new development on 15-30% Slope - new development should be subject to additional development controls.
- c.** Where terraces, walls or retaining elements are required it should be in keeping with contextual colors and materials.
- d.** A general approach to keep flattening and leveling of the slope to the minimum required should be pursued.
- e.** For new development on >30% Slope - generally development should not be permitted.



**Figure 9** Slopes maximum intensity diagram

### 1.5.2 Standards:

#### a. 0-5% Slope

- New development shall be subject to general development controls. Where small terraces, walls, or retaining elements are required it shall be in keeping with contextual colors and materials.



#### b. 5-15% Slope

- New development shall be subject to additional development controls. Where terraces, walls or retaining elements are required it shall be in keeping with contextual colors and materials.
- Existing development may be assessed on a case by case basis to establish development that does not meet the AUDC requirements and appropriate mitigation measures agreed and implemented.



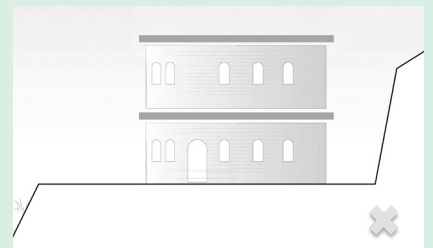
#### c. 15-30% Slope

- New development shall be subject to additional development controls. Where terraces, walls or retaining elements are required it shall be in keeping with contextual colors and materials. A general approach to keep flattening and leveling of the slope to the minimum required shall be pursued.
- Existing development shall be assessed on a case by case basis to establish development that does not meet the AUDC requirements and appropriate mitigation measures agreed and implemented.



#### d. >30% Slope

- Development shall not be permitted.
- Existing development shall be assessed on a case by case basis to establish appropriate mitigation measures to be implemented.



Development on Slope Guidance & Additional Development Controls	Checklist		
	0-5% Slope	5-15% Slope	15-30% Slope
<ul style="list-style-type: none"> <li>Development on slopes over 30% shall be prohibited.</li> </ul>			
<ul style="list-style-type: none"> <li>Slope analysis shall be required for all new development proposals.</li> </ul>			
<ul style="list-style-type: none"> <li>Industrial land uses shall be generally restricted from slopes above 15%</li> </ul>			
<ul style="list-style-type: none"> <li>A minimum 30% of green space shall be required within plot.</li> </ul>			
<ul style="list-style-type: none"> <li>Where development is restricted on a plot due to slope, ridge line or hillside requirements, transfer of development rights may be agreed with authority on flatter areas of the site to ensure sustainable development.</li> </ul>			
<ul style="list-style-type: none"> <li>A 2 Point Study visualizations or formal LVIA must be provided as part of planning application to demonstrate how the project fits into the context and any mitigation measures adopted. Pre-development images shall also provide for comparison.</li> </ul>			
<ul style="list-style-type: none"> <li>Building must be stepped with terrain to minimize grading and enhance appearance of setting within the landscape.</li> </ul>			
<ul style="list-style-type: none"> <li>Building finishes must be in keeping with context &amp; blend with landscape - see architectural guidance for materials, finishes and colors.</li> </ul>			
<ul style="list-style-type: none"> <li>The re-naturalization of slopes and blending of transitions between lots or adjacent undeveloped areas shall be required.</li> </ul>			
<ul style="list-style-type: none"> <li>Required retaining must be in keeping with natural context - see sub strategies for material, color, scale and design guidance.</li> </ul>			
<ul style="list-style-type: none"> <li>Vegetation must be in keeping with context to enhance appearance of setting within the landscape, additional vegetation buffers may be required for mitigation.</li> </ul>			
<ul style="list-style-type: none"> <li>Access routes such as roads and driveways shall be sloped and graded in such a way it respects the natural topography. Deep cuts and retaining walls shall be minimized.</li> </ul>			
<ul style="list-style-type: none"> <li>Straight, linear top of slope shall be avoided. Radii and undulations that resemble pre-development slope conditions shall be used.</li> </ul>			
<ul style="list-style-type: none"> <li>Sharp cuts and long or wide slopes with a uniform grade shall be avoided. Natural pre-development slope conditions shall be replicated wherever possible.</li> </ul>			
<ul style="list-style-type: none"> <li>Existing development shall be assessed to establish development that does not meet the AUDC requirements and appropriate mitigation measures agreed and implemented. This may include vegetation buffers, grading or retaining techniques or changes in color or material.</li> </ul>			

## 1.6 Control Grading & Retaining Walls

### 1.6.1 Guidance:

a. Slope control and retaining should be in keeping with the context, including materiality, color and scale.

### 1.6.2 Standards:

a. Generally, slopes shall be stabilized with rip-rap /armor stone to a max slope of 1:3.

b. Generally, retaining walls for terracing shall be kept to a maximum height of 1.2m and spaced a minimum of 1m apart to offer space for landscaping.

c. Generally, walls shall have a maximum height of 3m, exceptions may be granted if in the interest of the public and must be subject to additional scrutiny and engineering.

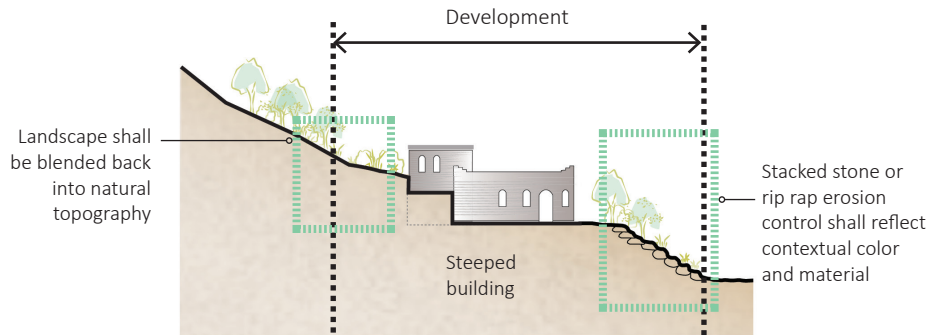


Figure 10 Slope option 1 - ideal situation

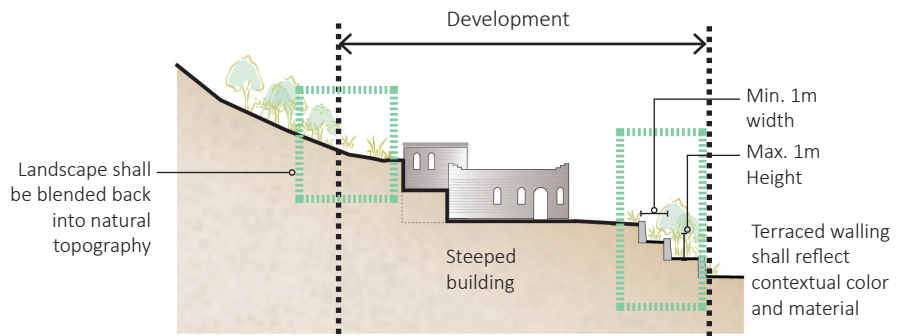


Figure 11 Slope option 2 - limited space

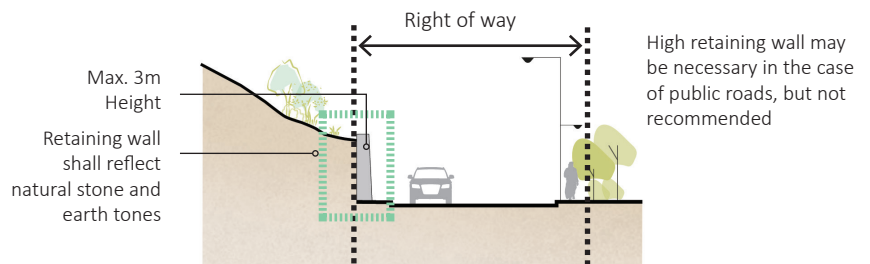


Figure 12 Slope option 3 - space crunch

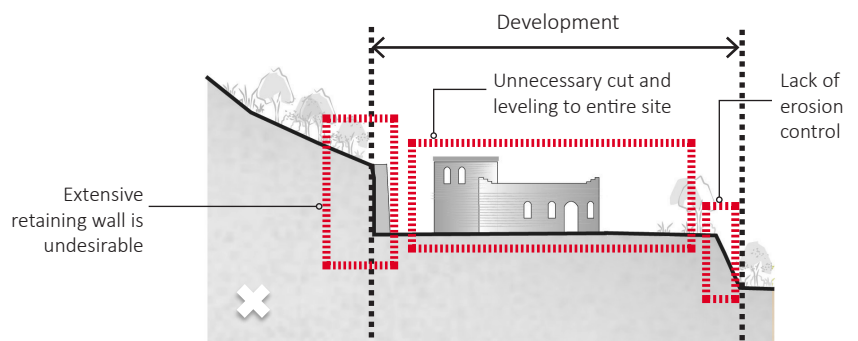


Figure 13 Unacceptable leveling of site and retaining

## 1.7 Preserve & Enhance Wadi Network

### 1.7.1 Guidance:

The AUDC defines the wadi as comprised of 3 distinctive areas.

**a. Wadi Corridor:** The Wadi Corridor is defined as the extent of the flood zone comprised of the 1 in 100-year flood event. The Wadi Corridor may provide public access, farming, support passive recreational activities and natural spaces, and sports spaces where appropriate.

**b. Wadi Edge:** The Wadi Edge is defined as the area next to the Wadi Corridor.

**c. Wadi Development Zone (Area of Influence):** The Wadi Development zone is defined as the area that extends from the wadi edge to a minimum of 100m or the first urban block.

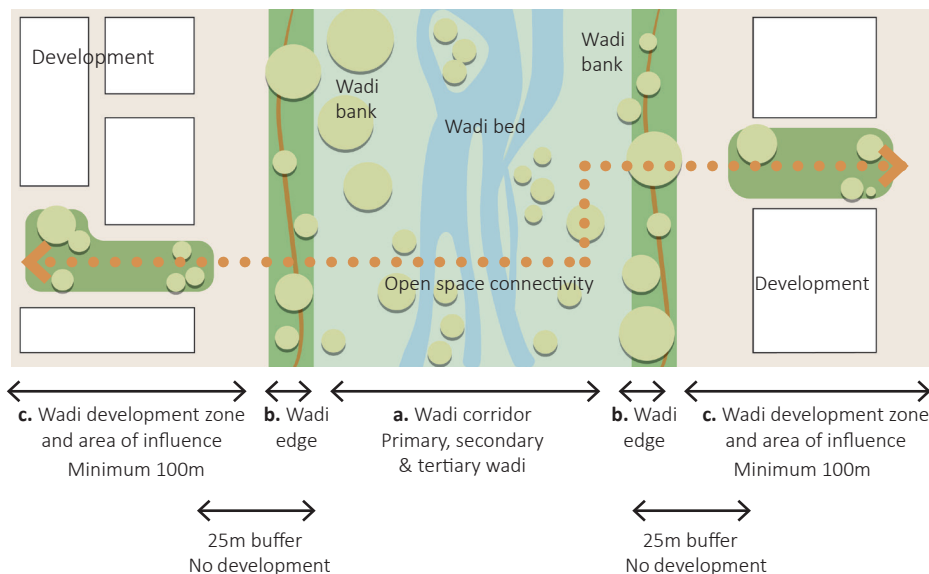


Figure 14 Diagram identifying the 3 wadi areas

### 1.7.2 Standards:

**a.** Development shall be prohibited within the Wadi Corridor.

**b.** A typical minimum width of 10-20m shall be allocated for public space along the length of the Wadi Edge.

**c.** All development adjacent or within the Wadi Development Zone must provide hydrological modeling to demonstrate the built form sits outside 1 in 100-year flood zone as part of development application or mitigation measures provided.

**d.** Development plots within the Wadi Development Zone shall contain a minimum 25m buffer from Wadi Edge to the building edge.

**e.** 100m to 25m buffers based upon natural/ peri-urban/ urban contexts along the Wadi Corridor shall be required. Buffers can be used to limit development and provide generous space for natural functions to prevail, for visual connectivity and to enhance public open space amenities.

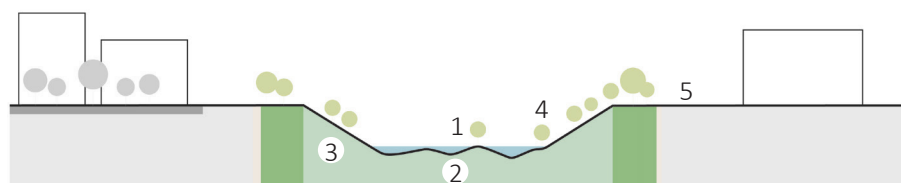


Figure 15 Wadi corridor condition

1. Wadi channel
2. Wadi bed
3. Wadi bank
4. Retained and enhanced native wadi vegetation
5. Open space upland connection

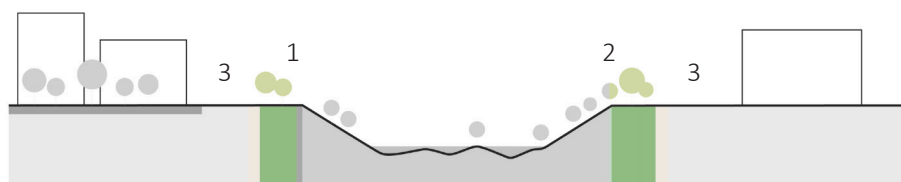


Figure 16 Wadi edge conditions

1. Vegetated edge
2. Continuous public pedestrian and cycle access
3. Open space upland connection within private development
4. Additional controls to landscape treatment

## 1.8 Protect and Use Natural Vegetation

### 1.8.1 Guidance:

**a.** Removal of native vegetation from protected sites, ridges and wadi beds should be prohibited. (Exception for key public infrastructure or regionally important projects and subject to replacement and /or compensation obligations may be granted).

**b.** Pristine vegetation in any context should be protected and integrated into habitat corridor plans where possible.

### 1.8.2 Standards:

**a.** All trees over 3m in height shall require approval before removal and shall be subject to replacement obligations of a similar tree and a minimum height of 1.5m.

**b.** Greenfield development sites over 10,000sqm shall provide a flora study and arboricultural report as part of development application.

**c.** Greenfield development sites over 10,000sqm shall provide re-vegetation / compensation plans, including management strategy for up to 2 years after completion, for any natural vegetation areas that will be removed as part of the development.

1.8.3 Standards on Minimum Plant Spacing	
Plant Type	Spacing
Large trees (H=6m-12m+ height) to ROW <ul style="list-style-type: none"> <li>&gt;60m</li> <li>60-40m</li> <li>40-18m</li> <li>&lt;18</li> <li>Minimum height at planting</li> <li>Minimum offset from buildings</li> </ul>	8- 15m road/6.5-8m sidewalk 8- 15m road/6.5-8m sidewalk max. 15m, 6.5-8m sidewalk max.12m, 6.5-8m sidewalk 3m 5m
Large trees (H=6m-12m+ height) to Parks, plazas, natural areas <ul style="list-style-type: none"> <li>Group or copse of trees</li> <li>Minimum offset from buildings</li> </ul>	4.5m 5m
Medium trees (H<6m) ROW Group/copse Minimum offset from buildings	4m 3.5m 5m
Palms Use should be limited to areas of very high importance <ul style="list-style-type: none"> <li>ROW</li> <li>Group or copse</li> <li>Min. height at planting</li> <li>Minimum offset from buildings</li> </ul>	6m 6m 4m 5m
Large shrubs (H ≥ 2m)	150mm
Medium shrub (H=0.8-2m)	900mm
Small shrubs (H ≤0.8m)	500mm
Herbaceous species (H ≤0.8m)	300mm
Grasses	500mm
Ground cover	300mm
Succulents	300mm

**Figure 17** Table illustrating general standards on minimum plant spacing



**Figure 18** Example of low water use planting in clusters, swales and in a naturalistic manner

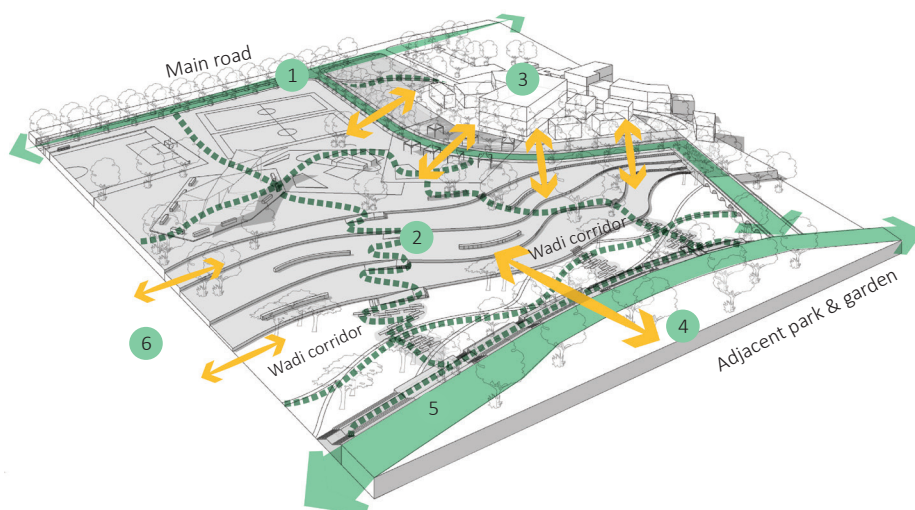
1.8.4 Contextual and Sustainable Planting Guidance & Standards					
Context	Character	Typical Irrigation demands	Species / Plant Type	Density / spacing	Comments
Natural	Planting character, layout, density and cover shall be in keeping with the natural contextual vegetation.	Irrigation shall be for establishment period only, and where possible, planting should take place in appropriate wet and cooler seasons. In some cases irrigation may not be required.	Areas for revegetation shall be carefully assessed to establish appropriate species and diversity.	As per contextual vegetation areas.	Consider species suited for erosion control/ stabilization where required in addition to gravel or mulch.
Rural	Planting character should be naturalistic and clustered.	Irrigation shall be for establishment period only, and where possible, planting shall take place in appropriate wet and cooler seasons. In some cases irrigation may not be required.	Contextual species appropriate for desired function. Consider diversity to improve habitat quality and ensure resilience. Consider shade and wind break tree and shrub planting, and understory vegetation species for habitat.	As per contextual vegetation areas.	Gravel or mulch may be specified.
Urban	Planting character should reinforce the urban context and a sense of place. Consider mass planting for reduced maintenance and/or layered planting for screening and shading.	Low to medium water demand in general. Promenades and plazas medium to high water demand. Side walks and street scape may feature high water demanding trees.	Trees, shrubs, climbers, understory species including grasses and ground covers. Consider species diversity to ensure resilience and improve overall biodiversity, avoid monocultures.	Refer to minimum spacing guidance on previous page.	Prioritize species with urban resilience, combined with less resilient species.
Street Trees	Planting should feature appropriate street trees. Ensure visibility and sight lines are maintained for all users.	Low to medium water demand in general. Side walks may have trees with higher water demands.	Trees, understory species such as grasses, low shrubs and ground covers. Consider tree species diversity to ensure resilience and improve overall biodiversity, avoid monocultures.	Refer to minimum spacing guidance on previous page.	Consider tree canopy size at maturity to ensure right tree for right location. Prioritize species with known urban resilience. Ensure visibility from road at junctions and tree clearance height along roads and sidewalk.
Open Spaces	Naturalistic, medium or high design character, relative to design intent, urban context, function, frequency of use and importance. Consider: mass planting, layering, naturalistic drifts accent planting, specimen planting, shading, foliage contrast and color.	Low to high water demands, relative to frequency of use and function.	Trees, shrubs, climbers, understory species including grasses and ground covers. Consider species diversity to ensure resilience and improve overall biodiversity, avoid monocultures.	Refer to minimum spacing guidance on previous page.	

Figure 19 Table for contextual and sustainable planting guidance &amp; standards

## 1.9 Designing Open Space

### 1.9.1 Guidance:

- a.** Urban areas should be integrated with well structured and hierarchy of open spaces providing for diverse active and passive recreational activities.
- b.** Materials and patterns used for hardscaping, softscaping and street furniture should complement the natural and local heritage context of Aseer region to enhance the visual quality of open spaces and establish a distinctive sense of place.
- c.** Storm water principles should be integrated into all open spaces.



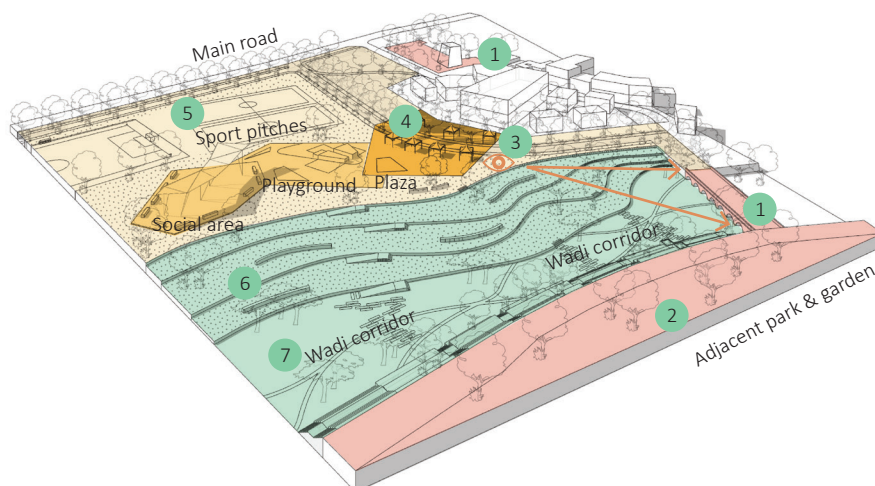
**Figure 20** Design open spaces while considering movement hierarchy and connections

### 1.9.2 Standards:

- a.** A minimum amount of 9sqm of green open space per person shall be required within urban areas.
- b.** Pathways must be a min. 2m wide. Minimum 3.5m, maximum 6m wide pathways shall be required for shared pedestrian and cycle tracks.
- c.** Universal accessibility must be achieved.

### New park development: shall consider movement hierarchy and connections

1. Primary paths shall be a minimum 3m wide and hard paved for year round functionality
2. Secondary paths should feature permeable surfaces where possible
3. Maximize connectivity with adjacent heritage neighborhood
4. Maximize connectivity to other green open spaces
5. Maximize connectivity to existing routes
6. Maximize connectivity with adjacent neighborhood and small commercial areas



**Figure 21** Design open spaces while considering layout and hierarchy of spaces

### New park development: shall consider layout and hierarchy of spaces

1. Maximize connectivity with heritage buildings and structures as attractors
2. Maximize connectivity with adjacent mature park and garden
3. Consider views
4. Establish centralized high use areas such as plazas and playgrounds
5. Active recreation shall be located outside wadi corridor
6. Passive recreation may be located inside wadi corridor
7. Wadi Corridor shall be re-naturalized and pedestrian access facilitated





**Figure 22** Best practice open spaces: varied scale and intimacy of spaces



**Figure 23** Best practice open spaces: integrated and strategically located passive and active recreational areas



**Figure 24** Best practice open spaces: shaded formal and informal play areas



**Figure 25** Best practice open spaces: comfort, contextual materials, appropriate use





2

ENHANCE

HERITAGE &

CULTURAL

LANDSCAPES

# 2 Enhance Heritage & Cultural Landscape

## 2.1 Overall Objectives

- No Interventions or new developments of any kind shall be allowed to partially or completely destroy, alter or remove features of existing heritage and cultural landscapes without prior approval of the Heritage Authority and ASDA.
- Heritage assets and cultural landscapes shall be authentically restored, preserving the natural environment, and utilizing the traditional materials, construction techniques and detailing as defined by the Heritage Authority regulations.
- In general, if new development is proposed in a heritage, buffer/ transition or visual buffer zone, this shall be located, designed and scaled so that its form, massing, layout, facade treatment, land uses, retaining walls and proximity, do not have a detrimental impact on the existing heritage, cultural landscape, and their visual setting.
- New developments shall complement the existing heritage and cultural landscape reinforcing the historic urban fabric, settlement typologies and open space network.
- Activities with a high visual impact shall be located in such a way so to minimize any detrimental impact on existing heritage and cultural landscape assets.
- Utility and service networks shall be designed and located so not to have a negative direct, indirect, or cumulative impact, on heritage assets and cultural landscapes.



Figure 26 Rijal Almaa heritage village in Aseer



Figure 27 Wadi farming, Beesha



Figure 28 Heritage site, Sarat Abidah

## 2.2 Establish Heritage Boundaries

### 2.2.1 Guidance:

**a.** The Heritage types generally found are:

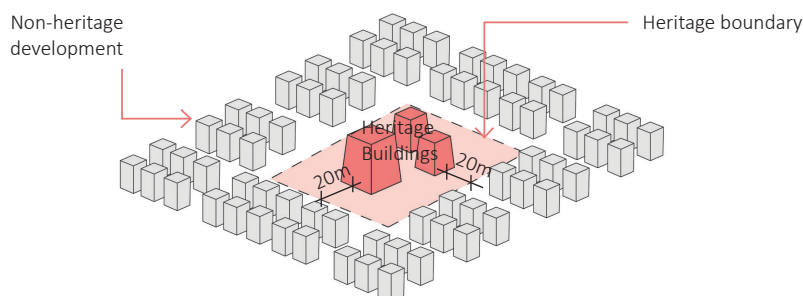
- Immovable cultural heritage (i.e. settlement typologies, buildings, structures, etc.). These are defined as architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art or science, generally older than 100 years.
- Movable cultural heritage (i.e. objects, building contents, etc.).
- Intangible cultural heritage (art, processes, traditions, etc.).
- Cultural landscapes (with strong cultural history or aesthetic qualities).
- Ancient landscapes (areas and places of archaeological significance or potential).

**b.** For single monument / building or building groups, a heritage boundary should be defined as the limits of the plot boundary or an offset of a minimum of 20m from the building facade.

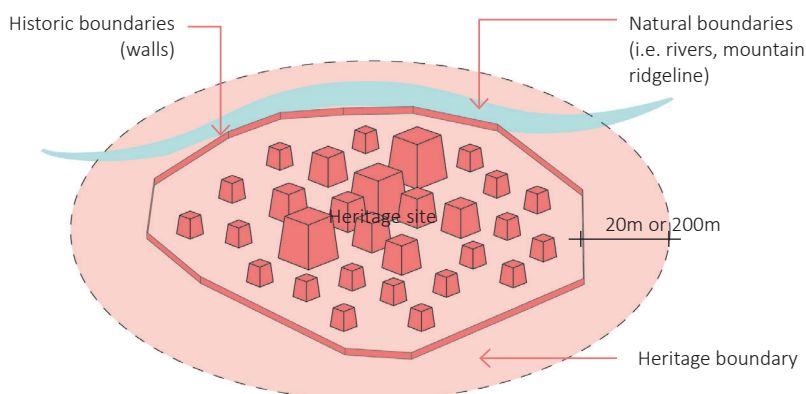
**c.** For sites or historic settlements, the heritage boundary should be defined as the historic physical or natural boundaries (like city walls or rivers) or an offset from the building facade of typically 20m for urban areas and of minimum 200m for rural or natural areas.

**d.** For cultural landscapes the heritage boundary may be defined as:

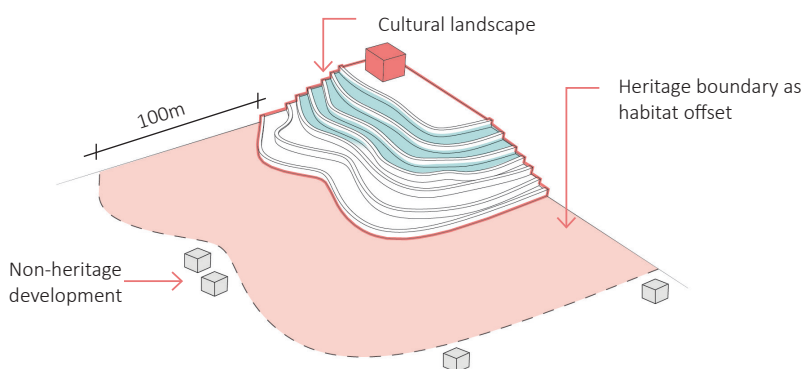
- 100m offset habitat buffer for rural and natural settings.
- 30-50m hydrological offset for suburban and urban settings.
- 10-20m wide publicly accessible area around the perimeter of the asset.



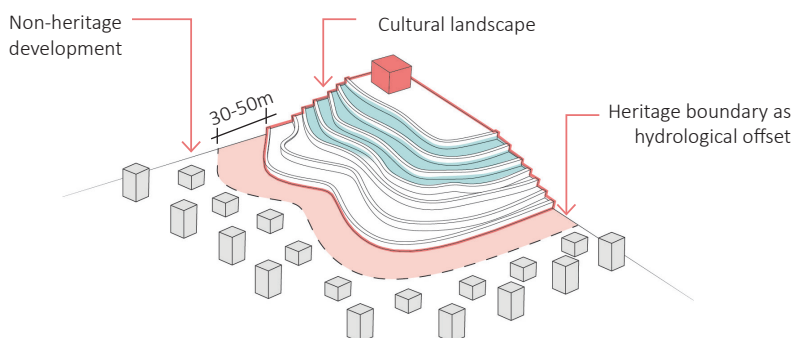
**Figure 29** Boundary for single monuments or building groups



**Figure 30** Boundary for sites or historic settlements: the historic or natural limits, or an offset from the building facade, typically 20m for urban areas and 200m for rural or natural areas



**Figure 31** Boundary for cultural landscapes in rural or natural areas



**Figure 32** Boundary for cultural landscapes in urban areas

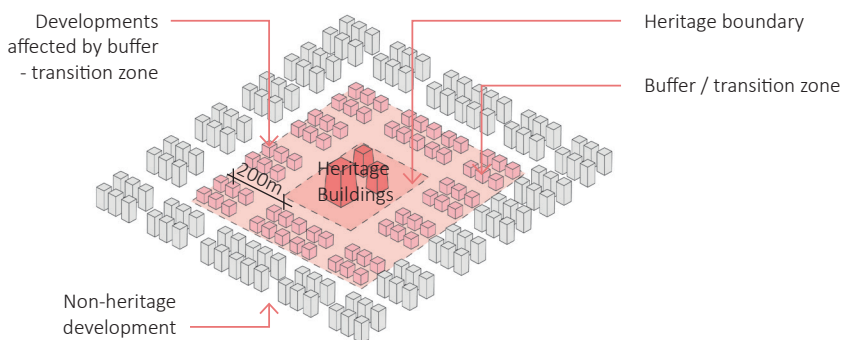
## 2.3 Establish Buffer / Transition Zones

### 2.3.1 Guidance:

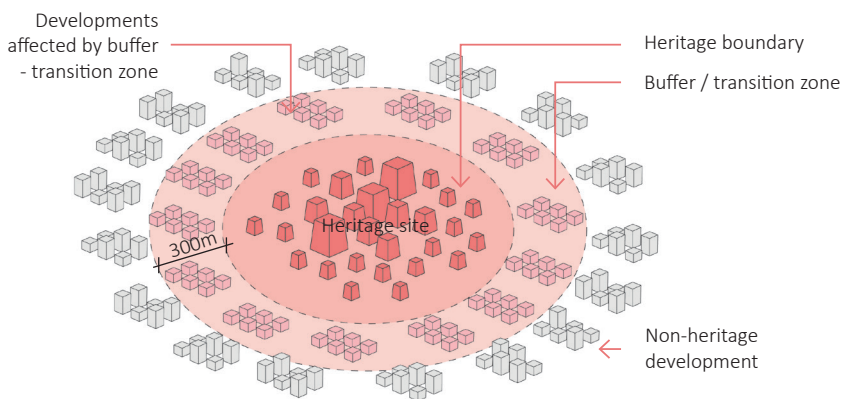
**a.** For single monument or building a Buffer / Transition Zone should be established as a minimum of 200m offset from the asset's heritage boundary limits.

**b.** For sites or historic settlements, the Buffer / Transition Zone should be a minimum of 300m offset from the heritage boundary limits.

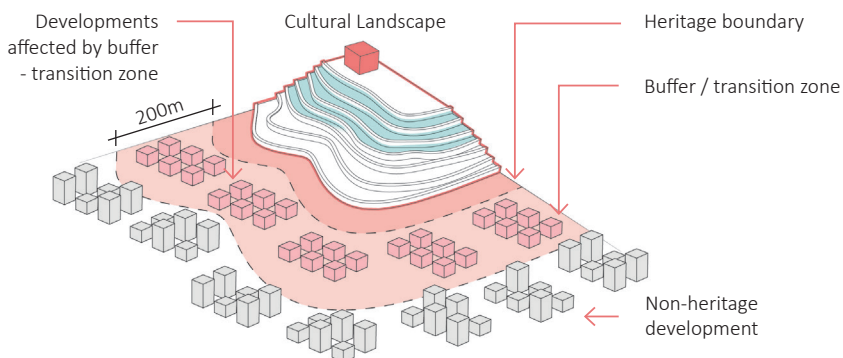
**c.** For cultural landscapes the Buffer / Transition Zone should be defined as a 200m offset from the heritage boundary.



**Figure 33** Buffer / transition zone boundary for single monuments or building groups



**Figure 34** Buffer / transition zone boundary for sites or heritage settlements



**Figure 35** Buffer / transition zone boundary for cultural landscapes

## 2.4 Development in Heritage Areas

### 2.4.1 Guidance:

- a.** Any new exterior addition to a heritage structure should be considered only after determining that requirements for the new or adaptive re-use cannot be successfully met by altering non-significant interior spaces.
- b.** New architectural elements should be minimized and limited to those required to support the permissible level of impact.
- c.** Any new exterior addition to heritage assets should preserve their significant historic materials, features and form, and should be compatible but differentiated from the historic building. When planning a new addition, the placement or location of the new addition, its size, scale and massing should be carefully considered.
- d.** Any new intervention, development or infrastructure element within the heritage area should be strictly controlled so not

to affect the integrity, authenticity and value of significance of the existing heritage asset.

- e.** Prior to any construction, a site management plan should fully outline the measures to protect the heritage asset during all phases of implementation.

### 2.4.2 Standards

- a.** Listed heritage or potential heritage assets must not be altered, partially or completely destroyed, and their features or debris must not be removed or used without prior approval and supervision from the Heritage Authority and ASDA.
- b.** If development is allowed, this shall preserve all existing heritage and cultural landscape features on site in accordance with the Heritage Authority and ASDA.
- c.** If unknown cultural heritage sites are discovered, an officially recognized archaeological survey must be carried out before starting / resuming development work.



**Figure 36** Example of vernacular architecture in Al Basta and Sarat Abidah villages



**Figure 37** Example of vernacular architecture in Dhahran Al Janub village

## 2.5 Development in Buffer and Transition Zones

### 2.5.1 Guidance:

#### a. Layout

- Interventions and/or new developments should contribute to reinforce the historic urban fabric through respecting the historic building typologies and open space network, and by promoting a network of pedestrian-oriented passageways and squares.

#### b. Massing

- If new development is allowed, it should have a compact form having height and scale in harmony with adjacent heritage assets.
- Landmark buildings may be varying in height, being limited in number, located to protect existing view lines and inspired by the vernacular architectural forms and massing.
- Large building massing and floor plates should be broken down and recessed to introduce variation and foster human scale. Human scale can be defined as design optimized for human use and perception. Traditionally, in Aseer region human scale built form refers to a massing of 4-5 storied and 20-30m wide with narrow shaded streets.
- Buildings should be stepped in relationship to the natural landscape and integrate terracing wherever possible.

#### c. Facade Treatment

- Facade design for new development should respond to the heritage assets in terms of opening proportions, recesses, roof lines, facade breaks, decorative detailing, materials and colors.
- Building materials should be in the same color range or value as those

of the heritage assets. Materials need not be the same as those on the heritage asset, but they should be harmonious; they should not be so different that they stand out or distract from the heritage asset.

- Contemporary adaptation of Aseer typical building techniques and materials should be encouraged.

#### d. Recommended Uses

- Recommended uses may include: residential, civic, cultural, religious, hospitality, commercial, touristic and recreational.
- Non recommended uses may include highly car driven uses like gas stations, logistics, industrial, mining and other resource extraction, as well as large utility infrastructures.
- Mixed-use development should be preferred.

#### e. Open Space Treatment

- Open space treatment should reinforce the character and sense of place of a heritage site by adding contextual paving, street furniture, lighting, signage and wayfinding, upon approval of the Heritage Authority and ASDA.
- The removal of existing native vegetation should be minimized, compensating for the removed vegetation by replacing it with plant species native to the respective environment in Aseer region.
- The implementation of a network of recreational trails connecting different heritage sites and integrating such sites with their surrounding cultural and natural landscapes should be promoted. These trails should typically be designed to merge with their surrounding natural landscapes.





**Figure 38** Example of layout showing new developments reinforcing the historic fabric in the Al-Bujairi buffer area in Ad-Diriayah



**Figure 41** The historic center of Jeddah as an example of an active urban heritage site



**Figure 39** Vernacular architecture massing in the Aseer region



**Figure 42** New developments should contribute to the preservation of existing cultural landscapes

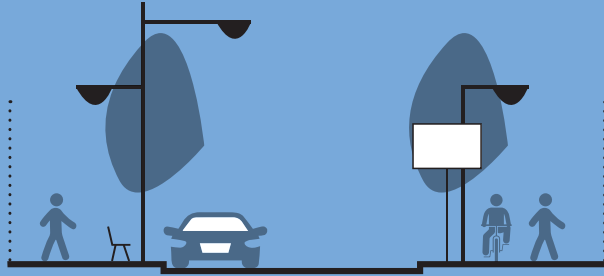


**Figure 40** Example of facade treatment present in the Sarwat Mountain's vernacular architecture



**Figure 43** Example of open space treatment complementing the heritage assets in Riyadh Old Center





# 3 | COMPLETE STREETS & MOVEMENT NETWORK

# 3 Complete Streets & Movement Network

## 3.1 Overall Objectives

- Provide a site responsive and highly connected street network, which provide access for multi-modal movement for all users.
- Balance vehicle traffic management with walking, cycling, the streetscape and community spaces by incorporating different design elements.
- Ensure that the street layout provides a continuous street frontage that is safe, attractive and efficient for pedestrians, cyclists and vehicles and creates a sense of place.
- Particular attention should be placed to public frontages in new development, to their interface with the street and to the provision of high quality and attractive public realm.
- Establish a layered network approach of transportation facilities - not all streets can or should be prioritized for bicycles or pedestrians, given the need to accommodate essential automobile trips on strategic routes. Likewise, vehicle throughput cannot take priority in the design of every street.



Figure 44 Existing conditions of King Fahd Road in Abha City



Figure 45 Example of complete street and attractive public realm frontages treatment of main access corridor in urban area

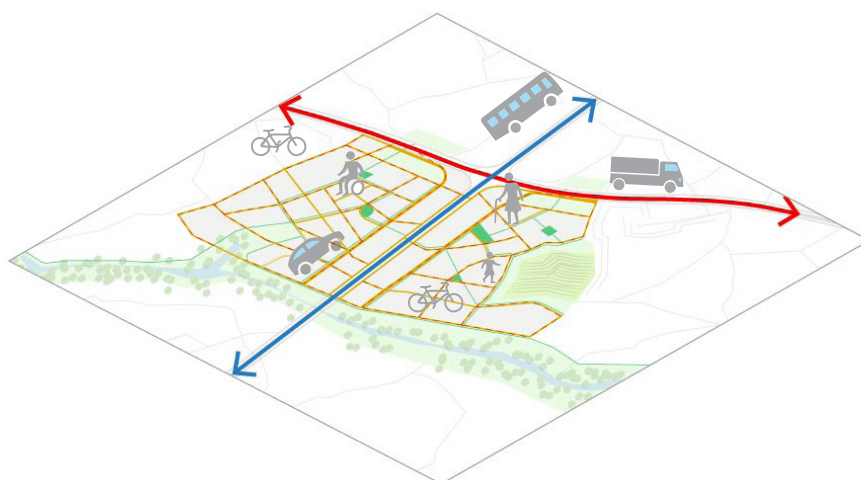


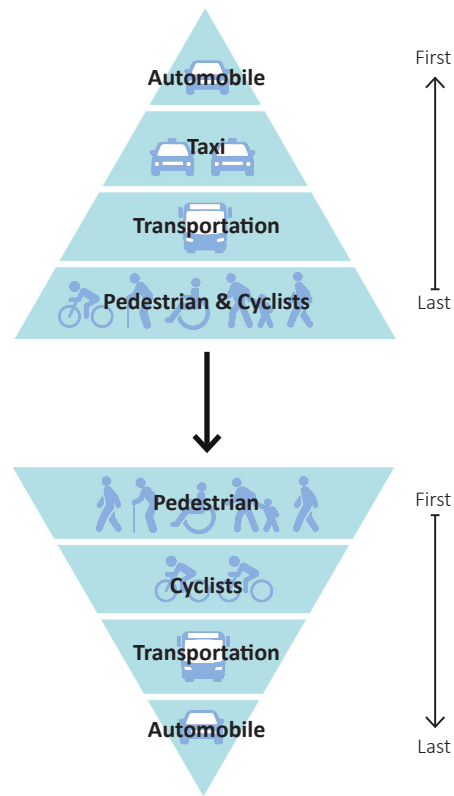
Figure 46 Create a layered network - overlay all networks to identify modal priorities on specific streets or blocks

### 3.2 Complete Streets

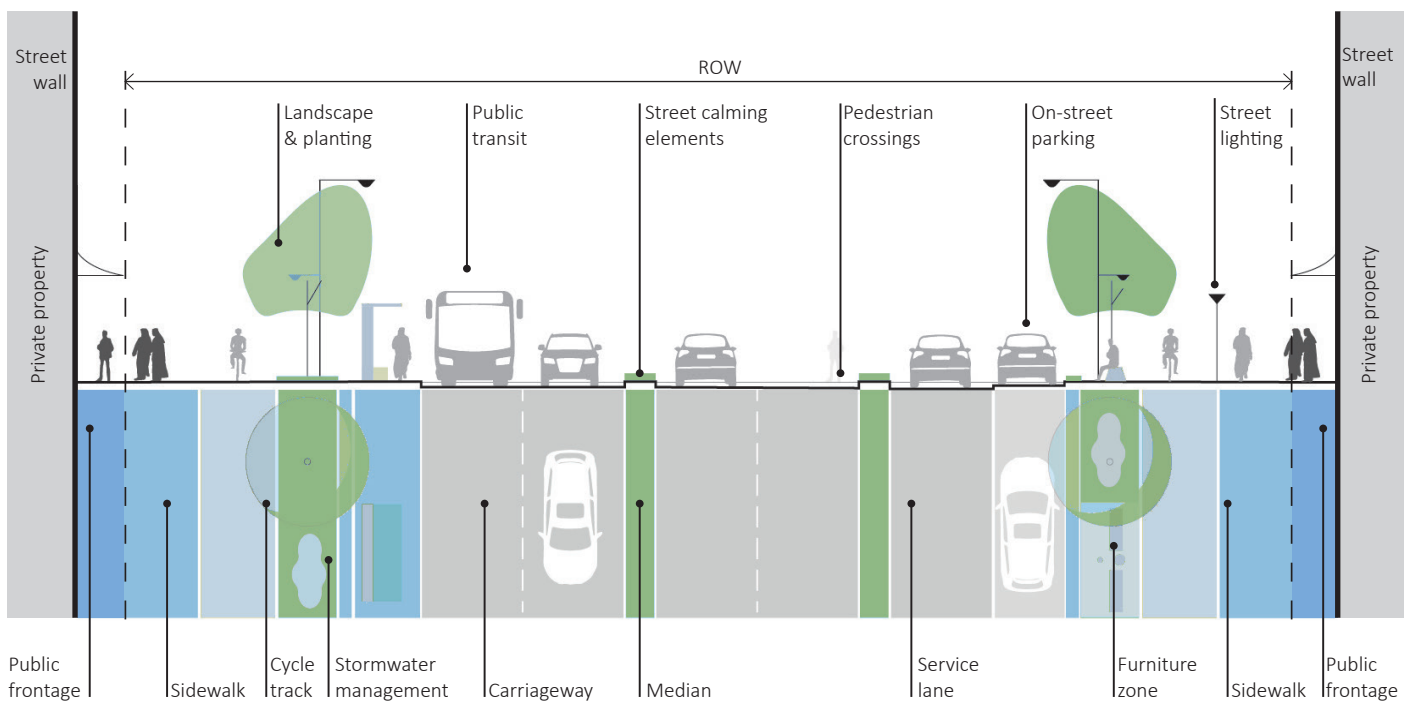
#### 3.2.1 Guidance:

**a.** Streets in the Aseer urban areas need to be designed and operated with the overall objective of enabling safe access for all users in the community. People of all ages and abilities should be able to move along and across streets in regardless of how they are traveling.

**b.** Street classification should correspond to the amount of public life expected in the public realm and enhance the relationship of the street with the landscape.



**Figure 47** AUDC encourages reversing the pyramid of users priority in street design considerations



**Figure 48** Typical design elements of a complete street to be considered

### 3.3 Street Hierarchy and Design Templates

The AUDC identifies the following hierarchy of roads and streets in Aseer urban areas, broad recommendations for complete streets, and minimum required standards:

#### Main Access Corridors

- Widest city streets with regional significance that function as the entry gateways to the city. Designed to serve through-traffic, these streets form barriers to cross-street traffic. Crossing aids are needed to minimize segregation. Roadside activity should be properly buffered.

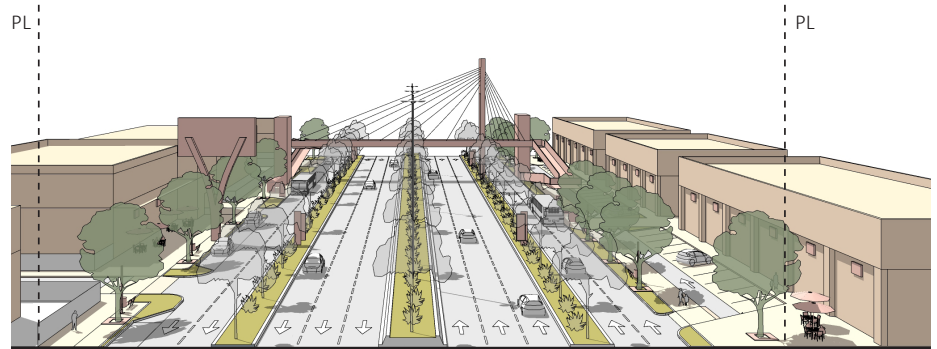


Figure 49 Recommended main access corridor organization

#### Arterial Road

- Connect different neighborhoods and allow access to key destinations and city services. Although they primarily promote faster mobility, they should accommodate for all users, supporting a higher volume of pedestrians and road side activity.



Figure 50 Recommended arterial road organization

#### Collector Road

- Neighborhood main streets which offer a series of walkable destinations and future transit stops. Traffic speeds should be limited to accommodate for the needs of multiple users, prioritizing key transit routes and cycle lanes where possible.

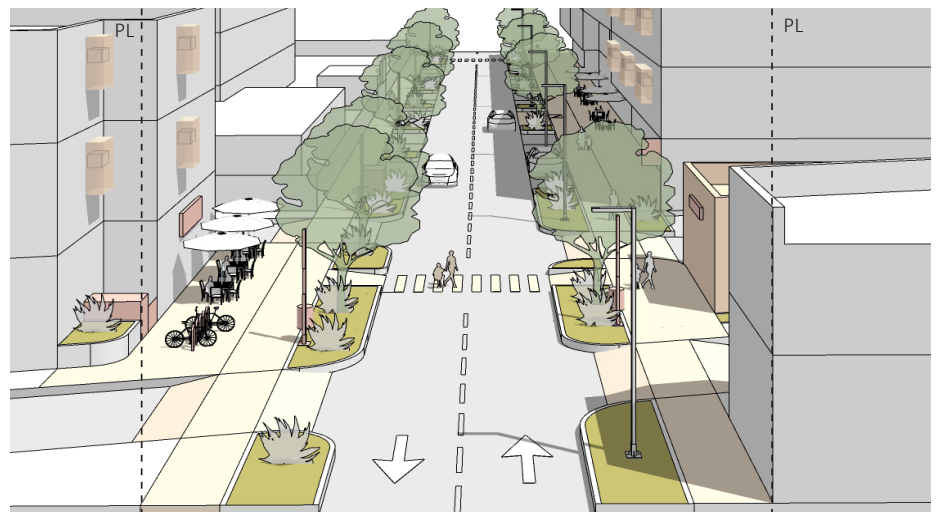


Figure 51 Recommended collector road organization

### Local Road

- Provide access to residential units, schools and some local stores within neighborhoods. They could be utilized as places for play and leisure, requiring slower speeds and higher safety standards for pedestrians and cyclists.



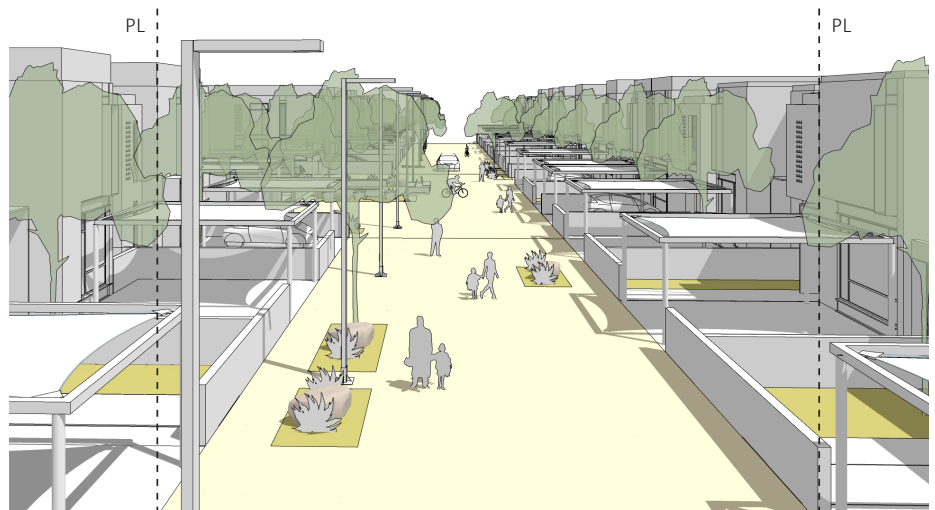
**Figure 52** Recommended local road organization

### Shared Street

- The concept of the Living Street follows 'Shared Space' principles in order to reduce car speeds by not designating space exclusively for cars. Designated car lanes would be underutilized in these short residential streets and result in high speeds.
- The concept is practically suitable for local street arrangements in heritage districts and for new updated local street in residential development.



**Figure 53** Recommended shared street organization



**Figure 54** Recommended shared street organization for new developments

### 3.3.1 Main Access Corridors Guidance:

#### a. Public Open Space / RoW

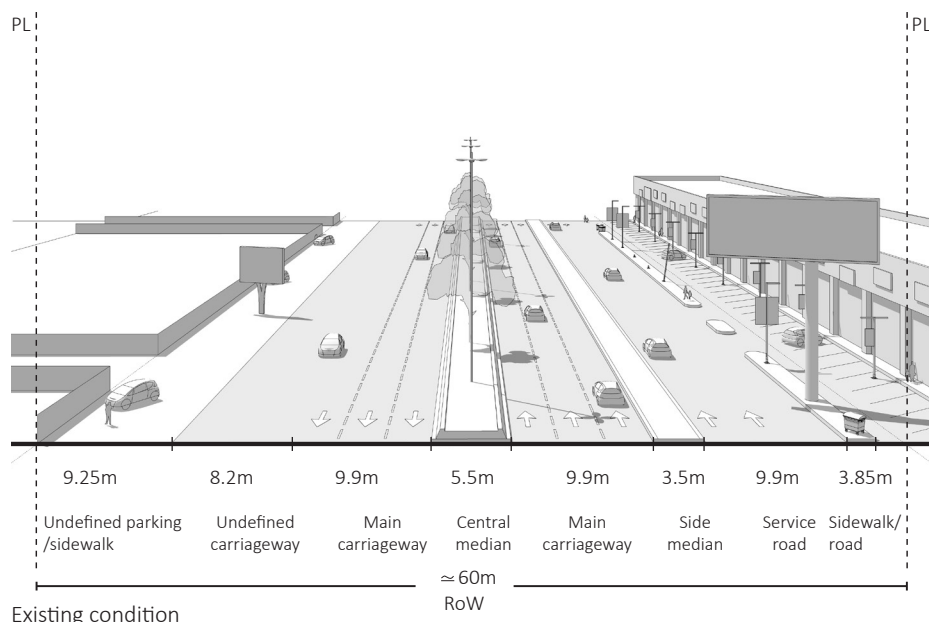
- Create a continuous, representative and unique landscape treatment.
- Define fast-moving and slow-moving zones.
- Provide an attractive and appropriate public realm at road edges.
- Provide for last-mile connectivity and comfortable, safe and visually pleasing pedestrian bridges.
- Define adequate signage size and location for fast-moving and slow-moving zones.
- Provide furniture zones with human-scale street lighting.
- Provide for parallel parking and bus bulbs when needed.

#### b. Private Plot / Setback

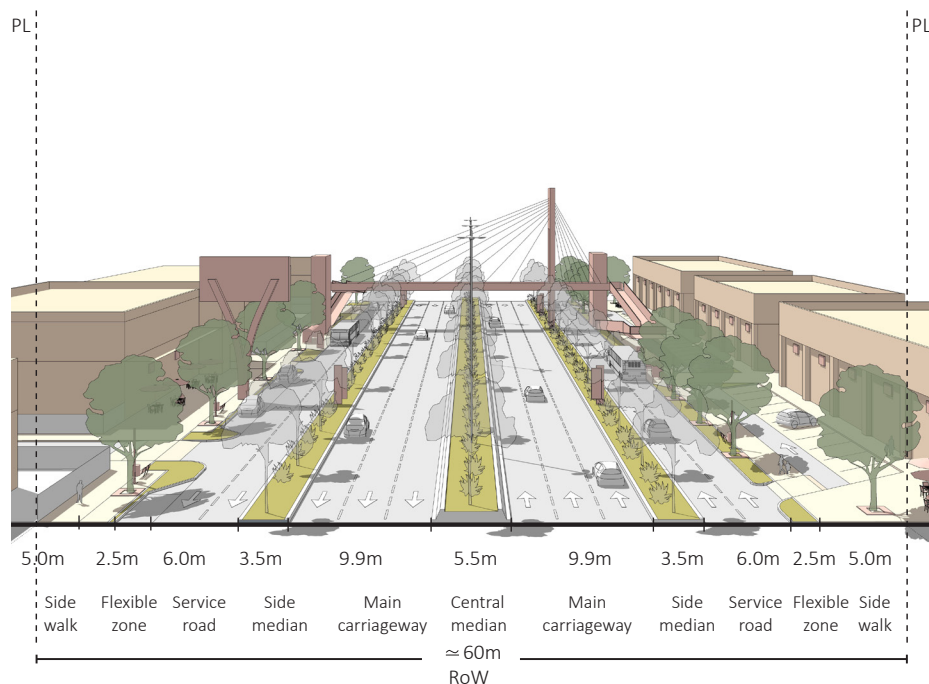
- Promote active edges and public / semi-public pedestrian uses.
- At grade private parking preferably located at the back of the lot or underground.
- Exposed water tanks, satellite dishes and other to be screened from public view.
- Appropriate design of street walls and roof lines (first row buildings).
- Define adequate signage size and location.



Example of main access corridor in Abha city



Existing condition



Complete street organization with minimum standards



### 3.3.2 Arterial Road Type A Guidance:

#### a. Public Open Space / RoW

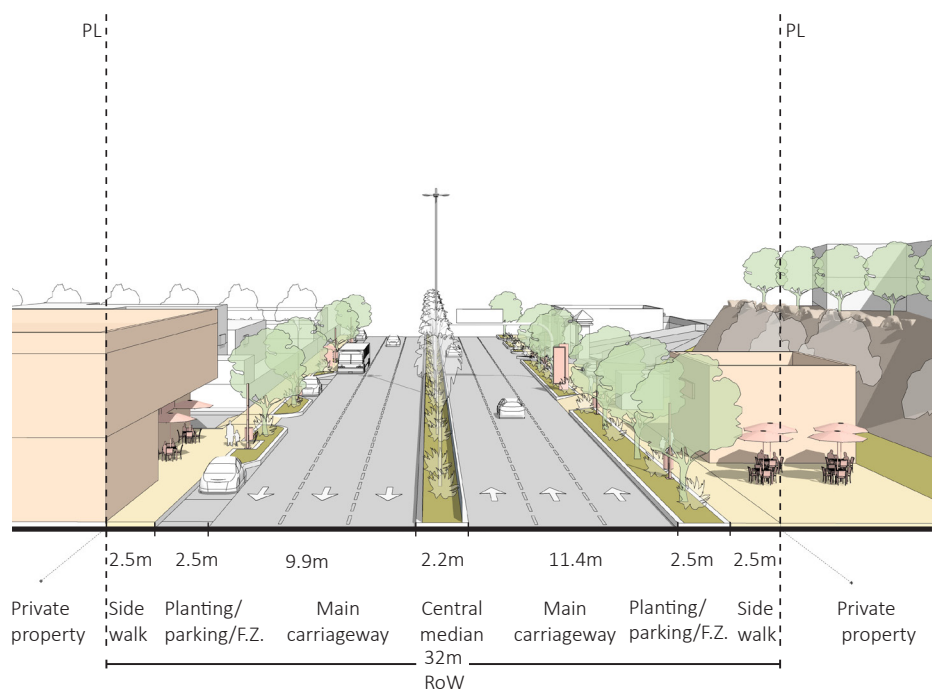
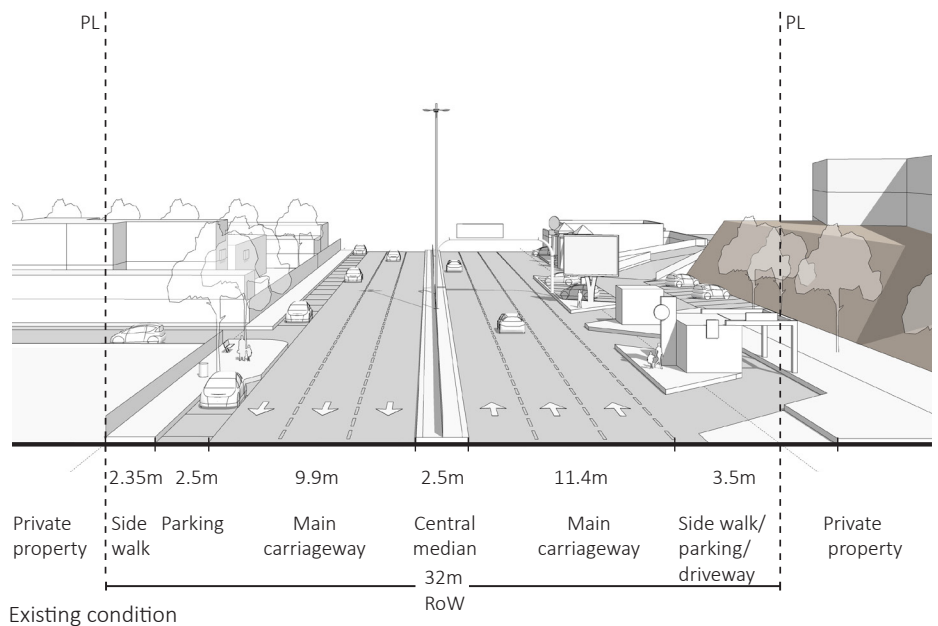
- Create a continuous, representative and unique landscape treatment.
- Provide an attractive and appropriate public realm at road edges.
- Provide for last-mile connectivity and comfortable and signaled at grade pedestrians crossings.
- Define adequate signage size and location.
- Provide furniture zones and locate street lighting and planting so not to disturb pedestrian movement.
- Provide for parallel parking and bus bulbs when needed.
- Possibility of having either one exclusive bus lane or a flexible central lane.

#### b. Private Plot / Setback

- Promote active edges and public / semi-public pedestrian uses.
- At grade private parking preferably located at the back of the lot or underground.
- Exposed water tanks, satellite dishes and other to be screened.
- Appropriate design of street walls and roof lines (first row buildings).
- Define adequate signage size and location.
- Drive-through uses should not be allowed.
- Screen sloped development with planting buffers.



Ring road in Abha city



### 3.3.3 Arterial Road Type B Guidance:

#### a. Public Open Space / RoW

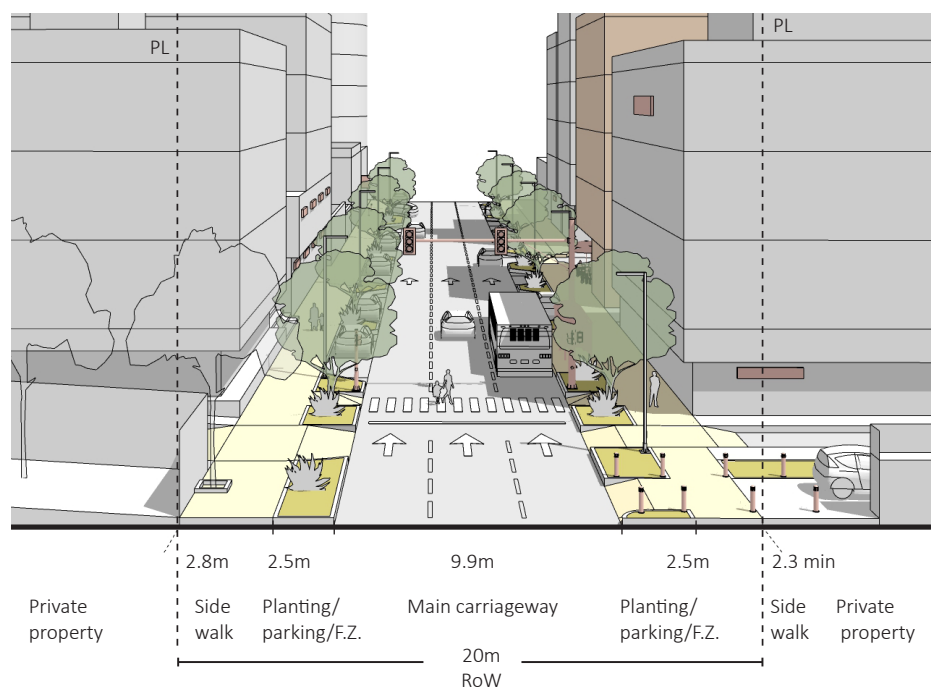
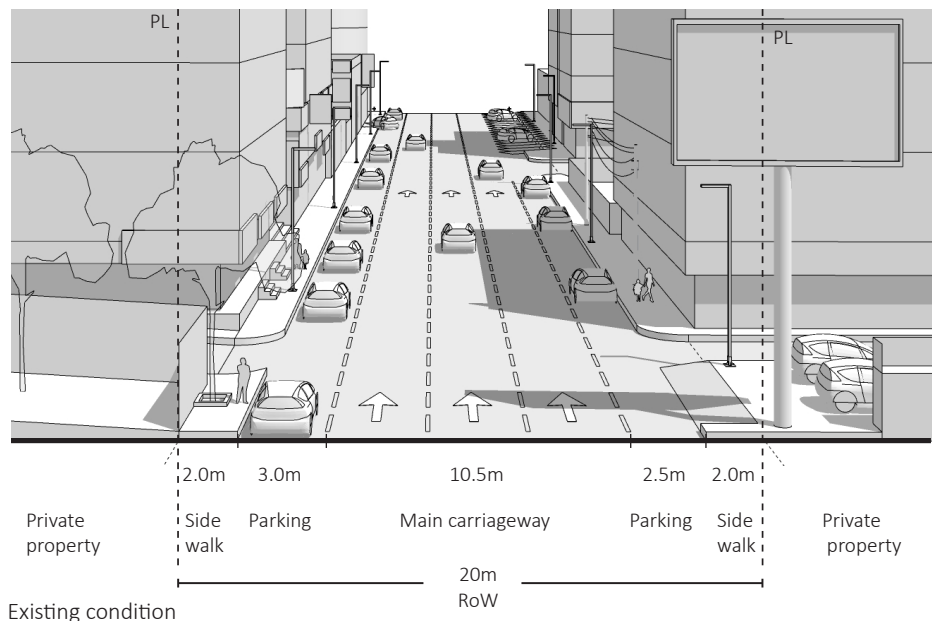
- Create a continuous, representative and unique landscape treatment.
- Provide an attractive and appropriate public realm at road edges.
- Provide for last-mile connectivity and comfortable and signaled at grade pedestrian crossings.
- Define adequate signage size and location.
- Provide furniture zones and locate street lighting and planting so not to disturb pedestrian movement.
- Provide for parallel parking and bus bulbs when needed.
- Possibility of having either one exclusive bus lane or a flexible central lane.

#### b. Private Plot / Setback

- Promote active edges and public / semi-public pedestrian uses.
- At grade private parking preferably located at the back of the lot or underground.
- Exposed water tanks, satellite dishes and other to be screened.
- Appropriate design of street walls and roof lines (first row buildings).
- Define adequate signage size and location.



Example of arterial road in Abha city



### 3.3.4 Collector Road Guidance:

#### a. Public Open Space / RoW

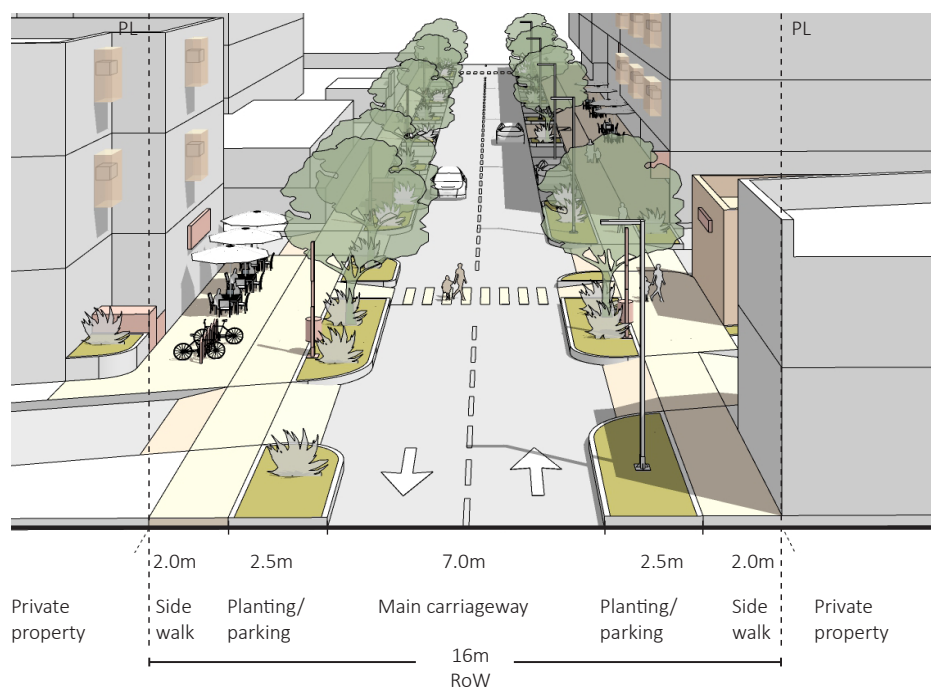
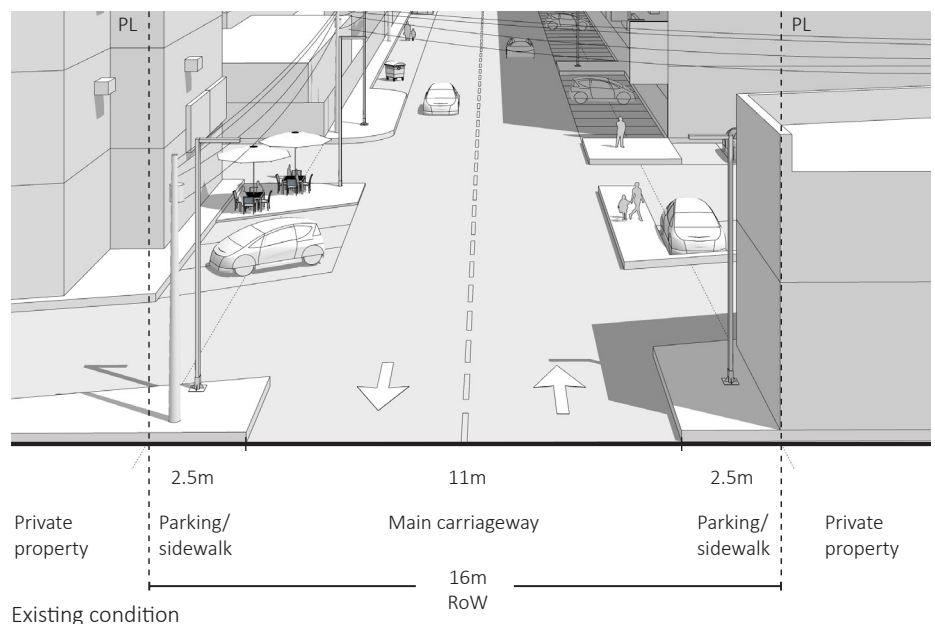
- Create a continuous landscape treatment.
- Provide an attractive and appropriate public realm at road edges.
- Provide for last-mile connectivity and comfortable at grade pedestrians crossings.
- Define adequate signage size and location.
- Provide furniture zones with human-scale street lighting.
- Provide for parallel parking when needed.

#### b. Private Plot / Setback

- At grade private parking preferably located at the back of the lot or underground.
- Exposed water tanks, satellite dishes and other to be screened.
- Appropriate design of street walls and roof lines (first row buildings).
- Define adequate signage size and location.



Example of collector road in Abha city



### 3.3.5 Local Road Guidance:

#### a. Public Open Space / RoW

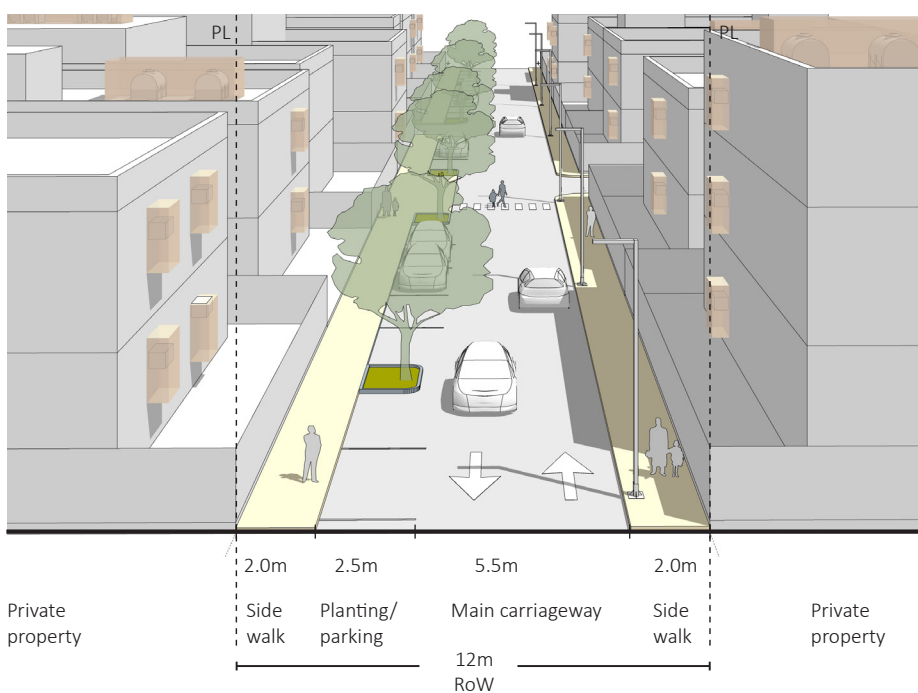
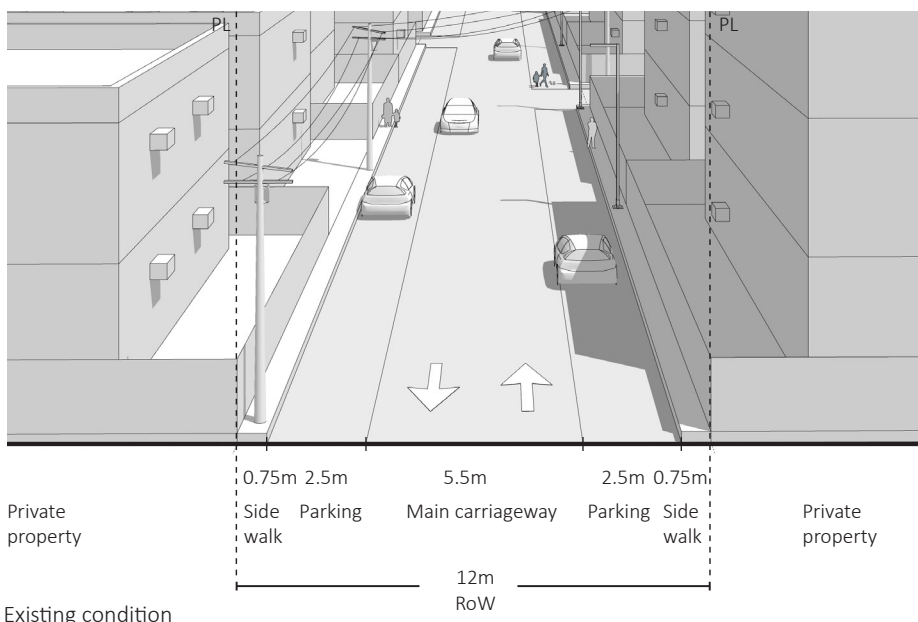
- Create a continuous landscape treatment.
- Provide an appropriate public realm at street edges.
- Provide for comfortable at grade pedestrian crossings.
- Provide for planting on one side of the road edge and street lighting on the other.
- Provide for parallel parking when needed on one side of the roads.

#### b. Private Plot / Setback

- Exposed water tanks, satellite dishes and other equipments to be screened.
- Appropriate design of street walls and roof lines (first row buildings).



Example of local road in Abha city



### 3.3.6 Shared Street Guidance:

#### a. Public Open Space / RoW Intent

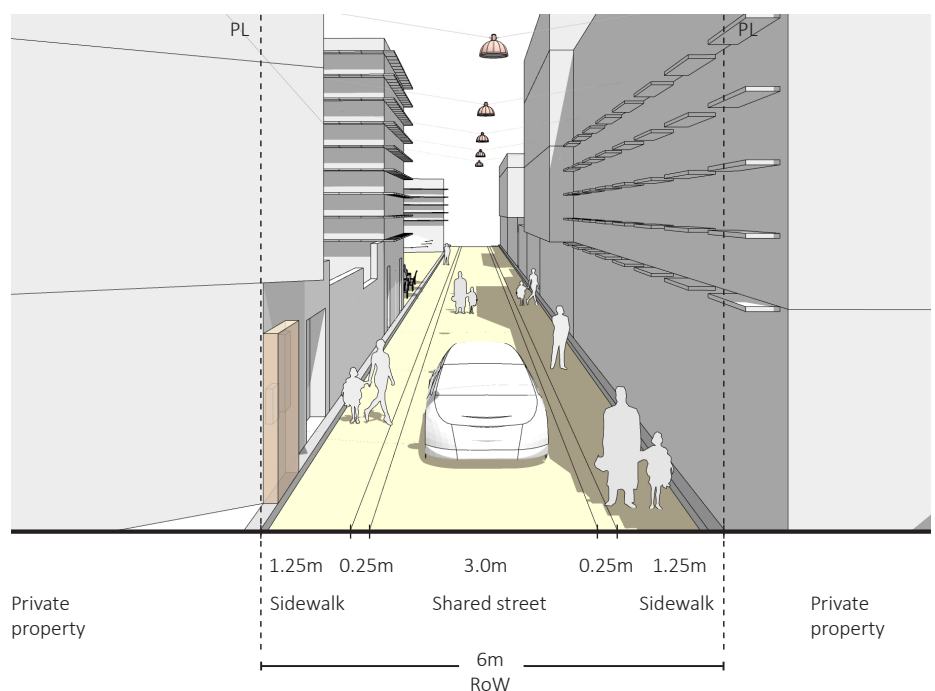
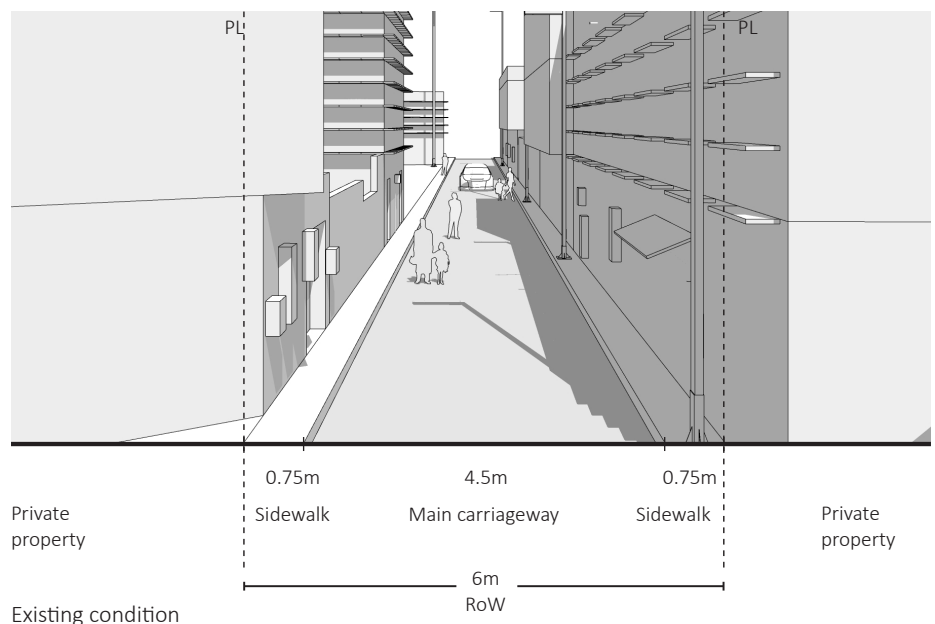
- Create a continuous landscape treatment.
- Provide an attractive and appropriate public realm at road edges.
- Define adequate signage size and location.
- Provide furniture zones with human-scale street lighting.
- Provide for parallel parking when needed.

#### b. Private Plot / Setback Intent

- At grade private parking preferably located at the back of the lot or underground.
- Exposed water tanks, satellite dishes and other to be screened.
- Appropriate design of street walls and roof lines (first row buildings).
- Define adequate signage size and location.



Example of local road in Abha city



### 3.3.7 Shared Street Guidance - New Residential Developments:

#### a. Public Open Space / RoW Intent

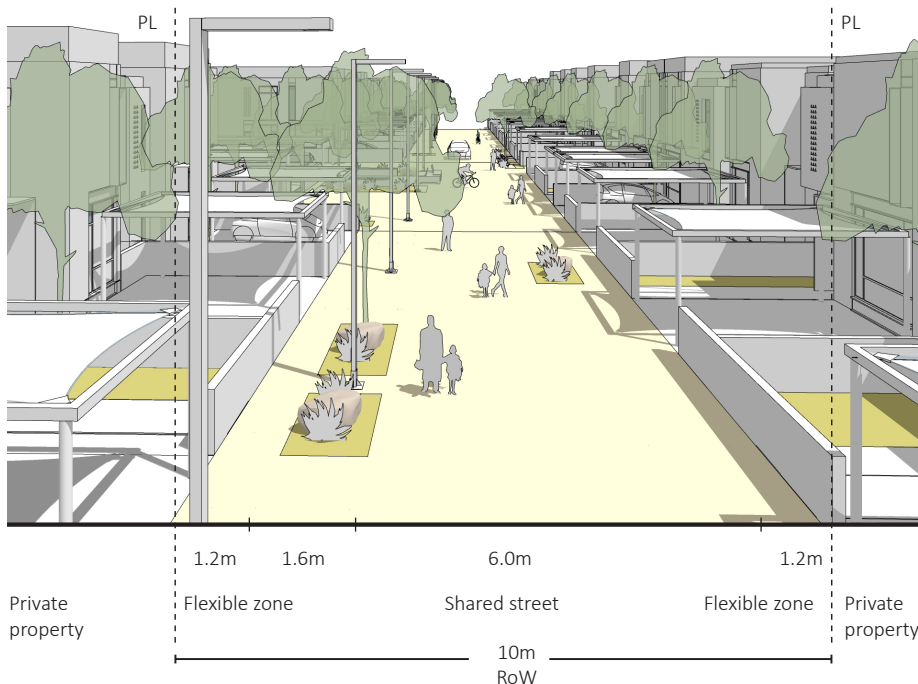
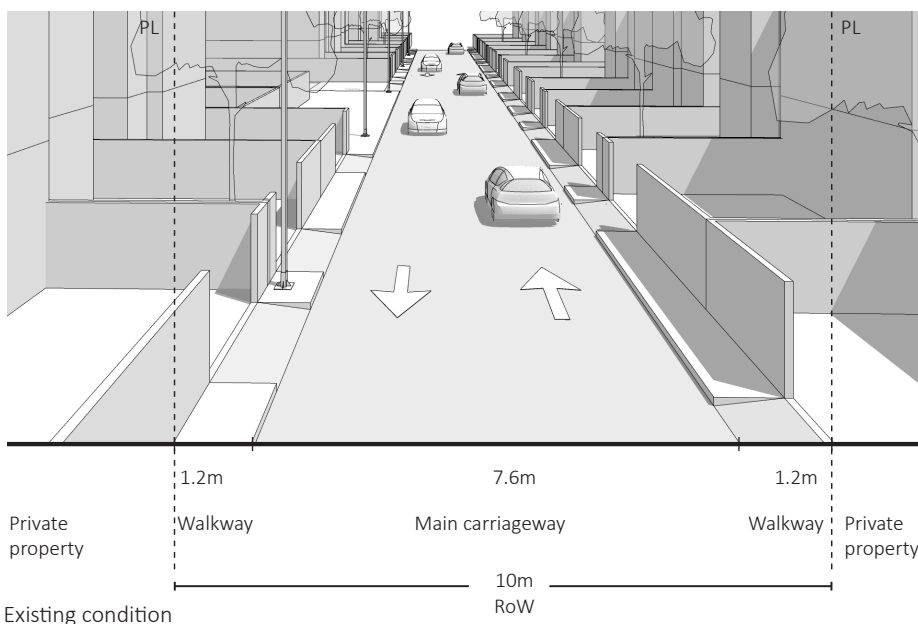
- Create a continuous landscape treatment.
- Provide an attractive and appropriate public realm at road edges.
- Define adequate signage size and location.
- Provide furniture zones with human-scale street lighting.

#### b. Private Plot / Setback Intent

- At grade private parking preferably located at the back of the lot or underground or integrated within development.
- Exposed water tanks, satellite dishes and other to be screened.
- Appropriate design of street walls and roof lines (first row buildings).



Example of local / shared road in Abha city



## 3.4 Street Design Elements

### 3.4.1 Sidewalks

#### 3.4.1.1 Guidance:

In general, all pedestrian sidewalks should be designed following the below spatial arrangement.

#### a. Pedestrian Through-Zone

The pedestrian through-zone is the primary, accessible walking area that runs parallel to the street and must provide continuous connections from the public right-of-way to building and property entry points, parking areas, and transit stops.

#### b. Frontage Zone

The frontage zone is the section of the sidewalk located immediately adjacent to the building frontage or property boundary. This zone effectively functions as an extension of the building and may spread into the public right-of-way, for example with entryways and doors where people come and go.

#### c. Street Furniture/Buffer Zone

The street furniture/buffer zone is defined as the section of the sidewalk between the curb and the pedestrian through-zone that provides separation and protection from moving vehicular traffic. It provides space for the placement and organization of various street elements, such as landscaping, street furniture, and utilities (both above and below ground).

#### d. Flexible Zone/Parking Zone

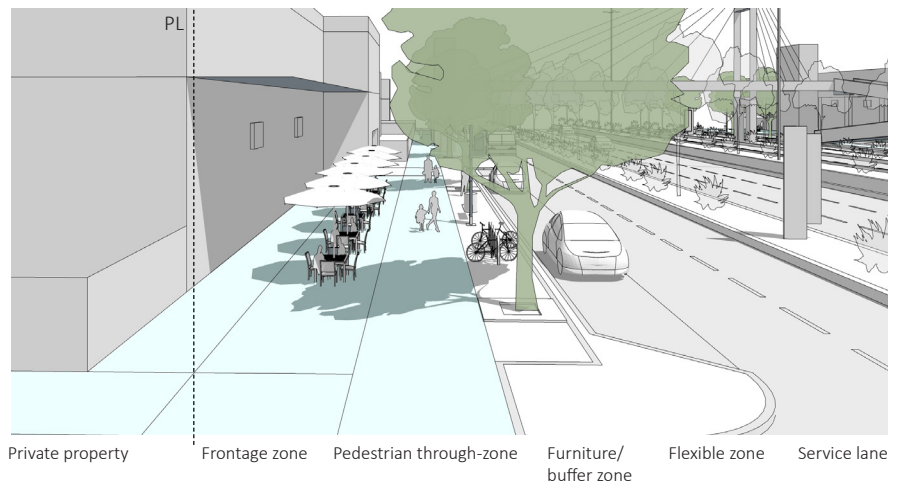
A section of RoW which can be used as landscaped sidewalk or for parking/vehicular movement based upon the requirements and context of a street segment.

#### 3.4.1.2 Standards:

a. In general, all pedestrian sidewalks shall have typical minimum dimensions of:

- 1.5m wide in residential settings.
- 2m wide within 500m of school sites.
- 2.5m wide within 500 m of activity centers.
- 3m wide in downtown and highly mixed-use commercial areas.

b. Universal accessibility must be achieved.



**Figure 55** Example of correct organization of pedestrian environment for a main access corridor



**Figure 56** Example of correct organization of pedestrian environment for a main access corridor



**Figure 57** Example of correct organization of pedestrian environment along a main access corridor

### 3.4.2 On-Street Parking

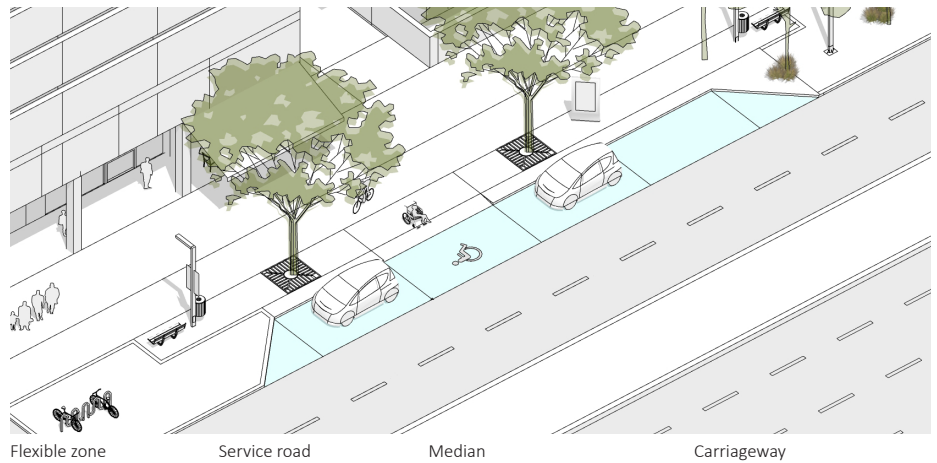
#### 3.4.2.1 Guidance:

- a.** In general, on-street parking should be allocated only after adequate provision of space for pedestrian movement and landscape treatment is provided.
- b.** Parallel parking should be preferred to allow more space for sidewalks and public realm improvements.
- c.** On street parking may be provided on service lanes for convenience.

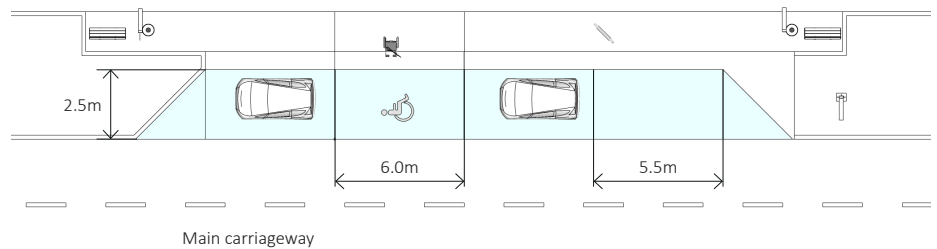
#### 3.4.2.2 Standards:

- a.** The standard parking bay dimensions shall be defined as 2.50m wide and 5.50m long (max. 6.0m).
- b.** Along local streets (two-way 20m streets) parallel parking, angled parking or perpendicular parking may be used as appropriate.
- c.** Continuous, uninterrupted strips of parking to minimize the risk of use as additional lane shall be avoided; tree and shrub planting between parking bays every 3-6 parking bays shall be introduced according to typical designs of segments to provide tree-lined streets and additional shading for adjacent walkways and cycle paths.
- d.** Recommended parking layout shall be:

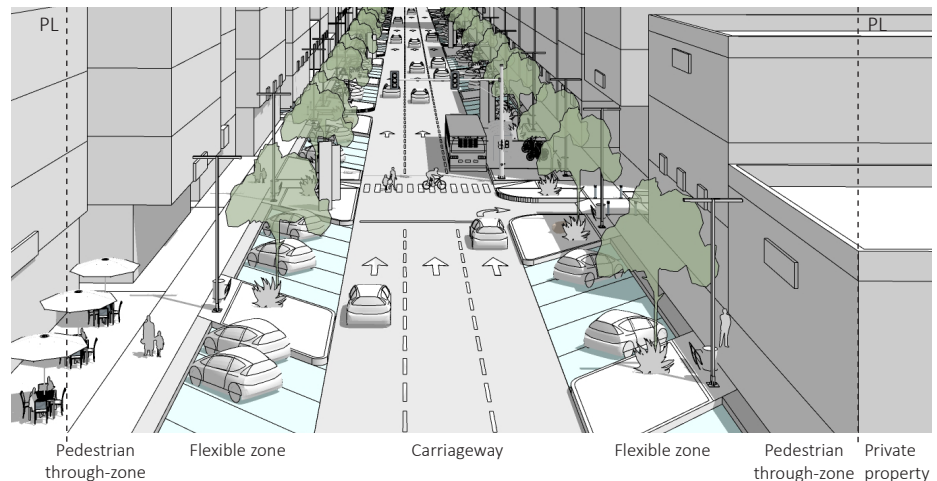
- Parallel spaces - take less space.
- 45-degree angle parking - angled parking increases parking supply and can help calm traffic, however creates poor visibility for drivers.
- Perpendicular parking on two-way streets with min. of 20m increases the pedestrian walkways on one side.



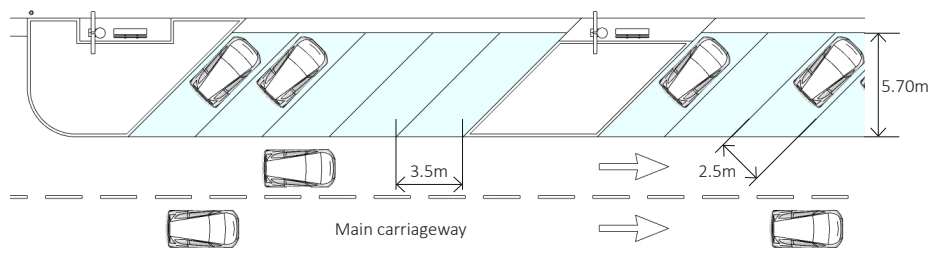
**Figure 58** Example of parallel parking layout



**Figure 59** Standard dimensions of parallel parking



**Figure 60** Example of on-street angled parking layout



**Figure 61** Standard dimensions of 45 degree parking



### 3.4.3 Street Furniture

#### 3.4.3.1 Guidance:

**a.** Generally, street furniture should be placed in the street furniture/ buffer zone as described in the sidewalks section.

**b.** Street furniture design and placement should be consistent through a project and/or road corridor. Uniformity in the design and application of a street furniture palette should contribute to a sense of place and unique identity.

**c. Seating**

- Generally, seating should be located where people are likely to congregate or wait, and also at regular intervals to provide rest points.

**d. Trash Cans and Recycling Bins**

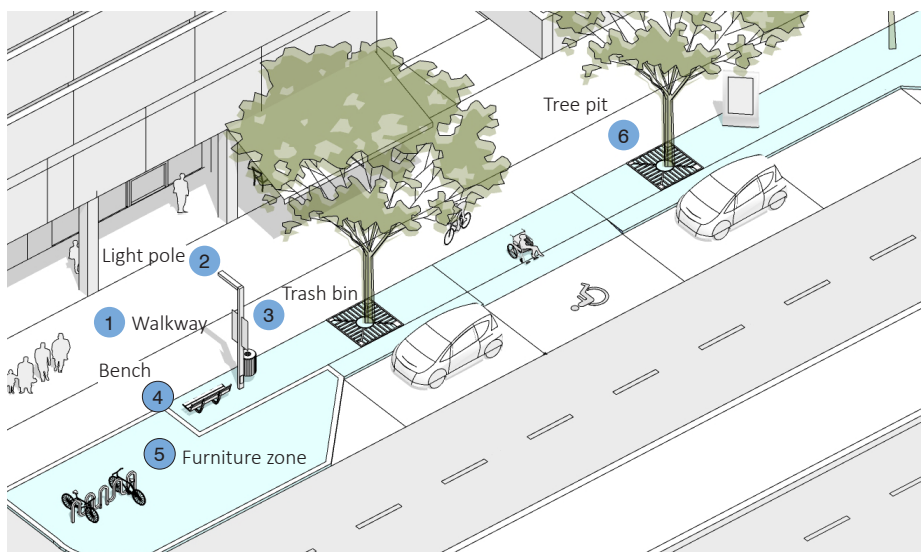
- Should be situated in the street furniture zone of a sidewalk in areas where there is high activity (e.g. street corners, transit stops, public/event spaces).
- They should be clearly visible and identifiable as trash cans/recycling bins.
- They should be provided at regular intervals to ensure use.

**e. Street Lighting**

- Lights should enhance the road markings and lane markings.
- Lighting design should ensure safety and lively activities at public plazas, crossings, intersections, transit stops, isolated areas, or high retaining walls.

**f. Future Public Transit**

- Transit design should also be a component of roadway width design. Transit stops and right-of-way designations may change how the street looks and functions.
- Future transit stops should be clearly marked with appropriate signage and furniture.



**Figure 62** Example of a correct street furniture placement in furniture/buffer zones

Street Type	Light Pole Height (m)	Spacing (m)
Sidewalk or Cycle Track (<5m width)	4.5- 6.0	12.0- 16.0
Local Street (<12m width)	8.0- 10.0	25.0- 27.0
Arterial or Collector Street (>12m width)	10.0- 12.0	30.0- 33.0

**Figure 63** Table showing recommended standards for height and spacing for light poles in different contexts



**Figure 64** Example of appropriate configuration of street furniture and street light

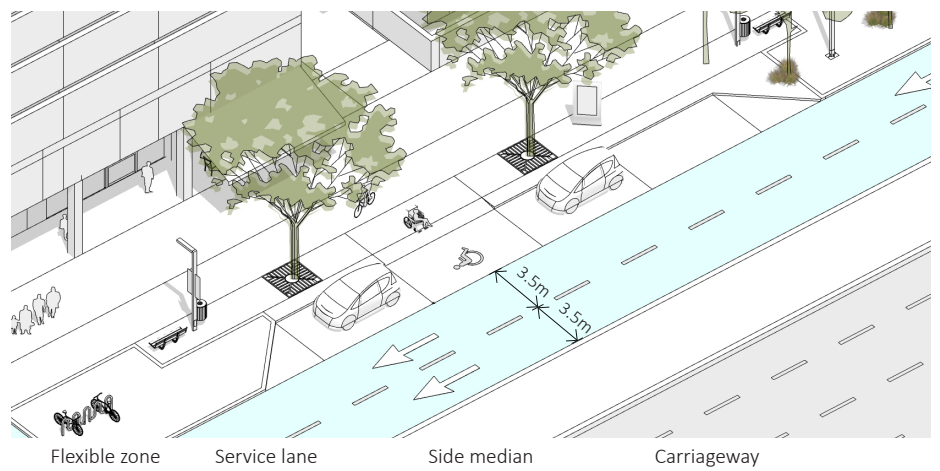
### 3.4.4 Service Lanes

#### 3.4.4.1 Guidance:

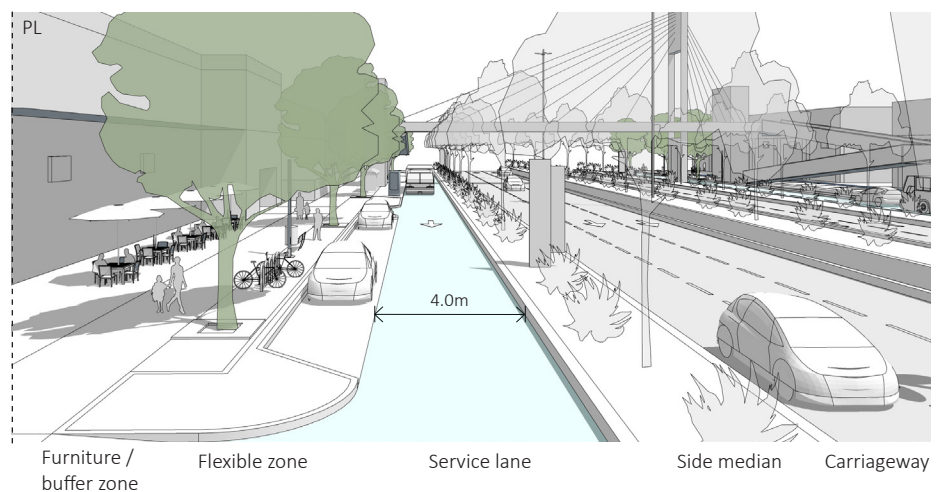
- a.** The service road predominantly serves for access and service. This means that all main turning movements should be possible from the main carriageway at all at grade junctions. Turning via service roads should be limited to minor junctions.
- b.** Width of the service lanes should slow down / discourage speeding traffic to ensure safety and safe access to private plots.
- c.** Service lanes should be provided in consideration to the number and frequency of access and allowing continuous pedestrian traffic flow.
- d.** Service lanes should allow continuous pedestrian and cycle movement by providing raised entry and exit points.
- e.** Service road should not be continues for longer sections and should be discontinuous at main junctions.

#### 3.4.4.2 Standards:

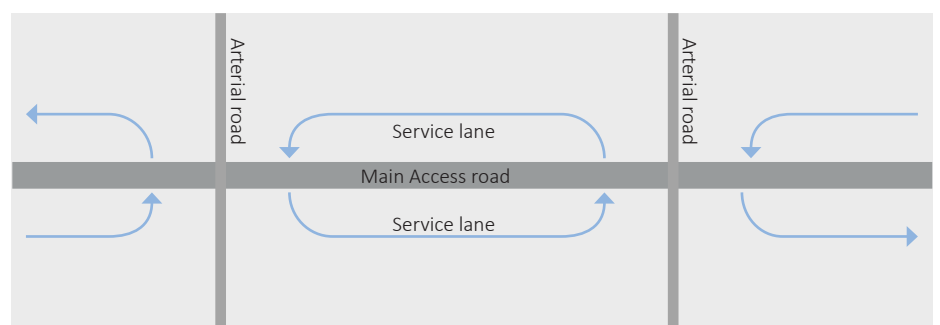
- a.** Service roads shall provide a maximum of 1 to 2 lanes, except at grade-separated junctions where service roads may be combined with ramps to facilitate turning movements.



**Figure 65** Example of appropriate configuration of double service lane for main access road



**Figure 66** Example of appropriate configuration of single service lane for main access road



**Figure 67** Example of integration of service lanes along main access road

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# 4 | PLACEMAKING & LAND SUBDIVISION

# 4 Placemaking & Land Subdivision

## 4.1 Overall Objectives

Future development should follow AUDC overall placemaking objectives to positively contributing to shaping Aseer region’s urban form by enhancing its sense of place, legibility and its contextual features.

The placemaking objectives are:

- Protect natural and cultural assets and minimize environmental impact.
- Conserve and protect agricultural land.
- Provide adequate buffers and landscape treatment between different land uses.
- Provide a clear hierarchy of movement network, places and gateways.
- Improve accessibility to open spaces by providing links, hierarchy and variety.
- Prioritize mixed-use development, particularly clustered around social hubs and activity centers.
- Adopt strategically higher density, particularly along future transit, and a more compact, walkable and context responsive urban form.
- Promote sustainable neighborhood planning for urban areas with a typical density of 60 person/ hectare and new urban centralities along main transport corridors.
- Create urban characters in relationship with context, traditional patterns and forms, density, building setting, massing and public realm to establish a sense of belonging.
- Enhance corridors with high quality public realm, building edge and frontage treatment.



Figure 68 Placemaking principles for Aseer region

## 4.2 Urban Character and Corridor Types

- To properly apply the placemaking objectives described in section 4.1, the AUDC identifies different *urban characters* – from urban to rural, and different *corridors types* – from main access to local.
- Specific provisions are given for each type as well as for their intended interrelation. In section 4.3 urban character and corridor types are placed in relationship to the proposed development standards by land use, to showcase the intended applicability.

### Urban Character

- The AUDC describes an urban character zone as a typological area with similar attributes in terms of natural elements, history, heritage, land use, urban morphology and density. This may be comprising of multiple neighborhoods clustered together. The AUDC identifies the following urban character zones:
  - Urban Center
  - Old District
  - New District
  - Rural / Hillside District
- The guidelines presented in the following section provide a framework on how the different zones should look, function and feel, while building a stronger image of the city. The guidelines address environmental considerations, land uses, circulation and connectivity, built-form and public realm, enabling a seamless transition from urban to rural areas yet allowing legibility and sense of belonging.

### Corridors

- The urban design quality of the movement corridors in Aseer's urban areas are also an important part of the placemaking exercise. The AUDC identifies the following urban corridors:
  - Main Access
  - Arterial
  - Collector
  - Local
- The guidelines in the following section provide a framework to enhance the spatial and visual quality of the corridors through streetscape and public realm treatment, land use and building frontages considerations.

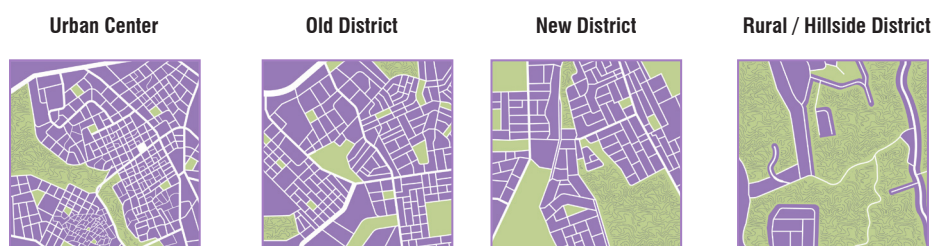


Figure 69 Urban character area classification

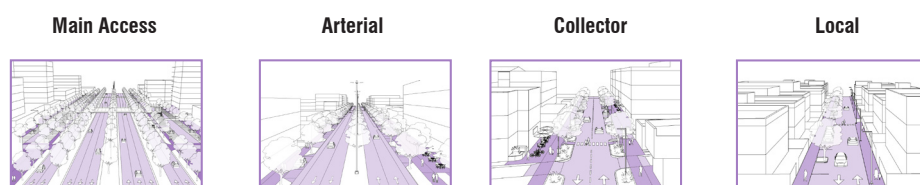


Figure 70 Movement corridor classification

## 4.2.1 Urban Character Zone Guidance

The 4 typical urban characters zones identified by AUDC are:

- Urban Center
- Old District
- New District
- Rural / Hillside District

These different zones are characterized based on layout and massing, building placement, frontage type and character of public realm.



### a. Urban Centers

Urban centers are generally the developments shaped over time comprising and surrounding old historic settlement core and are characterized by: moderate to high density; a variety of neighborhoods and uses; civic functions; mixed-use buildings accommodating residential, offices and retail; fine and organic urban grid with small to medium block sizes, highly walkable; provide opportunities for infill development and re-development.

### b. Old Districts

Old Districts were developed before the year 2000 and are characterized by: moderate density; primarily residential uses with some mix of uses; less dense urban grid, medium sized blocks, small limited setbacks with opportunities for infill development and re-development.

<b>Layout and Massing</b>	<ul style="list-style-type: none"> <li>• Massing of <b>2 - 5</b> stories should be maintained.</li> <li>• Mid-block passage required for block longer then <b>60m</b>.</li> <li>• Tall buildings only as landmarks; not to block view corridors.</li> <li>• Maintain and reinforce current development pattern with a mosaic of highly walkable organic grid.</li> </ul>
<b>Building Placement</b>	<ul style="list-style-type: none"> <li>• Consistent/no setbacks with buildings oriented to street.</li> </ul>
<b>Frontage type</b>	<ul style="list-style-type: none"> <li>• Frontage break every <b>40m</b>.</li> <li>• Active and attractive frontages with stores, shopfronts, galleries.</li> </ul>
<b>Public realm and Landscape</b>	<ul style="list-style-type: none"> <li>• Continuous shading to support walkability and comfort with integration of landscape and shading structures within streets, plazas and parks.</li> </ul>

<b>Layout and Massing</b>	<ul style="list-style-type: none"> <li>• Massing of <b>2 - 5</b> stories should be maintained.</li> <li>• Mid-block passage required for block longer then <b>60m</b>.</li> <li>• Tall buildings may be allowed in central activity hubs as landmarks.</li> <li>• Highly walkable neighborhoods and open space network responding to the existing development pattern.</li> </ul>
<b>Building Placement</b>	<ul style="list-style-type: none"> <li>• Consistent/limited setbacks with buildings defining street wall.</li> </ul>
<b>Frontage type</b>	<ul style="list-style-type: none"> <li>• Frontage break every <b>40m</b>.</li> <li>• Active and attractive frontages with stores, shopfronts, galleries.</li> </ul>
<b>Public realm and Landscape</b>	<ul style="list-style-type: none"> <li>• Continuous shading to support walkability and comfort with integration of landscape and shading structures within streets, plazas and parks.</li> </ul>

Figure 71 Urban center

Figure 72 Old district





**c. New Districts**

New Districts were developed after the year 2000, or constitute new urban expansion within the UGB and are characterized by: medium to low densities; primarily residential uses with some clusters of commercial and mixed-uses; less dense, medium to large blocks, and more-car driven urban grid with opportunities for green fill development.



**d. Rural / New Hillside District**

New Hill Side / Rural Districts were developed after the year 2000 and are characterized by: low density development in the outskirts of urban areas, typically on the hillsides; primarily residential uses with some clusters of commercial and mixed-uses; medium to large blocks with generous setbacks, less dense and more-car driven organic grid with opportunities for green fill development.

<b>Layout and Massing</b>	<ul style="list-style-type: none"> <li>• Massing of <b>2 - 5</b> stories should be maintained.</li> <li>• Mid-block passage required for block longer then <b>60m</b>.</li> <li>• Tall buildings only as landmarks; not to block view corridors.</li> <li>• New development pattern responding to the landscape character, adjacent development and promoting walkability.</li> </ul>
<b>Building Placement</b>	<ul style="list-style-type: none"> <li>• Shallow to medium consistent front and side setbacks, landscape edge should define the street wall.</li> </ul>
<b>Frontage type</b>	<ul style="list-style-type: none"> <li>• Frontage break every <b>40m</b>.</li> <li>• Active ground floor use in mixed-use centers.</li> </ul>
<b>Public realm and Landscape</b>	<ul style="list-style-type: none"> <li>• Shade trees lining wide sidewalks, street fronts, building setbacks and open spaces.</li> </ul>

<b>Layout and Massing</b>	<ul style="list-style-type: none"> <li>• Massing of <b>1-3</b> stories should be maintained.</li> <li>• Mid-block passage required for block longer then <b>60m</b>.</li> <li>• Tall structures not allowed.</li> <li>• Organic development pattern to respond to natural features and landscape character, proper treatment of slopes to be ensured.</li> </ul>
<b>Building Placement</b>	<ul style="list-style-type: none"> <li>• Deep and variable front and side setbacks, landscape edge and natural vegetation buffers should define the street wall.</li> </ul>
<b>Frontage type</b>	<ul style="list-style-type: none"> <li>• Frontage break every <b>30m</b>.</li> <li>• Active and attractive frontages with stores and shopfronts.</li> </ul>
<b>Public realm and Landscape</b>	<ul style="list-style-type: none"> <li>• Shade trees lining wide sidewalks, street fronts, building setbacks and open spaces.</li> </ul>

Figure 73 New district

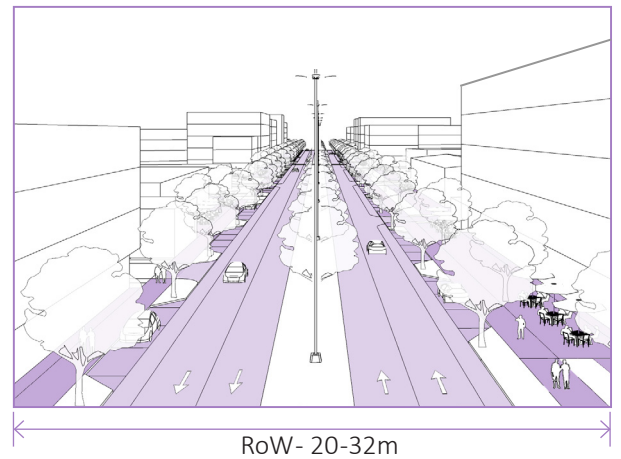
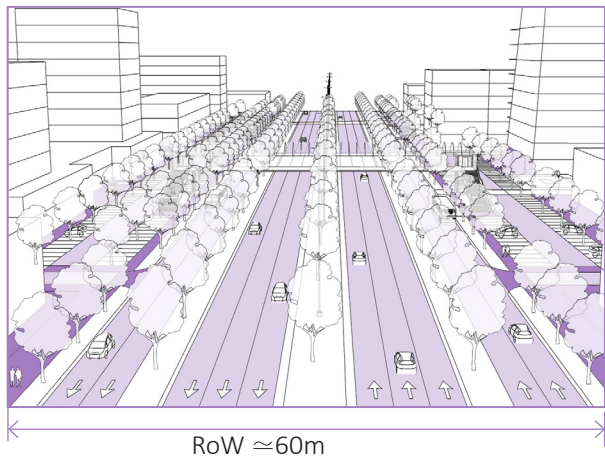
Figure 74 Rural / hillside district

## 4.2.2 Corridors Guidance

Based on location, connectivity, and MoT designation, the AUDC defines the following types of movement corridors:

- Main Access
- Arterial
- Collector
- Local

These corridors are characterized based on RoW, streetscape, public realm, land uses and building considerations, for the first development blocks on both sides.



### a. Main Access Corridors

- Widest city streets with regional significance that function as the entry gateways. Designed to serve through-traffic, these corridors form barriers to cross-street traffic. Crossing aids are needed to minimize segregation. Roadside activity should be properly buffered and served by service lanes. Main access corridors can be further classified as priority corridors and scenic corridors.

### b. Arterial Road

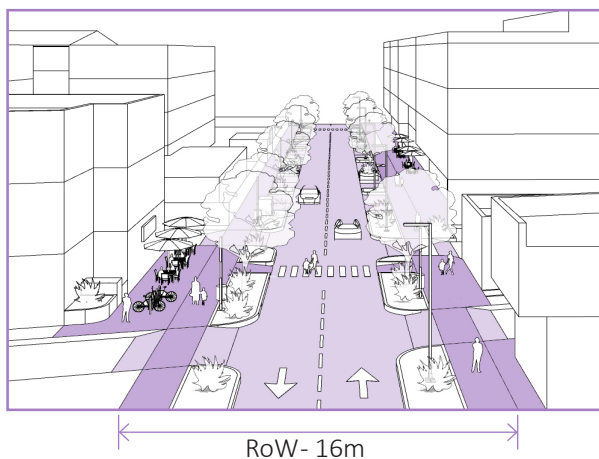
- Corridors connecting different neighborhoods, ring roads, and allowing access to key destinations and city services. Although they primarily promote faster mobility, they should accommodate for all users, supporting a higher volume of pedestrians and road side activity. Attractive public realm and active ground floor uses are promoted.

<b>RoW streetscape and Public Realm</b>	<ul style="list-style-type: none"> <li>• Urban centers: min. <b>5m</b> public realm on either side.</li> <li>• Suburban/rural/scenic areas: min. <b>20m</b> buffer along each side.</li> <li>• Highly contextual landscape treatment for medians, buffers and public realm.</li> </ul>
<b>Land Uses</b>	<ul style="list-style-type: none"> <li>• High density mixed-use commercial in future transit nodes, commercial, mixed use commercial, civic uses, light industrial only in industrial zones.</li> </ul>
<b>Building Considerations</b>	<ul style="list-style-type: none"> <li>• Consistent setback of min. <b>10m</b> with flexible landscape zone.</li> <li>• Parking: Preferably at side/rear of plot or underground. Max. <b>1 bay</b> in front with landscape buffer.</li> <li>• Consistent street wall edge at max. <b>20m</b> setback line.</li> <li>• Minimum <b>2 story</b> or <b>8m</b> height for street frontage.</li> <li>• Max. <b>60m</b> height ( in transit nodes).</li> <li>• No compound wall/fence allowed.</li> </ul>

<b>RoW streetscape and Public Realm</b>	<ul style="list-style-type: none"> <li>• Urban centers: min. <b>3m</b> public realm on either side.</li> <li>• On-street parallel parking facilities and drop-off should be provided for street retail.</li> </ul>
<b>Land Uses</b>	<ul style="list-style-type: none"> <li>• Mixed-use commercial, mixed-use residential, commercial, civic use, public park, recreational use.</li> <li>• Active ground floor with retail areas for shopping.</li> </ul>
<b>Building Considerations</b>	<ul style="list-style-type: none"> <li>• Consistent street wall at built-to setback line or max. <b>5m</b>.</li> <li>• Consistent street wall edge at built-to setback line in urban centers.</li> <li>• Max. <b>20m</b> height. Minimum <b>2 stories</b> or <b>8m</b> height for street frontage.</li> <li>• Design for entrance canopies, awnings and shading structures for ground floor use should follow AUDC guidelines.</li> <li>• Compound wall/fence not preferred.</li> </ul>

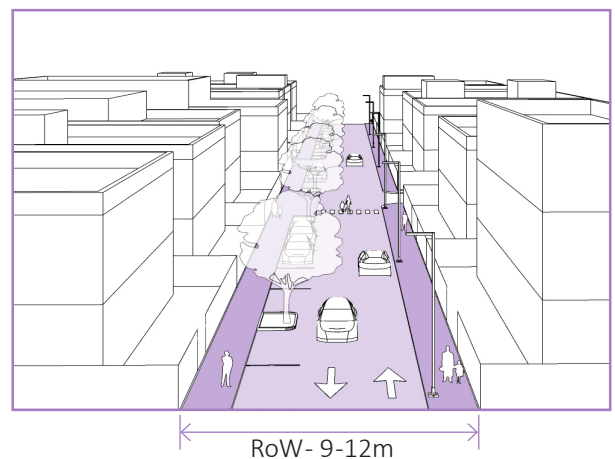
Figure 75 Main access corridor

Figure 76 Arterial street



**c. Collector Road**

- Neighborhood main streets which offer a series of walkable destinations and future transit stops. Traffic speeds should be limited to accommodate for the needs of multiple users, prioritizing key transit routes and cycle lanes where possible.



**d. Local Road**

- Provide access to residential units, schools and some local stores within neighborhoods. They may be utilized as places for play and leisure, requiring slower speeds and higher safety standards for pedestrians and cyclists. Local streets can be further classified as shared streets in heritage / rural districts based on the location.

<b>RoW streetscape and Public Realm</b>	<ul style="list-style-type: none"> <li>• Urban centers: min. <b>2m</b> public realm on either side.</li> <li>• On-street parallel parking facilities and drop-off should be provided for street retail.</li> </ul>
<b>Land Uses</b>	<ul style="list-style-type: none"> <li>• Mixed-use residential, civic use, public park in urban centers; residential, low density residential, civic use, public park in old, new and rural districts.</li> <li>• Active ground floor with retail areas for small scale establishments.</li> </ul>
<b>Building Considerations</b>	<ul style="list-style-type: none"> <li>• Consistent street wall edge at built-to setback line in urban centers.</li> <li>• Max. <b>18m</b> height. min. <b>2 story</b> or <b>8m</b> height for street frontage.</li> <li>• Design for entrance canopies, awnings and shading structures for ground floor use should follow AUDC guidelines.</li> <li>• Compound wall/fence not preferred.</li> </ul>

**Figure 77** Collector street

<b>RoW streetscape and Public Realm</b>	<ul style="list-style-type: none"> <li>• Urban centers: min <b>1.5m</b> public realm on either side. Suburban/rural areas: min. <b>2m</b> public realm along each side.</li> <li>• On-street parallel parking facilities should be provided along one side of the road where necessary.</li> </ul>
<b>Land Uses</b>	<ul style="list-style-type: none"> <li>• Mixed-use residential, civic use, public park in urban centers; residential &amp; low density residential in old, new and rural districts.</li> </ul>
<b>Building Considerations</b>	<ul style="list-style-type: none"> <li>• Consistent setback of min. <b>2m</b> / as specified in development standards.</li> <li>• Max. <b>18m</b> height. Max. <b>10m</b> height in rural areas with low density residential.</li> <li>• Exposed water tanks, satellite dishes and other equipments to be screened.</li> <li>• Appropriate design for compound wall/fence. Height max. <b>3m</b>.</li> </ul>

**Figure 78** Local street

## 4.3 Land Use Guidelines and Development Standards

- The following section provides placemaking guidance and recommended standards for dominant land use types in urban areas. The AUDC classifies land uses into 3 main categories based on the activities, namely:
  - Dominant Uses or Activities
  - Mixed-Use
  - City Landscape

### Dominant Use or Activity Categories

- |  |  |
|--|--|
| <span style="color: yellow;">■</span> Residential Activities                                   | <span style="color: blue;">■</span> Civic / Governmental / Social, institutional, or infrastructure related Activities |
| <span style="color: lightyellow;">■</span> Low Density Residential Activities                  | <span style="color: gray;">■</span> Transportation / Travel or Movement Activities                                     |
| <span style="color: red;">■</span> Commercial / Shopping, Business or Trade Activities         | <span style="color: olive;">■</span> Recreational / Leisure Activities   |
| <span style="color: purple;">■</span> Industrial / Light Industrial / Manufacturing Activities | <span style="color: green;">■</span> Environmental / Natural Resources related Activities                              |

### Mixed of Uses and Activities

- |   |  |
|---|--|
| <span style="color: brown;">■</span> Mixed Use / Commercial (Transit Oriented Corridor) | <span style="color: orange;">■</span> Mixed Use / Residential (Neighborhood)                   |
| <span style="color: orange;">■</span> Mixed Use / Commercial (Corridor)                 | <span style="color: tan;">■</span> Mixed Use / Residential in Heritage District (Neighborhood) |

### City Landscape: Mix of Uses and Activities for Open Spaces

- |   |  |
|---|--|
| <span style="color: teal;">■</span> Public Park / Civic Space                 | <span style="color: lightteal;">■</span> Productive / Agricultural |
| <span style="color: lightteal;">■</span> Open Space / Recreation / Productive |  |

### 4.3.1 Guidance for Dominant Uses and Activities

**a. Residential**

- Promote higher densities and a mix of typologies.
- Reduce single villa development typologies.
- Promote walkable clusters.
- Provide activity centers, socio cultural amenity hubs, and green space within walking distance.
- Integrate with living streets.

**b. Low Density Residential**

- Promote low density residential use in residential/productive landscape areas, where there are infrastructure or environmental constraints that limit development.
- Promote locally serviced suburban neighbourhoods that offer a high level of amenities, socio cultural amenity hubs, and green space within walking distance and a sense of openness.
- Promote development with high quality public realm and set amongst generous landscaping.
- Low rise blending with local character.
- Avoid land use conflict with adjacent ecologically sensitive zone, environmental zone and agricultural land by providing for adequate buffer areas.

**c. Commercial**

**General Commercial**

- High quality contextual design and development.
- Consistent and well landscaped setbacks to contribute to quality of street frontages.
- Promote multi modal access and walkability.

**Office / Neighborhood Commercial**

- Encourage the establishment of commercial business uses in mixed-use districts.
- High quality contextual design and development.
- Consistent and well landscaped setbacks to contribute to quality of street frontages.
- Promote multi modal access and walkability.

**d. Industrial**

**Heavy Industrial**

- Provide appropriate location for industrial uses generating heavy environmental and visual impact and render them compatible for adjacent land uses and natural environment.
- Provide adequate landscape buffer to protect adjacent land uses and environment to mitigate visual impact.



**d. Industrial****Light Industrial**

- Provide for a range of generally small scale production development that can be integrated with any adjacent urban and rural areas.
- Provide adequate landscape buffer to protect adjacent land uses and environment to mitigate visual impact.
- Provide adequate public realm treatment to integrate development in neighborhoods.

**e. Civic / Governmental**

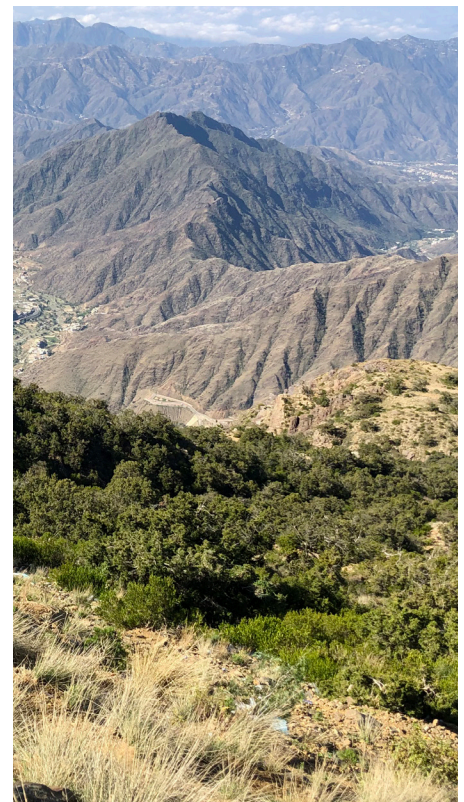
- Accommodate state or local government offices, public facilities like educational facilities, universities, schools, health care complexes, and any other type of public facilities.
- Allow public uses like cultural facilities, museums, libraries, art galleries, convention centers and any other type of cultural facilities enhancing the quality of life.
- High quality contextual design and development.
- Consistent and well landscaped setbacks to contribute to quality of street frontages.
- Promote multi modal access and walkability.

**f. Transportation**

- Provide adequate landscape buffer to protect adjacent land uses and environment.
- Mitigate visual impact.
- Provide ancillary activities like offices, convenience retail, training facilities besides the light industrial, transportation, utility and parking use for active public realm.
- Promote multimodal access and walkability.

**g. Recreational and Leisure**

- Provide open space for active and passive recreation.
- Develop a green network of open spaces, parks, natural landscapes and streets.
- Provide street furniture, way-finding and signage elements.
- Protect and conserve natural, historic and cultural resources.
- Protect and provide habitat for flora and fauna.
- Prevent development in environmentally sensitive locations (i.e. escarpments, wadis).
- Enhance natural beauty and provide buffer between nature and urban development.
- Protect and enhance viewpoints and natural landscapes.

**h. Natural Preserve / Environmental**

- Conserve and protect sensitive natural features, ecology and habitat from development of any type.
- Create ecological corridors with surrounding ecologically sensitive areas.
- Enhance the natural landscape character zone to strengthen the image and identity of the region.
- Provide adequate protective buffer between the natural environment and urban land uses.
- Preserve the unique scenic conditions of natural landscapes.
- Provide movement trail network.
- Protect and enhance the view corridors.

### 4.3.2 Guidance for Mixed of Uses and Activities

**a. Mixed Use / Commercial (Transit Oriented Corridor)**

- Promote transit oriented development along King Fahd road.
- Promote commercial activities with vertical/horizontal mixed use programming.
- Encourage high density with high buildings, and mix of uses around activity centers along the corridor.
- Promote residential neighborhoods within catchment areas with amenities and last mile connectivity.
- Reduce the need for vehicular trips and provide a pedestrian-friendly walkable development.
- Promote walkable clusters.
- Provide active ground floor and high quality public realm.

**b. Mixed Use / Commercial (Corridor)**

- Encourage high density and mix of uses around activity centers along corridor.
- Promote commercial activities with vertical/horizontal mixed use programming.
- Promote high density residential neighborhoods with amenities and last mile connectivity to the mixed use corridors.
- Reduce the need for vehicular trips and provide a pedestrian-friendly walkable development.
- Promote walkable clusters.
- Provide active ground floor and high quality public realm.

**c. Mixed Use / Residential**

- Promote high density residential activities with ground floor retail / mixed use programming within urban centers.
- Provide last mile connectivity to mixed use corridors.
- Reduce the need for vehicular trips and provide a pedestrian-friendly walkable development.
- Promote walkable clusters.
- Provide active ground floor and high quality public realm.

**d. Mixed Use / Residential in Heritage District**

- Promote high density residential activities with ground floor retail / mixed use programming within the urban centers.
- Promote shared streets, retail, tourism related activities within the heritage district.
- Provide last mile connectivity to the mixed use corridors.
- Reduce the need for vehicular trips and provide a pedestrian-friendly walkable development.
- Promote walkable clusters.
- Provide active ground floor and high quality public realm.
- Provide high quality built form with architectural design in line with the heritage structures of Sarwat mountains.



### 4.3.3 Guidance for City Landscape: Mix of Uses and Activities for Open Spaces

#### a. Public Park / Civic Space

- Develop public parks and civic spaces that are accessible to the surrounding neighborhoods both physically and visually.
- Maximize accessibility by providing safe, layered and legible movement network to the parks.
- Provide wide range of activity/program clusters and experiences catering to all the population.
- Design flexible spaces catering to different program and uses.
- Provide adequate street furniture, art features, shaded areas, way-finding and signage elements.
- Provide active street edge around civic spaces and parks.
- Enhance the natural environment to strengthen the image and identity of the region.
- Preserve the unique conditions of landscape character zones with resilient and sustainable design.



#### b. Open Space / Recreational

- Provide open space for active and passive recreation.
- Protect and conserve natural, historic and cultural resources,
- Protect and provide habitat for flora and fauna.
- Prevent development in environmentally sensitive locations (i.e. escarpments, wadis).
- Enhance natural beauty and provide buffer between nature and urban development.
- Develop a green network of open spaces, parks, natural landscapes and streets.
- Provide street furniture, way-finding and signage elements.
- Protect and enhance viewpoints and natural landscapes.



#### c. Productive / Agricultural

- Conserve farmlands for agricultural purposes and food production in urban area.
- Preserve the unique scenic qualities of cultural landscapes.
- Add to the offer of publicly accessible open space.

## 4.3.4 Development Standards

### a. Use: Residential Activities

RESIDENTIAL ACTIVITIES			
LOCATION (URBAN CHARACTER): Urban Center, Old District, New District			
LOCATION (CORRIDOR): Arterial Corridor, Collector Corridor, Local Corridor			
TYPICAL PLOT SIZE: 20x30m to 60x60m			
ALLOWABLE TYPOLOGIES: Multifamily Midrise Apartments, Multifamily Lowrise Apartments, Attached and Detached Units			
LANDSCAPE SETTINGS	REMARKS	AUDC SECTION	
RIDGE LINE VIEW CORRIDOR	MIN. 50M OFFSET FROM RIDGE LINE WITH NO LARGE STRUCTURE OR BUILDING ESTABLISHED PUBLIC VIEWS TO BE PROTECTED	LARGE STRUCTURE IF EXCEEDING 3M IN DIMENSION IN ANY DIRECTION	C.1.3, C.1.4
SLOPE	> 30% SLOPE NO LARGE STRUCTURE OR BUILDINGS	LARGE STRUCTURE IF EXCEEDING 3M IN DIMENSION IN ANY DIRECTION	C.1.5
WADI ZONES	DEVELOPMENT ALLOWED ONLY IN WADI DEVELOPMENT ZONE		C.1.7
HERITAGE BOUNDARY	LIMITS OF THE PLOT BOUNDARY OF HERITAGE MONUMENT/BUILDING OR BUILDING GROUP, OR AN OFFSET OF A MIN. 20M FROM THE HERITAGE BUILDING FAÇADE	PREFERRED WITH NO DEVELOPMENT	C.2.2.C.2.4
ROW	20 TO 10M TYPICAL	CONTINUOUS AND ACCESSIBLE SIDEWALKS WITH TREE PLANTING; SHARED STREET PROMOTED IN LOCAL STREET	C.3.3
PUBLIC REALM	MIN. 1.5M SIDEWALK	CONTINUOUS AND ACCESSIBLE SIDEWALKS WITH TREE PLANTING; SHARED STREET PROMOTED IN LOCAL STREET	C.3.4
PERIMETER WALLS / FENCES	MAX 3M IN HEIGHT FROM PUBLIC STREET/GROUND LEVEL	WITH LEVELS OF TRANSPARENCY	C.5.3.6
OPEN SPACE	MIN 20% LANDSCAPED AREA	ORIENTED TOWARDS MAIN PUBLIC FRONTAGE	C.5.2.3
BUFFER	MIN. 30M LANDSCAPED BUFFER BETWEEN LANDUSE AND NATURAL AREAS	VACANT PLOT: VEGETATION BUFFER OR HOARDING REQUIRED	C.5.3.9
BUILDING ENVELOPE	REMARKS	AUDC SECTION	
URBAN BLOCK	MAX. 120M ANY DIRECTION WITHOUT INTERRUPTION	LARGER BLOCK ALLOWED WITH MIDBLOCK PEDESTRIAN/VEHICULAR PASSAGE	C.5.2.2
ALLOWABLE USES	RESIDENTIAL / ANCILLARY RETAIL OR COMMERCIAL - MAX. 5% OF TOTAL DEVELOPMENT	UTILITARIAN USES TO BE LOCATED AT THE BACK OF THE PLOT AWAY FROM PUBLIC FRONTAGE	C.5.3.7
FLOORPLATE	MAX 30M LENGTH ANY SIDE WITHOUT BREAK ALONG PUBLIC FRONTAGES; MULTIPLE STRUCTURES OK	MIN. 1.5 M IN DEPTH AND 3 M IN WIDTH, FOR THE ENTIRE HEIGHT OF THE FAÇADE	C.5.2.5
STRUCTURE HEIGHT	MAX. 18M		
NUMBER OF FLOORS	MAX. 4.5 LEVELS; MIN. FLOOR TO FLOOR 3.0M		
LAC	MAX. 70%		
SET BACK			
FRONT	MIN. 4M		
LEFT AND RIGHT SIDES, SIDE STREETS	MIN. 2M , 1/5TH OF ROW WITH 2M MIN	NO MIN. SETBACK FOR ATTACHED UNITS REQUIRED	
BACK SIDE	MIN. 2M		
STREETWALL	N/A		
PARKING	1 SPACE PER DU ≤ 130 SQM; 2 SPACES PER DU > 130 SQM	INTEGRATED IN DEVELOPMENT, UNDERGROUND, LOCATED AT BACK OF THE PLOT NOT ALONG PUBLIC FRONTAGE; PARKING LOT MAX. 70% OF OPEN SPACE	C.5.2.4
ACCESS	MAX. 1 VEHICULAR ENTRY FOR PLOT UP TO 30M WIDE; FOR LARGER PLOTS, MAX. 1 VEHICLE ENTRY FOR EVERY 50M OF MAIN ROAD FRONTAGE		C.5.2.4
ARCHITECTURE	REMARKS	AUDC SECTION	
FAÇADE	MAX. 30M LENGTH WITHOUT BREAK ALONG PUBLIC FRONTAGES; MIN. 50% OF FAÇADE TREATMENT WITH ONE CONSISTENT MATERIAL	INTEGRAL TO ALL PUBLIC FAÇADES	C.5.3.1
OPENINGS	OPENINGS SHOULD HAVE A SHARE OF MAXIMUM 30 TO 50% OF THE OVERALL FAÇADE SURFACE	% ACCORDING TO THEIR ORIENTATION TO MINIMIZE SOLAR IMPACT. BALCONIES AND OPENINGS SHOULD BE LOCATED TO MINIMIZE THE IMPACT ON PRIVACY	C.5.3.2
ROOFTOP	MIN. 0.9M PARAPET; SET BACK FOR MECHANICAL EQUIPMENT MIN. 4M	SCREENING OF ALL UTILITIES VISIBLE FROM PUBLIC ROADS	C.5.3.8
MATERIALS / COLORS	70% RANGE OF LIGHT GRADATIONS OF EARTH TONES; NO CURTAIN WALL; NO METAL CLADDING	SYMPATHETIC TO LOCAL LANDSCAPE AND CULTURAL HERITAGE	C.5.3.3, C.5.3.4
SIGNAGE	SIGNAGE WELL INTEGRATED WITHIN OVERALL ARCHITECTURAL COMPOSITION	SIGNAGE SHALL AVOID CONFLICTS WITH ADJACENT RESIDENTIAL USES AND PUBLIC REALM TREE CANOPIES	C.6.10

Figure 79 Development standards for residential areas

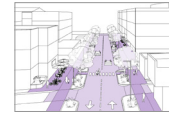


Sample location

New district



Collector corridor



Local corridor

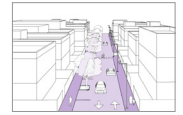


Figure 80 Block plan: residential neighborhood

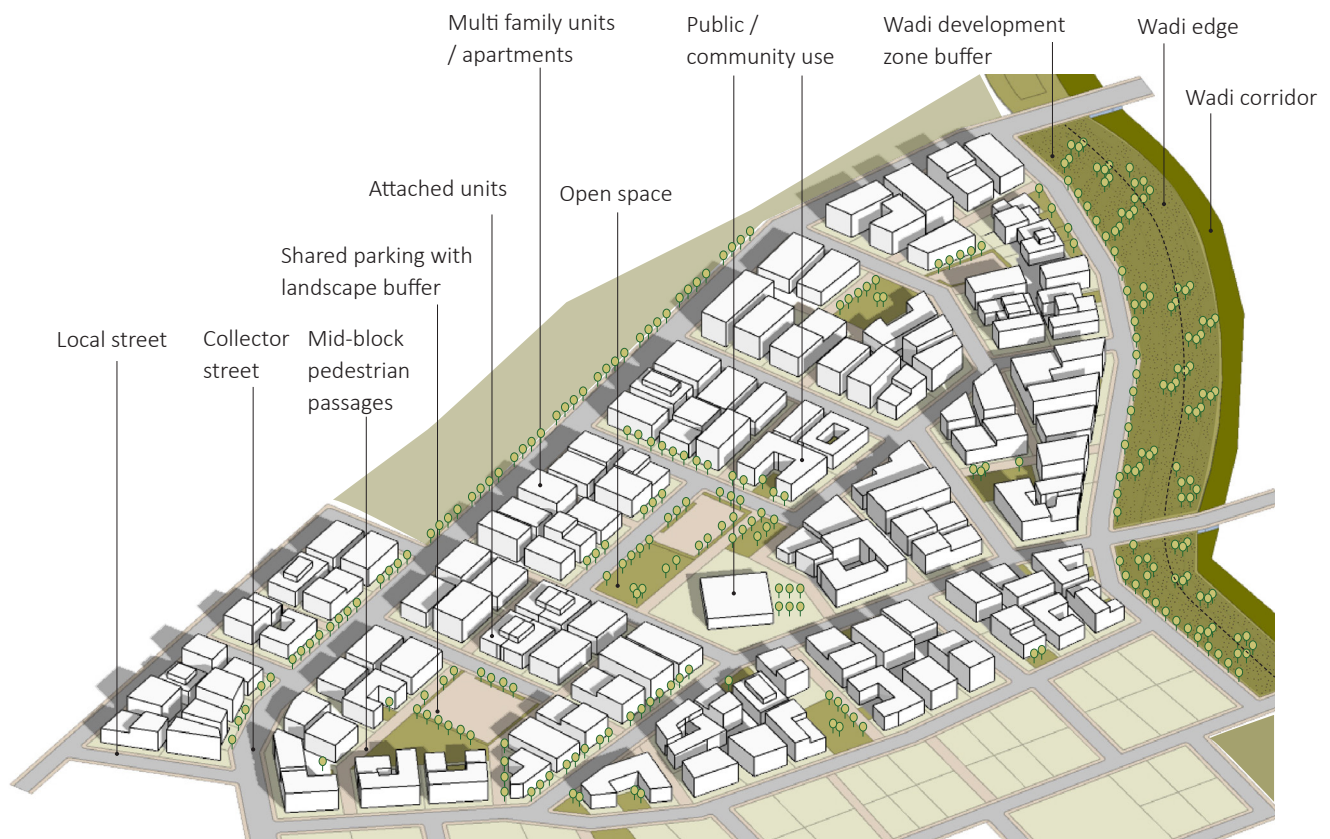
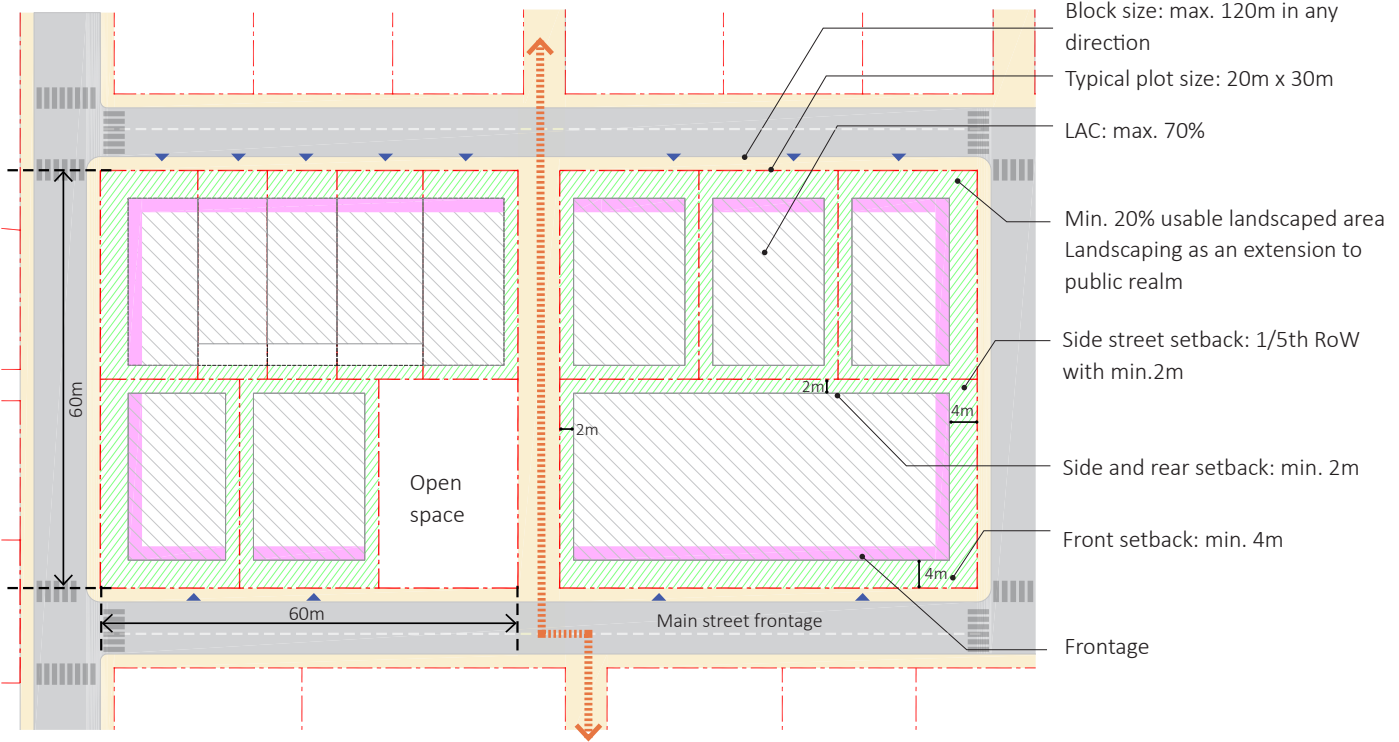
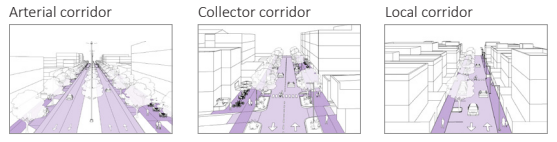


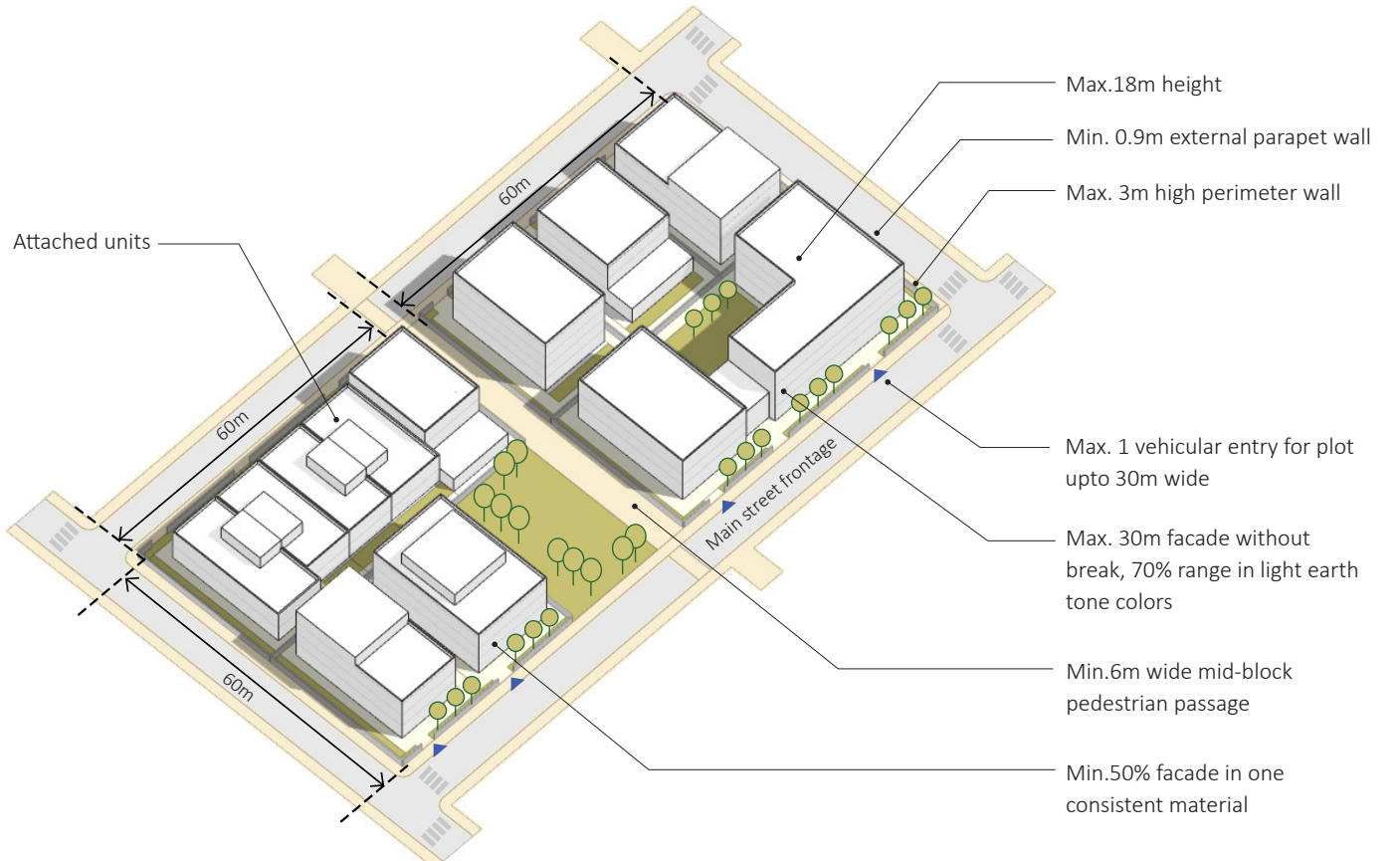
Figure 81 Block isometric: residential neighborhood

Sample location



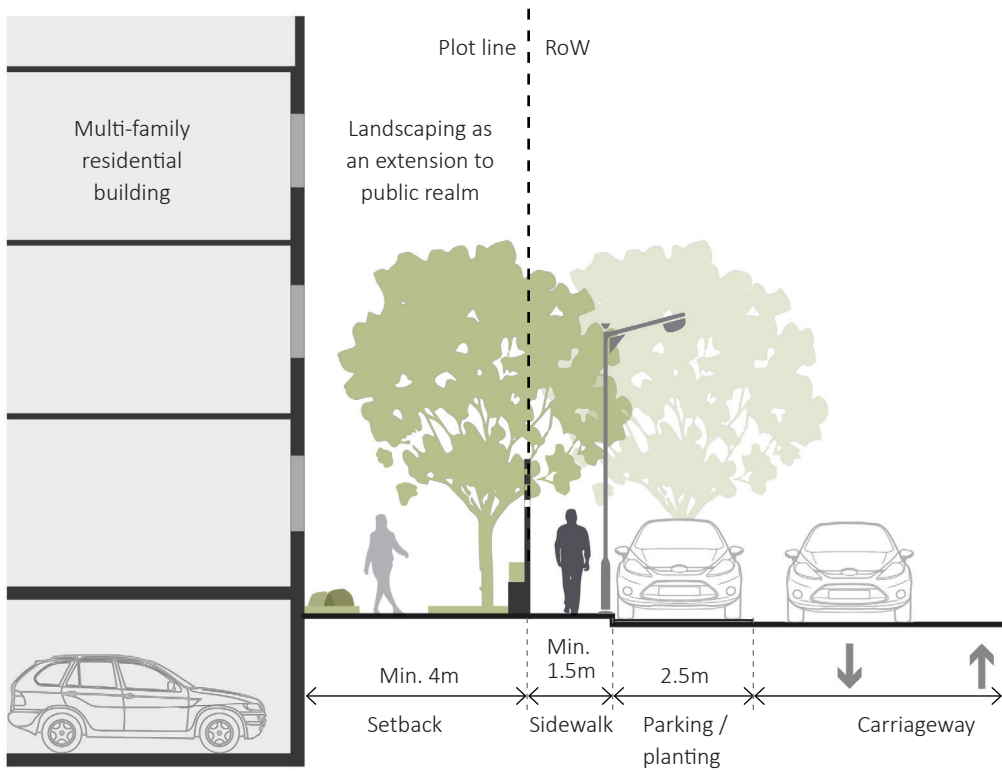
- Block size: max. 120m in any direction
- Typical plot size: 20m x 30m
- LAC: max. 70%
- Min. 20% usable landscaped area  
Landscaping as an extension to public realm
- Side street setback: 1/5th RoW with min. 2m
- Side and rear setback: min. 2m
- Front setback: min. 4m
- Frontage

Figure 82 Typical block plan: residential

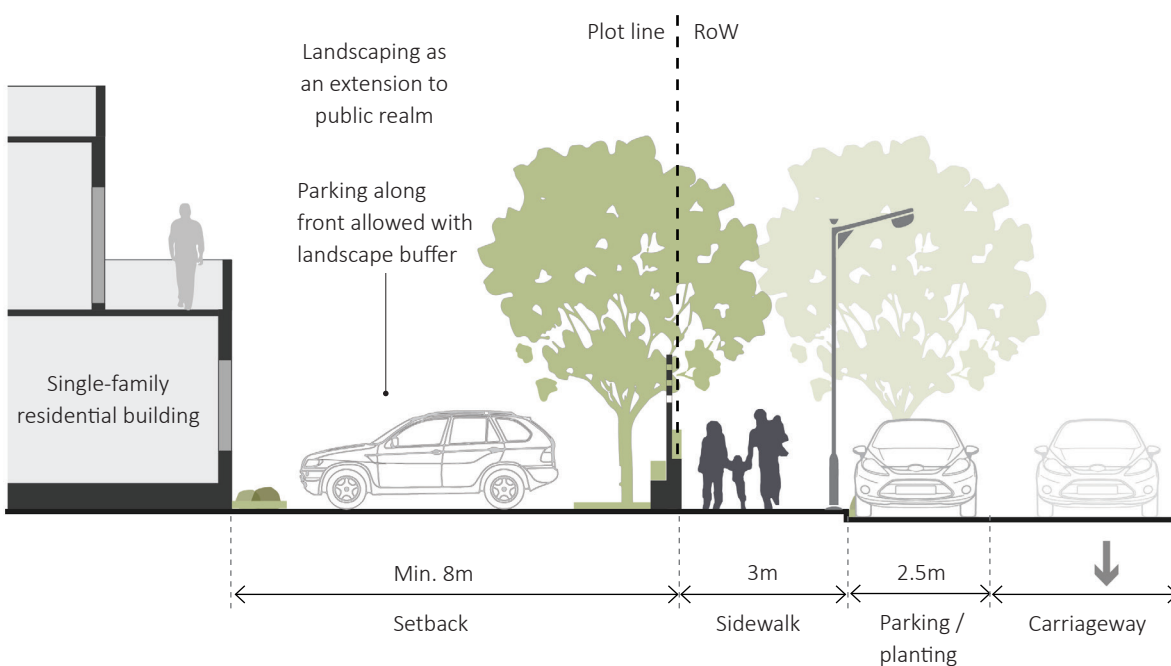


- Max. 18m height
- Min. 0.9m external parapet wall
- Max. 3m high perimeter wall
- Max. 1 vehicular entry for plot upto 30m wide
- Max. 30m facade without break, 70% range in light earth tone colors
- Min. 6m wide mid-block pedestrian passage
- Min. 50% facade in one consistent material

Figure 83 Block isometric: residential



**Figure 84** Residential use street edge treatment



**Figure 85** Low density residential use street edge treatment

## b. Use: Low Density Residential

LOW DENSITY RESIDENTIAL ACTIVITIES		
LOCATION (URBAN CHARACTER): New District, Rural / Hillside District		
LOCATION (CORRIDOR): Collector Corridor, Local Corridor		
TYPICAL PLOT SIZE: 20x30m to 0.5 Hectare, Large plots: 1 Hectare		
ALLOWABLE TYPOLOGIES: Villa, Single Family Detached, Multi-family Lowrise Apartments		
LANDSCAPE SETTINGS	REMARKS	AUDC SECTION
RIDGE LINE VIEW CORRIDOR	MIN. 200M OFFSET FROM RIDGE LINE WITH NO LARGE STRUCTURE OR BUILDING ESTABLISHED PUBLIC VIEWS TO BE PROTECTED	LARGE STRUCTURE IF EXCEEDING 3M IN DIMENSION IN ANY DIRECTION C.1.3, C.1.4
SLOPE	> 30% SLOPE NO LARGE STRUCTURE OR BUILDINGS	LARGE STRUCTURE IF EXCEEDING 3M IN DIMENSION IN ANY DIRECTION C.1.5
WADI ZONES	DEVELOPMENT ALLOWED ONLY IN WADI DEVELOPMENT ZONE	C.1.7
HERITAGE BOUNDARY	LIMITS OF THE PLOT BOUNDARY OF HERITAGE MONUMENT/BUILDING OR BUILDING GROUP, OR AN OFFSET OF A MIN. 20M FROM THE HERITAGE BUILDING FAÇADE	PREFERRED WITH NO DEVELOPMENT C.2.2,C.2.4
ROW	20 TO 10M TYPICAL	CONTINUOUS AND ACCESSIBLE SIDEWALKS WITH TREE PLANTING; SHARED STREET PROMOTED IN LOCAL STREET C.3.3
PUBLIC REALM	MIN: 1.5M SIDEWALK	CONTINUOUS AND ACCESSIBLE SIDEWALKS WITH TREE PLANTING C.3.4
PERIMETER WALLS / FENCES	MAX 3M IN HEIGHT FROM PUBLIC STREET/GROUND LEVEL	WITH LEVELS OF TRANSPARENCY C.5.3.6
OPEN SPACE	MIN 20% LANDSCAPED AREA	ORIENTED TOWARDS MAIN PUBLIC FRONTAGE C.5.2.3
BUFFER	MIN. 30M LANDSCAPED BUFFER BETWEEN LANDUSE AND NATURAL AREAS	VACANT PLOT: VEGETATION BUFFER OR HOARDING REQUIRED C.5.3.9
BUILDING ENVELOPE	REMARKS	AUDC SECTION
URBAN BLOCK	MAX. 120M ANY DIRECTION WITHOUT INTERRUPTION	LARGER BLOCK ALLOWED WITH MIDBLOCK PEDESTRIAN/VEHICULAR PASSAGE; LAYOUT OF BLOCKS SHOULD RESPOND TO NATURAL SETTING C.5.2.2
ALLOWABLE USES	RESIDENTIAL WITH ANCILLARY / WORKSHOP / EDUCATIONAL / TRAINING / PRODUCTIVE / NEIGHBOURHOOD RETAIL OR COMMERCIAL - MAX. 5% OF TOTAL DEVELOPMENT, HOMESTAY / BOUTIQUE HOSPITALITY	UTILITARIAN USES TO BE LOCATED AT THE BACK OF THE LOT AWAY FROM PUBLIC FRONTAGE C.5.3.7
FLOORPLATE	MAX 30M LENGTH ALONG MAIN FRONTAGE; MULTIPLE STRUCTURES OK	MIN. 1.5 M IN DEPTH AND 3 M IN WIDTH, FOR THE ENTIRE HEIGHT OF THE FAÇADE C.5.2.5
STRUCTURE HEIGHT	MIN. 3.5M, MAX. 10M	
NUMBER OF FLOORS	MAX. 2.5 LEVELS; MIN. FLOOR TO FLOOR 3.0M	
LAC	MAX. 40%	
SET BACK		
FRONT	MIN. 8M	
LEFT AND RIGHT SIDES, SIDE STREETS	MIN. 3M, 1/5TH OF ROW WITH 3M MIN	
BACK SIDE	MIN. 5M	
STREETWALL	N/A	
PARKING	VILLA: 1 SPACE PER PLOT ≤ 550 SQM; 2 SPACES PER DU > 550 SQM , MULTIFAMILY: 1 SPACE PER DU ≤ 130 SQM; 2 SPACES PER DU > 130 SQM	INTEGRATED IN DEVELOPMENT; MIN. 3M LANDSCAPED BUFFER FROM PUBLIC ROADS; PARKING LOT MAX. 70% OF TOTAL OPEN SPACE
ACCESS	MAX. 1 VEHICULAR ENTRY FOR PLOT UP TO 30M WIDE. FOR LARGER PLOTS, MAX. 1 VEHICLE ENTRY FOR EVERY 50M OF MAIN ROAD FRONTAGE	C.5.2.4
ARCHITECTURE	REMARKS	AUDC SECTION
FAÇADE	MAX 30M LENGTH ALONG MAIN FRONTAGE, MIN. 50% OF FAÇADE TREATMENT WITH ONE CONSISTENT MATERIAL	INTEGRAL TO ALL PUBLIC FAÇADES C.5.3.1
OPENINGS	OPENINGS IN GENERAL; SHOULD HAVE A SHARE OF MAXIMUM 30 TO 50% OF THE OVERALL FAÇADE SURFACE	% ACCORDING TO THEIR ORIENTATION TO MINIMIZE SOLAR IMPACT. BALCONIES AND OPENINGS SHOULD BE LOCATED TO MINIMIZE THE IMPACT ON PRIVACY C.5.3.2
ROOFTOP	MIN. 0.9M PARAPET; SET BACK FOR MECHANICAL EQUIPMENT MIN. 4M	SCREENING OF ALL UTILITIES VISIBLE FROM PUBLIC ROADS C.5.3.8
MATERIALS / COLORS	70% RANGE OF LIGHT GRADATIONS OF EARTH TONES; NO CURTAIN WALL; NO METAL CLADDING	SYMPATHETIC TO LOCAL LANDSCAPE AND CULTURAL HERITAGE C.5.3.3, C.5.3.4
SIGNAGE	SIGNAGE INTEGRATED WITHIN OVERALL ARCHITECTURAL COMPOSITION	SIGNAGE SHALL AVOID CONFLICTS WITH ADJACENT RESIDENTIAL USES AND PUBLIC REALM TREE CANOPIES C.6.10

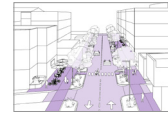
Figure 86 Development standards for low density residential areas

Sample location

New district



Collector corridor



Local corridor

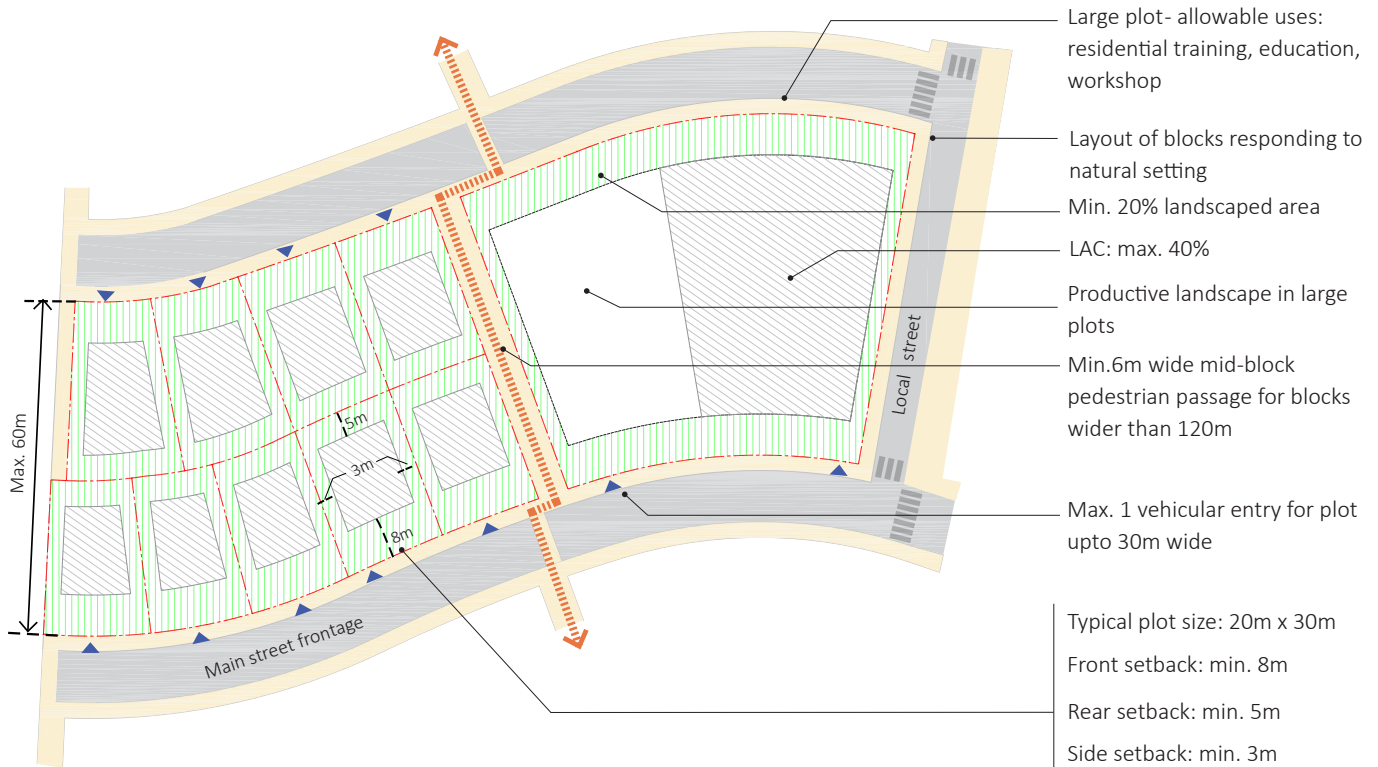
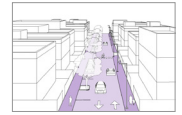


Figure 87 Block plan: low density residential



Figure 88 Block Isometric: low density residential

**C. Use: Commercial**

<b>COMMERCIAL / SHOPPING, BUSINESS OR TRADE ACTIVITIES</b>			
<b>LOCATION (URBAN CHARACTER):</b> Urban Center, Old District, New District			
<b>LOCATION (CORRIDOR):</b> Main Access Corridor, Arterial Corridor, Collector Corridor			
<b>TYPICAL PLOT SIZE:</b> Varies			
<b>ALLOWABLE TYPOLOGIES:</b> Varies			

<b>LANDSCAPE SETTINGS</b>		<b>REMARKS</b>	<b>AUDC SECTION</b>
<b>RIDGE LINE VIEW CORRIDOR</b>	MIN. 50M OFFSET FROM RIDGE LINE WITH NO LARGE STRUCTURE OR BUILDING ESTABLISHED PUBLIC VIEWS TO BE PROTECTED	LARGE STRUCTURE IF EXCEEDING 3M IN DIMENSION IN ANY DIRECTION	C.1.3, C.1.4
<b>SLOPE</b>	> 30% SLOPE NO LARGE STRUCTURE OR BUILDINGS	LARGE STRUCTURE IF EXCEEDING 3M IN DIMENSION IN ANY DIRECTION	C.1.5
<b>WADI ZONES</b>	DEVELOPMENT ALLOWED ONLY IN WADI DEVELOPMENT ZONE		C.1.7
<b>HERITAGE BOUNDARY</b>	LIMITS OF THE PLOT BOUNDARY OF HERITAGE MONUMENT/BUILDING OR BUILDING GROUP, OR AN OFFSET OF A MIN. 20M FROM THE HERITAGE BUILDING FAÇADE	PREFERRED WITH NO DEVELOPMENT	C.2.2,C.2.4
<b>ROW</b>	60M TYPICAL, 32M, 20M, 16M	CONTINUOUS AND ACCESSIBLE SIDEWALKS WITH LANDSCAPED AREA AND FLEX. ZONE	C.3.3
<b>PUBLIC REALM</b>	MIN. 5M SIDEWALK WITH LANDSCAPE FLEX. ZONE	ACTIVE FRONTAGES AT GROUND FLOOR PROMOTED	C.3.4
<b>PERIMETER WALLS / FENCES</b>	MAX 1.5M IN HEIGHT FROM PUBLIC STREET/GROUND LEVEL	MAX 50% PERIMETER WALL ALONG MAIN PUBLIC FRONTAGE	C.5.3.6
<b>OPEN SPACE</b>	MIN 20% LANDSCAPED AREA	TREATED AS AN EXTENSION TO PUBLIC REALM, TO FORM AN ATTRACTIVE STREET FRONT	C.5.2.3
<b>BUFFER</b>	MIN. 30M BUFFER BETWEEN LANDUSE AND NATURAL AREAS	VACANT PLOT: VEGETATION BUFFER OR HOARDING REQUIRED	C.5.3.9

<b>BUILDING ENVELOPE</b>		<b>REMARKS</b>	<b>AUDC SECTION</b>
<b>URBAN BLOCK</b>	MAX. 120M ANY DIRECTION WITHOUT INTERRUPTION	LARGER BLOCK ALLOWED WITH MIDBLOCK PEDESTRIAN/VEHICULAR PASSAGE	C.5.2.2
<b>ALLOWABLE USES</b>	RETAIL / OFFICE / COMMERCIAL / HOSPITALITY - VERTICAL AND HORIZONTAL MIX	UTILITARIAN USES TO BE LOCATED AT THE BACK OF THE LOT AWAY FROM PUBLIC FRONTAGE	C.5.3.7
<b>FLOORPLATE</b>	MAX. 40M LENGTH WITHOUT BREAK ALONG PUBLIC FRONTAGES	BREAKS MIN.1.5 M IN DEPTH AND 3 M IN WIDTH, FOR THE ENTIRE HEIGHT OF THE FAÇADE	C.5.2.5
<b>STRUCTURE HEIGHT</b>	MAX. 20M		
<b>NUMBER OF FLOORS</b>	MAX. 4.5 LEVELS; MIN. GROUND FLOOR HEIGHT 5M; MIN. FLOOR TO FLOOR 3.2M		
<b>LAC</b>	MAX. 70%		
<b>SET BACK</b>			
<b>FRONT</b>	MIN. 5M	LANDSCAPED; INTEGRATED WITH PUBLIC REALM; UNIVERSALLY ACCESSIBLE	
<b>LEFT AND RIGHT SIDES, SIDE STREETS</b>	MIN. 3M, 1/5TH OF ROW WITH 3M MIN		
<b>BACK SIDE</b>	MIN. 3M		
<b>STREETWALL</b>	MAIN FRONTAGE: MIN. 70% ALONG 20M SETBACK LINE; FOR PLOTS > 5000 SQM - MIN. 30% ALONG 20M SETBACK LINE	WITH ACTIVE FRONTAGE; ARCADES	C.5.2.5
<b>PARKING</b>	RETAIL, OFFICE AND ALL OTHER USES: 1 SPACE EACH 75 SQM OF GFA; RESTAURANT (DRIVE-THROUGH) 2 SPACES EACH 100 SQM OF GFA; HOSPITALITY 1 SPACE-ROOM	INTEGRATED IN DEVELOPMENT, UNDERGROUND, LOCATED AT BACK OF THE PLOT NOT ALONG PUBLIC FRONTAGE; FRONT OF THE LOT LIMITED TO 1 BAY LANDSCAPED (ONLY ALONG MAIN ACCESS CORRIDORS); PARKING LOT MAX. 70% OF OPEN SPACE	C.5.2.4
<b>ACCESS</b>	MAX. 1 VEHICULAR ENTRY FOR PLOTS UP TO 30M WIDE, FOR LARGER PLOTS, MAX. 1 VEHICLE ENTRY FOR EVERY 50M OF MAIN ROAD FRONTAGE		C.5.2.4

<b>ARCHITECTURE</b>		<b>REMARKS</b>	<b>AUDC SECTION</b>
<b>FAÇADE</b>	MAX. 40M LENGTH WITHOUT BREAK ALONG PUBLIC FRONTAGES. MIN. 50% OF FAÇADE TREATMENT WITH ONE CONSISTENT MATERIAL	INTEGRAL TO ALL PUBLIC FAÇADES; BREAKS MIN.1.5 M IN DEPTH AND 3 M IN WIDTH, FOR THE ENTIRE HEIGHT OF THE FAÇADE; GROUND LEVEL FAÇADE MAY HAVE A DISTINCT LOOK FROM THE UPPER FLOOR FAÇADES	C.5.3.1
<b>OPENINGS</b>	OPENINGS IN GENERAL; SHOULD HAVE A SHARE OF MAXIMUM 30 TO 50% OF THE OVERALL FAÇADE SURFACE	% ACCORDING TO THEIR ORIENTATION TO MINIMIZE SOLAR IMPACT. OPENINGS SHOULD BE LOCATED TO MINIMIZE THE IMPACT ON PRIVACY FOR NEIGHBORING PLOTS	C.5.3.2
<b>ROOFTOP</b>	MIN. 0.9M PARAPET; SET BACK FOR MECHANICAL EQUIPMENT MIN. 4M	SCREENING OF ALL UTILITIES VISIBLE FROM PUBLIC ROADS	C.5.3.8
<b>MATERIALS / COLORS</b>	70% RANGE OF LIGHT GRADATIONS OF EARTH TONES; MAX. 10% OF METAL CLADDING AND CURTAIN WALL	SYMPATHETIC TO LOCAL LANDSCAPE AND CULTURAL HERITAGE	C.5.3.3, C.5.3.4
<b>SIGNAGE</b>	SIGNAGE MUST BE WELL INTEGRATED WITHIN THE OVERALL ARCHITECTURAL COMPOSITION	SIGNAGE SHALL AVOID CONFLICTS WITH ADJACENT RESIDENTIAL USES AND PUBLIC REALM TREE CANOPIES	C.6.10

**Figure 89** Development standards for commercial areas

Sample location

Old district



Main access corridor

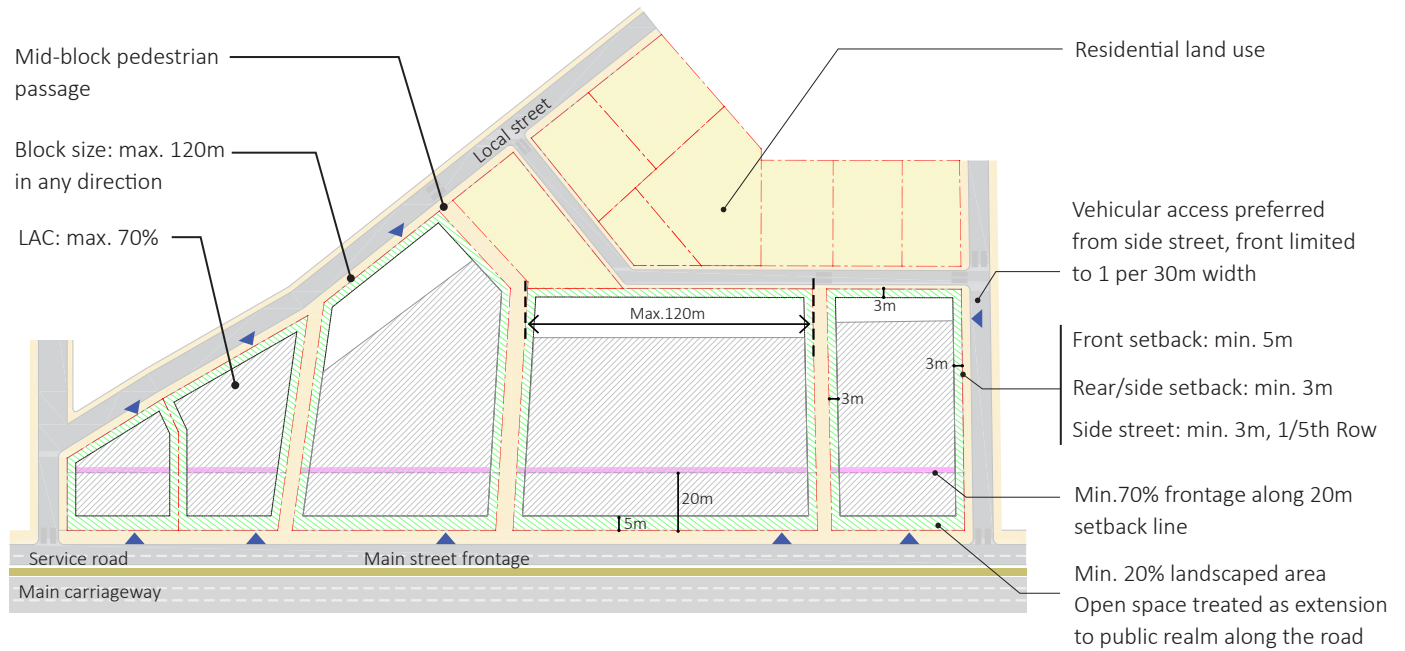
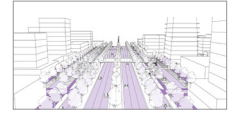


Figure 90 Block plan: multiple commercial blocks

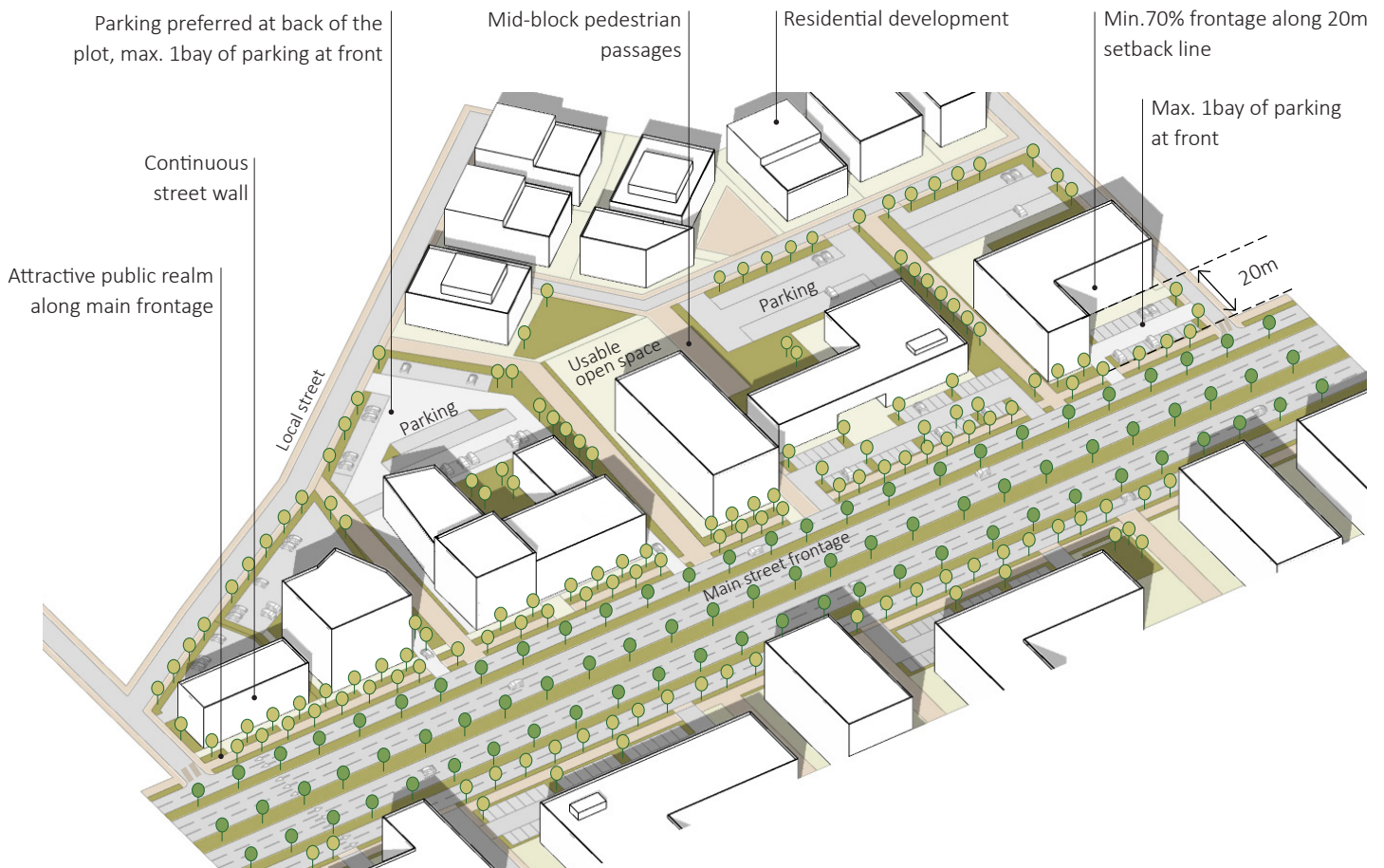


Figure 91 Block isometric: multiple commercial blocks

Sample location

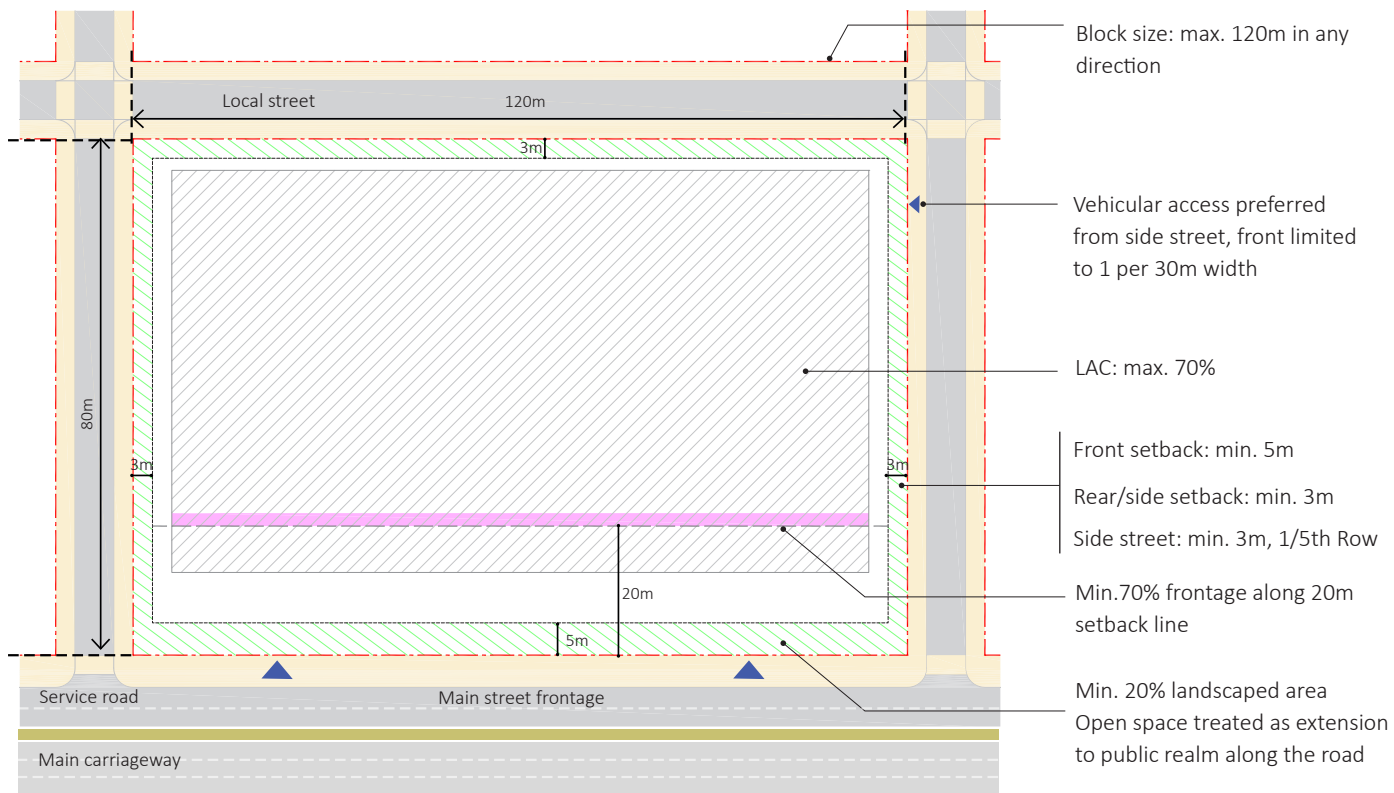
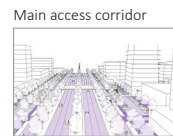


Figure 92 Typical block plan: commercial

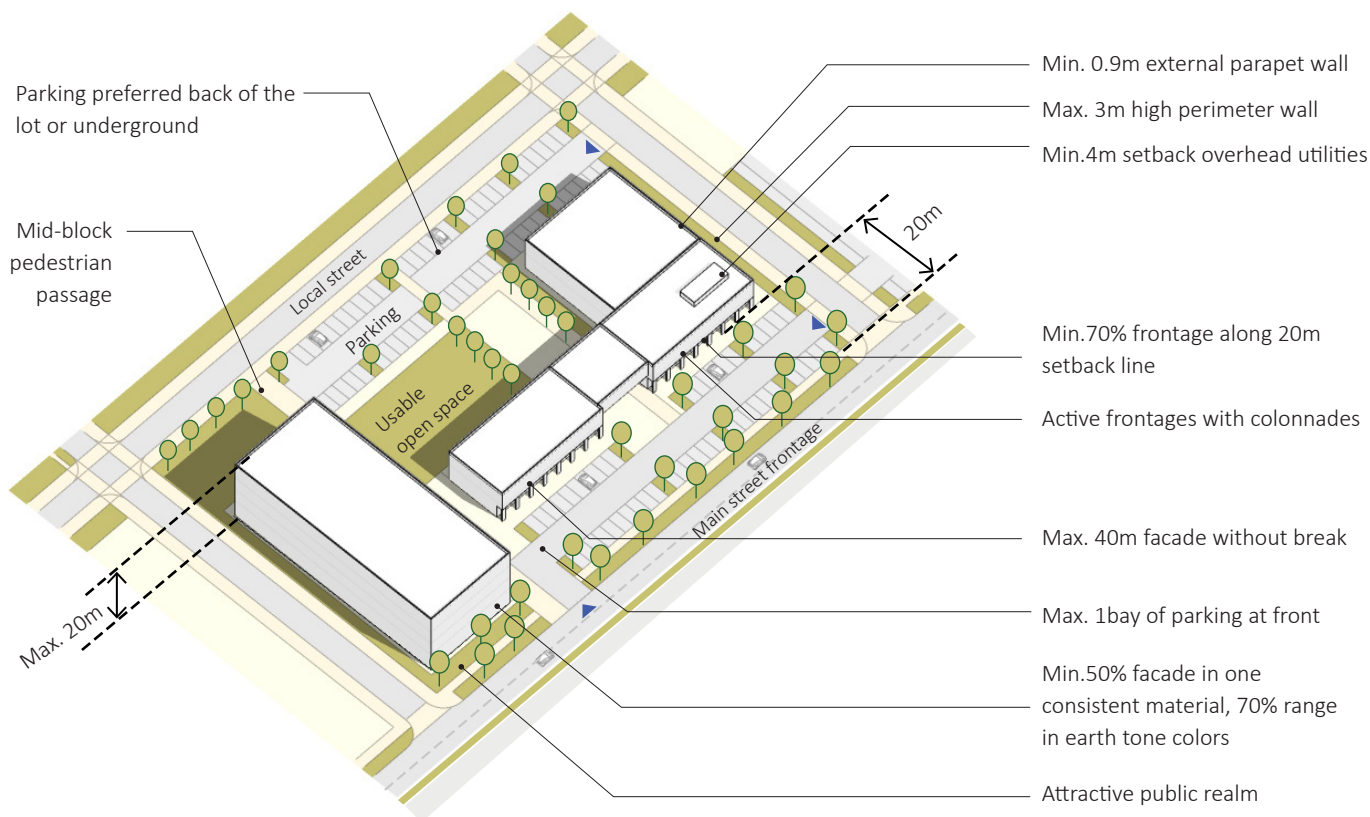
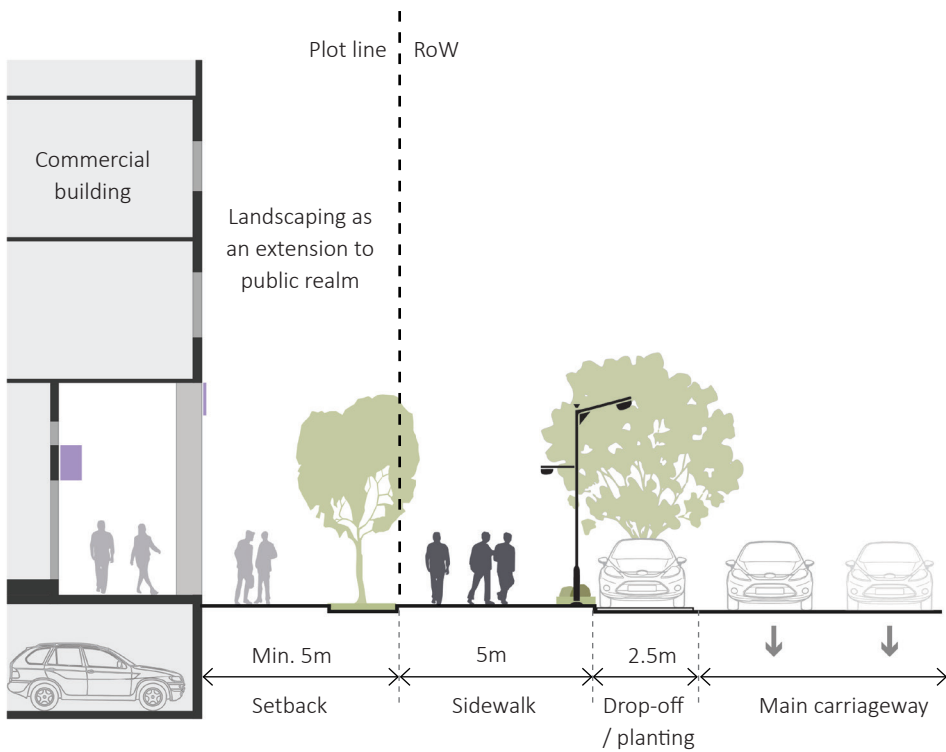
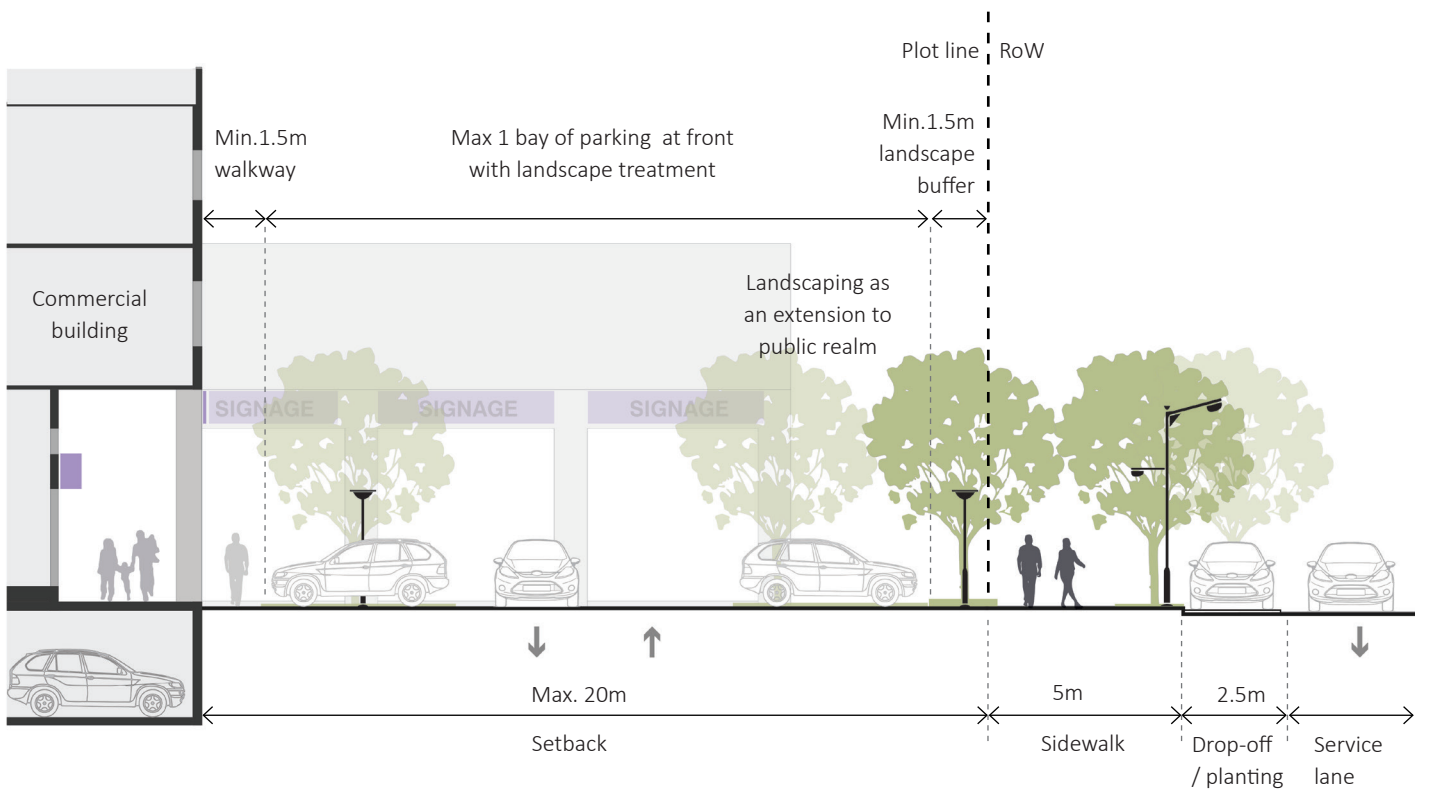


Figure 93 Block isometric: commercial





**Figure 94** Commercial use edge treatment along arterial/collector corridor



**Figure 95** Commercial use edge treatment along main access corridor

## d. Use: Industrial

INDUSTRIAL / LIGHT INDUSTRIAL / MANUFACTURING			
LOCATION (URBAN CHARACTER): Old District, New District			
LOCATION (CORRIDOR): Main Access Corridor, Arterial Corridor			
TYPICAL PLOT SIZE: Varies			
ALLOWABLE TYPOLOGIES: Varies			
LANDSCAPE SETTINGS		REMARKS	AUDC SECTION
RIDGE LINE	MIN. 200M OFFSET FROM RIDGE LINE WITH NO LARGE STRUCTURE OR BUILDING	LARGE STRUCTURE IF EXCEEDING 3M IN DIMENSION IN ANY DIRECTION	C.1.3, C.1.4
VIEW CORRIDOR	ESTABLISHED PUBLIC VIEWS TO BE PROTECTED		
SLOPE	>15% SLOPE NO LARGE STRUCTURE OR BUILDINGS	LARGE STRUCTURE IF EXCEEDING 3M IN DIMENSION IN ANY DIRECTION	C.1.5
WADI ZONES	DEVELOPMENT NOT ALLOWED	MIN. 100M LANDSCAPE BUFFER TO BE PROVIDED FOR MAIN WADIS, 25M LANDSCAPE BUFFER TO BE PROVIDED FOR SUBWADIS AND NATURAL STORMWATER DRAINS.	C.1.7
HERITAGE BOUNDARY	LIMITS OF THE PLOT BOUNDARY OF HERITAGE MONUMENT/BUILDING OR BUILDING GROUP, OR AN OFFSET OF A MIN. 20M FROM THE HERITAGE BUILDING FAÇADE	INDUSTRIAL USE NOT ALLOWED WITHIN HERITAGE BOUNDARY. INDUSTRIAL USE NOT RECOMMENDED WITHIN 200M HERITAGE BUFFER / TRANSITION ZONES.	C.2.2,C.2.4, C.2.5
ROW	60M TO 20M TYPICAL	CONTINUOUS AND ACCESSIBLE SIDEWALKS WITH LANDSCAPED AREA AND FLEX. ZONE	C.3.3
PUBLIC REALM	MIN. 5M SIDEWALK WITH MIN. 2.5M LANDSCAPED FLEX. ZONE AND LANDSCAPE BUFFER		C.3.4
PERIMETER WALLS / FENCES	TYPICALLY 3M IN HEIGHT FROM PUBLIC STREET/GROUND LEVEL	MIN. 3M WIDE LANDSCAPED BUFFER ALONG PERIMETER WALL ALONG PUBLIC FRONTAGES	C.5.3.6
OPEN SPACE	MIN 10% LANDSCAPED AREA	TREATED AS AN EXTENSION TO PUBLIC REALM, TO FORM AN ATTRACTIVE STREET FRONT	C.5.2.3
BUFFER	MIN. 100M LANDSCAPED BUFFER BETWEEN L HEAVY INDUSTRIAL USE AND NATURAL AREAS; MIN. 30M BUFFER BETWEEN LIGHT INDUSTRIAL AND NATURAL AREAS	VACANT PLOT: VEGETATION BUFFER OR HOARDING REQUIRED	C.5.3.9
BUILDING ENVELOPE		REMARKS	AUDC SECTION
URBAN BLOCK	MAX. 120M ANY DIRECTION WITHOUT INTERRUPTION	LARGER BLOCK ALLOWED WITH MIDBLOCK PEDESTRIAN/VEHICULAR PASSAGE WHEN POSSIBLE	C.5.2.2
ALLOWABLE USES	INDUSTRIAL / LIGHT INDUSTRIAL / MANUFACTURING	UTILITARIAN USES TO BE LOCATED AT THE BACK OF THE LOT AWAY FROM PUBLIC FRONTAGE AND VIEWS	C.5.3.7
FLOORPLATE	N/A		
STRUCTURE HEIGHT	N/A		
NUMBER OF FLOORS	MAX. 3 LEVELS; MIN. FLOOR TO FLOOR 3.2M		
LAC	MAX. 50%		
SET BACK			
FRONT	MIN. 10M	LANDSCAPED; INTEGRATED WITH PUBLIC REALM; UNIVERSALLY ACCESSIBLE	
LEFT AND RIGHT SIDES, SIDE STREETS	MIN. 5M	MIN. 3M LANDSCAPED BUFFER	
BACK SIDE	MIN. 5M	MIN. 3M LANDSCAPED BUFFER	
STREETWALL	MAIN FRONTAGE: MIN. 50% ALONG 20M SETBACK LINE; FOR PLOTS > 5000 SQM - MIN. 30% ALONG 20M SETBACK LINE		C.5.2.5
PARKING	2 SPACES EACH 100 SQM OF GFA	INTEGRATED IN DEVELOPMENT OR AT THE BACK OF THE PLOT; FRONT OF THE PLOT LIMITED TO 1 BAY LANDSCAPED, PARKING LOT MAX. 70% OF OPEN SPACE	C.5.2.4
ACCESS	MAX. 1 VEHICULAR ENTRY FOR PLOTS UP TO 30M WIDE, FOR LARGER PLOTS, MAX. 1 VEHICLE ENTRY FOR EVERY 50M OF MAIN ROAD FRONTAGE		C.5.2.4
ARCHITECTURE		REMARKS	AUDC SECTION
FAÇADE	MAX. 60M LENGTH WITHOUT BREAK ALONG PUBLIC FRONTAGES. MIN. 50% OF FAÇADE TREATMENT WITH ONE CONSISTENT MATERIAL	INTEGRAL TO ALL PUBLIC FAÇADES; BREAKS: MIN. 1.5 M IN DEPTH AND 3 M IN WIDTH, FOR THE ENTIRE HEIGHT OF THE FAÇADE; PURELY UTILITARIAN FAÇADES SHALL BE AVOIDED ALONG MAIN FRONTAGE	C.5.3.1
OPENINGS	IN GENERAL, SHOULD HAVE A SHARE OF MAXIMUM 30 TO 50% OF THE OVERALL FAÇADE SURFACE	% ACCORDING TO THEIR ORIENTATION TO MINIMIZE SOLAR IMPACT. OPENINGS SHOULD BE LOCATED TO MINIMIZE THE IMPACT ON PRIVACY FOR NEIGHBORING PLOTS	C.5.3.2
ROOFTOP	MIN. 0,9M PARAPET; SET BACK FOR MECHANICAL EQUIPMENT MIN. 4M	SCREENING OF ALL UTILITIES VISIBLE FROM PUBLIC ROADS	C.5.3.8
MATERIALS / COLORS	70% RANGE OF LIGHT GRADATIONS OF EARTH TONES; MAX. 10% FAÇADE SURFACE OF METAL CLADDING AND CURTAIN WALL	SYMPATHETIC TO LANDSCAPE AND CULTURAL HERITAGE	C.5.3.3, C.5.3.4
SIGNAGE	SIGNAGE MUST BE WELL INTEGRATED WITHIN THE OVERALL ARCHITECTURAL COMPOSITION	SIGNAGE SHALL AVOID CONFLICTS WITH ADJACENT RESIDENTIAL USES AND PUBLIC REALM TREE CANOPIES	C.6.10

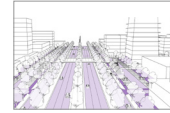
Figure 96 Development standards for industrial areas

Sample location

New district



Main access corridor



Arterial corridor

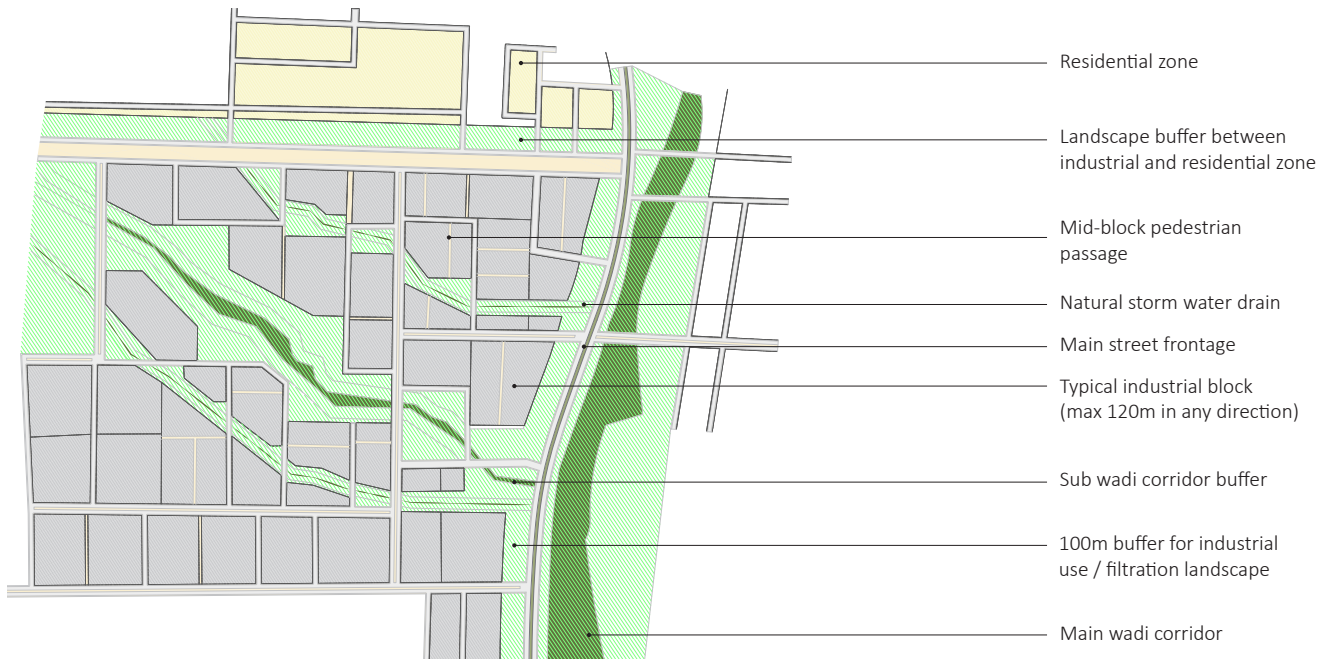
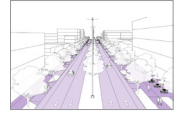


Figure 97 Block plan: light industrial / manufacturing zone



Figure 98 Block isometric: light industrial / manufacturing zone

Sample location

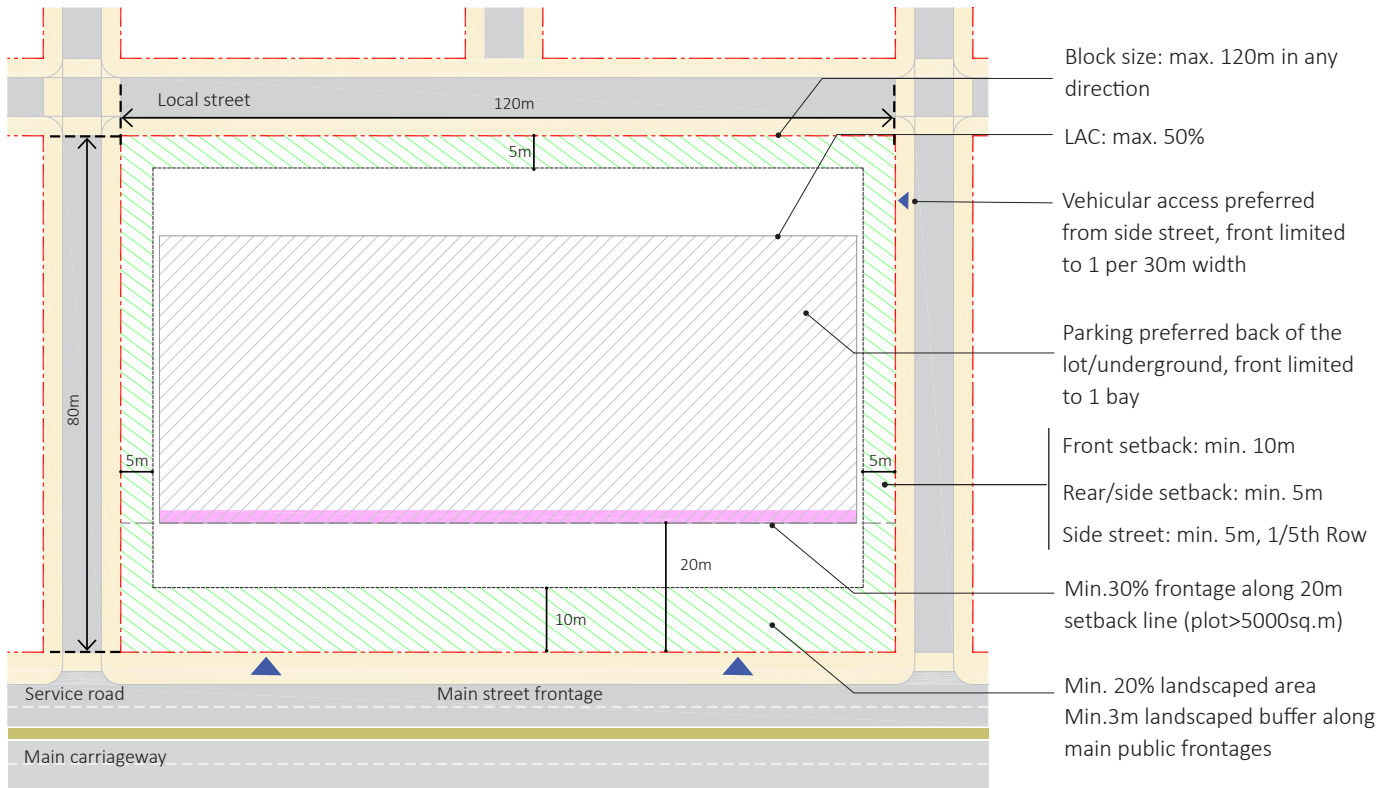
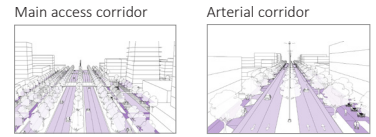


Figure 99 Typical block plan: industrial

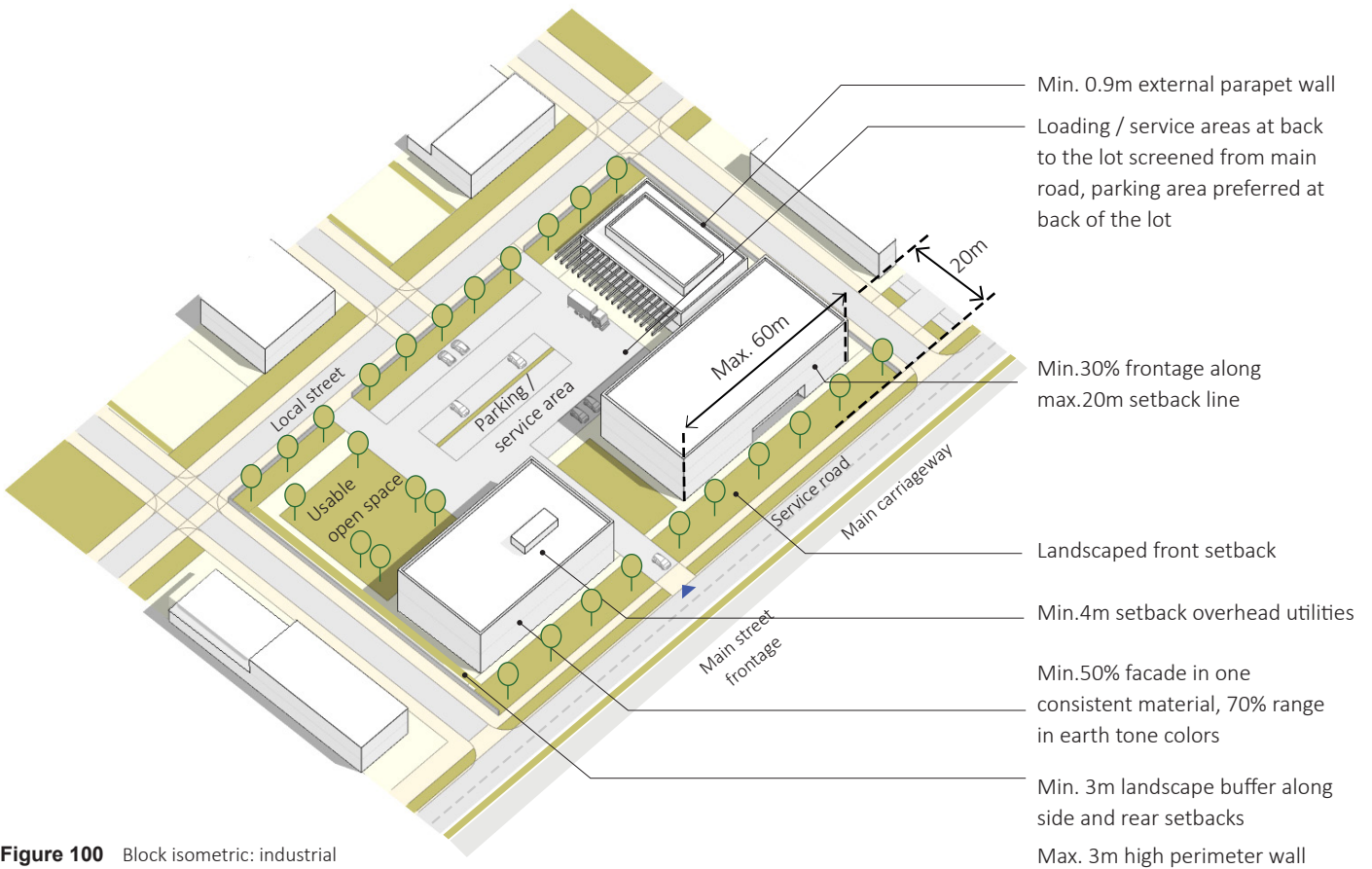
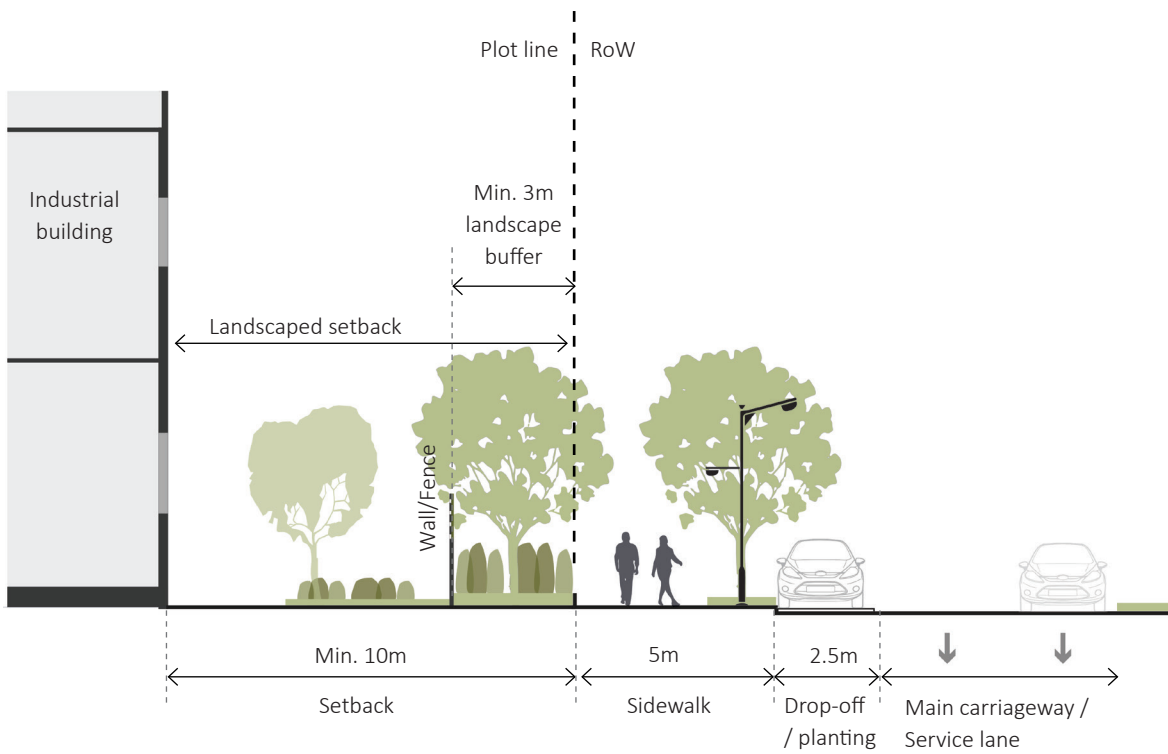


Figure 100 Block isometric: industrial



**Figure 101** Industrial use street edge treatment

## e. Use: Civic

CIVIC / GOVERNMENTAL / SOCIAL / INSTITUTIONAL / INFRASTRUCTURE-RELATED ACTIVITIES			
LOCATION (URBAN CHARACTER): <i>Varies</i>			
LOCATION (CORRIDOR): <i>Varies</i>			
TYPICAL PLOT SIZE: <i>Varies</i>			
ALLOWABLE TYPOLOGIES: <i>Varies</i>			
LANDSCAPE SETTINGS		REMARKS	AUDC SECTION
RIDGE LINE VIEW CORRIDOR	MIN. 50M OFFSET FROM RIDGE LINE WITH NO LARGE STRUCTURE OR BUILDING ESTABLISHED PUBLIC VIEWS TO BE PROTECTED	LARGE STRUCTURE IF EXCEEDING 3M IN DIMENSION IN ANY DIRECTION	C.1.3, C.1.4
SLOPE	> 30% SLOPE NO LARGE STRUCTURE OR BUILDINGS	LARGE STRUCTURE IF EXCEEDING 3M IN DIMENSION IN ANY DIRECTION	C.1.5
WADI ZONES	DEVELOPMENT ALLOWED ONLY IN WADI DEVELOPMENT ZONE		C.1.7
HERITAGE BOUNDARY	LIMITS OF THE PLOT BOUNDARY OF HERITAGE MONUMENT/BUILDING OR BUILDING GROUP, OR AN OFFSET OF A MIN. 20M FROM THE HERITAGE BUILDING FAÇADE	PREFERRED WITH NO DEVELOPMENT	C.2.2,C.2.4
ROW	VARIES	CONTINUOUS AND ACCESSIBLE SIDEWALKS WITH LANDSCAPED AREA AND FLEX. ZONE	C.3.3
PUBLIC REALM	MIN. 5M SIDEWALK WITH LANDSCAPED FLEX. ZONE	ACTIVE FRONTAGES AT GROUND FLOOR PROMOTED	C.3.4
PERIMETER WALLS / FENCES	MAX 1.5M IN HEIGHT FROM PUBLIC STREET/GROUND LEVEL	MAX 50% PERIMETER WALL ALONG MAIN FRONTAGE	C.5.3.6
OPEN SPACE	MIN 20% LANDSCAPED AREA	TREATED AS AN EXTENSION TO PUBLIC REALM, TO FORM AN ATTRACTIVE STREET FRONT ALONG MAIN FRONTAGE	C.5.2.3
BUFFER	MIN. 30M BUFFER BETWEEN LANDUSE AND NATURAL AREAS	VACANT PLOT: VEGETATION BUFFER OR HOARDING REQUIRED	C.5.3.9
BUILDING ENVELOPE		REMARKS	AUDC SECTION
URBAN BLOCK	MAX. 120M ANY DIRECTION	LARGER BLOCK ALLOWED WITH MIDBLOCK PEDESTRIAN/VEHICULAR PASSAGE	C.5.2.2
ALLOWABLE USES	CIVIC / GOVERNMENTAL / SOCIAL / INSTITUTIONAL	UTILITARIAN USES TO BE LOCATED AT THE BACK OF THE LOT AWAY FROM PUBLIC FRONTAGE	C.5.3.7
FLOORPLATE	MAX. 40M LENGTH WITHOUT BREAK ALONG PUBLIC FRONTAGES; MULTIPLE STRUCTURES OK	BREAKS: MIN. 1.5 M IN DEPTH AND 3 M IN WIDTH, FOR THE ENTIRE HEIGHT OF THE FAÇADE	C.5.2.5
STRUCTURE HEIGHT	MAX. 18M	TALL BUILDINGS OK ONLY AS LANDMARKS AND WITH ADDITIONAL DESIGN SCRUTINY; PODIUM + TOWER ZONES APPLY	
NUMBER OF FLOORS	MAX. 4.5 LEVELS; MIN. FLOOR TO FLOOR 3.2M		
LAC	MAX. 70%		
SET BACK			
FRONT	MIN. 10M FOR MAIN ACCESS CORRIDORS AND ARTERIAL STREET, PREVAILING CONSISTENT SETBACK /MIN. 3M FOR COLLECTOR AND LOCAL STREET	LANDSCAPED; INTEGRATED WITH PUBLIC REALM; UNIVERSALLY ACCESSIBLE	
LEFT AND RIGHT SIDES, SIDE STREETS	MIN. 3M , 1/5TH OF ROW WITH 3M MIN		
BACK SIDE	MIN. 3M		
STREETWALL	MIN. 70% ALONG MAIN FRONTAGE; MIN. 30% FOR PLOTS >5000SQ.M	WITH ACTIVE FRONTAGE; COLONADES	C.5.2.5
PARKING	MAX. 1 SPACE EACH 75 SQM OF GFA	INTEGRATED IN DEVELOPMENT, UNDERGROUND, NO FRONT OF THE PLOT; ADDITIONAL SHARED DISTRICT PARKING OK; MAX. 70% OF OPEN SPACE	C.5.2.4
ACCESS	MAX. 1 VEHICULAR ENTRY FOR PLOTS UP TO 30M WIDE, FOR LARGER PLOTS, MAX. 1 VEHICLE ENTRY FOR EVERY 50M OF MAIN ROAD FRONTAGE		C.5.2.4
ARCHITECTURE		REMARKS	AUDC SECTION
FAÇADE	MAX. 40M LENGTH WITHOUT BREAK ALONG PUBLIC FRONTAGES. MIN. 50% OF FAÇADE TREATMENT WITH ONE CONSISTENT MATERIAL	INTEGRAL TO ALL PUBLIC FAÇADES; BREAKS: MIN. 1.5 M IN DEPTH AND 3 M IN WIDTH, FOR THE ENTIRE HEIGHT OF THE FAÇADE	C.5.3.1
OPENINGS	IN GENERAL, SHOULD HAVE A SHARE OF MAXIMUM 30 TO 50% OF THE OVERALL FAÇADE SURFACE	% ACCORDING TO THEIR ORIENTATION TO MINIMIZE SOLAR IMPACT. OPENINGS SHOULD BE LOCATED TO MINIMIZE THE IMPACT ON PRIVACY FOR NEIGHBORING PLOTS	C.5.3.2
ROOFTOP	MIN. 0,9M PARAPET; SET BACK FOR MECHANICAL EQUIPMENT MIN. 4M	SCREENING OF ALL UTILITIES VISIBLE FROM PUBLIC ROADS	C.5.3.8
MATERIALS / COLORS	70% RANGE OF LIGHT GRADATIONS OF EARTH TONES; MAX. 10% OF METAL CLADDING AND CURTAIN WALL OF FAÇADE SURFACE	SYMPATHETIC TO LANDSCAPE AND CULTURAL HERITAGE; MUST ADHERE TO ASEER CONTEXTUAL ARCHITECTURE GUIDELINE PRINCIPLES	C.5.3.3, C.5.3.4
SIGNAGE	SIGNAGE MUST BE WELL INTEGRATED WITHIN OVERALL ARCHITECTURAL COMPOSITION	SIGNAGE SHALL AVOID CONFLICTS WITH ADJACENT RESIDENTIAL USES AND PUBLIC REALM TREE CANOPIES	C.6.10

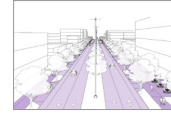
Figure 102 Development standards for areas with civic activities

Sample location

Urban Center



Arterial corridor



Collector corridor

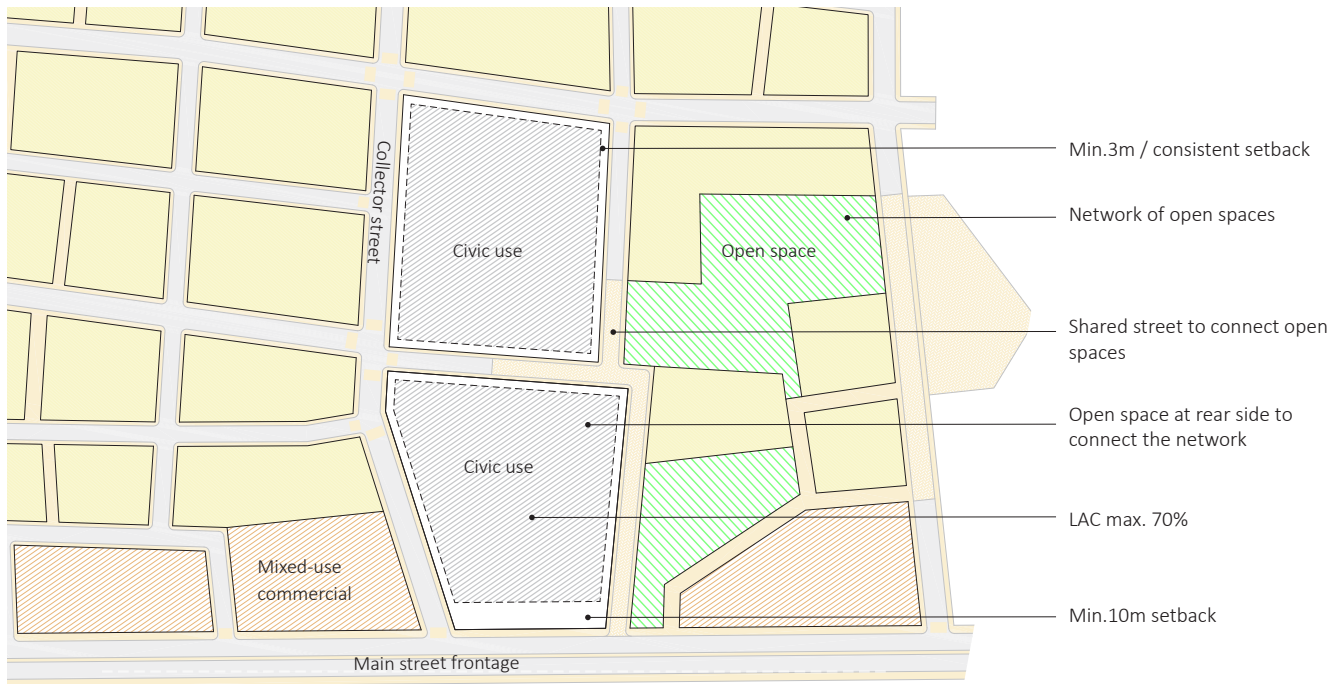
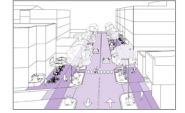


Figure 103 Block plan: civic use along arterial corridor and residential neighborhood

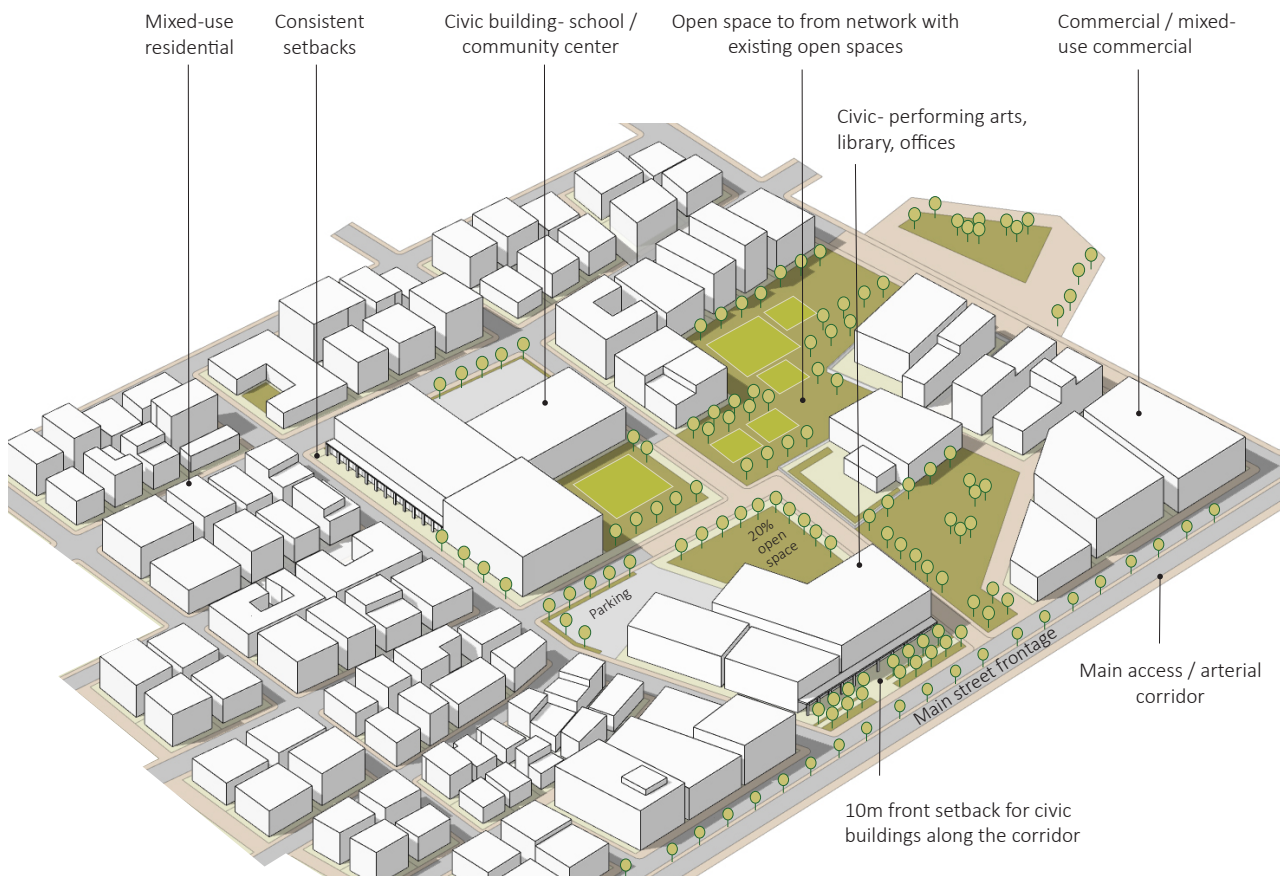
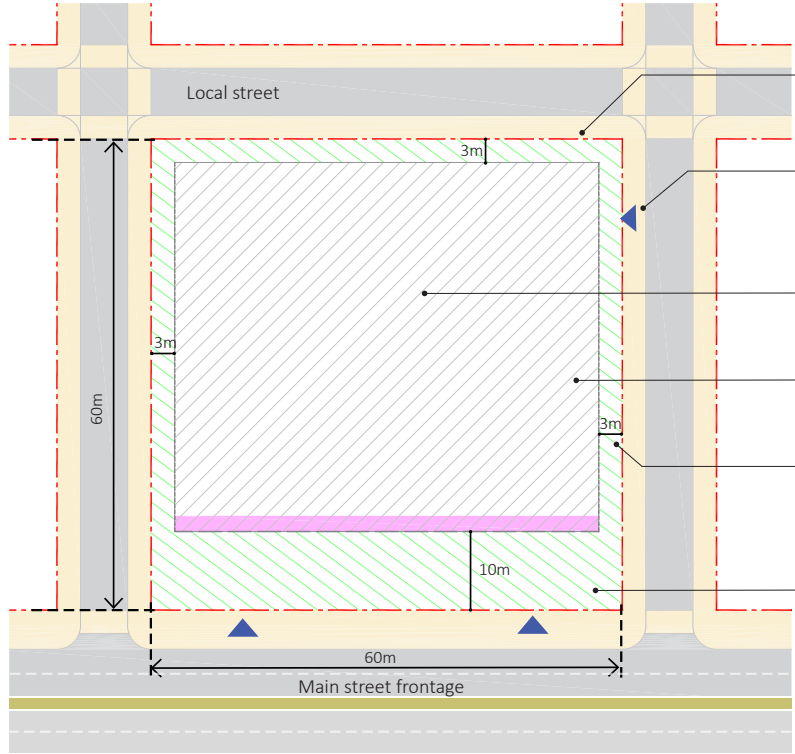
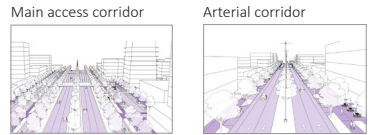


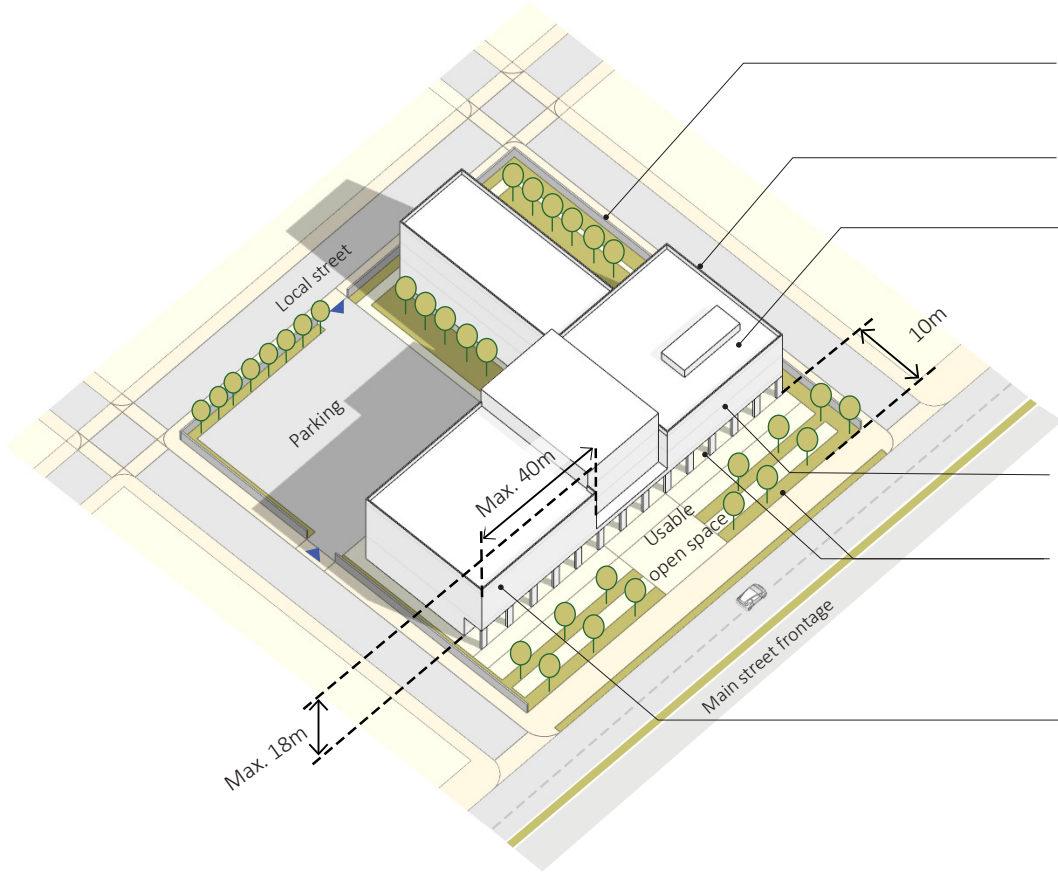
Figure 104 Block isometric: civic use along arterial corridor and residential neighborhood

Sample location



- Block size: max. 120m in any direction
- Vehicular access preferred from side street, front limited to 1 per 30m width
- Parking preferred back of the lot/underground, front limited to 1 bay
- LAC: max. 70%
- Front setback: min. 10m
- Rear/side setback: min. 5m
- Side street: min. 5m, 1/5th Row
- Min. 20% landscaped area
- Open space treated as extension to public realm along the road

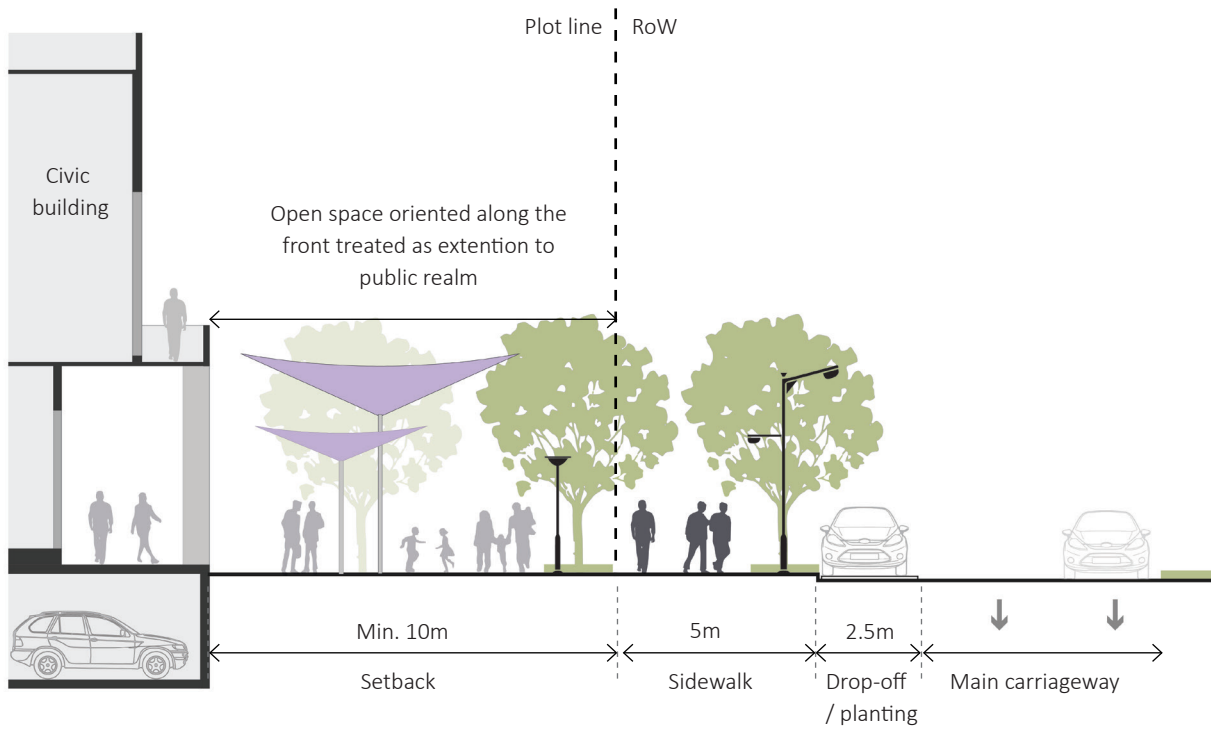
Figure 105 Block plan: civic use



- Max. 1.5m high perimeter wall
- Min. 0.9m external parapet wall
- Min. 4m setback overhead utilities
- Min. 70% frontage along 10m setback line
- Attractive public realm and open space along main frontage with active ground floor
- Max. 40m facade without break
- Min. 50% facade in one consistent material, 70% range in earth tone colors

Figure 106 Block isometric: civic use





**Figure 107** Civic use street edge treatment

**f. Use: Recreational**

<b>RECREATIONAL / LEISURE ACTIVITIES</b>
<b>LOCATION (URBAN CHARACTER):</b> Varies
<b>LOCATION (CORRIDOR):</b> Varies
<b>TYPICAL PLOT SIZE:</b> Varies
<b>ALLOWABLE TYPOLOGIES:</b> N/A

LANDSCAPE SETTINGS		REMARKS	AUDC SECTION
RIDGE LINE	MIN. 200M OFFSET FROM RIDGE LINE WITH NO LARGE STRUCTURE OR BUILDING	LARGE STRUCTURE IF EXCEEDING 3M IN DIMENSION IN ANY DIRECTION	C.1.3, C.1.4
VIEW CORRIDOR	ESTABLISHED PUBLIC VIEWS TO BE PROTECTED		
SLOPE	> 15% SLOPE NO LARGE STRUCTURE OR BUILDINGS	OTHER OPEN SPACE USES MAY BE LOCATED ON SLOPES <30%	C.1.5
WADI ZONES	DEVELOPMENT ALLOWED ONLY IN WADI DEVELOPMENT ZONE	OTHER OPEN SPACE USES MAY BE ACCEPTED WITHIN WADI CORRIDOR	C.1.7
HERITAGE BOUNDARY	200M TYPICAL, LIMITS OF THE PLOT BOUNDARY OF HERITAGE MONUMENT/BUILDING OR BUILDING GROUP, OR AN OFFSET OF A MIN. 20M FROM THE HERITAGE BUILDING FAÇADE	PREFERRED WITH NO DEVELOPMENT	C.2.2,C.2.4
ROW	VARIES	CONTINUOUS AND ACCESSIBLE PED/BIKE PATH; SHARED PATH PROMOTED	C.3.3
PUBLIC REALM	MIN. 1.5M SIDEWALK	CONTINUOUS AND ACCESSIBLE PED/BIKE PATH; CONTEXTUAL MATERIAL AND COLOR PALETTE; LAYOUT AND FUNCTIONS TO RESPOND TO FORMS AND TOPOGRAPHY OF LOCAL NATURAL AND CULTURAL LANDSCAPE	C.3.4
PERIMETER WALLS / FENCES	MAX 1.5M IN HEIGHT FROM PUBLIC STREET/GROUND LEVEL	MAX 50% PERIMETER WALL ALONG MAIN FRONTAGE	C.5.3.6
OPEN SPACE	MIN 20% LANDSCAPED AREA		C.5.2.3
BUFFER	MIN. 30M BUFFER BETWEEN LANDUSE AND NATURAL AREAS	VACANT PLOT: VEGETATION BUFFER REQUIRED	C.5.3.9

BUILDING ENVELOPE		REMARKS	AUDC SECTION
URBAN BLOCK	IF ANY, MAX. 120M ANY DIRECTION WITHOUT INTERRUPTION	ORGANIC SHAPES RESPONDING TO NATURAL AND CULTURAL LANDSCAPE SHALL BE PROMOTED; LARGER BLOCK ALLOWED WITH MIDBLOCK PEDESTRIAN/VEHICULAR PASSAGE	C.5.2.2
ALLOWABLE USES	ANCILLARY TO OPEN SPACE, SPORTS FACILITIES AND RECREATIONAL ACTIVITIES	UTILITARIAN USES TO BE LOCATED AT THE BACK OF THE PLOT AWAY FROM PUBLIC FRONTAGE AND PUBLIC VIEWS	C.5.3.7
FLOORPLATE	MAX. 30M LENGTH ANY SIDE; MULTIPLE STRUCTURES OK	ORGANIC SHAPES RESPONDING TO NATURAL E CULTURAL LANDSCAPE SHALL BE PROMOTED	C.5.2.5
STRUCTURE HEIGHT	MAX. 10M		
NUMBER OF FLOORS	MAX. 2 LEVELS		
LAC	MAX. 30%		
SET BACK			
FRONT	MIN. 10 M FROM MAIN FRONTAGE	LANDSCAPED; INTEGRATED WITH PUBLIC REALM; UNIVERSALLY ACCESSIBLE	
LEFT AND RIGHT SIDES	MIN. 5M	MIN. 3M LANDSCAPED BUFFER	
BACK	MIN. 5M	MIN. 3M LANDSCAPED BUFFER	
STREETWALL	N/A		
PARKING	MIN. 3M LANDSCAPED BUFFER FROM PUBLIC ROADS; MAX. 30% OF TOTAL PLOT AREA	PERMEABLE SURFACE TREATMENT	C.5.2.4
ACCESS	MAX. 1 VEHICULAR ENTRY FOR PLOTS UP TO 30M WIDE, FOR LARGER PLOTS, MAX. 1 VEHICLE ENTRY FOR EVERY 50M OF MAIN ROAD FRONTAGE		C.5.2.4

ARCHITECTURE		REMARKS	AUDC SECTION
FACADE	MIN. 50% OF FACADE TREATMENT WITH ONE CONSISTENT MATERIAL	INTEGRAL TO ALL PUBLIC FACADES	C.5.3.1
OPENINGS	IN GENERAL, SHOULD HAVE A SHARE OF MAXIMUM 30 TO 50% OF THE OVERALL FACADE SURFACE	% ACCORDING TO THEIR ORIENTATION TO MINIMIZE SOLAR IMPACT. OPENINGS SHOULD BE LOCATED TO MINIMIZE THE IMPACT ON PRIVACY FOR NEIGHBORING PLOTS	C.5.3.2
ROOFTOP	MIN. 0,9M PARAPET; SET BACK FOR MECHANICAL EQUIPMENT MIN. 4M	SCREENING OF ALL UTILITIES VISIBLE FROM PUBLIC ROADS	C.5.3.8
MATERIALS / COLORS	70% RANGE OF LIGHT GRADATIONS OF LOCAL LANDSCAPE TONES; NO CURTAIN WALL; NO METAL CLADDING	SYMPATHETIC TO LANDSCAPE AND CULTURAL HERITAGE; MUST ADHERE TO ASEER CONTEXTUAL ARCHITECTURE GUIDELINE PRINCIPLES	C.5.3.3, C.5.3.4
SIGNAGE	SIGNAGE MUST BE WELL INTEGRATED WITHIN OVERALL ARCHITECTURAL COMPOSITION	SIGNAGE SHALL AVOID CONFLICTS WITH ADJACENT RESIDENTIAL USES AND PUBLIC REALM TREE CANOPIES	C.6.10

**Figure 108** Development standards for areas with recreational activities

Sample location

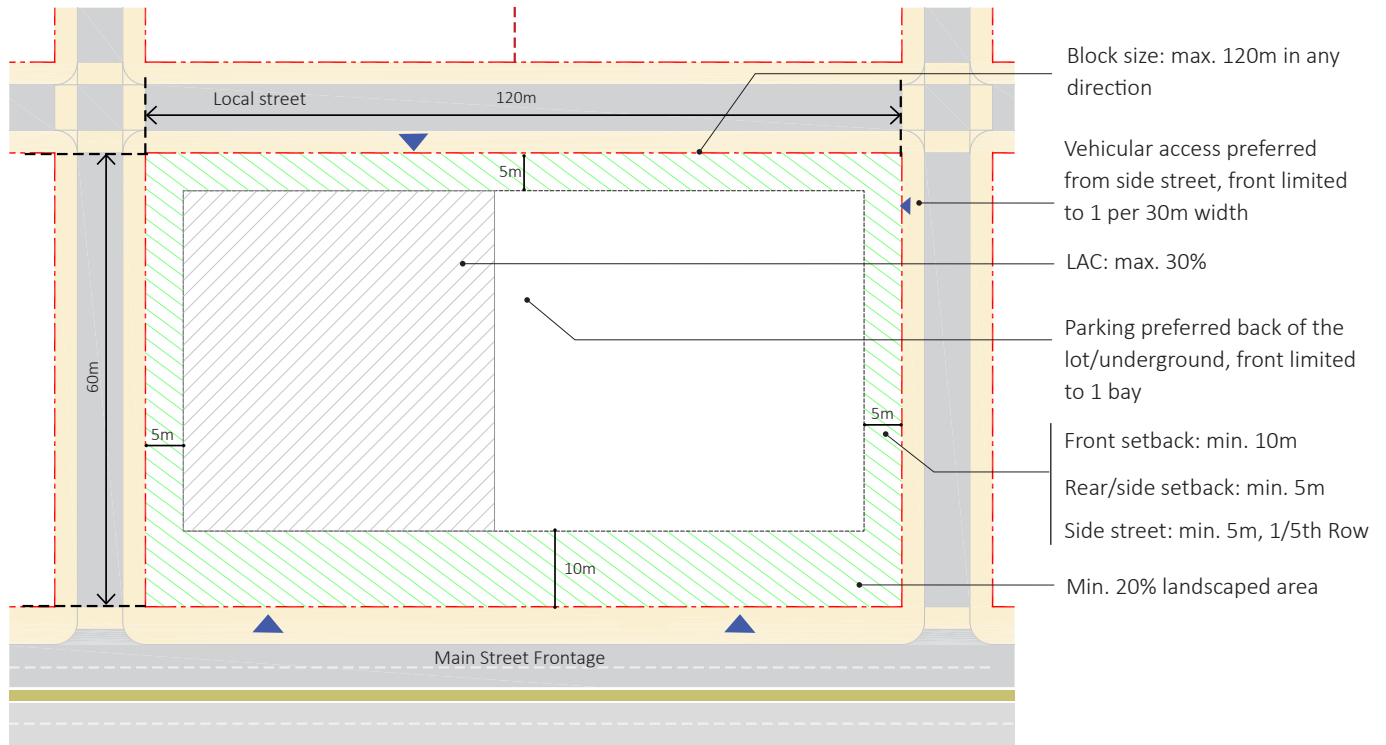
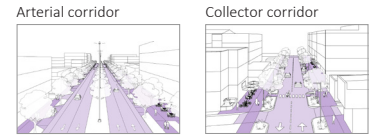


Figure 109 Block plan: recreational / leisure use

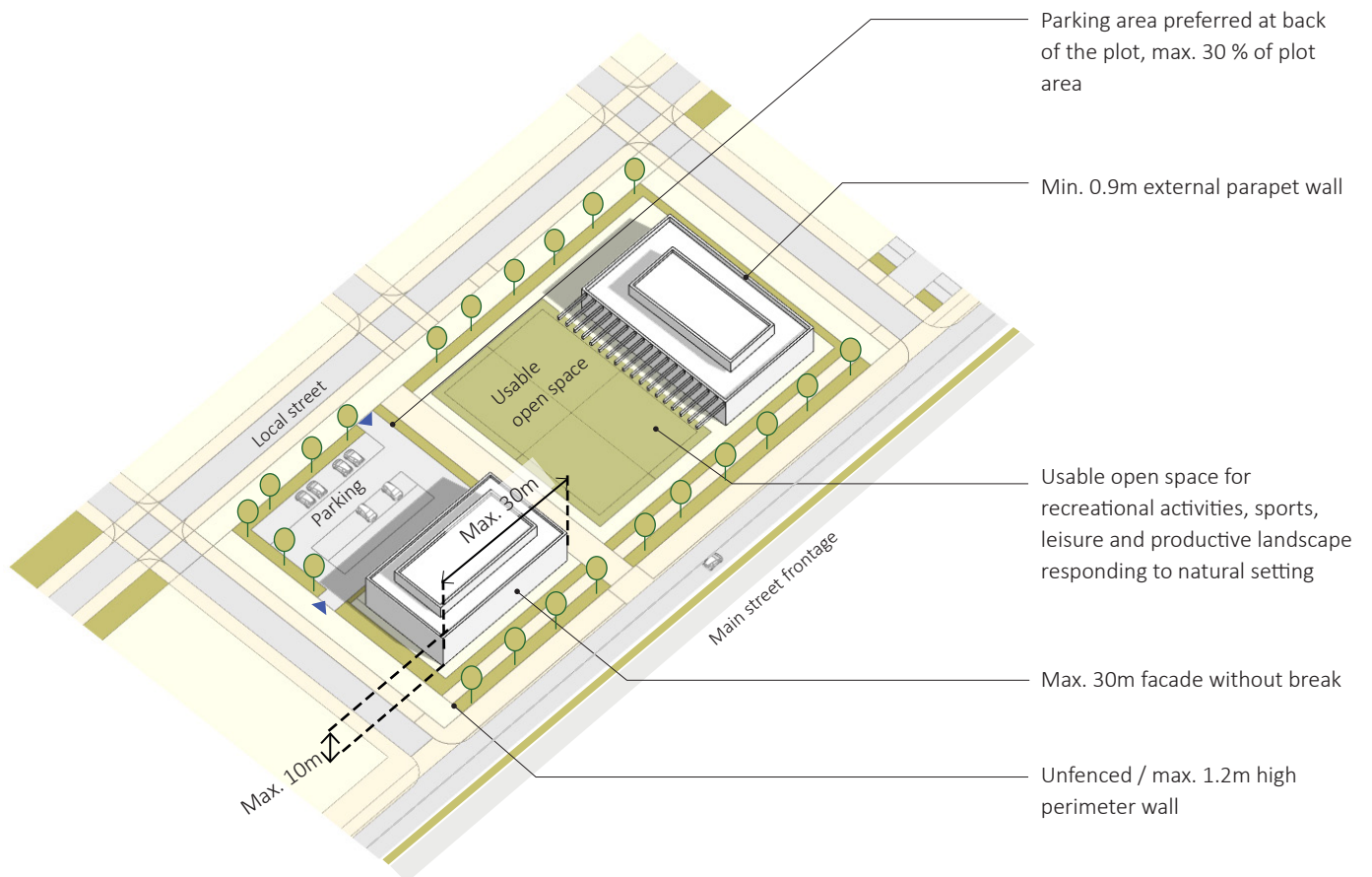


Figure 110 Block isometric: recreational / leisure use

## g. Use: Environmental

ENVIRONMENTAL / NATURAL RESOURCES, RELATED ACTIVITIES			
LOCATION (URBAN CHARACTER): Varies			
LOCATION (CORRIDOR): Varies			
TYPICAL PLOT SIZE: Varies			
ALLOWABLE TYPOLOGIES: N/A			
LANDSCAPE SETTINGS		REMARKS	AUDC SECTION
RIDGE LINE	MIN. 200M OFFSET FROM RIDGE LINE WITH NO LARGE STRUCTURE OR BUILDING	LARGE STRUCTURE IF EXCEEDING 3M IN DIMENSION IN ANY DIRECTION. OTHER OPEN SPACE USES MAY BE LOCATED WITHIN THE OFFSET.	C.1.3, C.1.4
VIEW CORRIDOR	ESTABLISHED PUBLIC VIEWS TO BE PROTECTED		
SLOPE	> 15% SLOPE NO LARGE STRUCTURE OR BUILDINGS	OTHER OPEN SPACE USES MAY BE LOCATED ON SLOPES <30%	C.1.5
WADI ZONES	NO STRUCTURE OR BUILDING	OTHER OPEN SPACE USES MAY BE ACCEPTED WITHIN WADI CORRIDOR	C.1.7
HERITAGE BOUNDARY	LIMITS OF THE PLOT BOUNDARY OF HERITAGE MONUMENT/BUILDING OR BUILDING GROUP, OR AN OFFSET OF A MIN. 20M FROM THE HERITAGE BUILDING FAÇADE	PREFERRED WITH NO DEVELOPMENT	C.2.2,C.2.4
ROW	VARIES	CONTINUOUS AND ACCESSIBLE PED/BIKE PATH; SHARED PATH PROMOTED	C.3.3
PUBLIC REALM	MIN. 1.5M SIDEWALK	CONTINUOUS AND ACCESSIBLE PED/BIKE PATH; CONTEXTUAL MATERIAL AND COLOR PALETTE; LAYOUT AND FUNCTIONS TO RESPOND TO FORMS AND TOPOGRAPHY OF LOCAL NATURAL AND CULTURAL LANDSCAPE	C.3.4
PERIMETER WALLS / FENCES	UNFENCED		C.5.3.6
OPEN SPACE	MIN 70% LANDSCAPED AREA		C.5.2.3
BUFFER	N/A	N/A	C.5.3.9
BUILDING ENVELOPE		REMARKS	AUDC SECTION
URBAN BLOCK	IF ANY, MAX. 120M ANY DIRECTION WITHOUT INTERRUPTION	ORGANIC SHAPES RESPONDING TO NATURAL AND CULTURAL LANDSCAPE SHALL BE PROMOTED; LARGER BLOCK ALLOWED WITH MIDBLOCK PEDESTRIAN/VEHICULAR PASSAGE	C.5.2.2
ALLOWABLE USES	ANCILLARY TO OPEN SPACE AND RECREATIONAL ACTIVITIES	UTILITARIAN USES TO BE LOCATED AT THE BACK OF THE LOT AWAY FROM PUBLIC FRONTAGE AND VIEWS	C.5.3.7
FLOORPLATE	MAX. 30M LENGTH ANY SIDE; MULTIPLE STRUCTURES OK	ORGANIC SHAPES RESPONDING TO NATURAL E CULTURAL LANDSCAPE SHALL BE PROMOTED	C.5.2.5
STRUCTURE HEIGHT	MAX. 10M		
NUMBER OF FLOORS	MAX. 2 LEVELS		
LAC	MAX. 5%		
SET BACK			
FRONT	MIN. 10 M FROM MAIN FRONTAGE	LANDSCAPED; INTEGRATED WITH PUBLIC REALM; UNIVERSALLY ACCESSIBLE	
LEFT AND RIGHT SIDES	MIN. 5M	MIN. 3M LANDSCAPED BUFFER	
BACK	MIN. 5M	MIN. 3M LANDSCAPED BUFFER	
STREETWALL	N/A		
PARKING	MIN. 3M LANDSCAPED BUFFER FROM PUBLIC ROADS; MAX. 30% OF TOTA LOT AREA	PERMEABLE SURFACE TREATMENT	C.5.2.4
ACCESS	MAX. 1 VEHICLE ENTRY FOR EVERY 50M OF MAIN ROAD FRONTAGE		C.5.2.4
ARCHITECTURE		REMARKS	AUDC SECTION
FACADE	MIN. 50% OF FACADE TREATMENT WITH ONE CONSISTENT MATERIAL	INTEGRAL TO ALL PUBLIC FACADES	C.5.3.1
OPENINGS	IN GENERAL, SHOULD HAVE A SHARE OF MAXIMUM 30 TO 50% OF THE OVERALL FACADE SURFACE	% ACCORDING TO THEIR ORIENTATION TO MINIMIZE SOLAR IMPACT. OPENINGS SHOULD BE LOCATED TO MINIMIZE THE IMPACT ON PRIVACY FOR NEIGHBORING PLOTS	C.5.3.2
ROOFTOP	MIN. 0,9M PARAPET; SET BACK FOR MECHANICAL EQUIPMENT MIN. 4M	SCREENING OF ALL UTILITIES VISIBLE FROM PUBLIC ROADS	C.5.3.8
MATERIALS / COLORS	70% RANGE OF LIGHT GRADATIONS OF LOCAL LANDSCAPE TONES; NO CURTAIN WALL; NO METAL CLADDING	SYMPATHETIC TO LANDSCAPE AND CULTURAL HERITAGE; MUST ADHERE TO ASEER CONTEXTUAL ARCHITECTURE GUIDELINE PRINCIPLES	C.5.3.3, C.5.3.4
SIGNAGE	SIGNAGE MUST BE WELL INTEGRATED WITHIN OVERALL ARCHITECTURAL COMPOSITION	SIGNAGE SHALL BE CLEARLY VISIBLE AND AVOID CONFLICTS WITH PUBLIC REALM TREE CANOPIES	C.6.10

Figure 111 Development standards for areas with environment related activities

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## h. Mixed Use / Commercial - High Density

MIXED-USE / COMMERCIAL ACTIVITIES - HIGH DENSITY			
LOCATION (URBAN CHARACTER): Urban Center, Old District, New District			
LOCATION (CORRIDOR): Main Access Corridor, Arterial Corridor			
TYPICAL PLOT SIZE: Varies			
ALLOWABLE TYPOLOGIES: Varies			
LANDSCAPE SETTINGS	REMARKS	AUDC SECTION	
RIDGE LINE VIEW CORRIDOR	MIN. 50M OFFSET FROM RIDGE LINE WITH NO LARGE STRUCTURE OR BUILDING ESTABLISHED PUBLIC VIEWS TO BE PROTECTED	LARGE STRUCTURE IF EXCEEDING 3M IN DIMENSION IN ANY DIRECTION	C.1.3, C.1.4
SLOPE	> 30% SLOPE NO LARGE STRUCTURE OR BUILDINGS	LARGE STRUCTURE IF EXCEEDING 3M IN DIMENSION IN ANY DIRECTION	C.1.5
WADI ZONES	DEVELOPMENT ALLOWED ONLY IN WADI DEVELOPMENT ZONE		C.1.7
HERITAGE BOUNDARY	LIMITS OF THE PLOT BOUNDARY OF HERITAGE MONUMENT/BUILDING OR BUILDING GROUP, OR AN OFFSET OF A MIN. 20M FROM THE HERITAGE BUILDING FAÇADE	PREFERRED WITH NO DEVELOPMENT	C.2.2,C.2.4
ROW	60M TYPICAL, 32M, 20M	MIN 2M CONTINUOUS AND ACCESSIBLE SIDEWALKS WITH MIN 3M LANDSCAPED AREA BUFFER	C.3.3
PUBLIC REALM	MIN. 5M SIDEWALK WITH LANDSCAPED FLEX. ZONE	ACTIVE FRONTAGES AT GROUND FLOOR PROMOTED	C.3.4
PERIMETER WALLS / FENCES	MAX 1.5M IN HEIGHT FROM PUBLIC STREET/GROUND LEVEL	MAX 50% PERIMETER WALL ALONG MAIN CORRIDOR	C.5.3.6
OPEN SPACE	MIN 20% LANDSCAPED AREA	TREATED AS AN EXTENSION TO PUBLIC REALM TO FORM AN ATTRACTIVE FRONTAGE ALONG MAIN CORRIDOR	C.5.2.3
BUFFER	MIN. 30M BUFFER BETWEEN LANDUSE AND NATURAL AREAS	VACANT PLOT: VEGETATION BUFFER OR HOARDING REQUIRED	C.5.3.9
BUILDING ENVELOPE	REMARKS	AUDC SECTION	
URBAN BLOCK	MAX. 120M ANY DIRECTION WITHOUT INTERRUPTION	LARGER BLOCK ALLOWED WITH MIDBLOCK PEDESTRIAN/VEHICULAR PASSAGE	C.5.2.2
ALLOWABLE USES	RETAIL / COMMERCIAL / RESIDENTIAL / CIVIC & GOVERNMENT / HOSPITALITY / VERTICAL AND HORIZONTAL MIX	UTILITARIAN AND SERVICE TYPE OF USES TO BE LOCATED AT THE BACK OF THE LOT AWAY FROM PUBLIC FRONTAGE. NOT ALLOWED: RESIDENTIAL VILLAS / LIGHT INDUSTRIAL; DRIVE-THROUGH TO BE LOCATED AT THE BACK OF THE LOT OR INTEGRATED IN DEVELOPMENT.	C.5.3.7
FLOORPLATE	MAX. 60M LENGTH WITHOUT BREAK ALONG PUBLIC FRONTAGES. 30M MAX FRONTAGE ALONG MAIN CORRIDOR FOR TOWER	TALL BUILDINGS - OVER 9 LEVELS TO BE DESIGN WITH PODIUM AND TOWER ZONES	C.5.2.5
STRUCTURE HEIGHT	MIN. 8M - MAX. 60M		
NUMBER OF FLOORS	MAX. 12 LEVELS; MIN. FLOOR TO FLOOR 3.2M		
LAC	MAX. 70%	PODIUM ZONE: MAX. 70%, TOWER ZONE: MAX. 35%	C.5.4.1
SET BACK			
FRONT	MIN. 10M	LANDSCAPED; INTEGRATED WITH PUBLIC REALM; UNIVERSALLY ACCESSIBLE	
LEFT AND RIGHT SIDES, SIDE STREETS	MIN. 4M		
BACK SIDE	MIN. 8M	WITH MIN. 5M LANDSCAPED BUFFER	
STREETWALL	MIN. 70% ALONG MAIN FRONTAGE ALONG 20M SETBACK LINE; MIN:30% FOR PLOTS >5000 SQ.M	WITH ACTIVE FRONTAGE ALONG MAIN CORRIDOR; ARCADES	C.5.2.5
PARKING	RETAIL, OFFICE AND ALL OTHER USES: 1 SPACE EACH 75 SQM OF GFA; RESTAURANT (DRIVE-THROUGH) 2 SPACES EACH 100 SQM OF GFA; HOSPITALITY 1 SPACE-ROOM 1 SPACE PER DU ≤ 130 SQM; 2 SPACES PER DU > 130 SQM PARKING LOT MAX. 70% OF OPEN SPACE; MAX.30% OF OPEN SPACE FOR PLOTS >5000 SQ.M	INTEGRATED IN DEVELOPMENT, UNDERGROUND, LOCATED AT BACK OF THE PLOT NOT ALONG PUBLIC FRONTAGE; FRONT OF THE LOT LIMITED TO 1 BAY LANDSCAPED; ADDITIONAL SHARED DISTRICT PARKING OK; WHEN TRANSIT IS OPERATIONAL; MAX. PARKING STANDARDS MAY APPLY AS: RESIDENTIAL: MAX. 1 SPACE PER DU; OFFICE: MAX. 1 SPACE EACH 80 SQM OF GFA; RETAIL: MAX. 1 SPACE EACH 100 SQM OF GLA	C.5.2.4
ACCESS	MAX. 1 VEHICULAR ENTRY FOR PLOTS UP TO 60M WIDE; MAX. 2 ENTRY PER URBAN BLOCK FRONTAGE		C.5.2.4
ARCHITECTURE	REMARKS	AUDC SECTION	
FAÇADE	MAX. 60M LENGTH WITHOUT BREAK ALONG PUBLIC FRONTAGES. MIN. 50% OF FAÇADE TREATMENT WITH ONE CONSISTENT MATERIAL	INTEGRAL TO ALL PUBLIC FAÇADES; HIGH QUALITY ALONG MIAN CORRIDOR; BREAK: MIN.1.5 M IN DEPTH AND 3 M IN WIDTH, FOR THE ENTIRE HEIGHT OF THE FAÇADE; GROUND LEVEL FAÇADE MAY HAVE A DISTINCT LOOK FROM THE UPPER FLOOR FAÇADES	C.5.3.1
OPENINGS	IN GENERAL, SHOULD HAVE A SHARE OF MAXIMUM 30 TO 50% OF THE OVERALL FAÇADE SURFACE	% ACCORDING TO THEIR ORIENTATION TO MINIMIZE SOLAR IMPACT. OPENINGS SHOULD BE LOCATED TO MINIMIZE THE IMPACT ON PRIVACY FOR NEIGHBORING PLOTS	C.5.3.2
ROOFTOP	MIN. 0.9M PARAPET; SET BACK FOR MECHANICAL EQUIPMENT MIN. 4M	SCREENING OF ALL UTILITIES VISIBLE FROM PUBLIC ROADS	C.5.3.8
MATERIALS / COLORS	70% RANGE OF LIGHT GRADATIONS OF LOCAL LANDSCAPE TONES; MAX 10% CURTAIN WALL; MAX 10% METAL CLADDING	SYMPATHETIC TO LOCAL LANDSCAPE AND CULTURAL HERITAGE	C.5.3.3, C.5.3.4
SIGNAGE	SIGNAGE MUST BE WELL INTEGRATED WITHIN OVERALL ARCHITECTURAL COMPOSITION	SIGNAGE SHALL AVOID CONFLICTS WITH ADJACENT RESIDENTIAL USES AND PUBLIC REALM TREE CANOPIES	C.6.10

Figure 112 Development standards for mixed use / commercial (high density) areas

Sample location

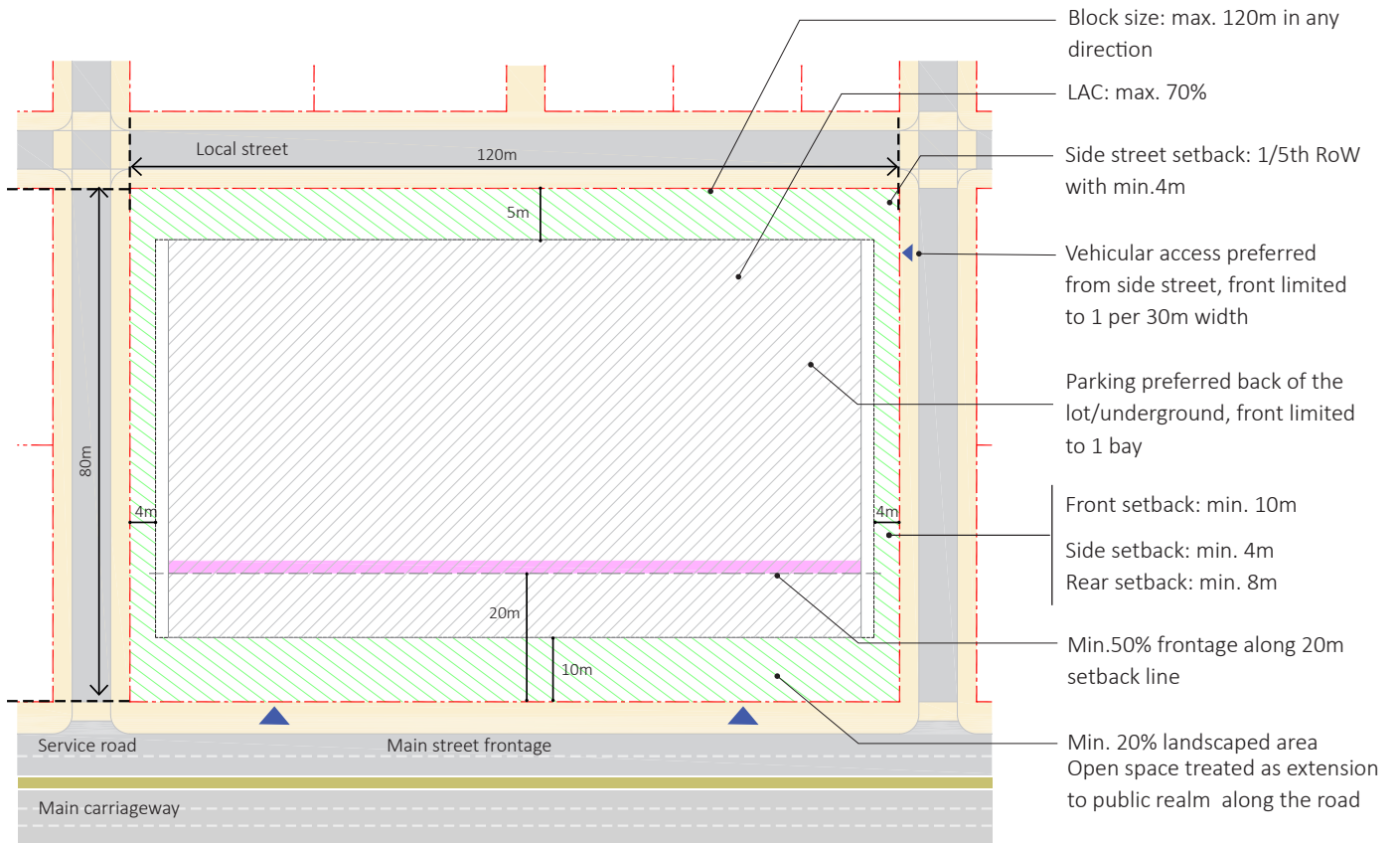
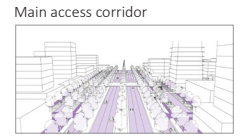


Figure 113 Block plan: mixed use commercial (high density)

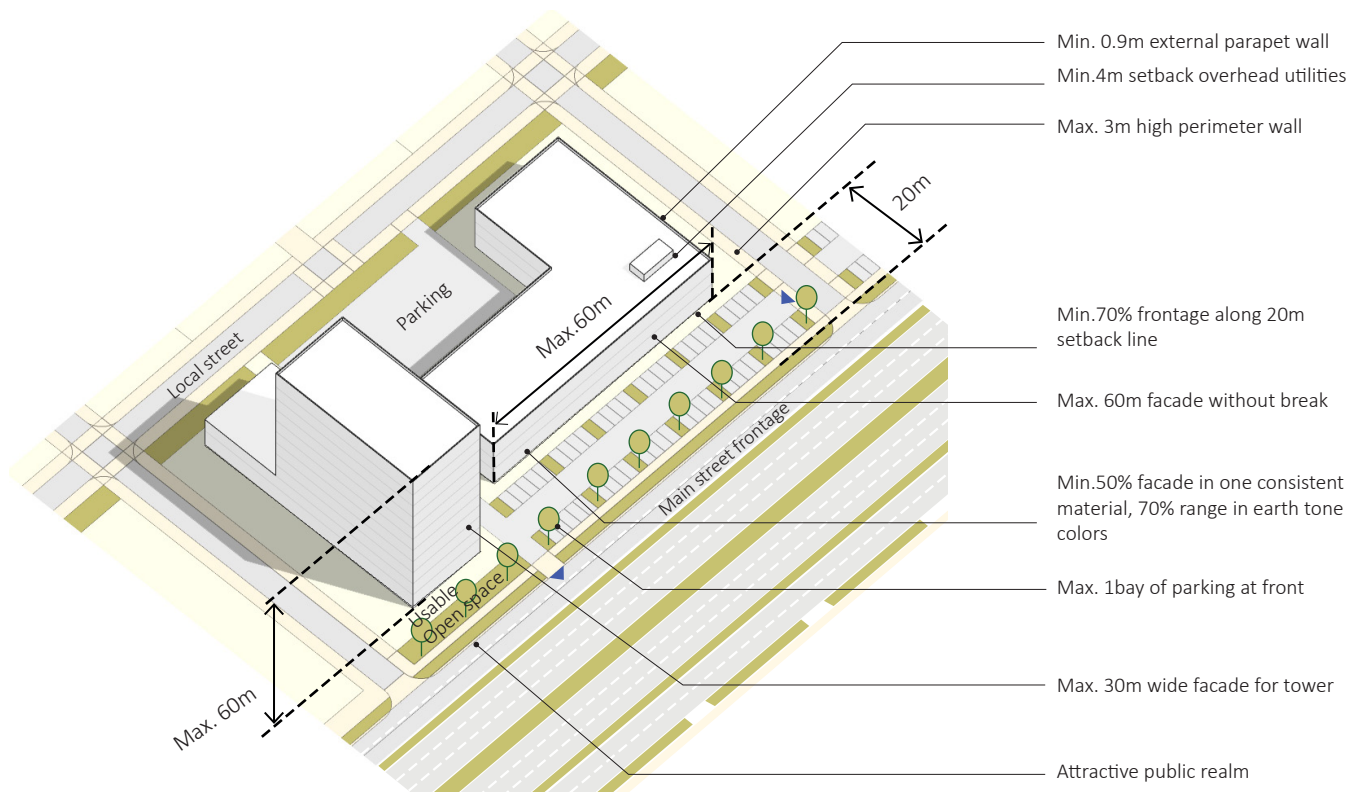


Figure 114 Block isometric: mixed use commercial (high density)

## i. Mixed Use / Commercial

MIXED-USE / COMMERCIAL ACTIVITIES			
LOCATION (URBAN CHARACTER): Urban Center, Old District, New District, Rural District			
LOCATION (CORRIDOR): Main Access Corridor, Arterial Corridor, Collector Corridor			
TYPICAL PLOT SIZE: Varies			
ALLOWABLE TYPOLOGIES: Varies			
LANDSCAPE SETTINGS		REMARKS	AUDC SECTION
RIDGE LINE VIEW CORRIDOR	MIN. 50M OFFSET FROM RIDGE LINE WITH NO LARGE STRUCTURE OR BUILDING ESTABLISHED PUBLIC VIEWS TO BE PROTECTED	LARGE STRUCTURE IF EXCEEDING 3M IN DIMENSION IN ANY DIRECTION	C.1.3, C.1.4
SLOPE	> 30% SLOPE NO LARGE STRUCTURE OR BUILDINGS	LARGE STRUCTURE IF EXCEEDING 3M IN DIMENSION IN ANY DIRECTION	C.1.5
WADI ZONES	DEVELOPMENT ALLOWED ONLY IN WADI DEVELOPMENT ZONE		C.1.7
HERITAGE BOUNDARY	LIMITS OF THE PLOT BOUNDARY OF HERITAGE MONUMENT/BUILDING OR BUILDING GROUP, OR AN OFFSET OF A MIN. 20M FROM THE HERITAGE BUILDING FAÇADE	PREFERRED WITH NO DEVELOPMENT	C.2.2.C.2.4
ROW	32M TYPICAL, 60M, 20M, 16M	CONTINUOUS AND ACCESSIBLE SIDEWALKS WITH LANDSCAPED AREA AND FLEX. ZONE	C.3.3
PUBLIC REALM	MIN. 5M SIDEWALK WITH LANDSCAPED FLEX. ZONE	ACTIVE FRONTAGES AT GROUND FLOOR PROMOTED	C.3.4
PERIMETER WALLS / FENCES	MAX 1.5M IN HEIGHT FROM PUBLIC STREET/GROUND LEVEL	MAX 50% PERIMETER WALL ALONG MAIN PUBLIC FRONTAGE	C.5.3.6
OPEN SPACE	MIN 20% LANDSCAPED AREA	TREATED AS AN EXTENSION TO PUBLIC REALM, TO FORM AN ATTRACTIVE STREET FRONT	C.5.2.3
BUFFER	MIN. 30M BUFFER BETWEEN LANDUSE AND NATURAL AREAS	VACANT PLOT: VEGETATION BUFFER OR HOARDING REQUIRED	C.5.3.9
BUILDING ENVELOPE		REMARKS	AUDC SECTION
URBAN BLOCK	MAX. 120M ANY DIRECTION WITHOUT INTERRUPTION	LARGER BLOCK ALLOWED WITH MIBLOCK PEDESTRIAN/VEHICULAR PASSAGE	C.5.2.2
ALLOWABLE USES	RETAIL / COMMERCIAL / RESIDENTIAL - VERTICAL AND HORIZONTAL MIX	UTILITARIAN USES TO BE LOCATED AT THE BACK OF THE LOT AWAY FROM PUBLIC FRONTAGE	C.5.3.7
FLOORPLATE	MAX. 40M LENGTH WITHOUT BREAK ALONG PUBLIC FRONTAGES	BREAKS MIN. 1.5 M IN DEPTH AND 3 M IN WIDTH, FOR THE ENTIRE HEIGHT OF THE FAÇADE	C.5.2.5
STRUCTURE HEIGHT	MIN. 8M - MAX. 20M		
NUMBER OF FLOORS	MAX. 5.5 LEVELS; MIN. FLOOR TO FLOOR 3.2M		
LAC	MAX. 70%		
SET BACK			
FRONT	BUILT-TO 5M SETBACK LINE	LANDSCAPED; INTEGRATED WITH PUBLIC REALM; UNIVERSALLY ACCESSIBLE	
LEFT AND RIGHT SIDES, SIDE STREETS	MIN. 3M		
BACK SIDE	MIN. 3M		
STREETWALL	MIN. 70% ALONG MAIN FRONTAGE	WITH ACTIVE FRONTAGE; COLONNADES	C.5.2.5
PARKING	RESIDENTIAL: MAX. 1 SPACE PER DU; OFFICE: MAX. 1 SPACE EACH 80 SQM OF GFA; RETAIL: MAX. 1 SPACE EACH 100 SQM OF GLA	INTEGRATED IN DEVELOPMENT, UNDERGROUND, LOCATED AT BACK OF THE PLOT NOT ALONG PUBLIC FRONTAGE; MAX. 70% OF OPEN SPACE; ADDITIONAL SHARED DISTRICT PARKING OK	C.5.2.4
ACCESS	MAX. 1 VEHICULAR ENTRY FOR PLOTS UP TO 30M WIDE, FOR LARGER PLOTS, MAX. 1 VEHICLE ENTRY FOR EVERY 50M OF MAIN ROAD FRONTAGE		C.5.2.4
ARCHITECTURE		REMARKS	AUDC SECTION
FAÇADE	MAX. 40M LENGTH WITHOUT BREAK ALONG PUBLIC FRONTAGES. MIN. 50% OF FAÇADE TREATMENT WITH ONE CONSISTENT MATERIAL	INTEGRAL TO ALL PUBLIC FAÇADES; BREAKS MIN. 1.5 M IN DEPTH AND 3 M IN WIDTH, FOR THE ENTIRE HEIGHT OF THE FAÇADE; GROUND LEVEL FAÇADE MAY HAVE A DISTINCT LOOK FROM THE UPPER FLOOR FAÇADES	C.5.3.1
OPENINGS	IN GENERAL, SHOULD HAVE A SHARE OF MAXIMUM 30 TO 50% OF THE OVERALL FAÇADE SURFACE	% ACCORDING TO THEIR ORIENTATION TO MINIMIZE SOLAR IMPACT. OPENINGS SHOULD BE LOCATED TO MINIMIZE THE IMPACT ON PRIVACY FOR NEIGHBORING PLOTS	C.5.3.2
ROOFTOP	MIN. 0.9M PARAPET; SET BACK FOR MECHANICAL EQUIPMENT MIN. 4M	SCREENING OF ALL UTILITIES VISIBLE FROM PUBLIC ROADS	C.5.3.8
MATERIALS / COLORS	70% RANGE OF LIGHT GRADATIONS OF EARTH TONES; MAX. 10% CURTAIN WALL, MAX. 10% METAL CLADDING OF FAÇADE SURFACE	SYMPATHETIC TO LOCAL LANDSCAPE AND CULTURAL HERITAGE	C.5.3.3, C.5.3.4
SIGNAGE	SIGNAGE MUST BE WELL INTEGRATED WITHIN OVERALL ARCHITECTURAL COMPOSITION	SIGNAGE SHALL AVOID CONFLICTS WITH ADJACENT RESIDENTIAL USES AND PUBLIC REALM TREE CANOPIES	C.6.10

Figure 115 Development standards for mixed use / commercial areas



Sample location

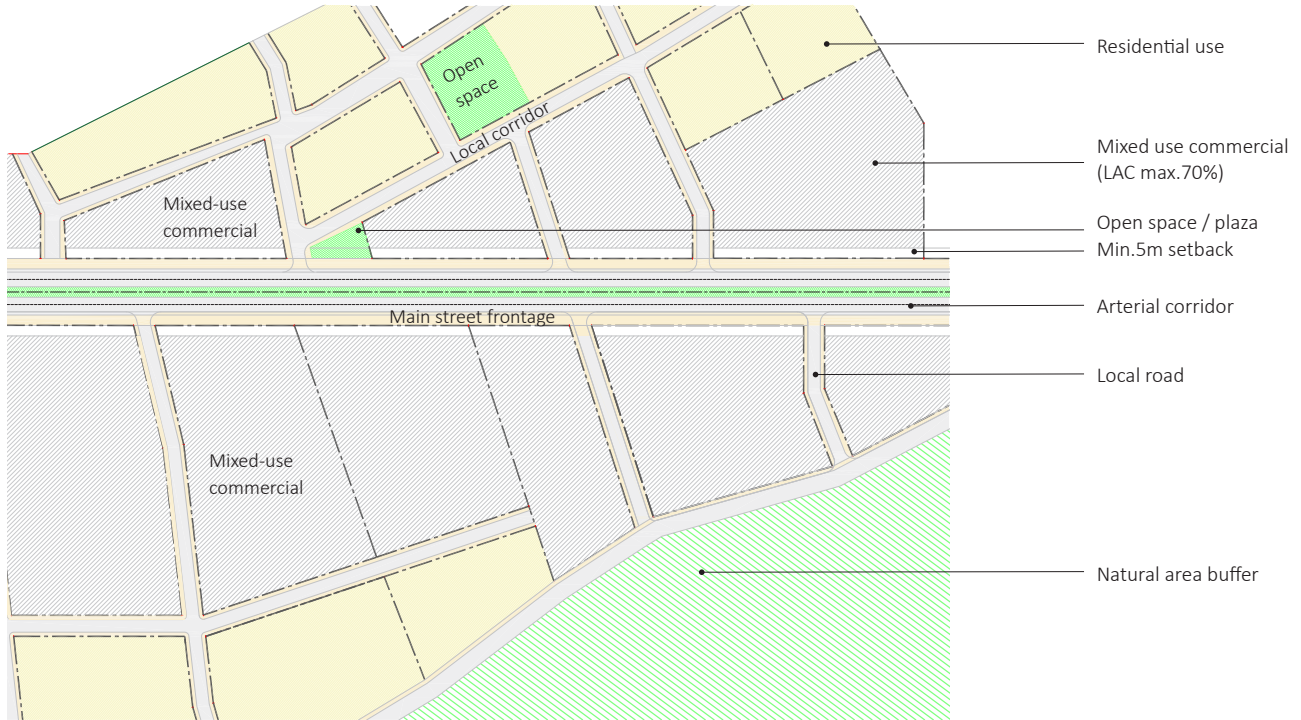
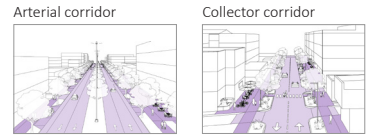


Figure 116 Block plan: mixed use commercial aggregate



Figure 117 Block isometric: mixed use commercial aggregate

Applicable locations

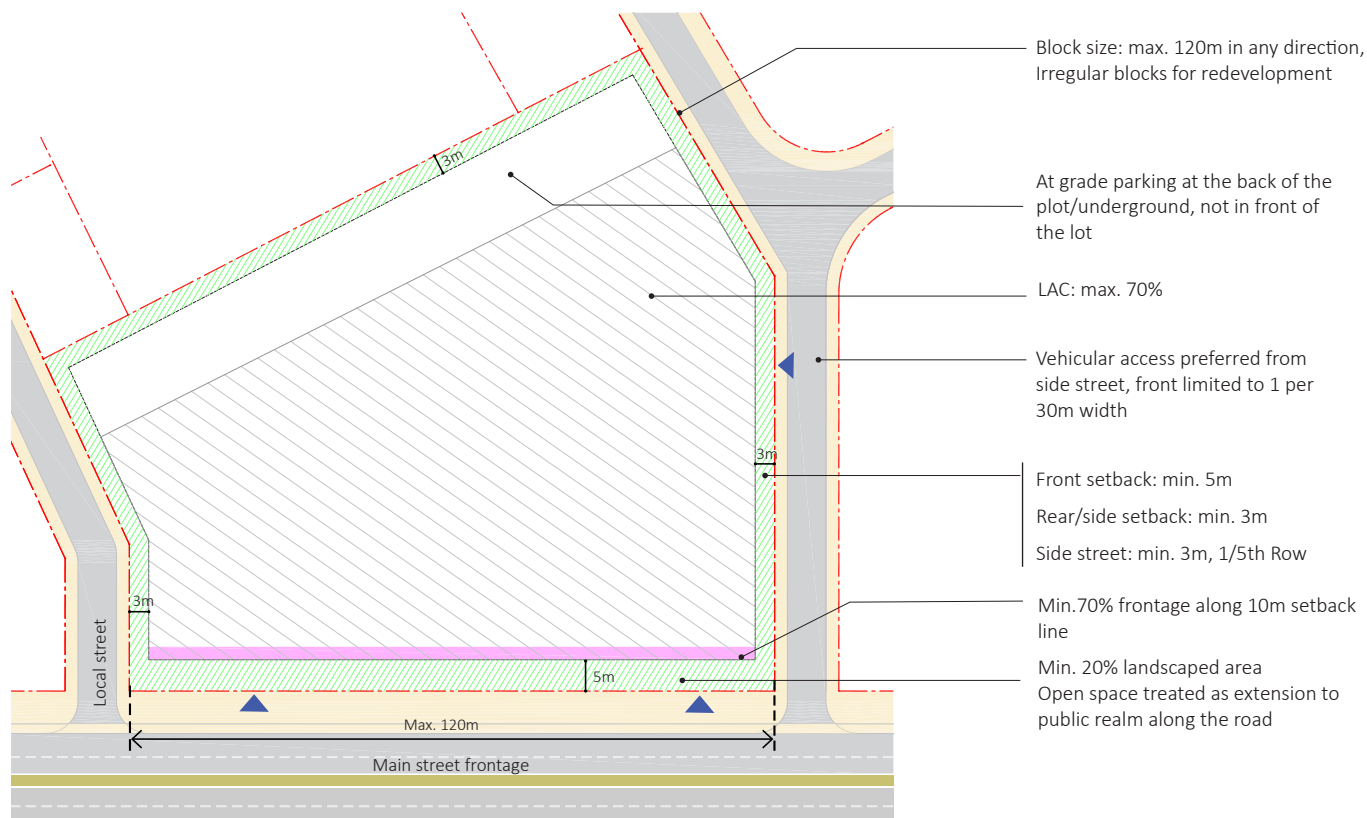
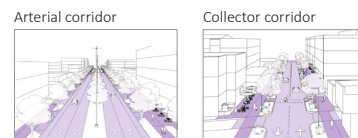


Figure 119 Block plan: mixed use commercial

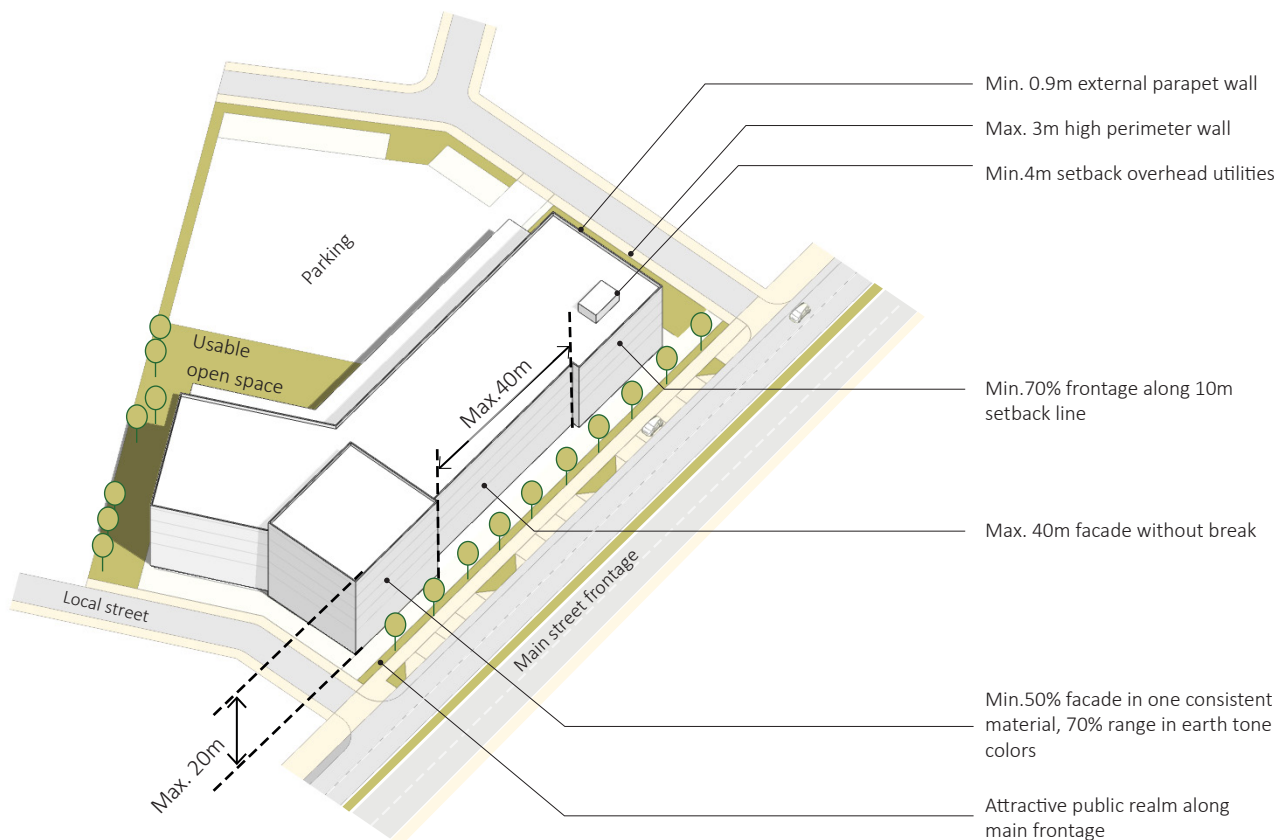


Figure 118 Block isometric: mixed use commercial

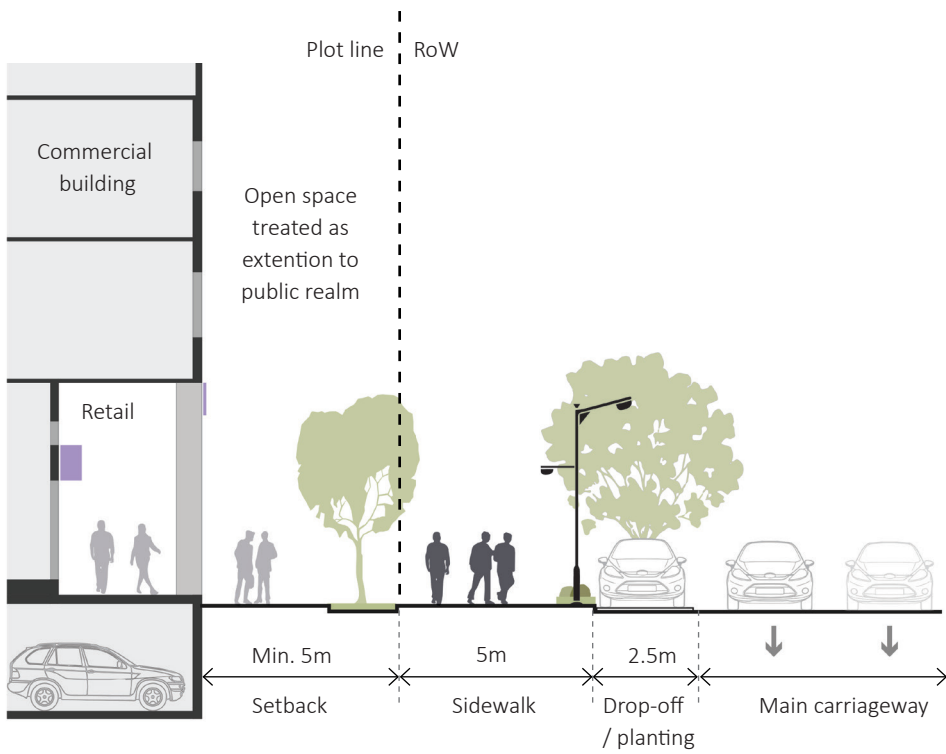


Figure 120 Mixed-use commercial use street edge treatment

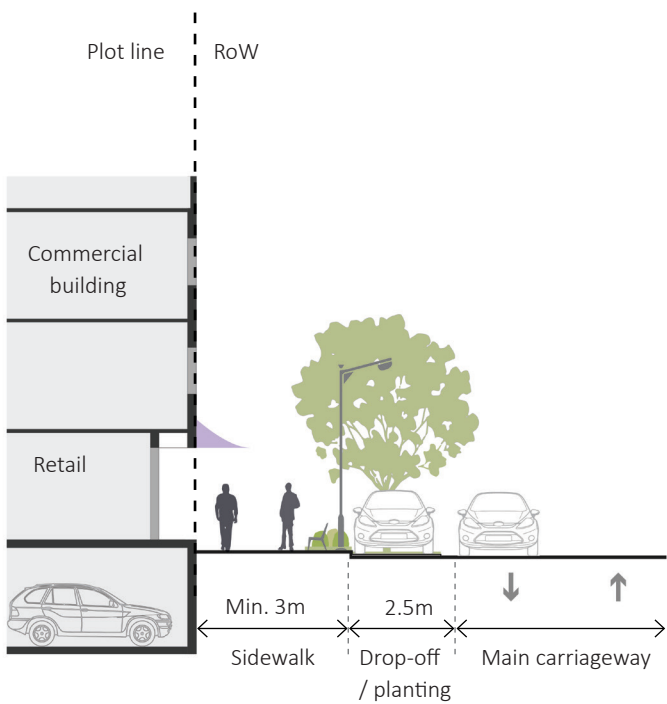


Figure 121 Mixed-use residential use street edge treatment

## j. Mixed Use / Residential

MIXED-USE / RESIDENTIAL ACTIVITIES		
LOCATION (URBAN CHARACTER): Urban Center, Old District, New District		
LOCATION (CORRIDOR): Arterial Corridor, Collector Corridor, Local Corridor		
TYPICAL PLOT SIZE: 20x30m to 60x60m		
ALLOWABLE TYPOLOGIES: Multifamily Midrise Apartments, Multifamily Lowrise Apartments, Others		
LANDSCAPE SETTINGS	REMARKS	AUDC SECTION
RIDGE LINE VIEW CORRIDOR	MIN. 50M OFFSET FROM RIDGE LINE WITH NO LARGE STRUCTURE OR BUILDING ESTABLISHED PUBLIC VIEWS TO BE PROTECTED	LARGE STRUCTURE IF EXCEEDING 3M IN DIMENSION IN ANY DIRECTION C.1.3, C.1.4
SLOPE	> 30% SLOPE NO LARGE STRUCTURE OR BUILDINGS	LARGE STRUCTURE IF EXCEEDING 3M IN DIMENSION IN ANY DIRECTION C.1.5
WADI ZONES	DEVELOPMENT ALLOWED ONLY IN WADI DEVELOPMENT ZONE	C.1.7
HERITAGE BOUNDARY	LIMITS OF THE PLOT BOUNDARY OF HERITAGE MONUMENT/BUILDING OR BUILDING GROUP, OR AN OFFSET OF A MIN. 20M FROM THE HERITAGE BUILDING FAÇADE	PREFERRED WITH NO DEVELOPMENT C.2.2,C.2.4
ROW	20 TO 10M TYPICAL	CONTINUOUS AND ACCESSIBLE SIDEWALKS WITH TREE PLANTING; SHARED STREET PROMOTED IN LOCAL STREET C.3.3
PUBLIC REALM	MIN 1.5M SIDEWALK	CONTINUOUS AND ACCESSIBLE SIDEWALKS WITH TREE PLANTING, ACCESSIBLE PARKS WITHIN RECOMMENDED CATCHMENT AREA C.3.4
PERIMETER WALLS / FENCES	MAX 3M IN HEIGHT FROM PUBLIC STREET/GROUND LEVEL	C.5.3.6
OPEN SPACE	MIN 20% LANDSCAPED AREA	ORIENTED TOWARDS MAIN PUBLIC FRONTAGE C.5.2.3
BUFFER	MIN. 30M LANDSCAPED BUFFER BETWEEN LANDUSE AND NATURAL AREAS	VACANT PLOT: VEGETATION BUFFER OR HOARDING REQUIRED C.5.3.9
BUILDING ENVELOPE	REMARKS	AUDC SECTION
URBAN BLOCK	MAX. 80M ANY DIRECTION WITHOUT INTERRUPTION	LARGER BLOCK ALLOWED WITH MIDBLOCK PEDESTRIAN/VEHICULAR PASSAGE C.5.2.2
ALLOWABLE USES	RETAIL / SMALL COMMERCIAL / OFFICE / RESIDENTIAL / WORKSHOP / EDUCATIONAL / TRAINING - VERTICAL AND HORIZONTAL MIX	UTILITARIAN USES TO BE LOCATED AT THE BACK OF THE LOT AWAY FROM PUBLIC FRONTAGE C.5.3.7
FLOORPLATE	MAX 30M LENGTH ANY SIDE WITHOUT BREAK ALONG PUBLIC FRONTAGES; MULTIPLE STRUCTURES OK	C.5.2.5
STRUCTURE HEIGHT	MAX. 18M	
NUMBER OF FLOORS	MAX. 4.5 LEVELS; MIN. FLOOR TO FLOOR 3.0M	
LAC	MAX. 70%	
SET BACK		
FRONT	BUILT-TO 5M SETBACK LINE	BUILT-TO PROPERTY LINE OKAY
LEFT AND RIGHT SIDES, LOCAL SIDE STREETS	MAX. 2M	
BACK SIDE	MIN. 2M	
STREETWALL	MIN. 70% ALONG MAIN FRONTAGE	C.5.2.5
PARKING	RESIDENTIAL: MAX. 1 SPACE PER DU; OFFICE: MAX. 1 SPACE EACH 80 SQM OF GFA; RETAIL: MAX. 1 SPACE EACH 100 SQM OF GLA	INTEGRATED IN DEVELOPMENT, UNDERGROUND, LOCATED AT BACK OF THE PLOT NOT ALONG PUBLIC FRONTAGE; MAX. 70% OF OPEN SPACE; ADDITIONAL SHARED DISTRICT PARKING OK C.5.2.4
ACCESS	MAX. 1 VEHICULAR ENTRY FOR PLOT UP TO 30M WIDE. FOR LARGER PLOTS, MAX. 1 VEHICLE ENTRY FOR EVERY 50M OF MAIN ROAD FRONTAGE	C.5.2.4
ARCHITECTURE	REMARKS	AUDC SECTION
FAÇADE	MAX. 40M LENGTH WITHOUT BREAK ALONG PUBLIC FRONTAGES; MIN. 50% OF FAÇADE TREATMENT WITH ONE CONSISTENT MATERIAL	INTEGRAL TO ALL PUBLIC FAÇADES; BREAKS: MIN.1.5 M IN DEPTH AND 3 M IN WIDTH, FOR THE ENTIRE HEIGHT OF THE FAÇADE C.5.3.1
OPENINGS	IN GENERAL, SHOULD HAVE A SHARE OF MAXIMUM 30 TO 50% OF THE OVERALL FAÇADE SURFACE	% ACCORDING TO THEIR ORIENTATION TO MINIMIZE SOLAR IMPACT. BALCONIES AND OPENINGS SHOULD BE LOCATED TO MINIMIZE THE IMPACT ON PRIVACY C.5.3.2
ROOFTOP	MIN. 0.9M PARAPET; SET BACK FOR MECHANICAL EQUIPMENT MIN. 4M	SCREENING OF ALL UTILITIES VISIBLE FROM PUBLIC ROADS C.5.3.8
MATERIALS / COLORS	70% RANGE OF LIGHT GRADATIONS OF EARTH TONES; MAX 10% CURTAIN WALL; MAX 10% METAL CLADDING	SYMPATHETIC TO LOCAL LANDSCAPE AND CULTURAL HERITAGE C.5.3.3, C.5.3.4
SIGNAGE	SIGNAGE MUST BE WELL INTEGRATED WITHIN OVERALL ARCHITECTURAL COMPOSITION	SIGNAGE SHALL AVOID CONFLICTS WITH ADJACENT RESIDENTIAL USES AND PUBLIC REALM TREE CANOPIES C.6.10

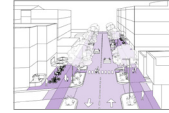
Figure 122 Development standards for mixed use / residential areas

Sample location

Old district



Collector corridor



Local corridor

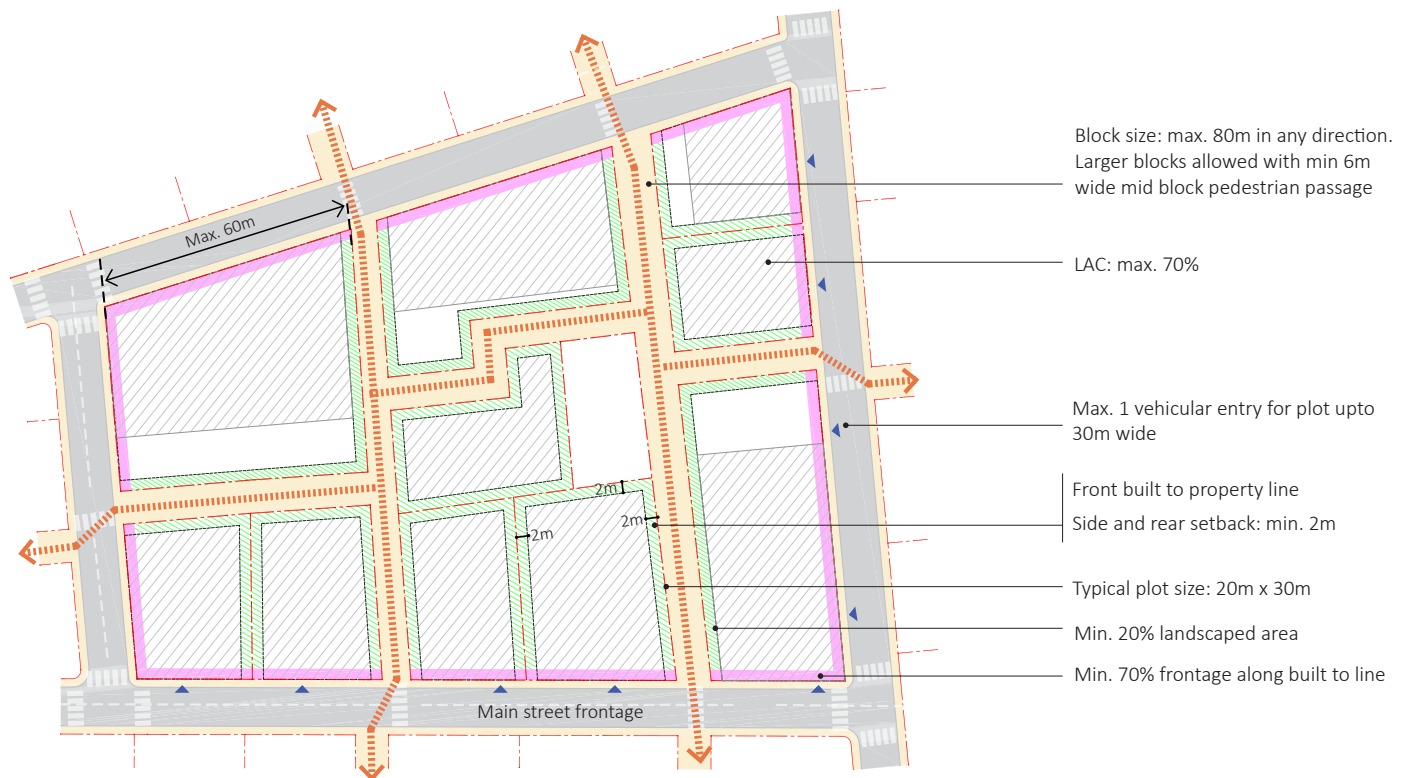
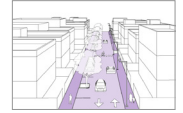


Figure 123 Block plan: mixed use residential



Figure 124 Block isometric: mixed use residential

### k. Mixed Use / Residential in Heritage Buffer District

MIXED-USE / RESIDENTIAL ACTIVITIES IN HERITAGE BUFFER DISTRICT		
LOCATION (URBAN CHARACTER): Urban Center, Old District, New District		
LOCATION (CORRIDOR): Collector Corridor, Local Corridor		
TYPICAL PLOT SIZE: 20x30m to 60x60m		
ALLOWABLE TYPOLOGIES: Multifamily Midrise Apartments, Multifamily Lowrise Apartments/ Attached Typologies		
LANDSCAPE SETTINGS	REMARKS	AUDC SECTION
RIDGE LINE VIEW CORRIDOR	MIN. 50M OFFSET FROM RIDGE LINE WITH NO LARGE STRUCTURE OR BUILDING ESTABLISHED PUBLIC VIEWS TO BE PROTECTED	LARGE STRUCTURE IF EXCEEDING 3M IN DIMENSION IN ANY DIRECTION C.1.3, C.1.4
SLOPE	> 30% SLOPE NO LARGE STRUCTURE OR BUILDINGS	LARGE STRUCTURE IF EXCEEDING 3M IN DIMENSION IN ANY DIRECTION C.1.5
WADI ZONES	DEVELOPMENT ALLOWED ONLY IN WADI DEVELOPMENT ZONE	C.1.7
HERITAGE BOUNDARY	LIMITS OF THE PLOT BOUNDARY OF HERITAGE MONUMENT/BUILDING OR BUILDING GROUP, OR AN OFFSET OF A MIN. 20M FROM THE HERITAGE BUILDING FAÇADE	PREFERRED WITH NO DEVELOPMENT C.2.2,C.2.4
ROW	20 TO 10M TYPICAL	CONTINUOUS AND ACCESSIBLE SIDEWALKS WITH TREE PLANTING; SHARED STREET PROMOTED IN LOCAL STREET C.3.3
PUBLIC REALM	MIN. 1.5M SIDEWALK	CONTINUOUS AND ACCESSIBLE SIDEWALKS WITH TREE PLANTING; CONTEXTUAL MATERIAL AND COLOR PALETTE, ACCESSIBLE PARKS WITHIN RECOMMENDED CATCHMENT AREA C.3.4
PERIMETER WALLS / FENCES	MAX 3M IN HEIGHT FROM PUBLIC STREET/GROUND LEVEL	C.5.3.6
OPEN SPACE	MIN 20% LANDSCAPED AREA	ORIENTED TOWARDS MAIN PUBLIC FRONTAGE C.5.2.3
BUFFER	MIN. 30M LANDSCAPED BUFFER BETWEEN LANDUSE AND NATURAL AREAS	VACANT PLOT: VEGETATION BUFFER OR HOARDING REQUIRED C.5.3.9
BUILDING ENVELOPE	REMARKS	AUDC SECTION
URBAN BLOCK	MAX. 60M ANY DIRECTION WITHOUT INTERRUPTION	LARGER BLOCK ALLOWED WITH MIDBLOCK PEDESTRIAN/VEHICULAR PASSAGE; BLOCK PATTERN TO REFLECT ORGANIC/HERITAGE GRID C.5.2.2
ALLOWABLE USES	RETAIL / COMMERCIAL / HOSPITALITY / RESIDENTIAL / WORKSHOP / EDUCATIONAL / TRAINING - VERTICAL AND HORIZONTAL MIX	UTILITARIAN USES TO BE LOCATED AT THE BACK OF THE LOT AWAY FROM PUBLIC FRONTAGE C.5.3.7
FLOORPLATE	MAX 30M LENGTH ANY SIDE WITHOUT BREAK ALONG PUBLIC FRONTAGES; MULTIPLE STRUCTURES OK	C.5.2.5
STRUCTURE HEIGHT	MAX. 18M	STRUCTURE SHOULD NOT NEGATIVELY IMPACT / OVERWHELM THE HERITAGE PROPERTY, PRESERVE VIEW CORRIDORS
NUMBER OF FLOORS	MAX. 4.5 LEVELS; MIN. FLOOR TO FLOOR 3.0M	
SET BACK		
FRONT	BUILT-TO PROPERTY LINE	
LEFT AND RIGHT SIDES, LOCAL SIDE STREETS	MAX. 2M	BUILT TO PROPEERTY LINE OKAY
BACK SIDE	MIN. 2M	
STREETWALL	MIN. 80% ALONG MAIN FRONTAGE	C.5.2.5
PARKING	MAX. RESIDENTIAL: 1 SPACE PER DU; OFFICE: 1 SPACE EACH 80 SQM OF GFA; RETAIL: 1 SPACE EACH 100 SQM OF GLA	INTEGRATED IN DEVELOPMENT, UNDERGROUND, LOCATED AT BACK OF THE PLOT NOT ALONG PUBLIC FRONTAGE; MAX. 70% OF OPEN SPACE; ADDITIONAL SHARED DISTRICT PARKING OK C.5.2.4
ACCESS	MAX. 1 VEHICULAR ENTRY FOR PLOTS UP TO 30M WIDE. FOR LARGER PLOTS, MAX. 1 VEHICLE ENTRY FOR EVERY 50M OF MAIN ROAD FRONTAGE.	C.5.2.4
ARCHITECTURE	REMARKS	AUDC SECTION
FAÇADE	MAX. 30M LENGTH WITHOUT BREAK ALONG PUBLIC FRONTAGES; MIN. 50% OF FAÇADE TREATMENT WITH ONE CONSISTENT MATERIAL	INTEGRAL TO ALL PUBLIC FAÇADES; BREAKS: MIN. 1.5 M IN DEPTH AND 3 M IN WIDTH, FOR THE ENTIRE HEIGHT OF THE FAÇADE; FAÇADE DESIGN SHOULD RESPOND TO HERITAGE ASSET IN TERMS OF OPENING PROPORTIONS, RECESSES, ROOF LINES, FAÇADE BREAKS, DECORATIVE DETAILING, MATERIALS AND COLORS C.5.3.1
OPENINGS	IN GENERAL, SHOULD HAVE A SHARE OF MAXIMUM 30 TO 50% OF THE OVERALL FAÇADE SURFACE	% ACCORDING TO THEIR ORIENTATION TO MINIMIZE SOLAR IMPACT. BALCONIES AND OPENINGS SHOULD BE LOCATED TO MINIMIZE THE IMPACT ON PRIVACY C.5.3.2
ROOFTOP	MIN. 0.9M PARAPET; SET BACK FOR MECHANICAL EQUIPMENT MIN. 4M	SCREENING OF ALL UTILITIES VISIBLE FROM PUBLIC ROADS C.5.3.8
MATERIALS / COLORS	70% RANGE OF LIGHT GRADATIONS OF LOCAL LANDSCAPE TONES; MAX 10% CURTAIN WALL; MAX 10% METAL CLADDING OF FAÇADE SURFACE	MATERIALS TO BE IN THE SAME COLOR RANGE OR VALUE AS THOSE OF THE HERITAGE ASSET - HARMONIOUS TO CONTEMPORARY ADAPTATION OF LOCAL TYPICAL BUILDING TECHNIQUES AND MATERIALS ENCOURAGED; LOCAL ART REFERENCE INSERT UP TO 10% OF TOTAL SURFACE. C.5.3.3, C.5.3.4
SIGNAGE	SIGNAGE MUST BE WELL INTEGRATED WITHIN OVERALL ARCHITECTURAL COMPOSITION	SIGNAGE SHALL AVOID CONFLICTS WITH ADJACENT RESIDENTIAL USES AND PUBLIC REALM TREE CANOPIES C.6.10

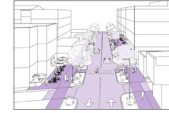
Figure 125 Development standards for mixed use / residential areas in heritage buffer districts

Sample location

Urban Center



Collector corridor



Local corridor

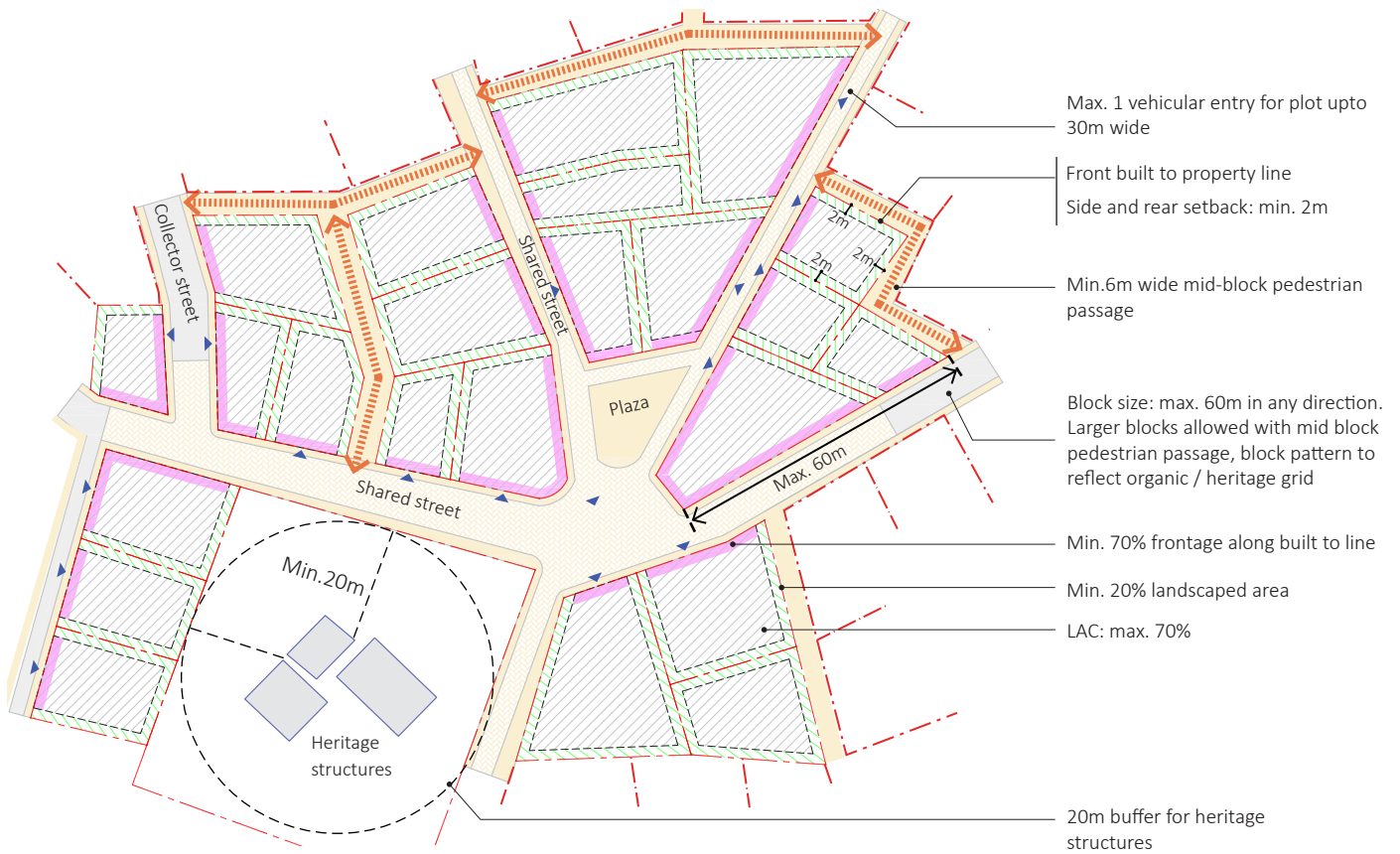
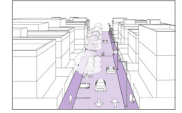


Figure 126 Block plan: mixed use residential in heritage district

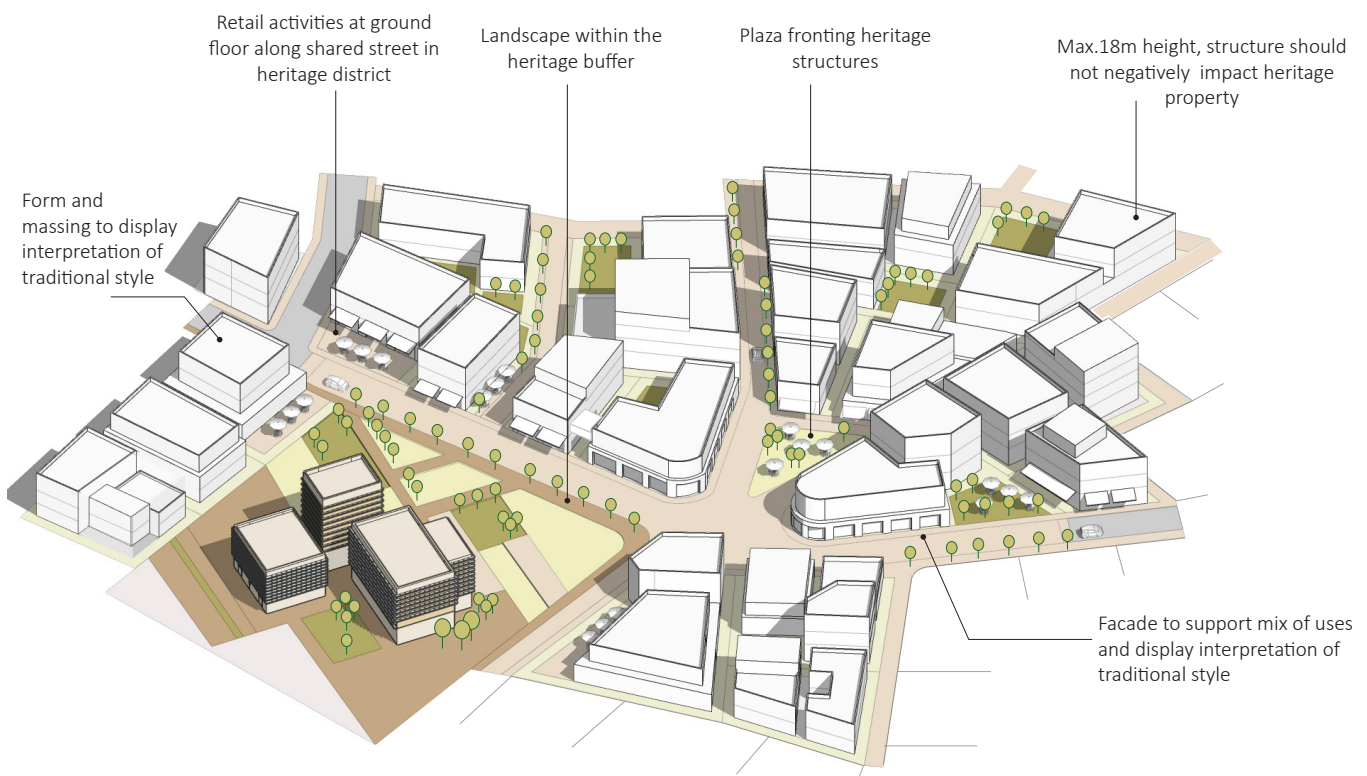


Figure 127 Block isometric: mixed use residential in heritage district

## I. City Landscape: Public Park / Civic Space

CITY LANDSCAPE: PUBLIC PARK / CIVIC SPACE			
LOCATION (URBAN CHARACTER): <i>Varies</i>			
LOCATION (CORRIDOR): <i>Varies</i>			
TYPICAL PLOT SIZE: <i>Varies</i>			
ALLOWABLE TYPOLOGIES: <i>N/A</i>			
LANDSCAPE SETTINGS		REMARKS	AUDC SECTION
RIDGE LINE	MIN. 200M OFFSET FROM RIDGE LINE WITH NO LARGE STRUCTURE OR BUILDING	LARGE STRUCTURE IF EXCEEDING 3M IN DIMENSION IN ANY DIRECTION. OTHER OPEN SPACE USES MAY BE LOCATED WITHIN THE OFFSET.	C.1.3, C.1.4
VIEW CORRIDOR	ESTABLISHED PUBLIC VIEWS TO BE PROTECTED		
SLOPE	> 15% SLOPE NO LARGE STRUCTURE OR BUILDINGS	OTHER OPEN SPACE USES MAY BE LOCATED ON SLOPES <30%	C.1.5
WADI ZONES	LARGE STRUCTURE OR BUILDINGS ARE LIMITED TO WADI DEVELOPMENT ZONE ONLY	OTHER OPEN SPACE USES MAY BE ACCEPTED WITHIN WADI CORRIDOR	C.1.7
HERITAGE BOUNDARY	LIMITS OF THE PLOT BOUNDARY OF HERITAGE MONUMENT/BUILDING OR BUILDING GROUP, OR AN OFFSET OF A MIN. 20M FROM THE HERITAGE BUILDING FAÇADE	PREFERRED WITH NO DEVELOPMENT	C.2.2
ROW	VARIES	CONTINUOUS AND ACCESSIBLE PED/BIKE PATH; SHARED PATH PROMOTED	C.3.3
PUBLIC REALM	MIN. 3M SIDEWALK	CONTINUOUS AND ACCESSIBLE PED/BIKE PATH; CONTEXTUAL MATERIAL AND COLOR PALETTE; LAYOUT AND FUNCTIONS TO RESPOND TO FORMS AND TOPOGRAPHY OF THE NATURAL AND CULTURAL LANDSCAPE	C.3.4
PERIMETER WALLS / FENCES	UNFENCED / LANDSCAPE BUFFER / MAX. 1.2M HEIGHT PERIMETER WALL	PREFERABLY UNFENCED	C.5.3.6
OPEN SPACE	MIN 20% LANDSCAPED AREA		C.5.2.3
BUFFER	MIN. 30M BUFFER BETWEEN LANDUSE AND NATURAL AREAS		C.5.3.9
BUILDING ENVELOPE		REMARKS	AUDC SECTION
URBAN BLOCK	IF ANY, MAX. 120M ANY DIRECTION WITHOUT INTERRUPTION	ORGANIC SHAPES RESPONDING TO NATURAL AND CULTURAL LANDSCAPE SHALL BE PROMOTED; LARGER BLOCK ALLOWED WITH MIBLOCK PEDESTRIAN/VEHICULAR PASSAGE	C.5.2.2
ALLOWABLE USES	ANCILLARY TO OPEN SPACE AND RECREATIONAL ACTIVITIES / CIVIC FUNCTIONS / GOVERNMENT / REPRESENTATIVE / PRODUCTIVE LANDSCAPE	UTILITARIAN USES TO BE LOCATED AT THE BACK OF THE LOT AWAY FROM PUBLIC FRONTAGE	C.5.3.7
FLOORPLATE	MAX. 30M LENGTH ANY SIDE; MULTIPLE STRUCTURES OK	ORGANIC SHAPES RESPONDING TO NATURAL E CULTURAL LANDSCAPE SHALL BE PROMOTED	C.5.2.5
STRUCTURE HEIGHT	MAX. 15M		
NUMBER OF FLOORS	MAX. 2.5 LEVELS	TALL LANDMARKS ELEMENTS OK WITH ADDITIONAL DESIGN SCRUTINY; PODIUM + TOWER ZONES APPLY	
LAC	MAX. 10%		
SET BACK			
FRONT	MIN. 10 M FROM MAIN FRONTAGE	LANDSCAPED	
LEFT AND RIGHT SIDES	MIN. 5M	MIN. 3M LANDSCAPED BUFFER	
BACK	MIN. 5M	MIN. 3M LANDSCAPED BUFFER	
STREETWALL	N/A		
PARKING	MIN. 3M LANDSCAPED BUFFER FROM PUBLIC ROADS; MAX. 30% OF TOTAL LOT AREA	PERMEABLE SURFACE TREATMENT	C.5.2.4
ACCESS	MAX. 1 VEHICULAR ENTRY FOR PLOTS UP TO 30M WIDE. FOR LARGER PLOTS, MAX. 1 VEHICLE ENTRY FOR EVERY 50M OF MAIN ROAD FRONTAGE		C.5.2.4
ARCHITECTURE		REMARKS	AUDC SECTION
FACADE	MIN. 50% OF FACADE TREATMENT WITH ONE CONSISTENT MATERIAL	INTEGRAL TO ALL PUBLIC FACADES	C.5.3.1
OPENINGS	IN GENERAL, SHOULD HAVE A SHARE OF MAXIMUM 30 TO 50% OF THE OVERALL FACADE SURFACE	% ACCORDING TO THEIR ORIENTATION TO MINIMIZE SOLAR IMPACT. OPENINGS SHOULD BE LOCATED TO MINIMIZE THE IMPACT ON PRIVACY FOR NEIGHBORING PLOTS	C.5.3.2
ROOFTOP	MIN. 0,9M PARAPET; SET BACK FOR MECHANICAL EQUIPMENT MIN. 4M	SCREENING OF ALL UTILITIES VISIBLE FROM PUBLIC ROADS	C.5.3.8
MATERIALS / COLORS	70% RANGE OF LIGHT GRADATIONS OF LOCAL LANDSCAPE TONES; MAX 10% CURTAIN WALL; MAX 10% METAL CLADDING	SYMPATHETIC TO LANDSCAPE AND CULTURAL HERITAGE; MUST ADHERE TO ASEER CONTEXTUAL ARCHITECTURE GUIDELINE PRINCIPLES	C.5.3.3, C.5.3.4
SIGNAGE	SIGNAGE MUST BE WELL INTEGRATED WITHIN OVERALL ARCHITECTURAL COMPOSITION	SIGNAGE SHALL AVOID CONFLICTS WITH ADJACENT RESIDENTIAL USES AND PUBLIC REALM TREE CANOPIES	C.6.10

Figure 128 Development standards for areas with public parks

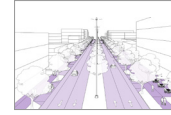


Sample location

Urban Center



Arterial corridor



Local corridor

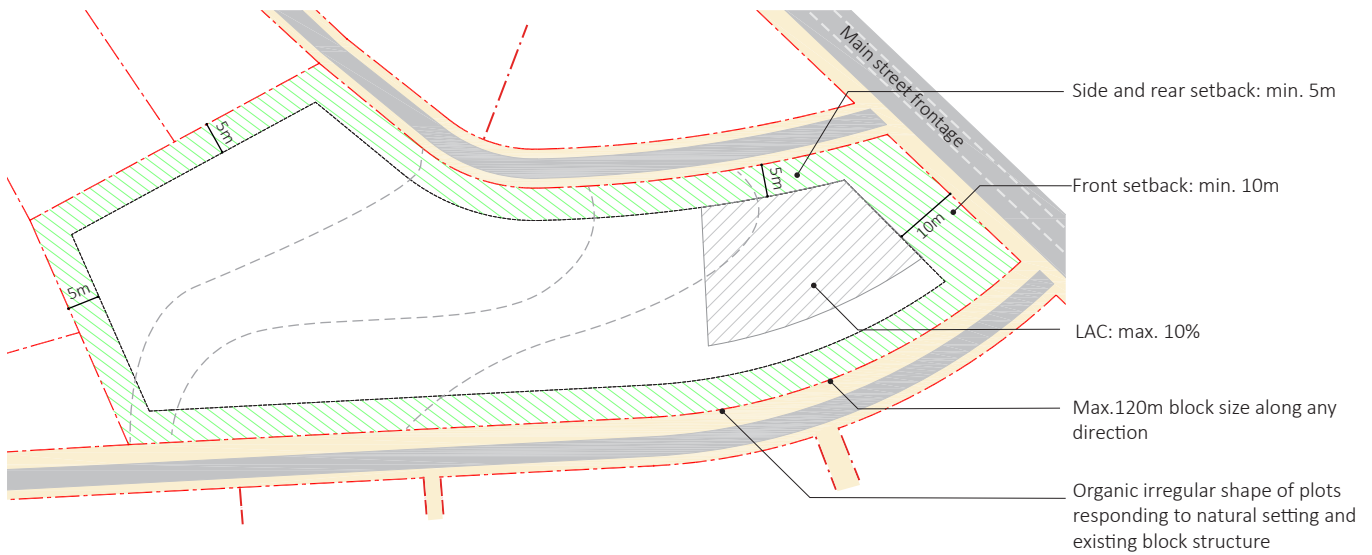
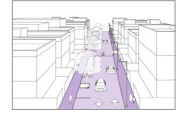


Figure 129 Block plan: public park / civic space



Figure 130 Block isometric: public park / civic space

### m. City Landscape: Open Space / Recreation / Productive

CITY LANDSCAPE: OPEN SPACE / RECREATION / PRODUCTIVE			
LOCATION (URBAN CHARACTER): <i>Varies</i>			
LOCATION (CORRIDOR): <i>Varies</i>			
TYPICAL PLOT SIZE: <i>Varies</i>			
ALLOWABLE TYPOLOGIES: <i>N/A</i>			
LANDSCAPE SETTINGS		REMARKS	AUDC SECTION
RIDGE LINE VIEW CORRIDOR	MIN. 200M OFFSET FROM RIDGE LINE WITH NO LARGE STRUCTURE OR BUILDING ESTABLISHED PUBLIC VIEWS TO BE PROTECTED	LARGE STRUCTURE IF EXCEEDING 3M IN DIMENSION IN ANY DIRECTION. OTHER OPEN SPACE USES MAY BE LOCATED WITHIN THE OFFSET.	C.1.3, C.1.4
SLOPE	> 15% SLOPE NO LARGE STRUCTURE OR BUILDINGS	AGRICULTURAL AND PRODUCTIVE USES ARE ALLOWED	C.1.5
WADI ZONES	LARGE STRUCTURE OR BUILDINGS ARE LIMITED TO WADI DEVELOPMENT ZONE ONLY	AGRICULTURAL AND PRODUCTIVE USES ARE ALLOWED WITHIN THE WADI CORRIDOR	C.1.7
HERITAGE BOUNDARY	LIMITS OF THE PLOT BOUNDARY OF HERITAGE MONUMENT/BUILDING OR BUILDING GROUP, OR AN OFFSET OF A MIN. 20M FROM THE HERITAGE BUILDING FAÇADE	PREFERRED WITH NO DEVELOPMENT	C.2.2,C.2.4
ROW	VARIES	CONTINUOUS AND ACCESSIBLE PED/BIKE PATH; SHARED PATH PROMOTED	C.3.3
PUBLIC REALM	N/A	CONTINUOUS AND ACCESSIBLE PED/BIKE PATH; CONTEXTUAL MATERIAL AND COLOR PALETTE; LAYOUT AND FUNCTIONS TO RESPOND TO FORMS AND TOPOGRAPHY OF THE NATURAL AND CULTURAL LANDSCAPE	C.3.4
PERIMETER WALLS / FENCES	UNFENCED / LANDSCAPE BUFFER / MAX. 1.2M HEIGHT PERIMETER WALL	PREFERABLY UNFENCED	C.5.3.6
OPEN SPACE	N/A		C.5.2.3
BUFFER	MIN. 30M BUFFER BETWEEN LANDUSE AND NATURAL AREAS	AGRICULTURAL AND PRODUCTIVE USES ARE ALLOWED	C.5.3.9
BUILDING ENVELOPE		REMARKS	AUDC SECTION
URBAN BLOCK	IF ANY, MAX. 120M ANY DIRECTION WITHOUT INTERRUPTION	ORGANIC SHAPES RESPONDING TO NATURAL AND CULTURAL LANDSCAPE SHALL BE PROMOTED	C.5.2.2
ALLOWABLE USES	PRODUCTIVE LANDSCAPE / PRODUCTIVE ACTIVITIES / ANCILLARY TO PRODUCTIVE ACTIVITIES / RECREATIONAL / RESIDENTIAL / WORKSHOP / EDUCATIONAL / TRAINING / HOMESTAY / BOUTIQUE HOSPITALITY	UTILITARIAN USES TO BE LOCATED AT THE BACK OF THE LOT AWAY FROM PUBLIC FRONTAGE	C.5.3.7
FLOORPLATE	MAX. 30M LENGTH ANY SIDE; MULTIPLE STRUCTURES OK		C.5.2.5
STRUCTURE HEIGHT	MAX. 10M		
NUMBER OF FLOORS	MAX. 2 LEVELS		
LAC	MAX. 10%		
SET BACK			
FRONT	MIN. 10 M FROM MAIN FRONTAGE	LANDSCAPED	
LEFT AND RIGHT SIDES	MIN. 5M	MIN. 3M LANDSCAPED BUFFER	
BACK	MIN. 5M	MIN. 3M LANDSCAPED BUFFER	
STREETWALL	N/A		
PARKING	MIN. 3M LANDSCAPED BUFFER FROM PUBLIC ROADS; MAX. 30% OF TOTAL LOT AREA	PERMEABLE SURFACE TREATMENT	C.5.2.4
ACCESS	MAX. 1 VEHICULAR ENTRY FOR PLOTS UP TO 30M WIDE, FOR LARGER PLOTS, MAX. 1 VEHICLE ENTRY FOR EVERY 50M OF MAIN ROAD FRONTAGE		C.5.2.4
ARCHITECTURE		REMARKS	AUDC SECTION
FACADE	MIN. 50% OF FACADE TREATMENT WITH ONE CONSISTENT MATERIAL	INTEGRAL TO ALL PUBLIC FACADES	C.5.3.1
OPENINGS	IN GENERAL, SHOULD HAVE A SHARE OF MAXIMUM 30 TO 50% OF THE OVERALL FACADE SURFACE	% ACCORDING TO THEIR ORIENTATION TO MINIMIZE SOLAR IMPACT. OPENINGS SHOULD BE LOCATED TO MINIMIZE THE IMPACT ON PRIVACY FOR NEIGHBORING PLOTS	C.5.3.2
ROOFTOP	MIN. 0,9M PARAPET; SET BACK FOR MECHANICAL EQUIPMENT MIN. 4M	SCREENING OF ALL UTILITIES VISIBLE FROM PUBLIC ROADS	C.5.3.8
MATERIALS/ COLORS	70% RANGE OF LIGHT GRADATIONS OF LOCAL LANDSCAPE TONES; NO CURTAIN WALL, NO METAL CLADDING	SYMPATHETIC TO LOCAL LANDSCAPE AND CULTURAL HERITAGE	C.5.3.3, C.5.3.4
SIGNAGE	SIGNAGE MUST BE WELL INTEGRATED WITHIN OVERALL ARCHITECTURAL COMPOSITION	SIGNAGE SHALL AVOID CONFLICTS WITH ADJACENT RESIDENTIAL USES AND PUBLIC REALM TREE CANOPIES	C.6.10

Figure 131 Development standards for areas with open space / recreational / productive land uses

Sample locations

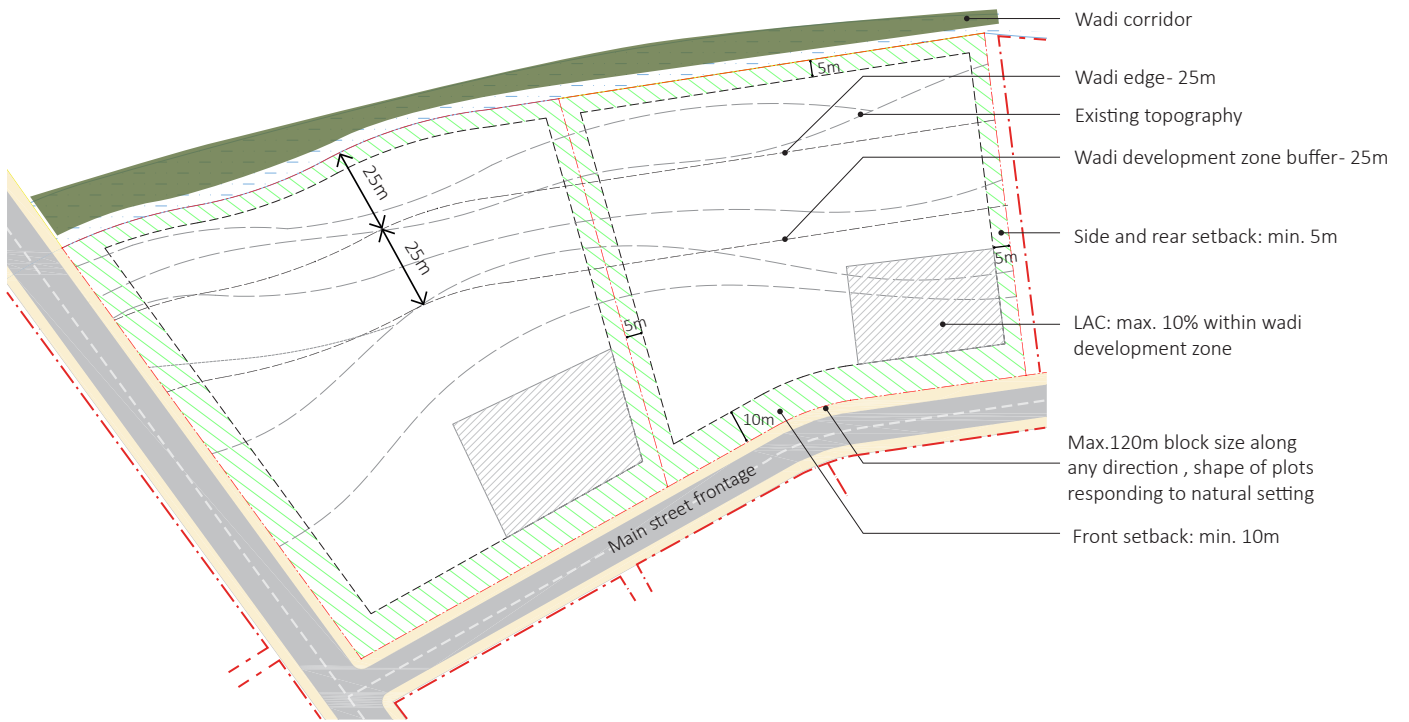
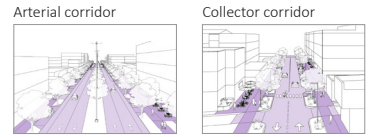


Figure 132 Block plan: open space / recreation / productive



Figure 133 Block isometric: open space / recreation / productive

## n. City Landscape: Open Space / Productive / Agricultural

CITY LANDSCB4:E42APE: OPEN SPACE / PRODUCTIVE / AGRICULTURAL			
LOCATION (URBAN CHARACTER): Varies			
LOCATION (CORRIDOR): Varies			
TYPICAL PLOT SIZE: Varies			
ALLOWABLE TYPOLOGIES: N/A			
LANDSCAPE SETTINGS		REMARKS	AUDC SECTION
RIDGE LINE VIEW CORRIDOR	MIN. 200M OFFSET FROM RIDGE LINE WITH NO LARGE STRUCTURE OR BUILDING ESTABLISHED PUBLIC VIEWS TO BE PROTECTED	LARGE STRUCTURE IF EXCEEDING 3M IN DIMENSION IN ANY DIRECTION. OTHER OPEN SPACE USES MAY BE LOCATED WITHIN THE OFFSET.	C.1.3, C.1.4
SLOPE	> 15% SLOPE NO LARGE STRUCTURE OR BUILDINGS	AGRICULTURAL AND PRODUCTIVE USES ARE ALLOWED	C.1.5
WADI ZONES	LARGE STRUCTURE OR BUILDINGS ARE LIMITED TO WADI DEVELOPMENT ZONE ONLY	AGRICULTURAL AND PRODUCTIVE USES ARE ALLOWED WITHIN THE WADI CORRIDOR	C.1.7
HERITAGE BOUNDARY	LIMITS OF THE PLOT BOUNDARY OF HERITAGE MONUMENT/BUILDING OR BUILDING GROUP, OR AN OFFSET OF A MIN. 20M FROM THE HERITAGE BUILDING FAÇADE	PREFERRED WITH NO DEVELOPMENT	C.2.2,C.2.4
ROW	VARIES	CONTINUOUS AND ACCESSIBLE PED/BIKE PATH; SHARED PATH PROMOTED	C.3.3
PUBLIC REALM	N/A	CONTINUOUS AND ACCESSIBLE PED/BIKE PATH; CONTEXTUAL MATERIAL AND COLOR PALETTE; LAYOUT AND FUNCTIONS TO RESPOND TO FORMS AND TOPOGRAPHY OF THE NATURAL AND CULTURAL LANDSCAPE	C.3.4
PERIMETER WALLS / FENCES	UNFENCED / LANDSCAPE BUFFER / MAX. 1.2M HEIGHT PERIMETER WALL	PREFERABLY UNFENCED	C.5.3.6
OPEN SPACE	N/A		C.5.2.3
BUFFER	MIN. 30M BUFFER BETWEEN LANDUSE AND NATURAL AREAS	AGRICULTURAL AND PRODUCTIVE USES ARE ALLOWED	C.5.3.9
BUILDING ENVELOPE		REMARKS	AUDC SECTION
URBAN BLOCK	IF ANY, MAX. 120M ANY DIRECTION WITHOUT INTERRUPTION	ORGANIC SHAPES RESPONDING TO NATURAL AND CULTURAL LANDSCAPE SHALL BE PROMOTED	C.5.2.2
ALLOWABLE USES	AGRICULTURE / PRODUCTIVE LANDSCAPE / ANCILLARY TO PRODUCTIVE ACTIVITIES / RESIDENTIAL	UTILITARIAN USES TO BE LOCATED AT THE BACK OF THE LOT AWAY FROM PUBLIC FRONTAGE	C.5.3.7
FLOORPLATE	MAX. 30M LENGTH ANY SIDE; MULTIPLE STRUCTURES OK		C.5.2.5
STRUCTURE HEIGHT	MAX. 10M		
NUMBER OF FLOORS	MAX. 2 LEVELS		
LAC	MAX. 10%		
SET BACK			
FRONT	MIN. 10 M FROM MAIN FRONTAGE	LANDSCAPED	
LEFT AND RIGHT SIDES	MIN. 5M	MIN. 3M LANDSCAPED BUFFER	
BACK	MIN. 5M	MIN. 3M LANDSCAPED BUFFER	
STREETWALL	N/A		
PARKING	MIN. 3M LANDSCAPED BUFFER FROM PUBLIC ROADS; MAX. 30% OF TOTAL LOT AREA	PERMEABLE SURFACE TREATMENT	C.5.2.4
ACCESS	MAX. 1 VEHICULAR ENTRY FOR PLOTS UP TO 30M WIDE, FOR LARGER PLOTS, MAX. 1 VEHICLE ENTRY FOR EVERY 50M OF MAIN ROAD FRONTAGE		C.5.2.4
ARCHITECTURE		REMARKS	AUDC SECTION
FAÇADE	MIN. 50% OF FAÇADE TREATMENT WITH ONE CONSISTENT MATERIAL	INTEGRAL TO ALL PUBLIC FAÇADES	C.5.3.1
OPENINGS	IN GENERAL, SHOULD HAVE A SHARE OF MAXIMUM 30 TO 50% OF THE OVERALL FAÇADE SURFACE	% ACCORDING TO THEIR ORIENTATION TO MINIMIZE SOLAR IMPACT. OPENINGS SHOULD BE LOCATED TO MINIMIZE THE IMPACT ON PRIVACY FOR NEIGHBORING PLOTS	C.5.3.2
ROOFTOP	MIN. 0.9M PARAPET; SET BACK FOR MECHANICAL EQUIPMENT MIN. 4M	SCREENING OF ALL UTILITIES VISIBLE FROM PUBLIC ROADS	C.5.3.8
MATERIALS/ COLORS	70% RANGE OF LIGHT GRADATIONS OF LOCAL LANDSCAPE TONES; NO CURTAIN WALL, NO METAL CLADDING	SYMPATHETIC TO LOCAL LANDSCAPE AND CULTURAL HERITAGE	C.5.3.3, C.5.3.4
SIGNAGE	SIGNAGE MUST BE WELL INTEGRATED WITHIN OVERALL ARCHITECTURAL COMPOSITION	SIGNAGE SHALL AVOID CONFLICTS WITH ADJACENT RESIDENTIAL USES AND PUBLIC REALM TREE CANOPIES	C.6.10

Figure 134 Development standards for areas with open space / productive / agricultural land uses

Sample location

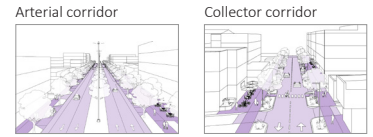


Figure 135 Block plan: open space / productive / agriculture



Figure 136 Block isometric: open space / productive / agriculture

## 4.4 Land Subdivision

### 4.4.1 Guidance:

For standard land subdivisions, the design process for the site should be structured in the following steps:

- Assessment of natural environment and heritage.
- Open space and landscape.
- Movement network and utility systems.
- On site and surrounding land uses.
- Placemaking and public realm.
- Buildings envelope and architecture.

#### a. Assessment of Natural Environment and Heritage

- Guidelines as mentioned in AUDC C1, C2 should be followed. For example:
  - All >30% slope demarcated as no development zone.
  - Main escarpment ridge-line with min. 100m buffer demarcated as no development zone.
  - Ridge lines demarcated as no development zone with a minimum 200m offset from the top edge of the ridge for large structures.
  - Areas likely to be affected by 100-year flood event demarcated as no development zone.
  - Protective wadi buffers of 25 to 50m with riparian vegetation should be established.
  - LVIA and EIA may be conducted as per ASDA requirements.
- Identification and protection measures for all heritage assets on site.

#### b. Open Space and Landscape

- Hierarchy of open spaces varying in size and function to meet a minimum of 9sqm per person requirement.

The following diagrams provide step by step guidance for a hypothetical land subdivision for a new mixed use neighborhood.

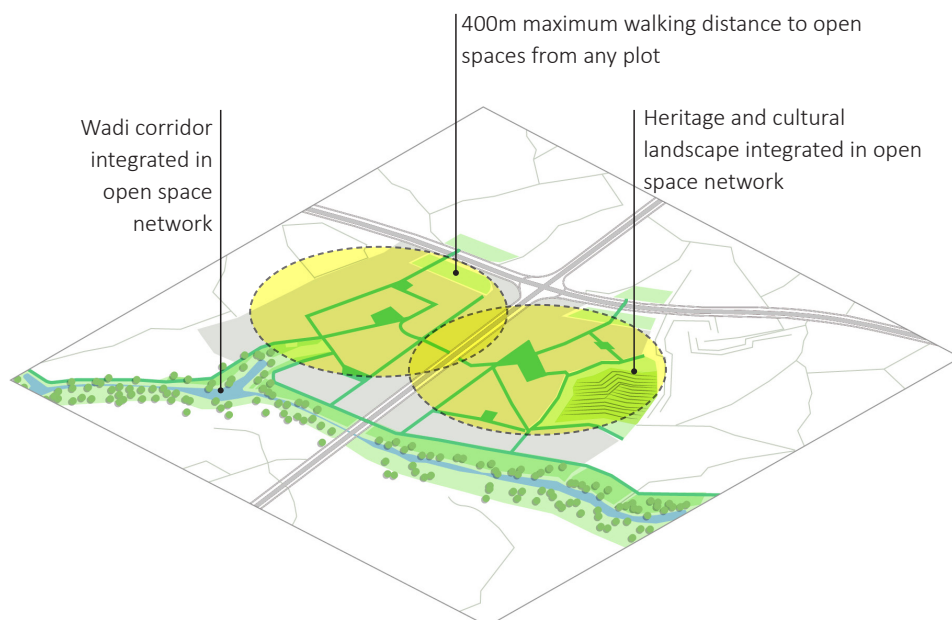


Figure 137 Open space network

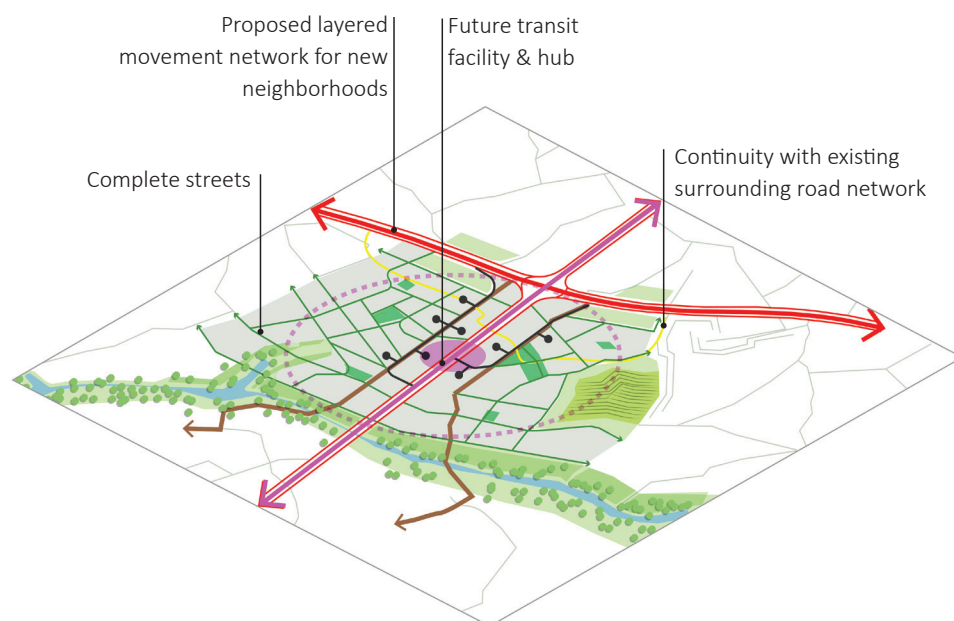


Figure 138 Movement network

- The nearest open space should be accessible and within a walking distance of not more than 400m / 5 minutes walk from any plot.
- Neighborhood units should not be more than 10 minutes / 800m walking distance from the center.
- Walkable urban block sizes typically should not exceed 120m in any direction.

### c. Movement Network and Utility Systems

- Guidelines as mentioned in AUDC C3, C6 should be followed.
- Land subdivision should clearly display the hierarchy of streets and a complete street approach.
- Utility, stormwater drainage, street landscape and lighting shall be provided within RoW space wherever possible.

### d. Land Uses and Placemaking

- Guidelines as mentioned in AUDC C4 should be followed.
- Typical residential subdivision should comprise a mix of high, medium, and low-density residential plots grouped with retail, commercial, social, and open spaces to support social and economic activities within walkable distances.
- Subdivision should be compatible for future transit-oriented development (TOD).

### e. Buildings Envelope and Architecture

- Guidelines as mentioned in AUDC C5 should be followed.
- Subdivision built form, scale and massing should respond and adapt to the district / character zone of the site.

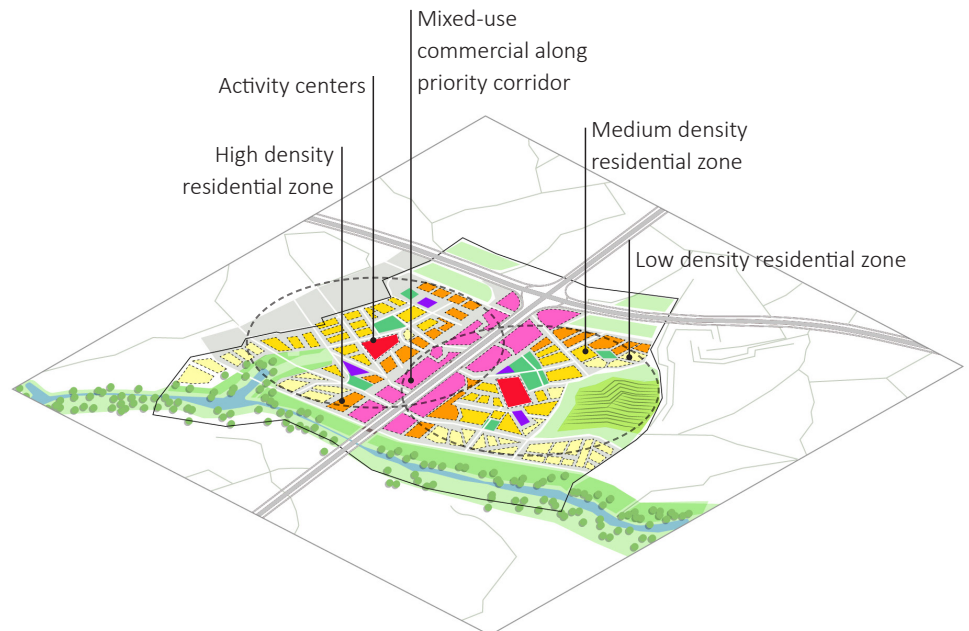


Figure 139 Mix of uses and activities

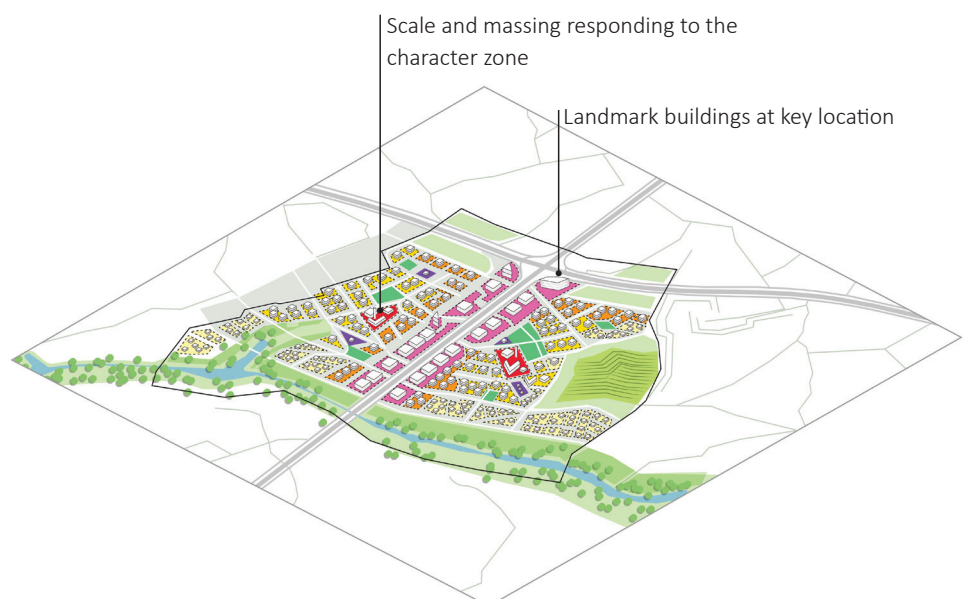


Figure 140 Built form and massing







# 5 | CHARACTERIZE ARCHITECTURE

## 5 Characterize Architecture

### 5.1 Overall Objectives

The standards and guidelines prescribed in this section primarily address the visual and spatial quality of the proposed development for built form and architecture. Emphasis is placed on the most public frontages of the development and access to the plot. Roof top view is also amongst the top priority given the impact on visual quality due to the topography of the Aseer region. Measures are provided for achieving minimum standard of visual quality for frontages along the local and side roads.

- Encourage human scale and minimize the visual prominence of cars / parking within the plot and streetscape.
- Encourage walkability through permeable block structure and pedestrian friendly building frontages.
- Establish design character derived from contextual architecture for building layout and facades primarily from highly visible frontages.
- Encourage attractive and harmonious view corridors and streetscapes.
- Focus on architectural details and construction techniques of new buildings:
  - A plain, simple and elegant style.
  - Respond to different climatic conditions (i.e. shading strategy and use of non-reflective surfaces, wind directions, rain harvesting, green roofs).
  - Using traditional building techniques and materials, or their contemporary adaptation (i.e. limestone, mud colored plaster, beige metal / high-pressure laminate HPL cladding).
  - A vocabulary of details that celebrate the traditional sub-regional architecture.
  - Combining traditional architectural elements with contemporary parameters and new technologies.



**Figure 141** Heritage architectural styles of the Aseer region and typical construction materials used: natural stone, mud, clay and timber



**Figure 142** Example of contemporary architectural characterization in Abha city

## 5.2 Plot

### 5.2.1 Site Considerations

#### 5.2.1.1 Guidance:

- The building's massing and layout should respect and respond sensitively to the natural terrain.
- The building's massing should be sculpted to avoid big bulky structures.
- Large retaining walls to build over slope should be generally avoided.
- Terraced landscape and built form should be preferred on slope.
- Massing should foster human scale.
- Large floor plates should be broken down.

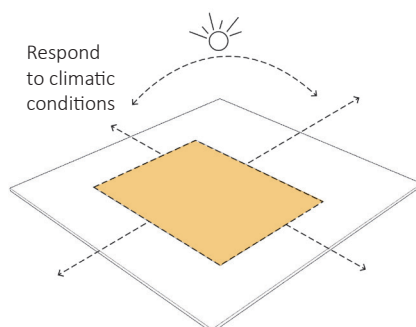


Figure 143 Site layout considerations

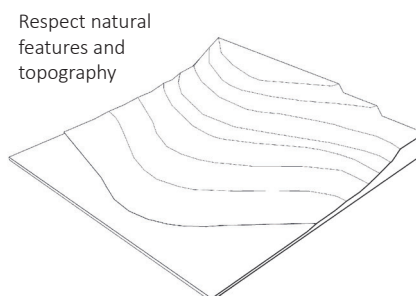


Figure 144 Topography considerations

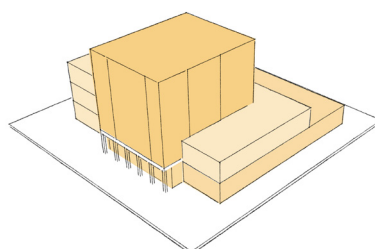


Figure 145 Sculpt building massing

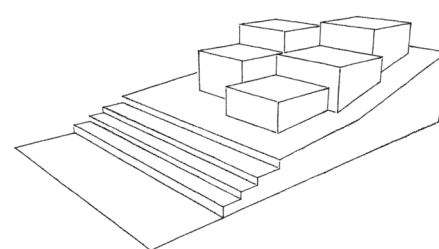


Figure 146 Respect natural terrain adopting terraced landscape, terraced built form

### 5.2.2 Urban Block Size

#### 5.2.2.1 Guidance:

- For large developments, consolidation of multiple plots may be acceptable, while maintaining the typical walkable block size using mid-block pedestrian passages.
- Particular attention should be provided for downtown areas and other mixed-use areas.
- Where pedestrian passages are utilized, they should be placed to connect to other passages, alleys, or mid-block crossings for greater street connectivity.

#### 5.2.2.2 Standards:

- A typical desirable block size for development in urban areas shall have dimensions not exceeding 100-120m along any direction.
- Typical block size in urban centers or heritage districts shall be of a typical dimension of 60x45m, with fine grain of street.

- Plots longer than 120m shall be developed with a mid-block shared pedestrian and cycling passage, or open space to provide permeability whenever possible.

- Pedestrian passages shall be no less than 5m wide.

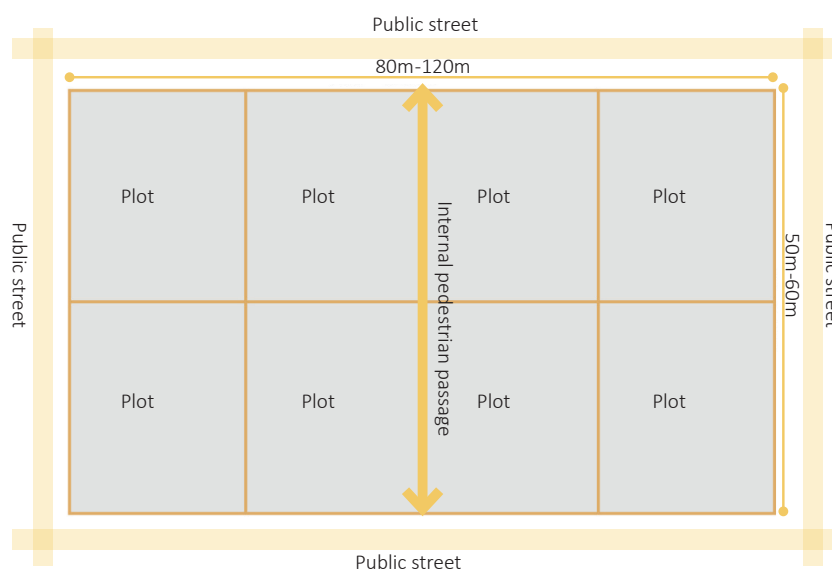
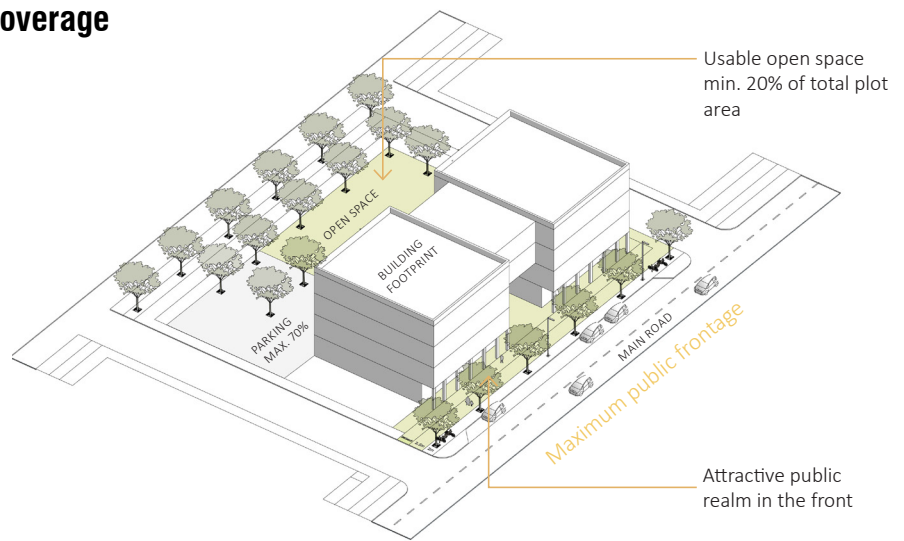


Figure 147 Appropriate block size for development

## 5.2.3 Open space and Building Coverage

### 5.2.3.1 Guidance:

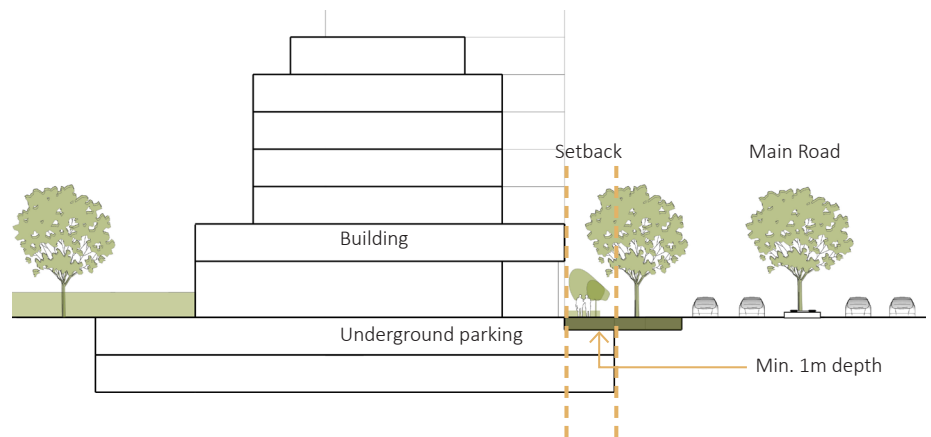
- a. Open space within the plot should be usable for use dependent activities and not a marginal left over space.
- b. Open space along public frontages should be treated as an extension to public realm, or public space, and form an attractive street front.
- c. Open spaces may be, but not restricted to, in the form of courtyards, plazas and activity areas.



**Figure 148** Open space and parking within the plot

### 5.2.3.2 Standards:

- a. Typically, a minimum 20% usable open space (landscaped/hardscaped area) shall be available within the plot.
- b. In addition to the minimum usable open space, areas not used for buildings, parking lot areas, driveways or pedestrian walkways shall be landscaped.
- c. Where subterranean parking structures or other underground structures (including foundations or footings) project into the required setback or easement, they shall be deep enough to allow for a minimum 1m clear depth of soil for planting.



**Figure 149** Landscape requirements



**Figure 150** Open space along the public realm



**Figure 151** Open space within the building enclosure for residential plot

## 5.2.4 Vehicular Access and Parking

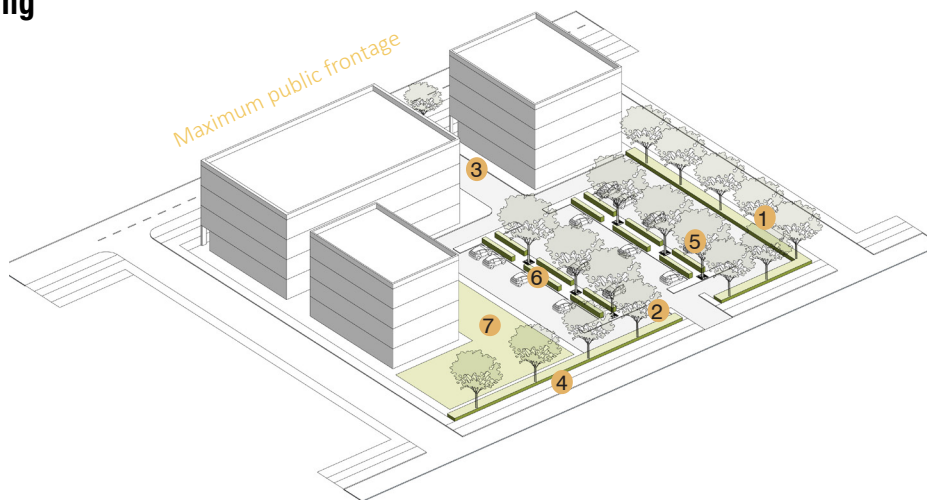
### 5.2.4.1 Guidance:

- a. Generally, on-site parking should be located to the side or rear of plots or underground.
- b. Only convenience parking and drop off should be allowed along the main street edge.
- c. Building should screen most of the parking lot from view from the main road.
- d. Parking entrances should be recessed from the building face and aligned with the overall architectural massing and composition.

e. On-site surface parking shall be designed to reduce hard impervious surface. Shading should be provided through trees.

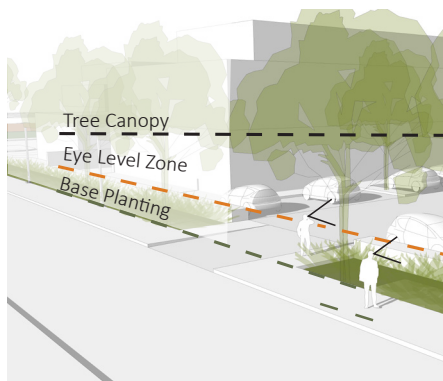
### 5.2.4.2 Standards:

- a. In general, parking area shall not exceed 70% of the total open space area of the plot.
- b. Max. 1 bay of parking with landscaped buffer shall be provided between the sidewalk and the parking lot when placed in front of the lot (based on the development standard).
- c. Visual screen or landscaped buffer shall be provided between the sidewalk and the parking lot.
- d. For large development plots (plots > 40,000 sqm), parking area shall not exceed 30% of the total plot area.

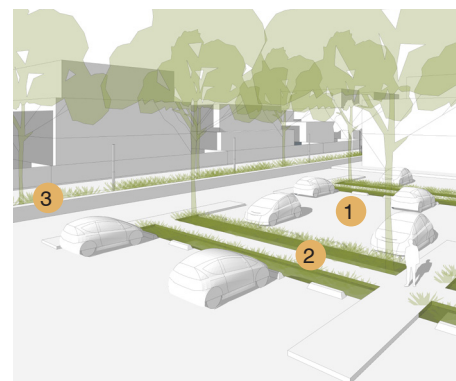


**Figure 152** On-site parking located at back of the plot shielded from the public view

- 1 Mandatory perimeter planting with combination of shrubs and trees - min 2m wide, If with masonry wall - min height 0.8m
- 2 Mature trees for landscape treatment - max spacing 14m
- 3 Typically, no more than 1 driveway per property frontage - maximum width 8m
- 4 Continuous sidewalk min width 2m
- 5 Interior planting with combination of shrubs and trees - min 2m wide
- 6 Extension of at-grade parking lot is limited to less than 70% of total lot open space
- 7 Usable open space



**Figure 153** Typical landscape screening



**Figure 154** Parking layout

- 1 Landscaped parking islands with canopy trees and integrated with Sustainable Urban Drainage System (SUDS)
- 2 Pedestrian path - minimum 2m width
- 3 Perimeter parking lot landscaped buffer

## 5.2.5 Scale and Heights

### 5.2.5.1 Guidance:

- a.** In general, building massing should be sculpted to help avoid big bulky structures and provide variety.
- b.** The scale and height of the buildings should be in proportion to the neighboring development, maintain street wall and should not dominate the neighborhood.
- c.** A compact form with a typical height of 4 stories should be desirable.
- d.** Corner buildings should require unique architectural treatments like increased height and/or building mass, or interesting entry designs, such as angled entries, to help “anchor” corners and further define the road.
- e.** Buildings should be located to frame the edges of streets, parks, and open space, reinforce corners, and to fit harmoniously within the existing context.
- f.** All buildings should have a well-delineated termination at the street wall roofline.

- g.** Generally, a general datum of 2 to 4 level minimum street wall should be held.
- h.** A minimum of 50 % of continuous main frontage should be built to the setback line to reinforce the street wall wherever possible.

### 5.2.5.2 Standards:

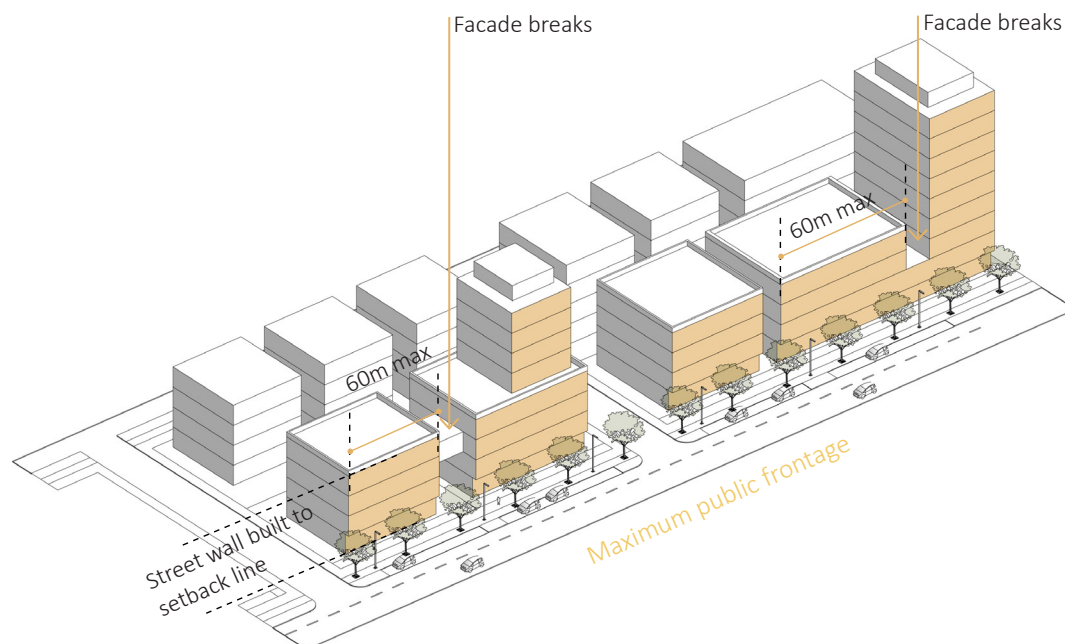
- a.** For large projects that consume half of an urban block or more (i.e. longer than 60m), large floor plates must be broken down and the building’s height must be varied through the creation of smaller structures or façades.
- b.** Floor plates larger than 40m shall be broken by means of breaks and/or recessed to introduce variation and foster human scale; avoiding large building massing.
- c.** No facade plane should extend more than 30 to 60m in length (varying on the use) without at least one break. Such a break should be a minimum of 1.5 meters in depth and 3 meters in width, for the entire height of the facade.



**Figure 155** Uniform scale with gradual variation provides street wall and well balanced view



**Figure 156** Disproportionate building scales and open space ratio causing lack of character and sense of place



**Figure 157** Street wall built to established setback line providing enclosure and creating a visual rhythm



## 5.3 Architecture

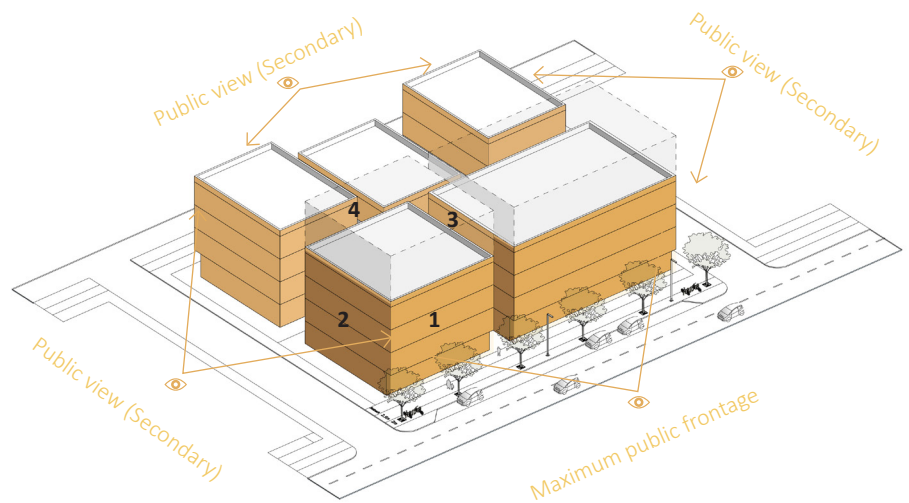
### 5.3.1 Facade Treatment

#### 5.3.1.1 Guidance:

- a. Building facades should employ architectural means to avoid the creation of flat or unarticulated building fronts.
- b. Facade design should respond to the contextual architecture in terms of opening proportions, facade breaks, materials and colors.
- c. Horizontal architectural variations should be applied to break down the scale and massing of longer facades.
- d. Alternation of different textures, colors, materials, and distinctive architectural treatments should help to provide scale and three-dimensional qualities to the building and add visual interest while avoiding dull or repetitive facades.

#### 5.3.1.2 Standards:

- a. Building facade and frontage design treatment shall be integral to all public sides (1,2,3,4).
- b. Every public face of the building shall be designed to an equal level of resolution and detail while ensuring privacy to neighboring plots.
- c. Blank or purely utilitarian facades along public frontages shall be avoided.



**Figure 158** Building facades visible to public view



**Figure 159** Fully glazed buildings or purely blank facades shall not be encouraged



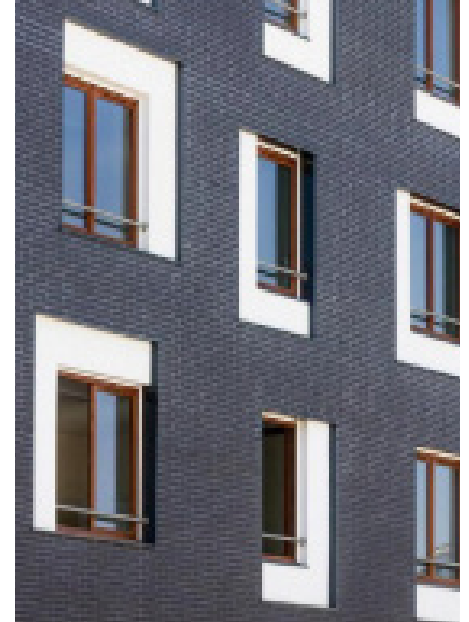
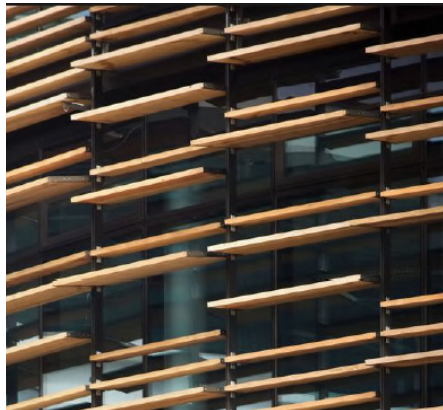
**Figure 160** Well articulated facade with contextual colors and materials



## 5.3.2 Openings

### 5.3.2.1 Standards:

- a.** Glass facades, reflective, mirrored, tinted and opaque glazing shall be minimized and/or used with environmental thoughtfulness to a maximum of 10% of total façade surface.
- b.** Generally, full glazed buildings shall be avoided.
- c.** Openings shall have a maximum share of 30 to 50% of the overall façade surface, according to their solar and wind exposure.



**Figure 161** Examples of facade design responding to contextual architecture with well articulated opening proportions, materials and colors

## 5.3.3 Materials and Finishes

### 5.3.3.1 Guidance:

**a.** High-quality durable materials should be used for lower and upper floor facades. Materials should convey a sense of quality and durability and be able to retain their appearance over time.

**b.** Use of local materials should be encouraged.

**c.** Since the lower part of a building, typically the first 4 levels, have the greatest visibility at ground level and while driving, its materials should be of enhanced quality and durability.



*Local stone*



*Rammed earth*



*Compressed mud bricks*



*Adobe*



*Plaster*

### 5.3.3.2 Standards:

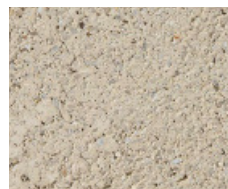
**a.** Solid materials and clear shaped geometries shall be preferred.

**b.** Materials, finishes and color treatment shall be integral to all public sides of the structure.

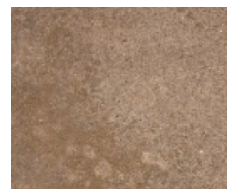
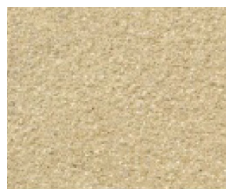
**c.** Min. 50% of facade treatment shall be with one consistent material.



*Shell limestone*



*Concrete*



*Concrete*



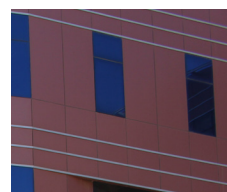
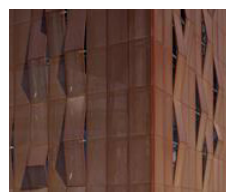
### 5.3.3.3 Recommended Building Materials

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

- Precast concrete or poured-in-place concrete, unitized ceramic panels, mud brick (full or face brick), rammed earth, cementitious panel siding, green walls, smooth plaster, tile, terrazzo, stone veneer, high-quality metal panels, low reflectivity glass and other durable, high-quality materials.



*Limited metal cladding*



*Limited metal cladding*



*Tensile fabric*

**Figure 162** Recommended materials

### 5.3.3.4 Discouraged Building Materials

**a.** Generally, the use of low-quality building materials and elements are discouraged particularly along the main public frontages:

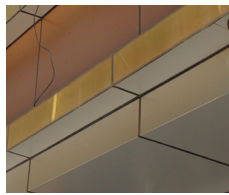
- Plywood siding, T-1-11 siding, vinyl siding, and thin layers of stone or unit masonry that appear veneer-like.
- Generally, the use of curtain walls shall be limited to a maximum of 10% of the total surface frontage of the public sides of the structure.
- Generally, the use of metal cladding shall be limited to a maximum of 10% of the total surface frontage of the public sides of the structure.



*Vinyl siding*



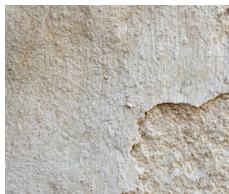
*EIFS paneling*



*Aluminum cladding*



*Aluminum cladding*



*Poorly plastered surface*



*Corrugated sheets*

**Figure 163** Discouraged materials

### 5.3.4 Colors

#### 5.3.4.1 Guidance:

- a.** Limited spectrum of natural colors and materials should be preferred.
- b.** Complementary colors may also be used for public realm, hardscape and softscape elements.
- c.** Changes of exterior color, texture or material may be used to reinforce the architectural formal idea and are best accompanied by changes in plane or occur at an inside corner (i.e. at vertical recesses, or horizontal step-backs), or accommodated via architectural detailing, such as gaps, or other changes in plane.

#### 5.3.4.2 Standards:

- a.** For all public frontages, typically, 70% range of the project's colors palette shall be composed of light gradations of earth tones, with a maximum of 20% of the total composition reserved for stronger gradations and complementary colors.
- b.** Intensified and/or contrasting colors shall be reserved for accentuating important elements, such as entries, arcades, openings, etc. The range for intensified and/or contrasting colors should be within 10%.
- c.** A maximum of 20% of the total composition shall be reserved for complementary colors.

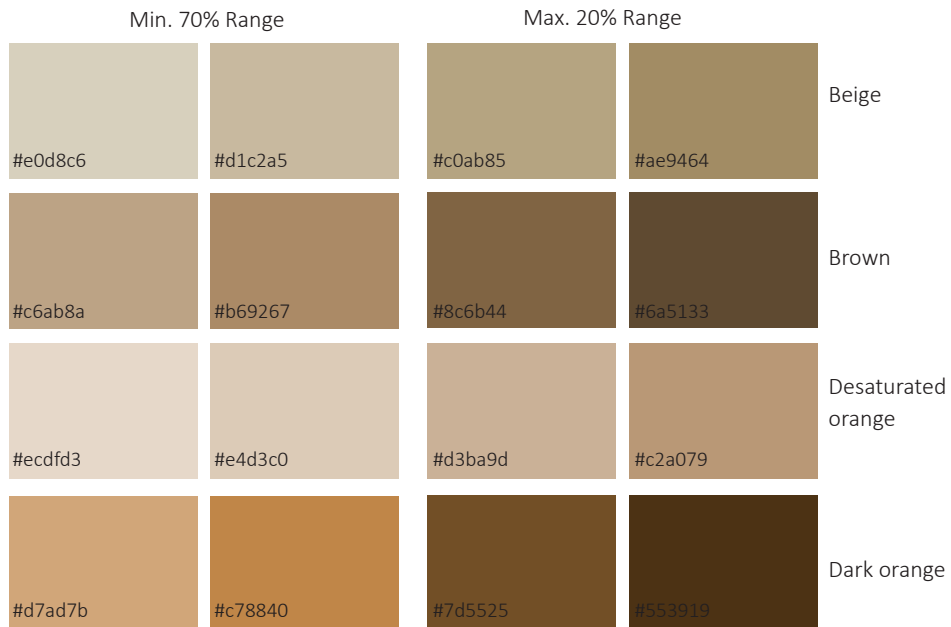


Figure 164 Samples of desired earth tone color palette

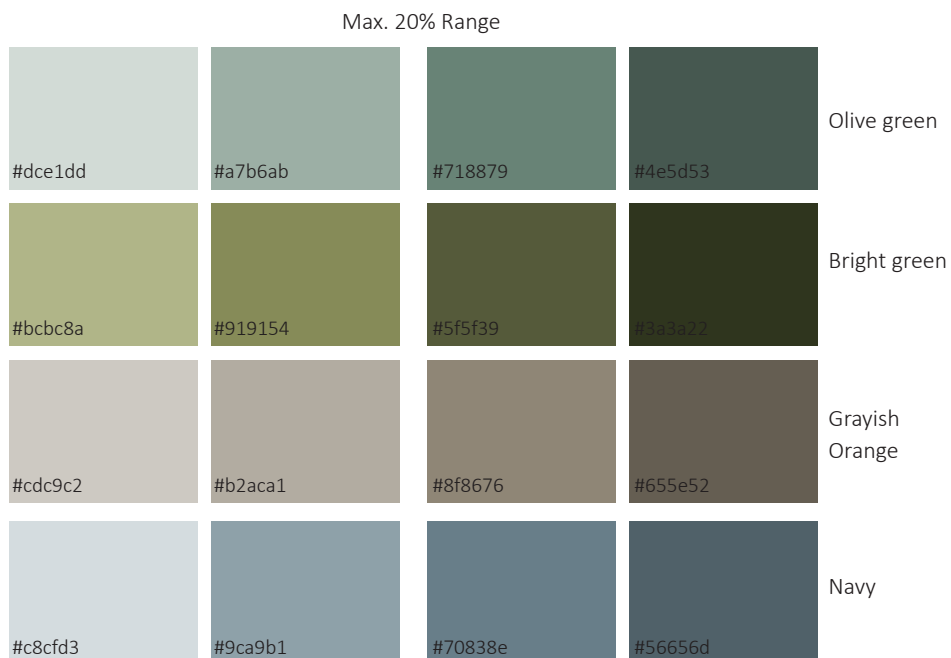


Figure 165 Samples of desired complementary color palette

## 5.3.5 Local Art

### 5.3.5.1 Guidance:

- a. Local art may be represented through use in facade treatment, public realm and hardscape elements.
- b. Art pattern should be used to reinforce the architectural formal idea, accentuate openings, entrance areas and for special architectural elements.
- c. Art patterns may also be used for enhancing a blank facade.
- d. In public plazas and open spaces, local art may be used for signage and wayfinding, branding and street furniture theme.

### 5.3.5.2 Standards:

- a. The range for intensified and/or contrasting colors and art shall be within maximum 10% of the total facade area.



Figure 166 Example of local art



Figure 167 Example of local art



Figure 169 Interpretation of local art for facade enhancement



Figure 168 Interpretation of local art for facade enhancement in Abha

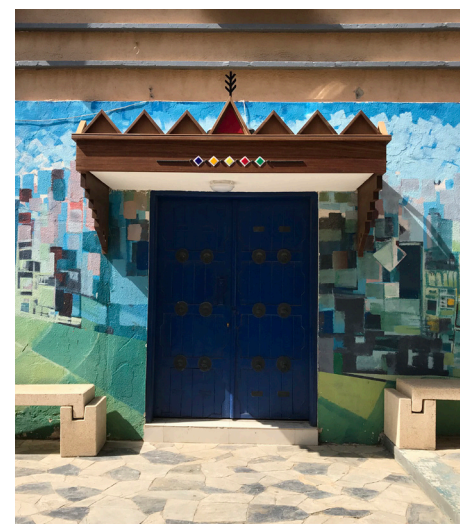


Figure 170 Highlighted entrance using art

## 5.3.6 Architectural Elements

### Shading Structures

#### 5.3.6.1 Guidance:

**a.** Building frontages along active pedestrian paths should provide arcades or recesses at the ground floor to allow for pedestrian movement and climate comfort for ground floor activities.

#### 5.3.6.2 Standards:

**a.** Recess and arcades shall have a depth between 3 and 6m and a height of between 4 and 10m. Double level height arcades shall be encouraged in large developments.

### Screens and Awnings

#### 5.3.6.3 Guidance:

**a.** Material used for shading structures, screens and awnings should be highly durable, waterproof, high UPF (Ultraviolet Protection Factor) value, easy to maintain and provide adequate light transmission.

**b.** Materials such as fabrics, tension membrane (matching the guidelines above), steel structures and wooden frames may be used.

**c.** The shades should be in harmony with the building.

**d.** The structure should be light and consistent with other façade elements.

#### 5.3.6.4 Standards:

**a.** Typically, canopies at entrances should have a max. overhang of 3m and should not obstruct movement and visual continuity within public realm/RoW.

### Walls and Fences

#### 5.3.6.5 Guidance:

**a.** Fence design should respond and be in harmony with the overall architectural design of the wall and buildings.

**b.** Monotonous fence walls should be discouraged.

**c.** Encourage walls with multiple / combination of materials to break the monotony and visually decrease the height.

**d.** Walls and fences should be integrated with landscape.

**e.** Encourage use of light materials / landscape above 1m height to allow transparency.

#### 5.3.6.6 Standards:

**a.** Colors shall be limited in order not to compete with the appearance of the building. The color palette should be limited to a spectrum of natural colors.

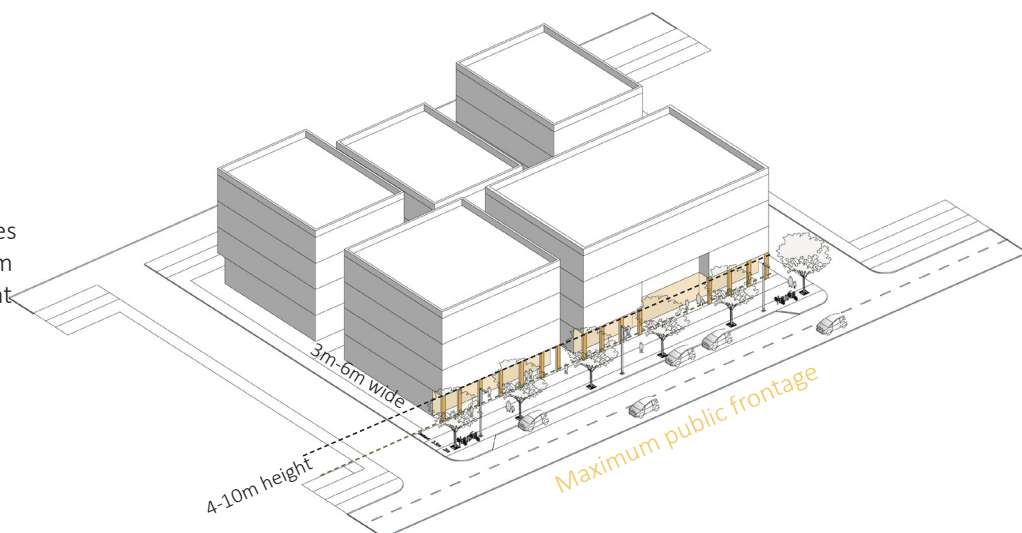
**b.** Typically, the height of all walls and fences shall be not less than 1.8m and not more than 3m in height.



**Figure 171** Low height fence integrated with landscape



**Figure 172** Fence integrated with landscape and allowing more transparency



**Figure 173** Arcades and recesses to provide active frontage, public realm, shading and highlight entrances

### 5.3.7 Building Services, Utilities, MEP Elements

#### 5.3.7.1 Guidance:

- a.** 'Back of the house' activities such as loading, servicing, utilities, and vehicle parking, should be located underground or at the back of the lot.
- b.** Service, utility, and mechanical equipment (i.e. utility box transformers and standpipes) should be screened from view from public roads with landscaping and/or enclosures.
- c.** Building design should accommodate equipment with niches or insets.
- d.** Screening should be compatible with the architecture, materials and colors of buildings.
- e.** Mechanical equipment should vent behind buildings wherever possible.
- f.** Utility vents should be flush with surrounding grade and screened with landscape.



**Figure 174** Example of exposed services and utilities



**Figure 176** Example of fully screened refusal area integrated within the design of the building



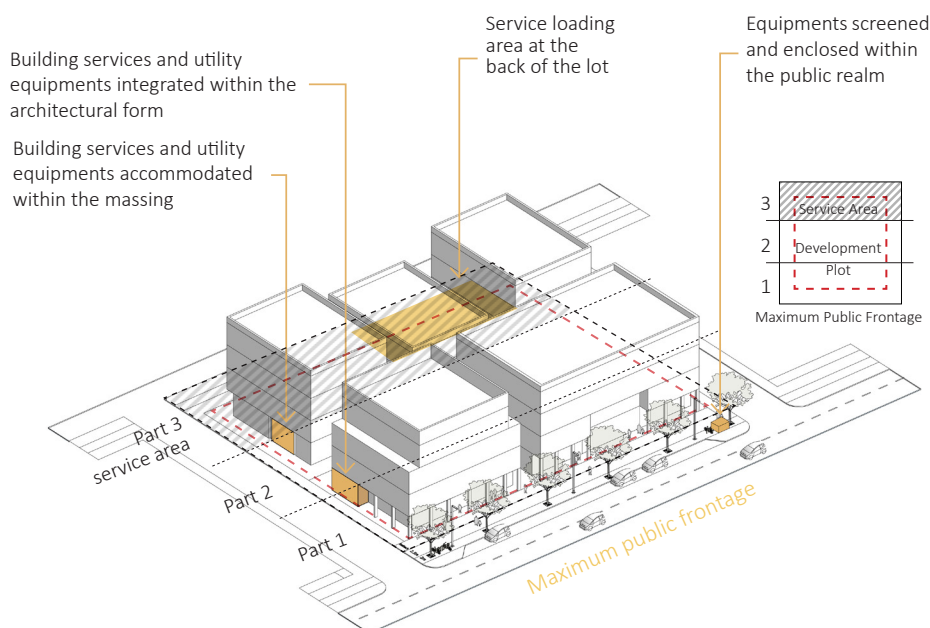
**Figure 175** Exposed utilities on sidewalk



**Figure 177** Fully integrated utility elements with the design of the building and open space

#### 5.3.7.2 Standards:

- a.** Loading, servicing, utilities, and service vehicle parking, shall be located underground or at the back of the lot, min. 1/3 (side width) away from the main public frontage. Where above ground, utilities shall be placed together in contained areas and enclosed.
- b.** Trash containers and retail loading areas shall be located at the back of the plot away and not visible from the main public frontage.
- c.** Trash enclosures shall be screened from public view or enclosed.
- d.** A utilitarian or 'add-on' appearance shall not be allowed.



**Figure 178** Utilities placement on site

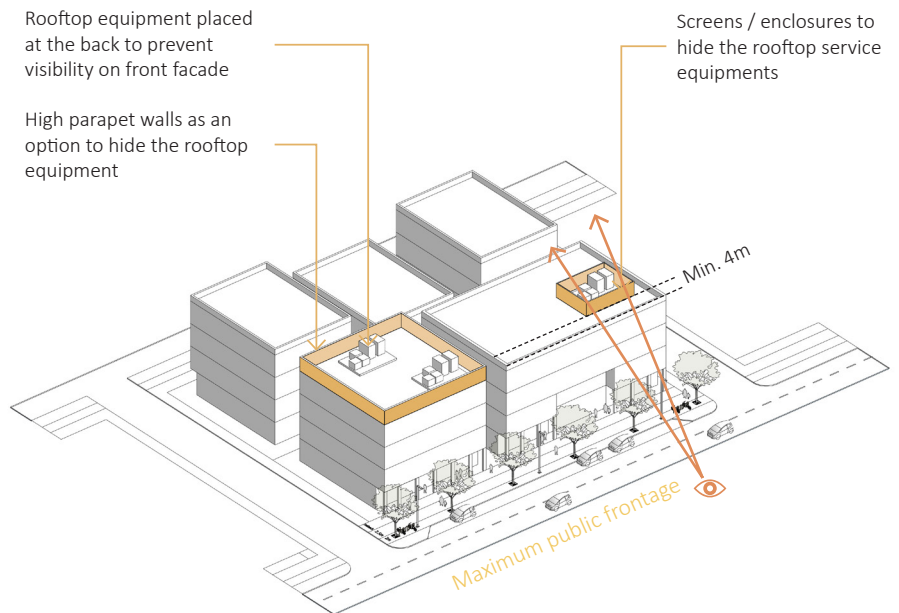
## 5.3.8 Rooftops and Rooflines

### 5.3.8.1 Guidance:

- a.** Rooftop mechanical and telecommunications equipment, as well as signage should be well-integrated into the total building design to avoid detracting from the form and elegance of the top.
- b.** Fixtures, fittings, or equipment on rooftops seen from above should also be screened on top.
- c.** Rooftop equipment not within an enclosure should be painted to match the rooftop.
- d.** Roof coverings and finishes' materials with bright and white color with Solar Reflective Index of at least 0.8 preferably, 0.9 with high emittance value from 0.85-0.9 should be encouraged.
- e.** Green roof should be encouraged.

### 5.3.8.2 Standards:

- a.** Any fixtures, fittings, or other equipment (i.e. pipes, tanks, compressors, air vents, solar panels) proposed for rooftop installations must be screened by screens / landscape / a solid or perforated parapet of at least equal height to the equipment and properly integrated within the building architectural design, colors and materials.
- b.** Rooftop mechanical equipment and roof-vent penetrations must be set back min. 4m from the edge of the building primary and secondary frontage and properly screened behind a parapet, or in an enclosure, to avoid visibility from the main road and other public streets and/or from other taller buildings. A min. 0.9m parapet wall should be provided along all sides for terraced roof tops and a min. 0.2m wall should be provided for upper and lower-level accessory building parapets.



**Figure 179** Rooftop equipment placement and screening



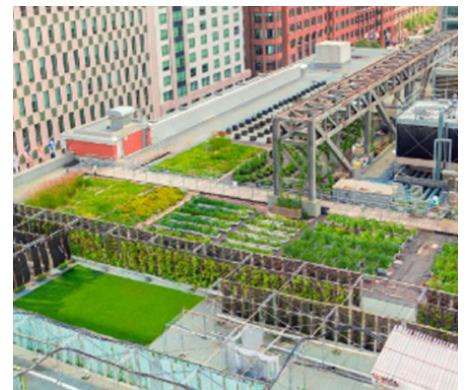
**Figure 180** Example of unscreened visible rooftop equipments



**Figure 182** Example of rooftop equipment screening well-integrated into the total building design



**Figure 181** Green stepped terraces with furniture on roof top and appropriately screened equipments



**Figure 183** Plantation screening for roof top mechanical elements



## 5.3.9 Temporary Structures, Walls and Works

### 5.3.9.1 Guidance:

a. Typically, temporary structures are installed for the following:

- Reparation works.
- Material storage.
- Material disposal.
- Temporary utilities.
- Safety.
- Liability to existing infrastructure.
- Vacant Plots.

b. The color palette of the screen cover should be limited to a minimum spectrum of natural colors.

c. Temporary panels should not be permitted.

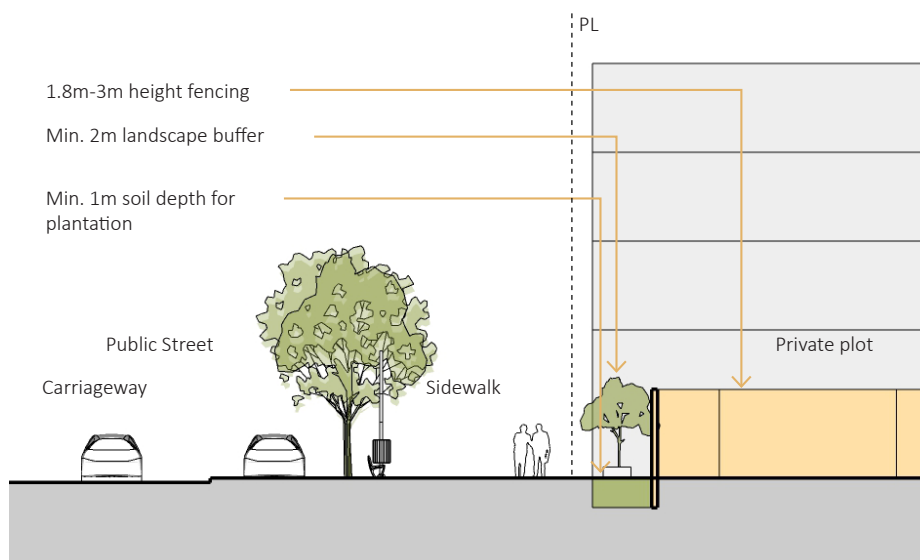


Figure 184 Appropriate fencing design

### 5.3.9.2 Standards:

a. The fence should be no less than 1.8m and not more than 3m in height.

b. As a minimum, a screened security fence must be installed on all construction projects.

c. A fence screen cover shall be placed around the entire perimeter of the site.

d. Wherever possible, the side of the fence facing the road shall be set back 2m to allow for temporary landscaping along the main road-front setback area.

e. The size of entry gates shall not be larger in width than that of the driveway.

f. Fence installation shall not result in obstructions preventing public access to sidewalks or a building's means of egress.

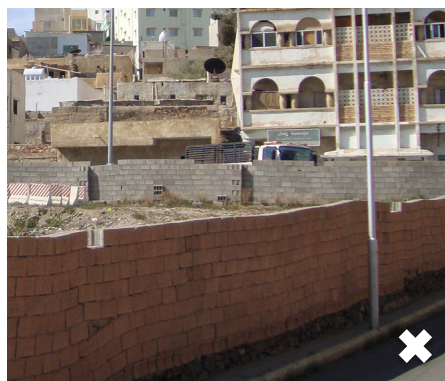


Figure 185 Temporary fencing with corrugated sheets



Figure 186 Example of appropriate fencing design with integrated landscape



## 5.3.10 Privacy

### 5.3.10.1 Guidance:

**a.** Roof terraces should have deep parapets preventing views down onto lower buildings (i.e. formed by planters).

**b.** All screening elements have to be included into the overall architectural design in terms of material, color and pattern.

**c.** The sides of the buildings that faced neighboring houses should be, to the extent possible, retained for service uses and staircases.

**d.** Window openings should be limited or located above eye level so as not to invade the privacy of adjacent neighborhoods.

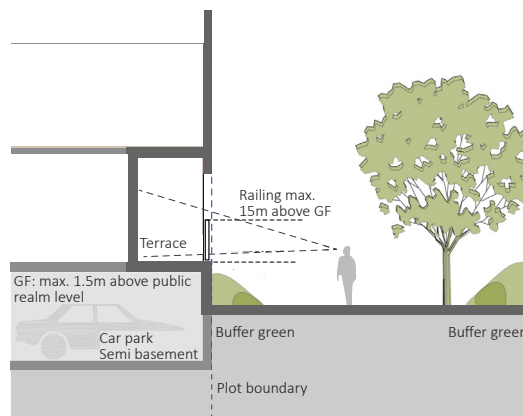
### 5.3.10.2 Standards:

**a.** Privacy must be ensured by an integrated approach on the orientation, positioning, and design of windows, other openings and shading elements.

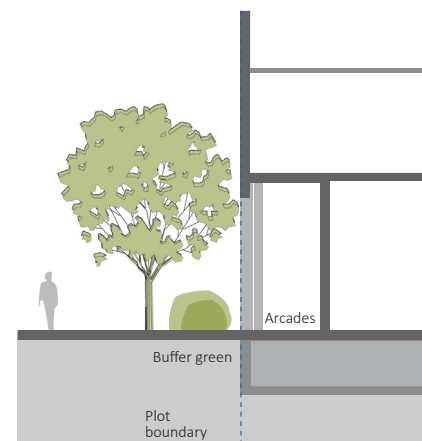
**b.** Whenever possible, new buildings shall be oriented to look on to the main road and public areas, such as squares or wide major streets.

**c.** The use of obscure glass in building openings shall not be desirable as a means of achieving privacy.

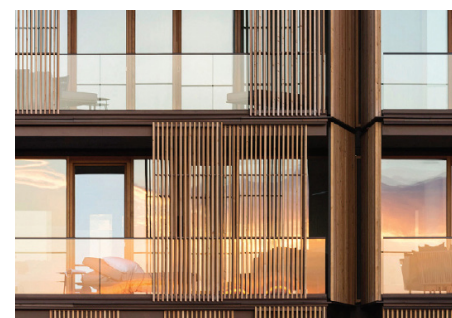
**d.** All external balconies and areas of accessible roof space from which overlooking would otherwise be possible shall be surrounded by a solid parapet with a minimum height of 1.80 meters measured from the adjacent finished floor level.



**Figure 187** Appropriate privacy design for residential use at first floor



**Figure 188** Appropriate screening of private ground floor activity from street by mean of arcade, screening element and landscape buffer



**Figure 189** Example of screening elements included into the overall architectural design in terms of material, color and pattern

## 5.4 Special Building Typologies

### 5.4.1 Tall Buildings

#### 5.4.1.1 Guidance:

**a.** Tall buildings are defined as structures taller than 40m and or with more than 9 levels. Generally, tall buildings should be designed with slender massing and sound proportions by using two integrated vertical building zones: The Podium Zone and the Tower Zone.

#### b. Podium Zone

- The Podium Zone is the portion of the building that extends vertically from the ground floor up to the 4th level of the building.
- The Podium Zone shall be located to frame the edges of streets, parks, and open space, reinforce corners, and to fit harmoniously within the existing context.

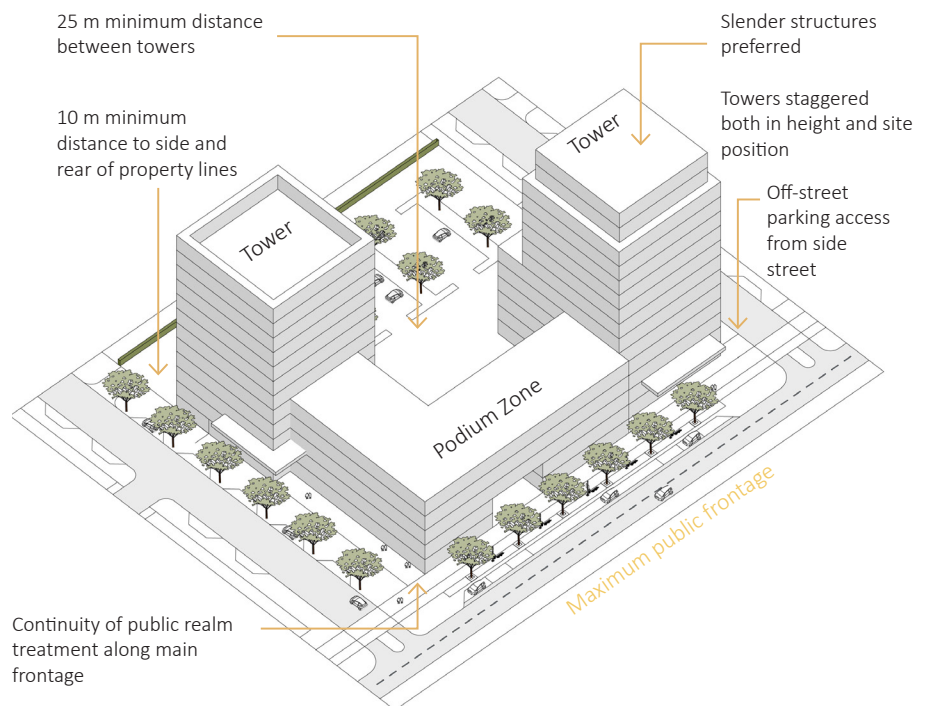
#### c. Tower Zone

- The Tower Zone is the portion of the building above the Podium Zone.
- Tall buildings / towers should be tall, slender structures that enhance the skyline without blocking significant views from other buildings and ensuring access to daylight to neighboring areas.
- Free standing towers without base buildings (Podium Zone) or a clear relationship to the street should not be allowed.
- Large, elongated, boxy or slab like floor plates should be avoided.

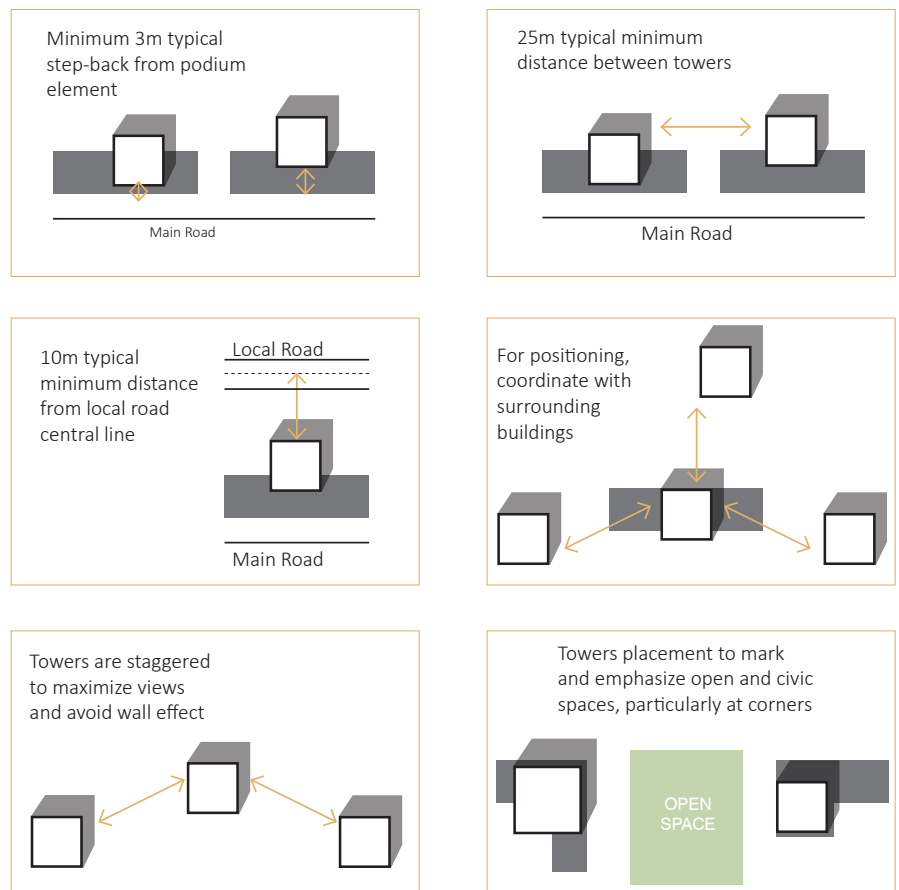
#### 5.4.1.2 Standards

**a.** Facade breaks shall be provided at every 60m minimum at the podium zone.

**b.** Tower Zone main frontage shall be limited to a maximum of 30m wherever possible.



**Figure 190** Recommended site planning considerations for tall buildings



**Figure 191** Recommended site planning considerations for tower placement

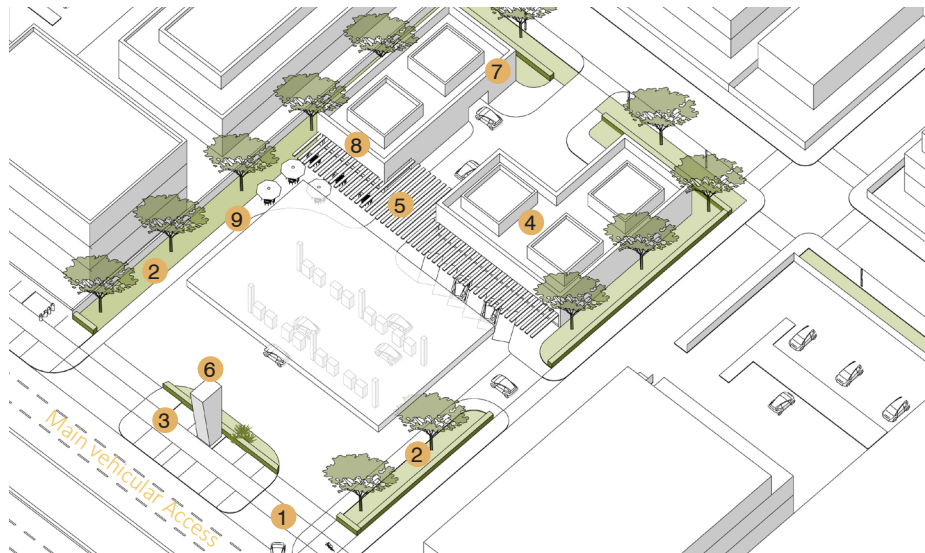
## 5.4.2 Gas Stations

### 5.4.2.1 Guidance:

- a.** Auto repair bay and car wash openings, service and storage areas and refuse enclosures should be oriented away from public view and from view from the main roads.
- b.** Blank wall and purely utilitarian facades shall be avoided along public frontages.
- c.** Facades of temporary nature and quality should be avoided.
- d.** All sides of buildings and pump islands should be designed with a consistent architectural style.
- e.** Items for sale shall be displayed within the main building, or within designated areas that are screened from public streets.
- f.** Overly dominating branding elements or colors shall be avoided on the facade. Branding elements should be well integrated with the facade or the landscape. Extreme bright colors should be avoided.
- g.** Highly reflective building materials and finishes should be avoided.
- h.** Ground-mounted signs must be integrated with landscape treatment.
- i.** Signs must be located and designed to complement the character and scale of the area and to promote an active, pedestrian friendly environment.

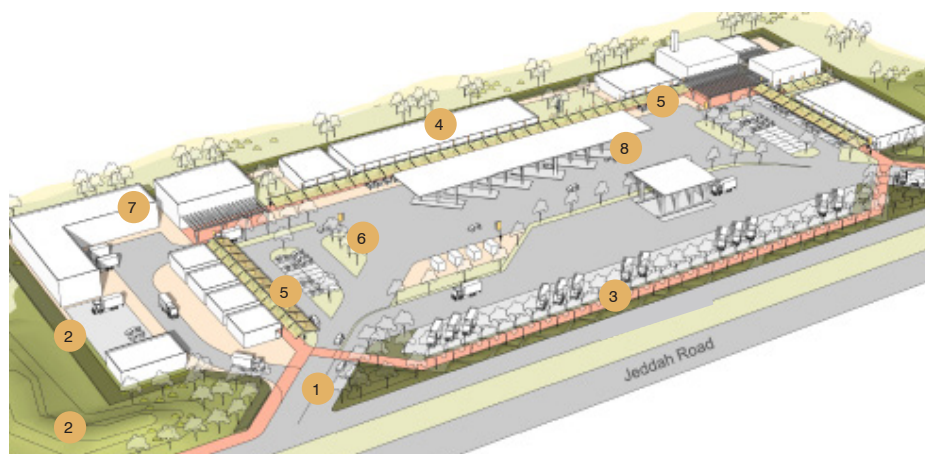
### 5.4.2.2 Standards

- a.** A minimum 3m wide (5m in suburban areas) landscaped area along the edges of a site shall be provided.
- b.** All utility equipment within buildings must be enclosed or screened from public view. Rooftop mechanical equipment must be set back from the edge of the building and screened.



**Figure 192** Recommended site planning considerations for gas stations in urban areas

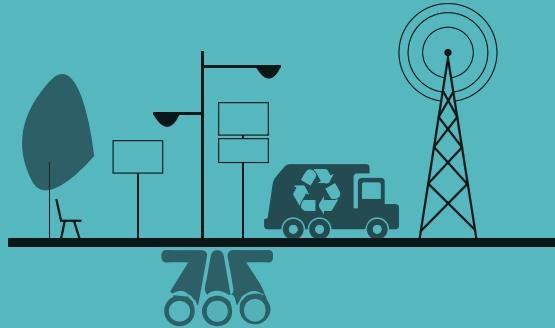
- |  |   |
|--|---|
| <p><b>1</b> Number and width of driveways from the road is minimized.</p>  | <p><b>5</b> Canopy element binding the building and massing elements.</p>   |
| <p><b>2</b> Minimum 2m (for urban context) and 5m (for suburban context) wide landscape area along the edges of the site.</p>  | <p><b>6</b> Ground-mounted signs are integrated with landscape treatment.</p>   |
| <p><b>3</b> Minimum 2m wide sidewalk/walkway in the public RoW or setback area across private access driveways.</p>  | <p><b>7</b> All utility equipment within buildings enclosed or screened from public view. Rooftop mechanical equipment set back from the edge of the building and screened.</p>                     |
| <p><b>4</b> Principle buildings oriented and relate to the streetscape and direct pedestrian connections from public streets in case of urban areas and the main road in case of suburban areas.</p> | <p><b>8</b> Overly dominating branding elements or colors are avoided on the facade. Branding elements are well integrated with the facade or the landscape. Extreme bright colors are avoided.</p> |



**Figure 193** Recommended site planning considerations for gas stations in suburban areas

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# 6 | ORGANIZE INFRASTRUCTURE & SIGNAGE

## 6 Organize Infrastructure and Signage

### 6.1 Overall Objectives

The following chapter presents design provisions to properly integrate, buffer or hide utilities and related functions within development and away from public view. Also, it provides clear provisions to better organize signage, and particularly advertisement, in relation to architecture and public spaces.

- Hide utilities, services and utility related functions from public view.
- Integrate and/or buffer overhead power-lines and towers with development.
- Reduce light pollution in public and private developments.
- Hide waste and trash from public view.
- Integrate signage in project design.
- Limit advertisement.



**Figure 194** Exposed infrastructural elements as seen in Aseer towns



**Figure 195** Existing overuse of lighting



**Figure 196** Open and exposed trash containers



**Figure 197** Existing images of unregulated signage in Aseer



## 6.2 Utility Networks

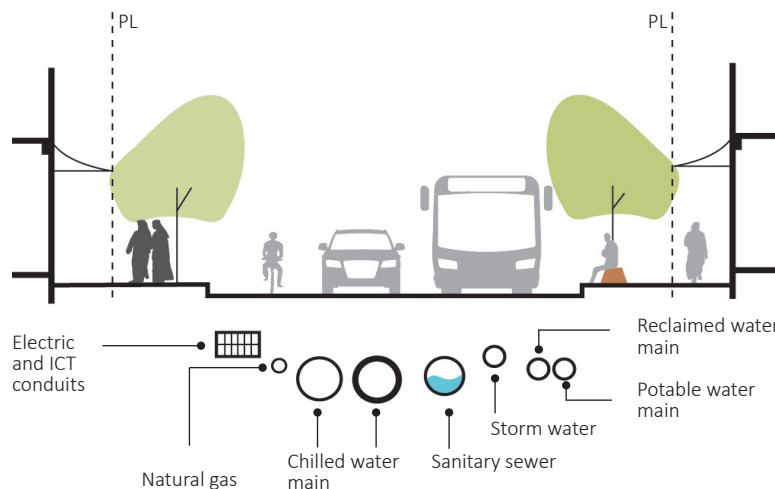
### 6.2.1 Guidance:

- a.** Wherever possible utility networks should be placed underground.
- b.** Utilities should be installed prior to completion of new road and sidewalk surface within the public RoW.
- c.** All building connections should be installed up to the property line.
- d.** For placement of underground utilities in the right-of-way the following three options should be preferred, as shown in the given diagrams:

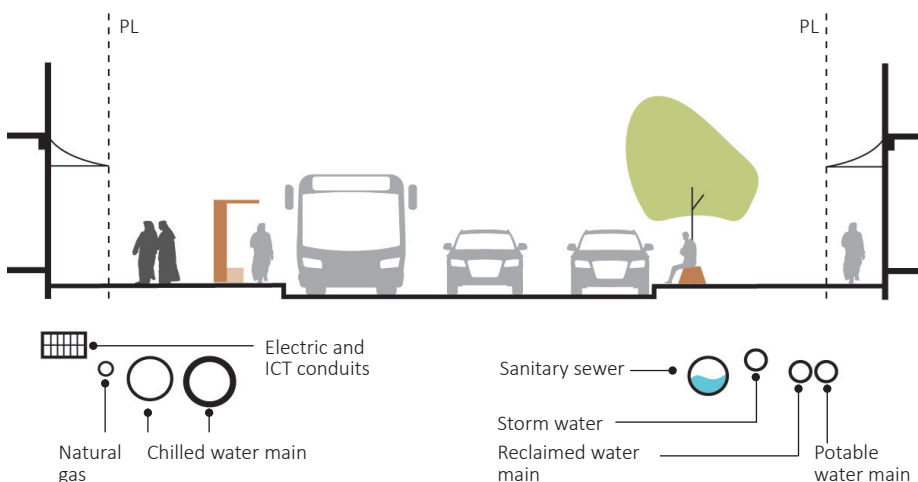
- 1. Installing utilities in the roadbed, preferably under service lanes if existing.
- 2. Installing utilities adjacent to the roadbed.
- 3. Installing utilities within the underground corridor.

**e.** Priority utilities should be placed in more accessible areas to avoid frequent traffic interruptions, especially for high-capacity lanes, like along service lanes.

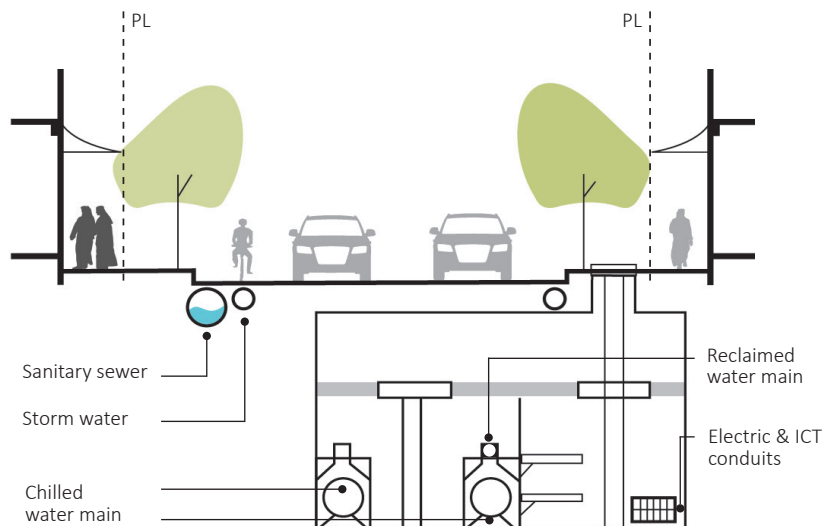
**f.** Priority should be given to utilities accessed most frequently. Typically, these are: electricity & communication; water supply; storm water & wastewater; gas and district cooling.



**Figure 198** Option 1 - Install utilities in the roadbed



**Figure 199** Option 2 - Install utilities adjacent to the roadbed



**Figure 200** Option 3 - Install utilities within the underground corridor

## 6.3 Infrastructural Elements

### 6.3.1 Guidance:

- a.** For large scale infrastructural elements generous setback and appropriately landscaped buffered zones should be required.
- b.** Particular attention should be placed to proper buffering of public frontages and incompatible adjacent uses.
- c.** Generally, a combination of vegetated and human made screens should be required.
- d.** Building massing should be broken down and articulated to foster a positive dialogue with its adjacent context (i.e. imitating existing patterns and preexisting urban form).
- e.** Harmonious or mimetic color arrangements should be preferred.
- f.** In any case, the proposed development should demonstrate how the visual impact on the nearby population has been mitigated.



**Figure 201** An example of building massing breakdown and harmonious color arrangements: The FBA 8 hot-dip galvanizing plant in Dortmund comprises three hall sections arranged in parallel with one another in accordance with a color concept by Friedrich E. v. Garnier (Credits: ThyssenKrupp Rasselstein GmbH, Andernach)



**Figure 202** Examples of mimetic color arrangements for utility boxes

## 6.4 Overhead Power Lines and Towers

### 6.4.1 Guidance:

**a.** Boundary areas to transmission routes should be effectively screened by landscape to reduce visual prominence of power lines.

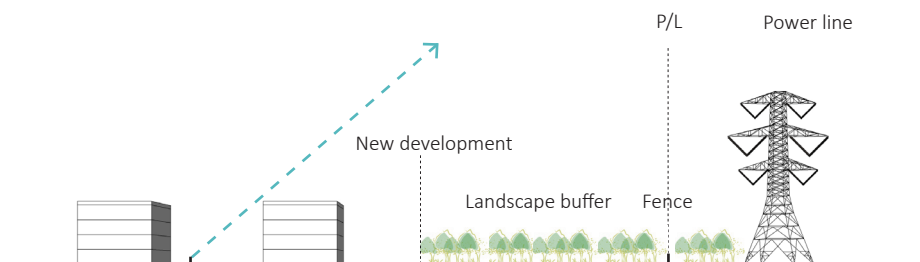
**b.** Arrangement of urban development should avoid following the linearity of the transmission route so to diminish its overall prominence.

**c.** Wherever possible, pylons should be located on lower ground so to limit their visual impact.

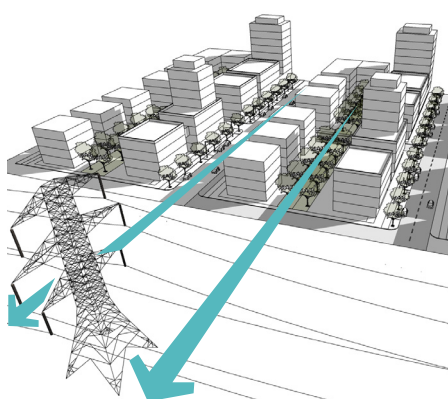
**d.** When designing an electricity transmission project, consideration must be given to the position of all listed and potential heritage sites as well as cultural landscapes so not to impact on these sites.

**e.** Comparative evaluation for corridor options should be carried out to select the electricity transmission corridor with the least impact on cultural heritage and all other environmental, technical and economic perspectives. Recommended factors to be considered for assessment of each corridor are:

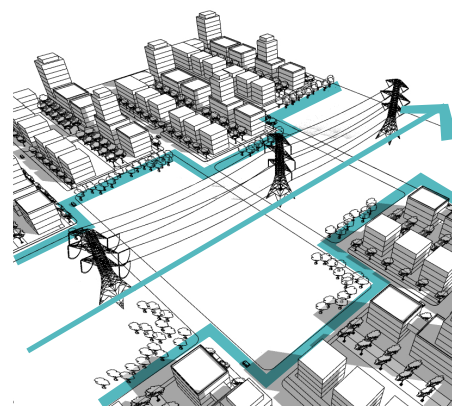
1. Physical presence in the landscape (scale, mass, appearance, setting and visibility).
2. Preservation (integrity, condition, vulnerability to change of the heritage asset).
3. Documented value and material about the heritage asset.
4. Inter-visibility between heritage assets.
5. Rarity in the heritage record.
6. Cultural and community value.



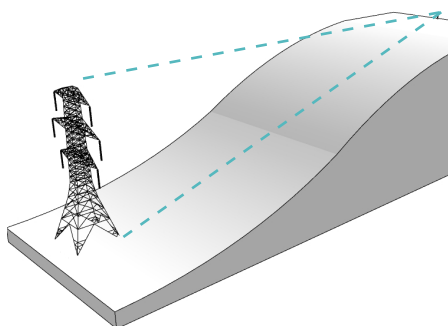
**Figure 203** Narrower streets with taller buildings may enable development to be sited closer to pylons without increasing visual impact



*Offsetting the views of pylons may help to make them less prominent. Orientated development block should be such that the majority of development does not front the transmission route.*



*The linear arrangement of urban development in parallel with the transmission route over long distances tend to highlight the presence of overhead power lines. One or more urban development elements should not follow the linearity of the transmission route so that its overall prominence may be diminished.*



*Whenever possible pylons shall be placed on lower grounds to be viewed from elevated positions to reduce their visual impact.*



*Appropriate planting may reduce visual impact of pylons from public spaces, enhancing the overall environment.*

**Figure 204** Guidance for overhead power lines and transmission towers

## 6.5 Lighting

### In Development

#### 6.5.1 Guidance:

- a. Lighting sources should be shielded, aiming light downward or back to the building wall, to reduce glare.
- b. Frontages, entrances, arcades, pathways and adjacent pedestrian public rights-of-way should be illuminated for pedestrian safety.
- c. Lighting fixtures should be installed to accent and complement architectural details.
- d. Shielded wall sconces and angled up lighting may be used at night to establish a facade pattern and animate a building's architectural features.

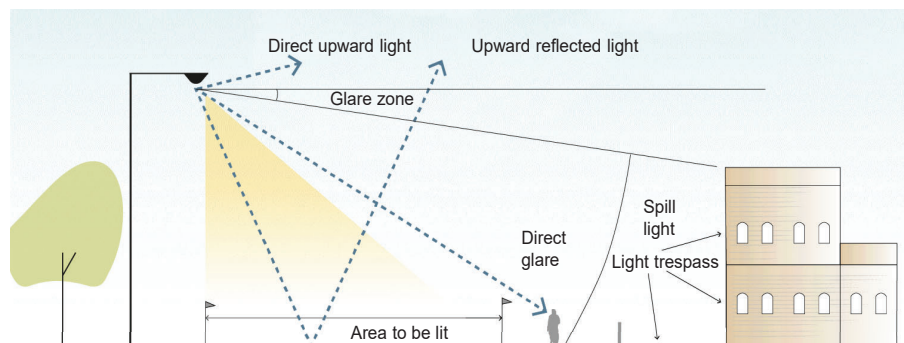
#### 6.5.2 Standards:

- a. For any new development acceptable average light levels shall be with a typical uniformity ratio of 3:1, where the maximum light level shall be 3 times the brightness of the minimum level.

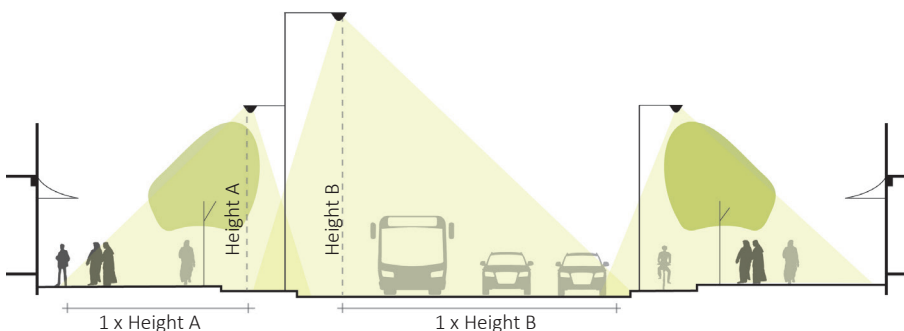
### In Right-of-Way

#### 6.5.3 Standards:

- a. Height
  - Standard light poles for sidewalks and bike facilities shall be kept to a height between 4.5–6m.
  - Light poles for roadbeds shall vary according to the street typology and land use. In most contexts, standard heights for narrow streets in residential, commercial, and historical contexts shall be between 8-10m.
  - Taller light poles may be appropriate only for wider streets in commercial or industrial areas but shall be generally discouraged.
- b. Spacing
  - Generally, spacing between two light poles should be 2.5–3 times the height of the pole.
  - Shorter light poles shall be installed at closer intervals.
- c. Light Cone
  - The light cone of the pole has roughly the same diameter as the height of the fixture from the ground. The height of the pole shall therefore determine the maximum suggested distance between two light poles to avoid dark areas.
  - Lighting from light poles and fixtures shall be focused directly onto the street to minimize glare and light pollution.
- d. Light Fixture
  - Different light fixtures will produce different light cones. Generally, cut-off and fully shielded fixtures directed into the street shall be preferred to minimize glare and light pollution.



**Figure 205** Examples of effective lighting in development



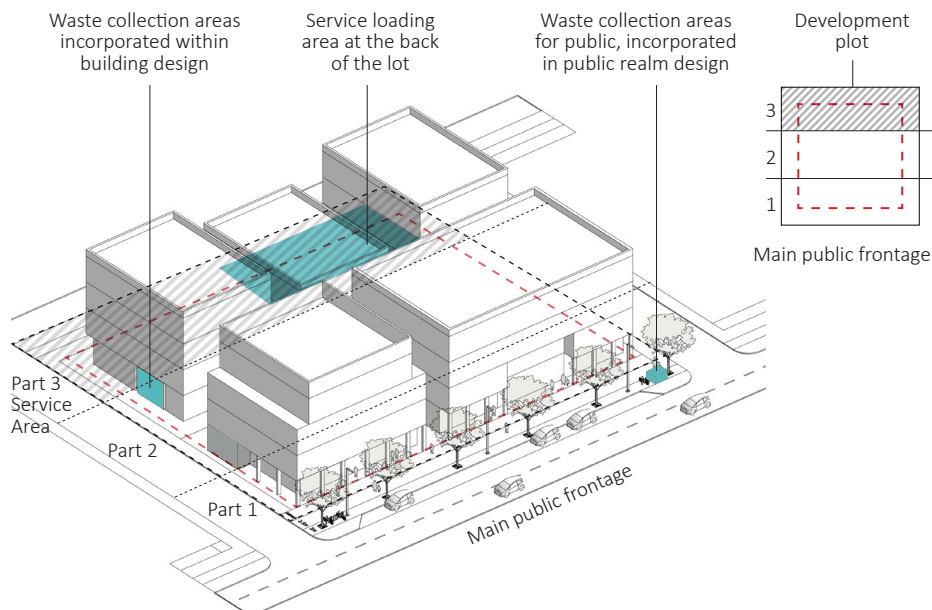
*The spacing between light poles should be typically 2.5 - 3 times the height of the fixture; a single row of light poles might be sufficient for a narrow street, while wider streets may require multiple rows.*

**Figure 206** Example of effective lighting in right of way

## 6.6 Waste

### 6.6.1 Guidance:

- a.** All publicly visible areas from main public roads should be kept clean from trash, construction materials and/or other refuses at all time.
- b.** Location of centralized facilities should be away from major public road and in any case adequately screened from public view.
- c.** Trash container placement areas should be cleaned of residual waste at any time.
- d.** Wherever possible, containers should be placed on a platform or raised from the floor to allow cleaning and ease of lifting.

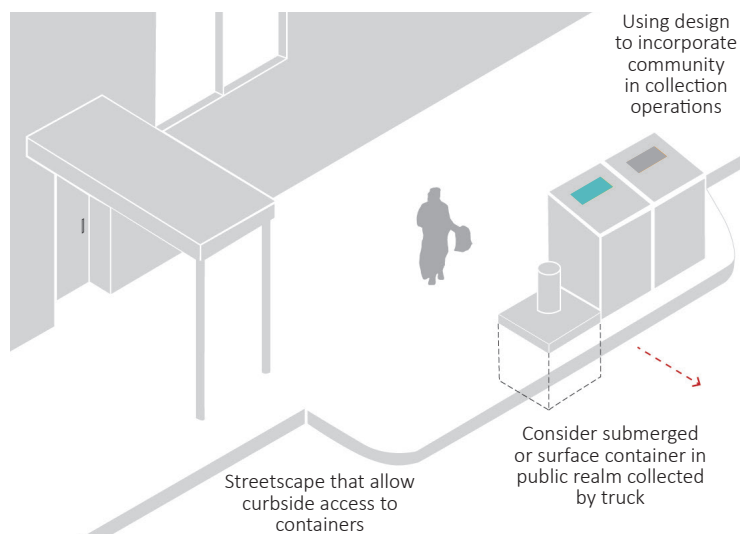


**Figure 207** Appropriate placement of waste collection areas in development

### Placement of Waste Bins

#### 6.6.2 Standards:

- a.** Trash containers and retail loading areas shall be preferably located in the 1/3 portion at the back of the plot away from the main public frontage and screened from public view.
- b.** Trash enclosures shall be screened from public view or enclosed.
- c.** Screened areas shall be capable of accommodating such number of waste containers as needed to hold the maximum calculated daily garbage output of the lot.



**Figure 208** Appropriate streetscape design integrating waste collection elements



**Figure 209** Screened waste disposal area



**Figure 210** Integrated waste disposal area with design of building and open space

## 6.7 Organize Signage

### Overall Objectives

- The AUDC considers signage as any kind of visual communication element present and/or visible in and from the public space (i.e. roads, streets, avenues, squares).
- The AUDC classifies signage into 2 main categories:
  - Way Finding Signage
  - Advertisement
- AUDC focuses on regulating advertisements as major source of visual pollution.
- In any case signage must be conceived as an integral part of the project design and composition so not to appear as an afterthought.
- The location, size, and appearance of signage must complement the building and/or should be in character with the urban context in which they are located.
- If falling under a family of elements, signage must be related in their design approach and convey a clear hierarchy of information.
- In any case signage must respect residential use. Small signs, no animation, limited lighting and shorter operating hours shall be appropriate where signs are visible from residences.



Figure 211 Unregulated signage in Aseer

## 6.8 Types of Advertisements

### 6.8.1 Guidance

#### A. Indicative Announcement

Indicative Announcement is signage that identifies the place of the activity, the establishment and/or professionals that make use of it, and may contain the name of the establishment or professional and their respective logos, indication of the services and activities performed, telephones, addresses and websites. Examples of Indicative Announcements are: signage for stores, medical establishments, schools, institutions, hotels, gas stations, petrol pumps, or parking areas.



Figure 212 Example of Indicative Announcement in Abha city

#### B. Publicity Advertising

Publicity Advertising is signage that is installed outside the place of activity for advertising. Examples of Publicity Advertisings are: advertising on billboard, advertising on freestanding poles, real estate related communication, advertising on street furniture, advertising on vehicles.



Figure 213 Example of Publicity Advertisement in Abha city

#### C. Special Announcement

Special Announcement is signage specifically dedicated to address cultural, educational, event information, administrative or real estate purposes. Examples of Special Announcements are: signage for stores, medical establishments, schools, institutions, hotels, gas station, petrol pumps, or parking areas.



Figure 214 Example of Special Announcement in Abha city

## 6.9 Restricted Areas

### 6.9.1 Standards:

**a.** Placement of advertisement shall be prohibited in the following areas and/or built form elements:

- In riverbeds, reservoirs, lakes, dams and mountains sides.
- In public parks, squares and other public places.
- On trees of any size.
- On transportation related signs.
- On streetlights.
- On infrastructure elements like bridges, viaducts, tunnels and utility towers.
- On continuous blank walls or fencing.
- On or next to public works of art.

**b.** The following type of advertisement structures shall be prohibited in **urban centers, downtown areas** and other urban mixed-use centers or walkable districts within the Aseer region:

- Unipoles
- Billboards
- Megacomms
- Hoardings



Natural assets like mountains & Wadi beds



Parks, squares and other public spaces



Trees of any size



Major Access Corridors



Bridges and tunnels



Utility towers & structures

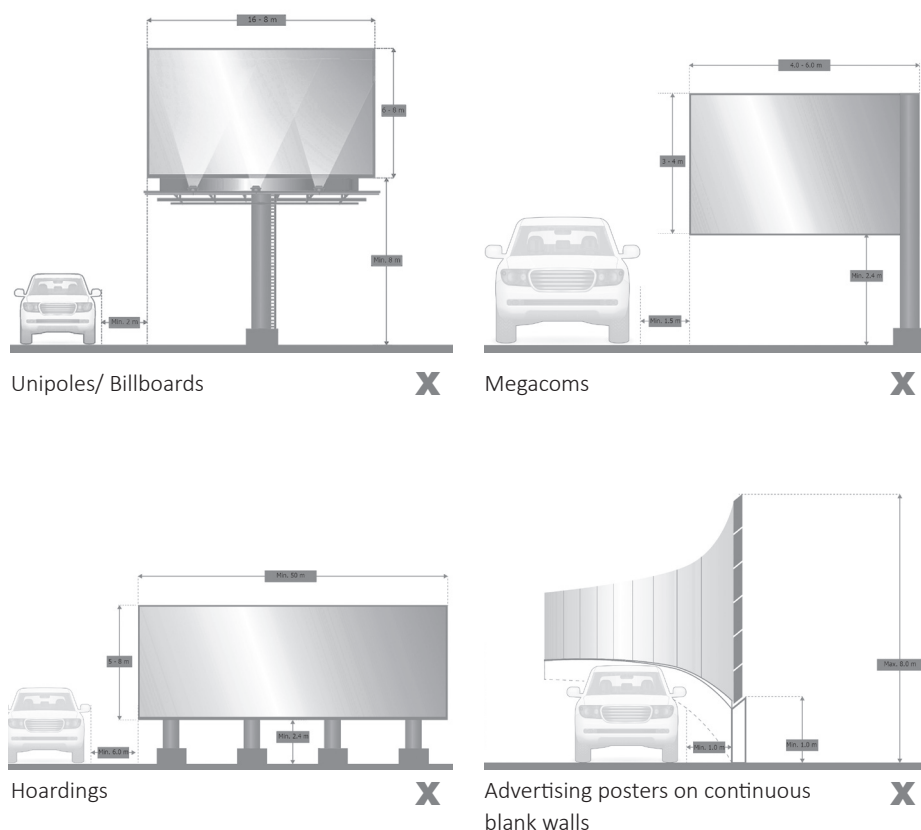


Continuous blank walls/fencing



Public art

**Figure 215** Areas and elements where advertisement placement is generally prohibited or highly controlled



**Figure 216** Restricted types of signage structures within downtown areas and urban mixed use centers



## 6.10 Placement on Buildings for Indicative Announcements

### 6.10.1 Guidance

#### Pedestrian Signage

Pedestrian signage is defined as signs placed at the pedestrian level - i.e. within the first vertical 5m of a building wall. Generally, pedestrian signage must be part of a common design family i.e. style, dimensions, colors, materials and with similar alignment and proportion when part of the same project. Pedestrian signage must reinforce the identity of the public street frontage and be conducive to a pleasant walkable environment.

#### Building Wall Signage

Building Wall signage is a sign placed above the pedestrian level - i.e. above 5m in height along a building wall. Building Wall signage shall be generally discouraged for building structures less than 3 levels height. For structures taller than 3 levels, 1 Building Wall signage per main frontage shall be allowed. Signage shall be appropriately scaled for the primary viewing audience (i.e. more pedestrian-oriented corridor segments will require smaller signage than fast moving automobile-oriented segments).

#### Tall Building Signage

Tall Building signage is a sign that identify tall buildings. The AUCD identifies tall buildings as structures taller than 40m and/or 9 levels. Tall Building signage shall be located within the area available 5m below the top of the parapet or between the top of the windows on the topmost floor and the top of the roof parapet (in case of flat-topped buildings). It should not take up more than 50% of that area or 8sqm (whichever is less). For tall buildings maximum 2 signage are allowed (each of max. size 8sqm).

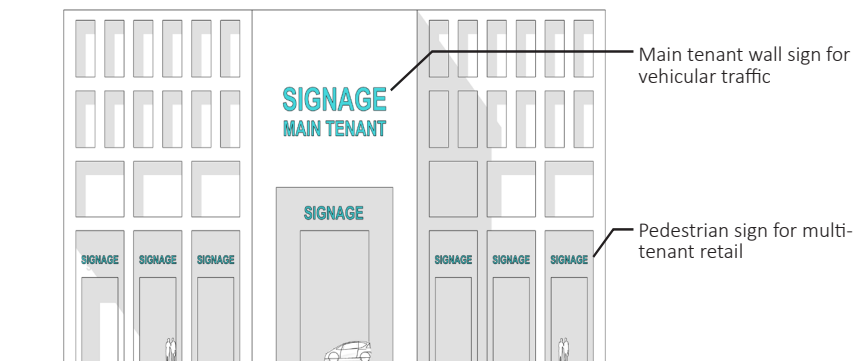


Figure 217 Example of correct placement for pedestrian and building wall

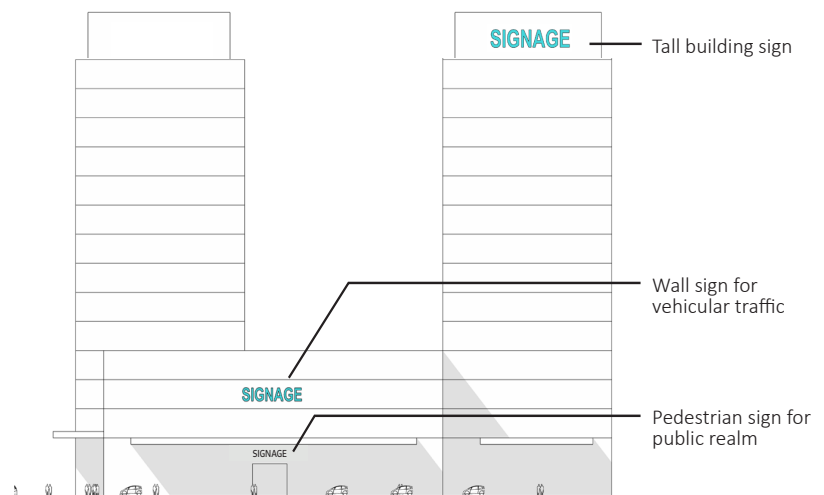


Figure 218 Example of correct placement for tall building signage



Figure 219 Example of building wall signage



Figure 220 Example of pedestrian signage

## 6.11 Indicative Announcement

### General Cases

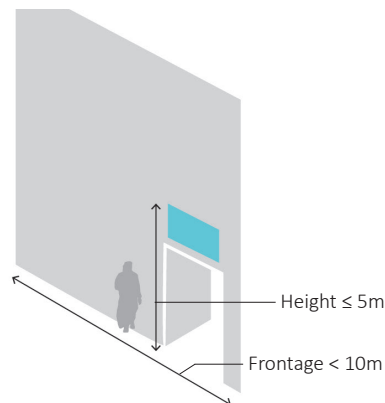
#### 6.11.1 Standards:

##### a. Allowed Zone Placement

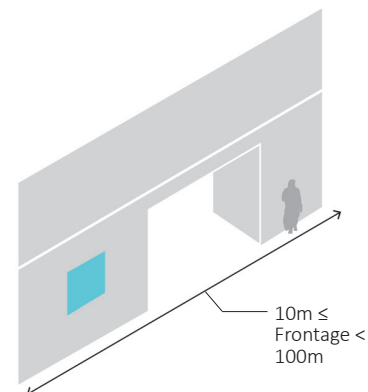
- Pedestrian/ Wall/ Tall

##### b. Allowed Proportion

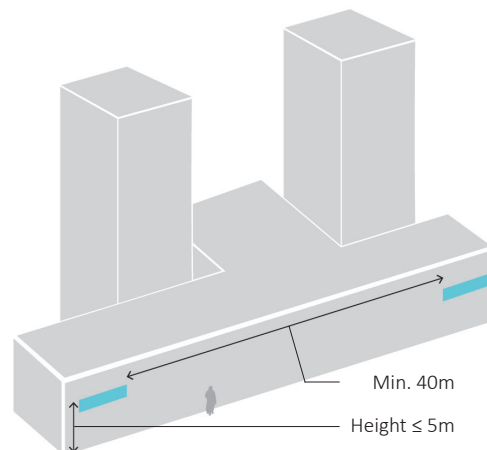
- For building frontage less than 10m the maximum exhibit area of signage shall be restricted to 1.5sqm.
- For building frontage in between 10m & 100m the maximum exhibit area of signage shall be restricted to 4sqm.
- For building frontage more than 100m, 2 advertisements with areas of 10sqm each separated by a minimum distance of 40m shall be allowed.
- One advertisement per facade shall be allowed in case of more than one public frontages.



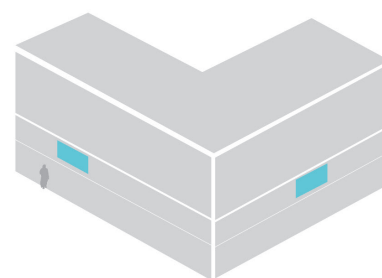
*For facade frontage less than 10m, the total area of the Ad shall not exceed 1.50sqm.*



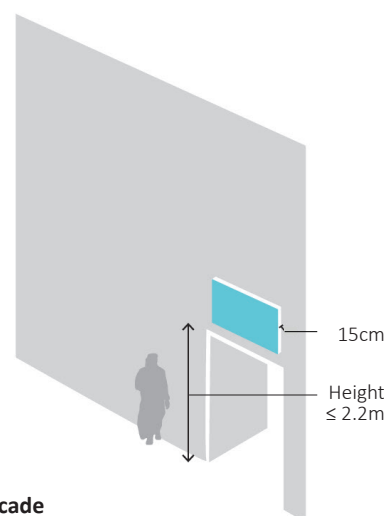
*For properties with facade frontage between 10m and 100m, the area total Ad shall not exceed 4sqm.*



*Properties with facade frontage 100m or more shall be allowed 2 Ads, with area up to 10sqm each and separated by at least 40m.*

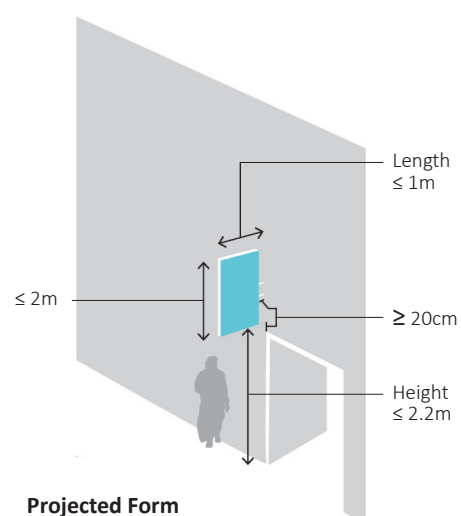


*For corner properties or properties with more than one frontage, the installation of 1 Ad per facade frontage shall be allowed.*



##### On Facade

*An Advertisement shall advance up to 15cm on the sidewalk, provided it is at a minimum height of 2.20m from the ground.*



##### Projected Form

*Signage may advance up to 1m on the sidewalk, having maximum height of 2m. It shall be at a minimum height of 2.20m.*

**Figure 221** Regulations for indicative announcements

### c. Allowed Form

#### On Facade

- Minimum allowed height from ground level shall be 2.2m and maximum shall be 5m.
- Fully contained within the facade.
- Projection shall not be more than 15cm from facade.

#### Projected

- Minimum height form ground level shall be 2.2m.
- Maximum Projection from the facade shall be 1m.
- Minimum gap between the facade and display area shall be 20cm.
- Maximum height of display area 2m
- Depth of letters 0.5cm.
- Multiple signage may be used to achieve the maximum allowed area mentioned as per length of frontage.

#### On Totem

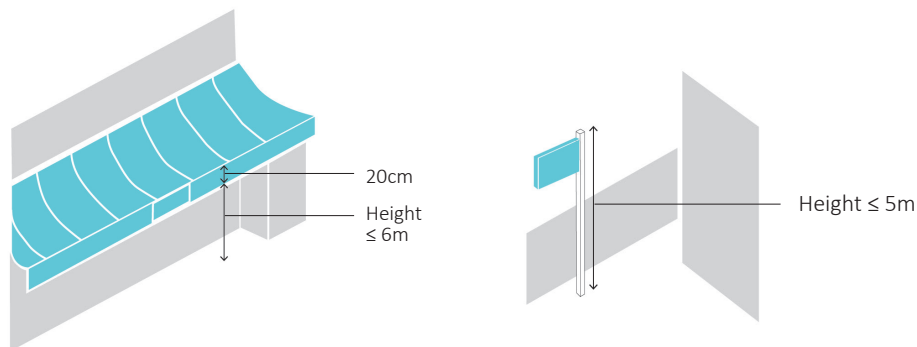
- Maximum allowed height from ground level shall be 5m.
- The signage must be fully contained within the boundary of the plot.

#### Retractable

- Maximum allowed height from ground level shall be 5m.
- Height of letters on awning pediment shall not be more than 20cm.

### d. Color, Material, Logo/Text Size

- All signage must be of the same family type (i.e. cut out letters, color scheme, material palette, blade, or neon) and the same relative size and source of illumination.

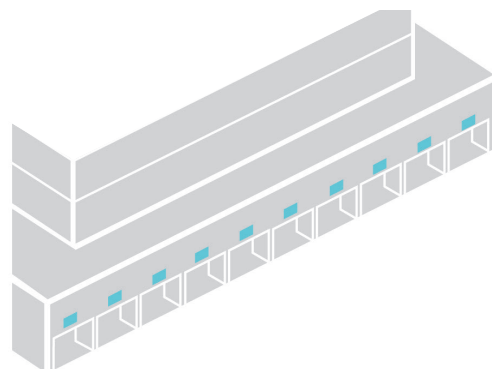


#### Retractable Form

The indicative advertisement may occupy the awning pediment retractable as long as the height of the letters do not exceed 20cm.

#### Totem Form

The structure must be fully contained within the boundaries of the lot, including its structure and total exposure area.



#### Advertisement subdivisions for various establishments

If the property houses more than one activity, the advertisement shall be subdivided into the different establishments, provided that the sum of areas of the advertisements do not exceed the total allowed area.

**Figure 222** Allowed forms and regulations for advertisement subdivisions



**Figure 223** Examples of appropriate indicative announcements

## Indicative Announcement - Petrol Pumps / Gas Stations

### 6.11.2 Standards:

#### a. Allowed Zone Placement

- Pedestrian/ Wall

#### b. Allowed Proportion

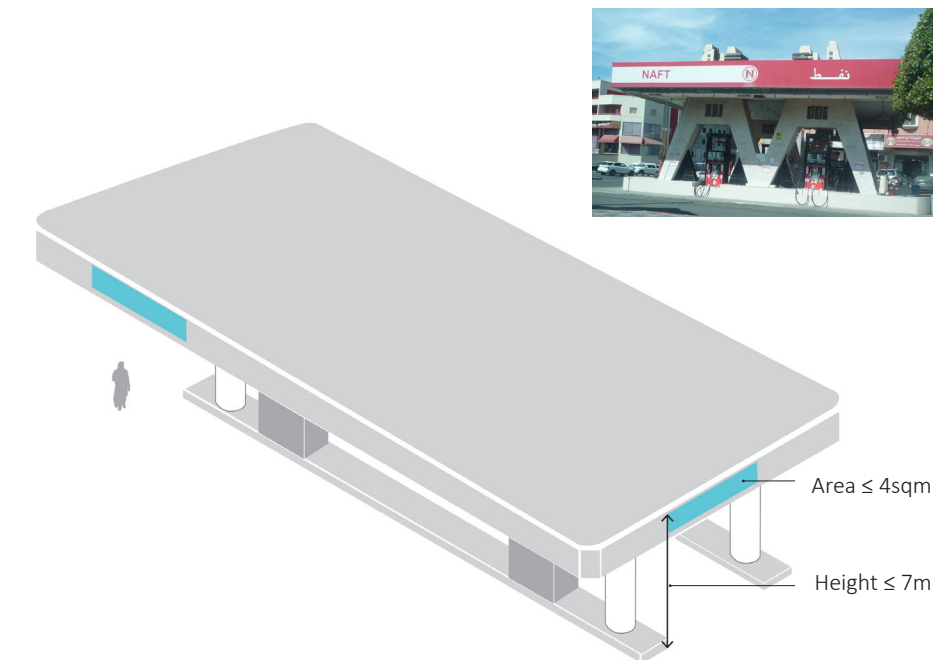
- The maximum allowed height shall be 7m.
- The exhibit area shall be between Minimum 1sqm to 4sqm.
- In case of more than one frontage maximum 2 frontages can be utilized, only 1 Advertisement per frontage shall be allowed.

#### c. Allowed Form

- The signage should be on facade or in totem form.
- Additional advertising elements like balloons or umbrellas shall generally be discouraged.

#### d. Color, Material, Logo/Text Size

- All signage must be of the same family type (i.e. cut out letters, color scheme, material palette, blade, or neon) and the same relative size and source of illumination.



Logo or brand of establishments when installed in the front panels, shall observe the maximum insertion area of 4sqm per front panel and the maximum height of 7m, measured from the floor to its highest point.

**Figure 224** Regulations for indicative announcements- petrol pumps/gas stations

## Indicative Announcement - Parking Areas

### 6.11.3 Standards:

#### a. Allowed Zone Placement

- Pedestrian/ Wall

#### b. Allowed Proportion

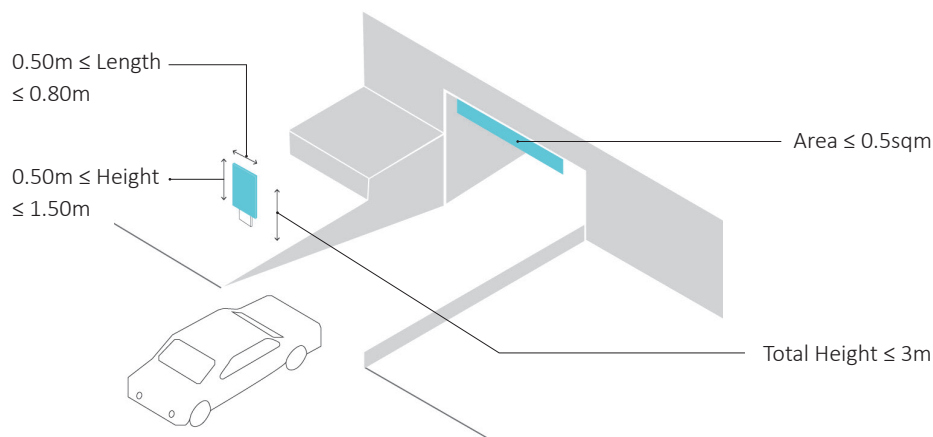
- Length of the signage shall be within 0.50m and 0.80m.
- Height of display shall be within 0.50m and 1.50m.
- Total height shall not be more than 3m.
- Area of display shall not be more than 0.50sqm.

#### c. Allowed Form

The signage can be on facade or in totem form.

#### d. Color, Material, Logo/ Text Size

All signage must be of the same family type (i.e., cut out letters, color scheme, material palette, blade, or neon) and the same relative size and source of illumination.



Signage in parking areas shall observe the dimensions of width between 0.50m and 0.80m and height between 0.50m and 1.50m. They must not advance on the public sidewalk or sidewalk, nor be posted in height above 3m.

**Figure 225** Regulations for indicative announcements- parking areas

## 6.12 Publicity Advertisement

### General Cases

#### 6.12.1 Standards:

##### a. Allowed Placement

- One ad per Pedestrian/ Wall zone per frontage shall be allowed.

##### b. Allowed Proportion

- For building frontage less than 10m the maximum exhibit area of signage shall be restricted to 1.5sqm.
- For building frontage in between 10m and 100m the maximum exhibit area of signage shall be 4sqm.
- For building frontage more than 100m, two advertisements with areas of 10sqm each separated by a minimum distance of 40m shall be allowed.

##### c. Allowed Form

###### On Facade

- Height from ground level shall not be more than 5m.
- Fully contained within the facade.
- Maximum projection 15cm from facade.

###### Projected

- Minimum 2.2m height from ground.
- Minimum projection from the facade 1m.
- Maximum gap between the facade and display area 20cm.
- Maximum height of display 2m.
- Depth of letters 0.5cm.

###### On Vertical Structure with Multiple Ads

- The maximum total height shall be 3m inside urban core areas of Aseer.

###### On Vehicles

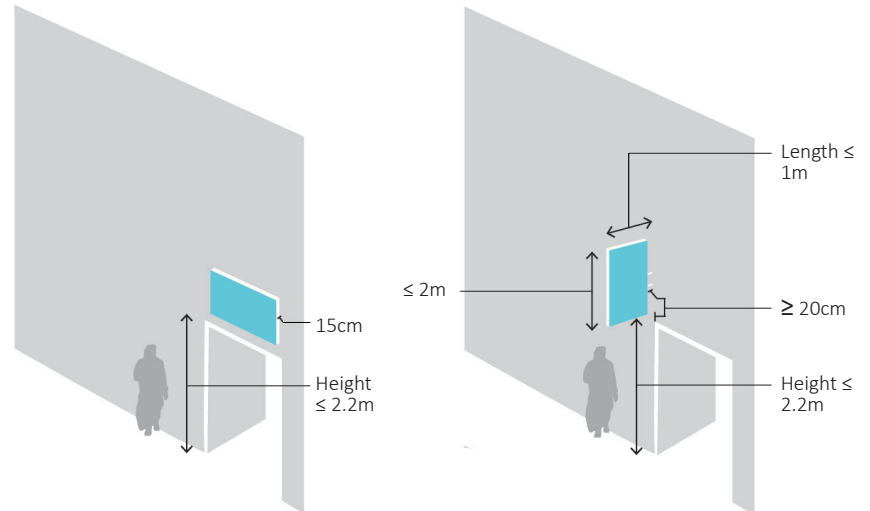
- Maximum area of advertisement is 1sqm (1 ad per face of the vehicle maximum 2 faces can be utilized).

###### Others

- Electronic screens, flags & banners, unipoles, megacoms, hoardings, advertising on lamp posts, MUPIs as per MoMRA guidelines.

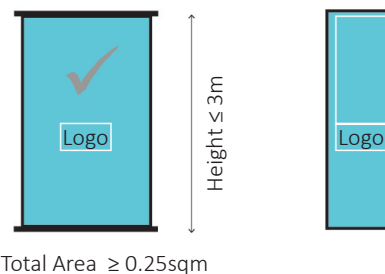
##### d. Color, Material, Logo/Text Size

All signage must be of the same family type (i.e. cut out letters, color scheme, material palette, blade, or neon) and the same relative size and source of illumination.



When attached to a building an advertisement may advance a maximum of 15cm on the sidewalk, provided it is at a minimum height of 2.20m from the ground.

Signage may advance up to 1m on the sidewalk, having maximum height of 2m. It shall be at a minimum height of 2.20m.



The totems and banners must be installed at a minimum distance of 100m from each other. The elements cannot be more than 3m high; The exhibition area for each logo shall be a maximum of 0.25sqm, limited to two faces of the element.

**Figure 226** Regulations for publicity announcements - general cases



**Figure 227** Examples of appropriate publicity advertisements

## Publicity Advertisement - Street Furniture

### 6.12.2 Standards:

#### a. Allowed Zone Placement

- Pedestrian

#### b. Allowed Proportion

Not more than 30% of total available surface area.

#### c. Allowed Form

On Bus Stops

- Must not in anyway obscure vision for bus driver/ users.
- No projections shall be allowed, No advertising shall be allowed to be attached to the overhang.

Kiosks / Temporary Structures

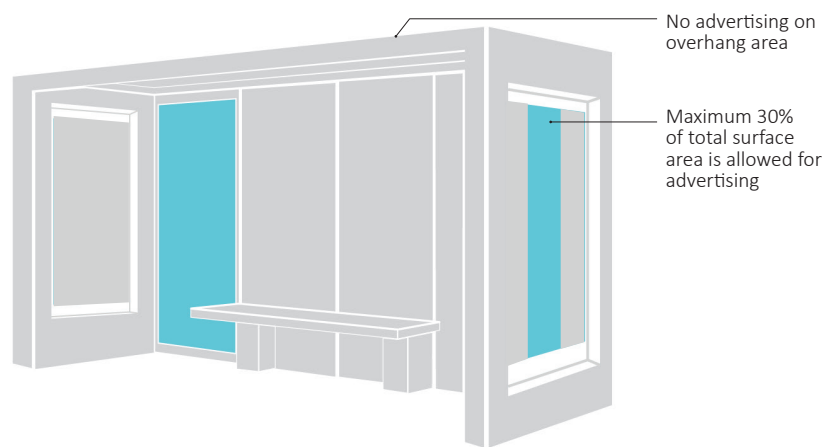
- In case of kiosks, 30% of the total surface area available can be utilized for public advertising provided there are no projected advertisements.
- No projections or advertisements shall be allowed on public seats, flower beds.

Others

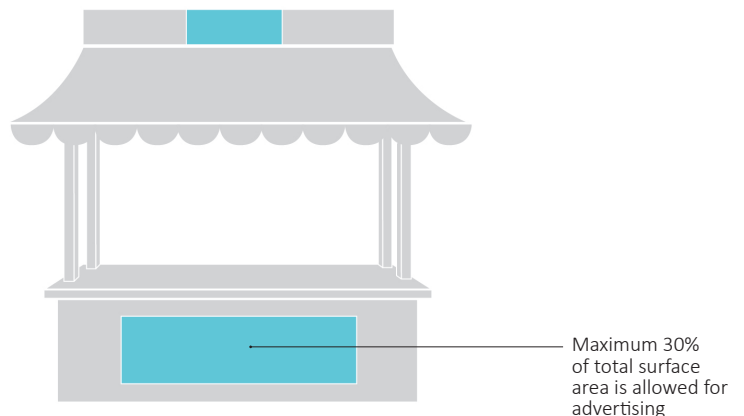
- For Optical laser display on building facades and flying advertisements MoMRA guidelines shall be followed.

#### d. Color, Material, Logo/Text Size

- All signage must be of the same family type (i.e. cut out letters, color scheme, material palette, blade, or neon) and the same relative size and source of illumination.



*In case of bus stops, 30% of the total surface area available can be utilized for public advertising provided there is no projected advertisements, no advertising attached to the overhang and should in no way hamper the vision of the drivers/ users.*



*In case of kiosks, 30% of the total surface area available can be utilized for public advertising provided there are no projected advertisements.*

**Figure 228** Regulations for appropriate publicity advertisements- street furniture



**Figure 229** Proposed bus stop design in Riyadh



**Figure 230** Example of Advertisement on a kiosk

## Publicity Advertisement - Real Estate

### 6.12.3 Standards:

#### a. Allowed Zone Placement

- Pedestrian/ Wall

#### b. Allowed Proportion

- For properties with frontage less than 100m, one advertisement with maximum area of 10sqm shall be allowed.
- For properties with frontage more than 100m, 2 ads of 10sqm each separated by a minimum distance of 40m shall be allowed.
- One advertisement per frontage shall be allowed in case of more than one frontages.

#### c. Allowed Form

On Facade

- Maximum allowed height shall be 5m.
- Fully contained within the façade.
- Maximum projection allowed shall be 15cm from facade.

Totem

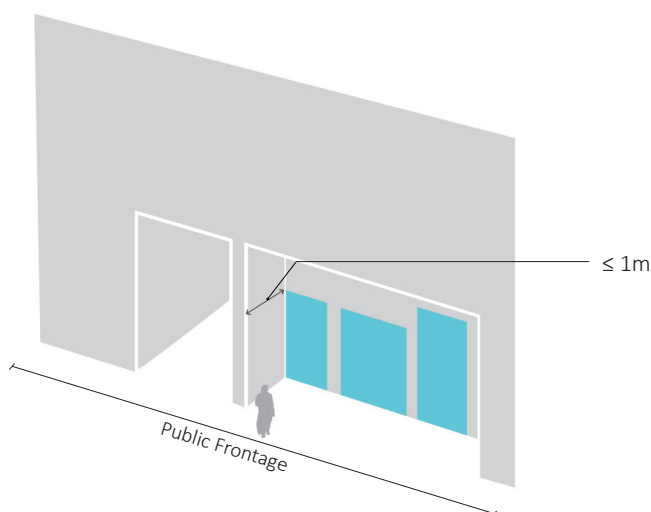
- Maximum allowed height shall be 5m.
- Signage shall be fully contained within the boundary.

Others

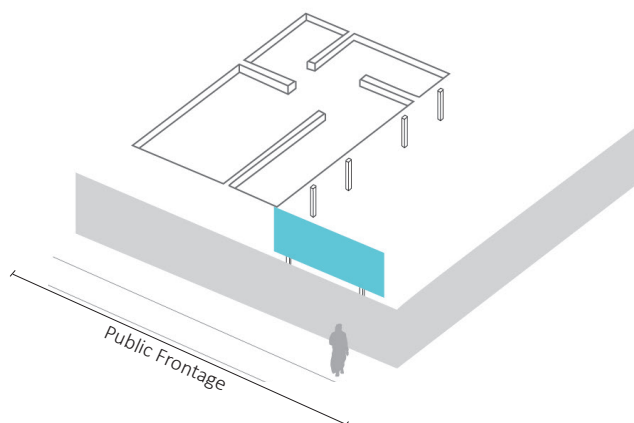
Mandatory messages by federal, state and local laws regarding real estate may be displayed in one or more boards, with total exposure area of up to 10sqm per property

#### d. Color, Material, Logo/ Text Size

- All signage must be of the same family type (i.e., cut out letters, color scheme, material palette, blade, or neon) and the same relative size and source of illumination.



Showcasing posters and banners indicating products, prices or settlements in the internal space of buildings may be allowed, provided they are set back more than 1m from any door, window or shop window of the establishment.



One hoarding per construction site fully contained within the site boundaries and within the vertical limits of 5m height may be allowed.

**Figure 231** Regulations for appropriate publicity advertisements- real estated related



**Figure 232** Examples of appropriate real estated related publicity advertisements

## 6.13 Special Announcement

### General Cases

#### 6.13.1 Standards:

##### a. Allowed Zone Placement

- Pedestrian

##### b. Allowed Proportion

- For frontages more than 10m allowed length of advertisement shall be less than 10% of facade.
- For frontages less than 10m maximum allowed length of advertisement shall be 1.2m.

##### c. Allowed Form

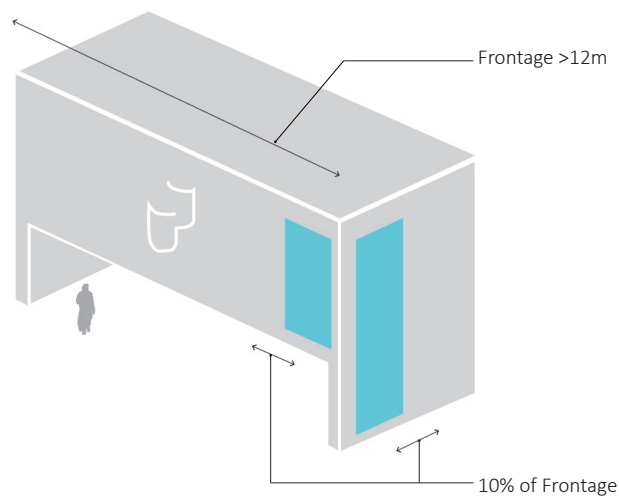
- On Facade / Totem

##### Others

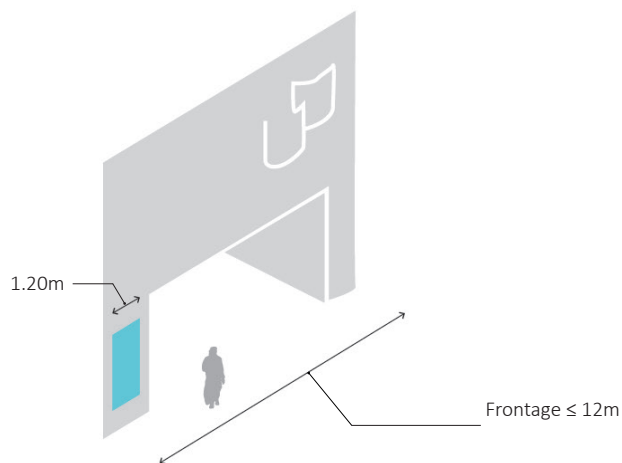
- For Optical laser display on building facades and flying advertisements MoMRA guidelines shall be followed.

##### d. Color, Material, Logo/Text Size

- All signage must be of the same family type (i.e. cut out letters, color scheme, material palette, blade, or neon) and the same relative size and source of illumination.



*Banners or posters indicating cultural events on the site of the activities should not occupy more than 10% of the public facade where it is installed.*



*In the case of frontage equal to or less than 12m, should not exceed the maximum width of 1.20m.*

**Figure 233** Regulations for special announcements



**Figure 234** Examples of appropriate special announcements



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# D

## APPENDICES



# Glossary of Terms

This glossary provides the most common terms and their definitions used in the AUDC. It is primarily intended to help local officials and the public understand the terms that are frequently used in the document and their meaning.

**Adaptive Reuse.** Converting obsolete or historic buildings from their original or most recent use to a new use. For example, an old manufacturing site could be converted into apartments or retail space.

**AMA.** Abha Metropolitan Area.

**AUDC.** Aseer Urban Design Code for Private Development.

**Agriculture.** Use of land for the production of food and fiber, including the growing of crops and/or the grazing of animals on natural prime or improved pasture land.

**Access Corridor.** Widest city street with regional significance that function as the entry gateways to the city. Designed to serve through-traffic, these streets form barriers to cross-street traffic. Crossing aids are needed to minimize segregation. Roadside activity should be properly buffered.

**Accessible (Publicly).** A place able to be reached or entered by the public.

**Base Flood.** In any given year, a 100-year flood that has a one percent likelihood of occurring, and is recognized as a standard for acceptable risk.

**Best Practice.** A working method, or set of working methods, that is officially accepted as being the best to use in a particular business or industry.

**Buffer (Zone).** An area of land separating two distinct land uses that softens or mitigates the effects of one land use on the other. Where a commercial district abuts a residential district, for example, additional use, yard, or height restrictions may be imposed to protect residential properties. The term may also be used to describe any zone that separates two unlike zones, such as a multifamily housing zone between single-family housing and commercial uses.

**Brownfield (development).** An area with abandoned, idle, or under-used industrial and commercial facilities where expansion, redevelopment, or reuse is complicated by real or perceived environmental contamination.

**Building envelope.** The space remaining on a site for structures after all building setback, height limit, and bulk requirements have been met. The skin of a building – including the windows, doors, walls, foundation, basement slab, ceilings, roof and insulation – that separates the interior of a building from the outdoor environment.

**Built-to line.** A zoning requirement that sets a line that a building facade must be built to. Usually required in order to maintain a uniform street wall and create a street as an “outdoor room.”

**Built Environment.** Buildings, roads, parks, and all other improvements constructed by people that form the physical character of a community.

**Character Zone (Community Character).**

The image of a community or area as defined by factors such as built environment, natural features and open space elements, type of housing, architectural style, infrastructure, and the type and quality of public facilities and services.

**Clustered Development.** Development in which a number of dwelling units are placed closer together than usual, or are attached, with the purpose of retaining an open space area.

**Civic (Use).** A use providing for public functions under the auspices of a government body and includes offices, public schools and colleges, public hospitals, community centers, libraries, museums, fire halls, police stations and courts of law.

**Commercial.** A land use classification that permits facilities for the buying and selling of commodities and services.

**Common Open Space.** Land within or related to a development, not individually owned or dedicated

for public use that is designed and intended for the common use of the residents of the development.

**Community.** (1) A specific group of people, often living in a defined geographic area, who share a common culture, values, and norms and who are arranged in a social structure according to relationships. (2) More generally, a distinct local area such as a neighborhood, district, jurisdiction or municipality.

**Commute Shed.** The area from which people may commute from their homes to a specific workplace destination, given certain assumptions about maximum travel time or distance.

**Compatibility.** The characteristics of different uses or activities that permit them to be located near each other in harmony and without conflict. The designation of permitted and conditionally permitted uses in a district is intended to achieve compatibility.

**Complete Streets.** Streets designed to accommodate all modes of travel and enable safe access for all users. Pedestrians, bicyclists, motorists and bus riders of all ages and abilities are able to safely move along and across a complete street.

**Conservation Management Plan.** Process which sets out what is significant in a place and, consequently, develops policies that are appropriate to enable that significance to be retained in its future use and development. It should be carried out before any master plan or interventions for any place with heritage, conservation or natural values, otherwise there is a risk that damage may be done to the importance/significance (or Outstanding Universal Values).

**Connectivity.** The ease of travel between two points. The degree to which streets or areas are interconnected and easily accessible to one another by direct routes. An example of high connectivity would be a dense grid pattern in a downtown area.

**Consistency (Consistent with).**

Free from significant variation or contradiction.

**Context.** The interrelated conditions in which development exists or occurs.

**Corridor.** An area or stretch of land identified by a specific common characteristic or purpose.

**Cul-de-sac.** A short street or alley with only a single means of ingress and egress at one end and with a large turnaround at its other end.

**Curb Cut.** A ramp opening in a curb where vehicles or wheel chairs may enter or leave the roadway.

**Cultural Landscape.** Represent the combined works of nature and of man. Represent the diverse, essential and distinct manifestations of a clearly defined geo-cultural region. Are illustrative of the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and of successive social, economic and cultural forces, both external and internal.

**Density.** The amount of development permitted on a parcel under the applicable regulation. Common measures of density include population per square mile. Gross density includes the area necessary for streets, schools and parks. Net density does not include land area for public facilities.

**Developable Land.** Land that is suitable as a location for structures and that can be developed free of significant impact on natural resource areas.

**Development (New).** The process of developing something new in construction.

**District.** An area of a city that has a unique character identifiable as different from surrounding areas because of distinctive architecture, streets, geographic features, culture, landmarks, activities, or land uses.

**Dwelling Unit (DU).** A room or group of rooms which constitutes an independent housekeeping unit,

occupied or intended for occupancy by one household on a long-term basis.

**Easement.** The right to use property owned by another for specific purposes or to gain access to another property. For example, utility companies often have easements on the private property of individuals to be able to install and maintain utility facilities.

**Easement (Scenic).** A tool that allows a public agency to use an owner's land for scenic enhancement such as roadside landscaping or vista preservation.

**Ecosystem.** The complex system of plant, animal, fungal, and microorganism communities and their associated non-living environment interacting as an ecological unit. Ecosystems have no fixed boundaries. Their parameters depend on the scientific, management, or policy question being examined. Depending upon the purpose of analysis, a single lake, a watershed, or an entire region could be considered an ecosystem.

**Encroachment.** Any obstruction or protrusion into a right of way or adjacent property, whether on the land or above it.

**Endangered Species.** Animal or plant species designated as endangered under national law, whose prospects for survival and reproduction are in immediate jeopardy from one or more causes.

**Environment.** The physical conditions which exist within the area which will be affected by a proposed project, including land, air, water, minerals, flora, fauna, noise, objects of historic or aesthetic significance.

**Environmental Impact Assessment (EIA).** A report required when an agency determines that a project may have a significant effect on the environment. An EIA evaluates a proposed project's impacts on the environment and recommends mitigation measures to reduce or eliminate those impacts. Decision makers use information in an EIA to help determine whether or not to approve a project.

**Erosion.** (1) The loosening and transportation of rock and soil debris by wind, rain, or running water. (2) The gradual wearing away of the upper layers of earth.

**Flood, 100-Year.** The magnitude of a flood expected to occur on the average every 100 years, based on historical data. The 100-year flood has a one percent chance of occurring in any given year.

**Floodplain.** The relatively level land area on either side of the banks of a stream or wadi regularly subject to flooding. Based on the expected 100-year flood flow rate, the flood water level can be mapped as an area of inundation. The resulting floodplain map is referred to as the 100-year flood plain.

**Floor Area Ratio (FAR).** The gross floor area permitted on a site divided by the total net area of the site, expressed in decimals to one or two places.

**Form-Based Codes.** A method of regulating development to achieve a specific urban form by controlling physical form primarily, with a lesser focus on land use. Form-based codes address the relationship between building facades and the public realm, the form and mass of buildings in relation to one another, and the scale and types of streets and blocks.

**Freeway.** A high-speed, high-capacity, limited-access road serving regional and municipality travel. Freeways generally are used for trips to or from major land use generators. Major streets cross at a different grade level.

**Frontage.** The frontage, or front, of a lot is usually defined as the side nearest the street.

**Gateway.** A point along a roadway where a motorist gains a sense of entering a city or county.

**GBA.** Growth Boundary Area of urban development. See UGB.

**General Plan.** The general plan is the foundation for local land use planning. The plan provides a vision for the foreseeable planning horizon –

usually 10 to 20 years – and translates it into goals and policies for the physical development of the city or metropolitan area. All other land use ordinances and policies should flow from the general plan. The general plan should cover all of the land within the jurisdiction and any additional land that, in the agency’s judgment, bears relation to its planning.

**Guideline.** Statements of policy direction. Guidelines are meant to set a direction and are typically put forth using the words “should” or “may”. They are not prescriptive but aim to provide guidance to property owners, architects, design professionals, evaluating authorities, residents and other interested parties. Most of the guidelines are specific in nature, while others are a matter for broad interpretation; however, none should be confused with imposing a mandated style or motif.

**Grade.** (1) Leveling or smoothing the contours of a property. (2) The rate of rise or descent of a sloping surface usually expressed in degrees or a percentage.

**Greenfield.** Farmland and open areas where the lack of prior industrial or commercial activity means that the threat of contamination is lower than in urbanized areas.

**Green Space.** Open, undeveloped land with natural vegetation.

**Greenways.** Linear open spaces that link parks and neighborhoods within the community, such as paths or trails. Greenways provide public access to green spaces and opportunities for residents of all ages and abilities to be physically active.

**Habitat.** The physical location or type of environment in which an organism or biological population lives or occurs.

**Health.** A state of physical, mental, and social well-being and not merely the absence of disease and infirmity.

**Heritage.** Features belonging to the culture of a particular society, such as traditions, languages, or buildings, which come from the past and are still important.

**Heritage boundary.** Incorporates all the attributes that ensure integrity and/or authenticity of a property including any outlying features or access routes.

**Heritage Buffer / Transition Zone.**

Immediate or close areas surrounding a heritage asset and closely associated with it not included within the boundary of the heritage property.

**Heritage site.** Works of man or the combined works of nature and of man, and areas including archaeological sites which are of Outstanding Universal Value from the historical, aesthetic, ethnological or anthropological points of view. Including Historic Towns and Town Centers no longer inhabited, still inhabited and new towns of the 20th century.

**Heritage visual buffer area** (or view corridor). Single line of sight from a specific point from the heritage property or approaching it.

**Historic Preservation.** The preservation of historically significant structures and neighborhoods to facilitate restoration and rehabilitation of the building(s) to a former condition.

**Human scale design.** Design optimized for human use and perception. Traditionally, in Aseer region human scale built form refers to a massing of 4-5 storied and 20-30m maximum wide structure with narrow shaded streets.

**Impact.** The effect of any direct human actions or the indirect repercussions of human actions on existing physical, social, or economic conditions.

**Infill Development.** Development of vacant or underutilized land (usually individual lots or leftover properties) within areas that are already largely developed.

**Infrastructure.** Public services and facilities like sewage-disposal systems, water-supply systems, other utility systems, schools, roads, bicycle and pedestrian facilities, and transit systems.

**Industrial.** A land use classification often divided into “heavy industrial” uses, like construction yards, quarrying, and factories; and “light industrial” uses, like research and development and less intensive warehousing and manufacturing.

**Integral (Architecture).** Necessary and important as a part of a whole architectural composition, or contained within it.

**Issues.** Important unsettled community matters or problems. Issues may be identified in a community’s local plan and dealt with by the plan’s objectives, policies, plan proposals, and implementation programs.

**LAC.** Lot Area Coverage (or Building Coverage). The amount of a plot that is covered by buildings, usually expressed as a percentage.

**Layered network (Movement).** Layered network approach of transportation facilities- not all streets can or should be prioritized for bicycles or pedestrians, given the need to accommodate essential automobile trips on strategic routes. Likewise, vehicle throughput cannot take priority in the design of every street.

**Land Use.** The occupation or use of land or water area for any human activity or any purpose defined in the local plan.

**Landscape Character Assessment.** is the process of identifying and describing variation in the character of the landscape. LCAs identify and explain the combination of elements and features that make landscapes distinct from one another by mapping and describing Landscape Character Types and Areas.

**Landmark.** (1) A building, site, object, structure, or significant tree having historical, architectural, social, or cultural significance and marked for preservation by the government. (2) A visually prominent or outstanding structure or natural feature that functions as a point of orientation or identification.

**Lot (Plot).** A tract or piece of land having fixed boundaries and designated on a plot or survey map.

**Microclimate.** The climate of a small, distinct area, such as a city street or a building’s courtyard; can be altered through functional landscaping, architecture, or other design features. Mitigation Measures. Measures that modify a project to reduce or eliminate a significant environmental impact.

**Mixed-Use.** Properties on which various uses like office, commercial, institutional, and residential are combined in a single building or on a single site in an integrated development project with significant functional interrelationships and a coherent physical design. A “single site” may include contiguous properties.

**Modal Choices.** Transportation options; one’s preferred method of transportation, such as walking, bicycling, using an automobile, or riding a bus or rail transit.

**Monument.** Architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of Outstanding Universal Value from the point of view of history, art or science.

**Natural State.** The condition existing prior to development.

**Neighborhood.** A planning area commonly identified as such in a community’s planning documents, and by the individuals residing and working within the neighborhood.

**Neighborhood (Unit).** Self-contained residential areas bounded by major roads with shops at the intersections and schools in the middle. Children would be able to walk to school without having to cross major roads, and the limited size of the units (typically 6,000-10,000 inhabitants) would encourage community spirit.

**Objective.** A specific statement of desired future condition toward which the city or metropolitan area will expend effort in the context of striving to achieve a broader goal.



**Open Space Land.** Any parcel or area of land or water that is essentially unimproved and devoted to an open space use for the purposes of (1) the preservation of natural resources, (2) the managed production of resources, (3) outdoor recreation, or (4) public health and safety.

**Overlay.** A land use designation or a zoning designation on a zoning map, that modifies the basic underlying regulations.

For example, overlay zones are often used to deal with areas with special characteristics, like flood zones or historical areas. Development of land subject to an overlay must comply with the regulations of both zones.

**Overlay Zoning.** Additional or stricter standards to existing zoning that can be used to protect particular natural or cultural features or to avoid or mitigate potential hazards.

**Parcel.** A lot in single ownership or under single control usually considered a unit for purposes of development.

**Parking Area (Public).** An open area, excluding a street or other public way, used for the parking of automobiles and available to the public, whether for free or for compensation.

**Parks.** Open space lands whose primary purpose is recreation.

**Pedestrian Friendly.** A street, neighborhood, or district that supports, through planning and zoning, the location of stores, offices, residences, schools, recreational areas, and other public facilities within walking distance of each other, and oriented to promote pedestrian access. Such areas also often feature narrow streets, street trees, awnings, covered transit shelters, benches, less conventional paving types, sidewalks on both sides of the roadway, and safe street crossings, among other elements.

**Placemaking.** Building communities around places, to mitigate the most negative aspects of conventional zoning practices.

**Permit.** A specific authorization from a planning body to engage in a particular type of development or activity.

**Permitted Use.** An authorized use within a zoning district.

**Quality of Life.** The degree to which individuals perceive themselves as able to function physically, emotionally and socially. Quality of life includes all aspects of community life that have a direct influence on the physical and mental health of its members.

**Quantitative provisions.** Quantifiable requirements. Quantitative data is information about quantities, and therefore numbers.

**Qualitative provisions.** Descriptive requirements. Qualitative data is descriptive and regards phenomenon which can be observed but not measured; relating to, measuring, or measured by the quality of something rather than its quantity.

**Redevelop/Redevelopment.** Building new construction on a site that has pre-existing uses or renovating existing uses on a site. Redevelopment generally is a strategy to rehabilitate blighted urban areas through renovation.

**Recreation (Active).** A type of recreation or activity that requires the use of organized play areas and various forms of children's play equipment.

**Recreation (Passive).** Type of recreation or activity that does not require the use of organized play areas.

**Reforestation.** Planting forests on lands that have previously contained forests but that have been converted to some other use.

**Regional.** Pertaining to activities or economies at a scale greater than that of a single jurisdiction, and affecting a broad geographic area.

**Regulation.** A rule or order issued by a public agency having the force of law.

**Residential.** Land designated in the city or general plan and zoning ordinance for buildings consisting only of dwelling units. May be improved, vacant, or unimproved land.

**Retrofit.** To add materials and/or devices to an existing building or system to improve its operation, safety, or efficiency. Buildings have been retrofitted to use solar energy and to strengthen their ability to withstand earthquakes, for example.

**Ridgeline.** A line connecting the highest points along a ridge and separating drainage basins or small-scale drainage systems from one another.

**Right-of-Way (Street).** Publicly owned land that contains both the street and a strip of land on either side of the street with facilities such as sidewalks, sewers and storm drains.

**Road Arterial.** Connect different neighborhoods and allow access to key destinations and city services. Although they primarily promote faster mobility, they should accommodate for all users, supporting a higher volume of pedestrians and roadside activity.

**Road Collector.** Neighborhood main streets which offer a series of walkable destinations and future transit stops. Traffic speeds should be limited to accommodate for the needs of multiple users, prioritizing key transit routes and cycle lanes where possible.

**Road Local.** Provide access to residential units, schools and some local stores within neighborhoods. They could be utilized as places for play and leisure, requiring slower speeds and higher safety standards for pedestrians and cyclists.

**Riparian Lands.** Plant and wildlife areas adjacent to perennial and intermittent streams. Riparian areas are delineated by the existence of plant species normally found near freshwater.

**Runoff.** Water from rain or snow that is not absorbed into the ground but instead flows over less permeable surfaces into streams and rivers.

**Rural (Area).** Any area not in urban areas. Areas outside the UGBs.

**Subdivision (land).** The division of a tract of land into defined plots, either improved or unimproved, which can be separately conveyed by sale or lease, and which can be altered or developed. The process often includes setting aside land for streets, sidewalks, parks, public areas, and other infrastructure needs, including the designation of the location of utilities.

**Scenic Corridor (highway).** The area outside a highway right-of-way that is generally visible to persons traveling on the highway.

**Scenic Highway/Scenic Route.** A highway, road, drive, or street that,

in addition to its transportation function, provides opportunities for the enjoyment of natural and scenic resources and access or direct views to areas or scenes of exceptional beauty or historic or cultural interest. The aesthetic values of scenic routes often are protected and enhanced by regulations governing the development of property or the placement of outdoor advertising.

**Setback.** The minimum distance required to be maintained between two structures or between a structure and a property line.

**Setback Regulations.** The requirements that a building be set back a certain distance from the front, side or rear lot line. The frontage or front of a lot is usually defined as the side nearest the street. On a corner lot, the narrowest side is usually determined to be the front lot line.

**Shared street.** The concept of the Living Street follows ‘Shared Space’ principles in order to reduce car speeds by not designating space exclusively for cars. Designated car lanes would be underutilized in these short residential streets and result in high speeds.

The concept is practically suitable for local street arrangements in heritage districts and for new updated local street in residential development

**Signage.** Any kind of visual communication element present and/or visible in and from the public space (i.e. roads, streets, avenues, squares).

**Site.** A parcel of land used or intended for one use or a group of uses and having frontage on a public or an approved private street.

**Site Plan.** A plan, to scale, showing uses and structures proposed for a parcel of land. It includes lot lines, streets, building sites, public open space, buildings, major landscape features – both natural and man-made – and, depending on requirements, the locations of proposed utility lines.

**Sprawl (Urban/Suburban).** The spreading of a city and its suburbs over rural land at the fringe of an urban area. Characteristics of sprawl include single-use zoning that often separates housing from jobs and commercial centers; low-density land use focused on single-family homes; and automobile dependent communities

with extensive land devoted to parking that often require residents to commute and conduct errands by car. The term sprawl generally has negative connotations due to associated health and environmental issues. For example, residents of sprawling neighborhoods tend to emit more pollution per person and suffer more traffic fatalities. Sprawl is also linked with increased obesity since walking and bicycling are often not viable commuting options.

**Standard (in development).** (1) A rule or measure establishing a level of quality or quantity that must be complied with or satisfied. (2) Requirements in a zoning ordinance that govern building and development as distinguished from use restrictions. Standards are required and are signified by the word “shall” or “must”. Development standards, for instance, regulate new site and building development by establishing place-making standards for building form, frontage, open space, and other elements.

**Street Furniture.** Features associated with a street that are intended to enhance its physical character and use by pedestrians and bicyclists, such as benches, trash receptacles, kiosks, lights, or bicycle racks.

**Streetscaping.** Physical enhancements that affect the appearance or view of a street. Streetscaping can include changes to the road cross section, traffic management, sidewalk conditions, landscaping, street furniture (such as utility poles, benches, or garbage cans), building fronts and materials, signage, and other amenities.

**Streetwall.** The vertical elements that define the edges of public streets. In most instances, streetwalls are the front walls of buildings along the street edge. Streetwalls, however, may also consist of elements that are not buildings, such as landscaping, fences, or other structures. A streetwall helps define the public street by providing enclosure and creating a human-scaled space.

**Structure.** Anything constructed or erected that requires location on the ground (excluding swimming pools, fences, and walls used as fences).

**Structure (Large).** Any construction exceeding 3m in any direction.

**Sustainable Development.** (1) A pattern of physical development and resource use that aims to meet human needs while preserving the environment, often stated as development meeting the needs of the present without compromising the ability of future generations to meet their own needs. (2) Physical development that simultaneously provides for economic prosperity, environmental quality, and social equity.

**SuDS.** Sustainable Urban Drainage Systems.

**Steep Slope.** any slope above 20 degrees.

**Traffic Calming.** A strategic set of physical changes to streets to reduce vehicle speeds and volumes. It refers to the use of street design techniques, such as curb extensions, widened sidewalks, traffic circles and speed humps, to slow and control the flow of automobile traffic.

**Transit, Public.** A system of regularly scheduled buses and/or trains available to the public on a fee-per ride basis. Also called mass transit.

**Transit-Oriented Development (TOD).** Moderate- to higher-density development, located within easy walk of a major transit stop, generally with a mix of residential, employment, and shopping opportunities designed for pedestrians without excluding the auto. TOD can be new construction or redevelopment of one or more buildings whose design and orientation facilitate transit use.

**Traditional Architecture (Vernacular).** Architecture characterized by the use of local materials and knowledge, in the past usually without the supervision of professional architects. Vernacular architecture represents the majority of buildings and settlements created in pre-industrial societies.

**Urban.** 1) Of, relating to, characteristic of, or constituting a city. Urban areas are generally characterized by moderate and higher density residential, commercial, and industrial development, and the availability of public services required for that development, specifically central water and sewer, an extensive road network, public transit, and other such services (for example, safety and emergency response). Development not providing such services may be “non-urban” or “rural.” 2) Area within the UGB.

**Urban Growth Boundary (UGB).** An officially adopted and mapped line dividing land to be developed from land to be protected for natural or rural uses. Urban growth boundaries (also called urban limit lines) are regulatory tools, often designated for long periods of time (20 or more years) to provide greater certainty for both development and conservation goals.

**Urban design.** The attempt to give form, in terms of both beauty and function, to selected urban areas or to whole cities. Urban design is concerned with the location, mass, and design of various urban components and combines elements of urban planning, architecture, and landscape architecture.

**Universal (Design).** Design of buildings, products and environments that are usable and effective for everyone, not just people with disabilities.

**View Corridor.** The line of sight - identified as height, width, and distance- of an observer looking toward an object of significance to the community (like ridgelines, rivers and historic buildings, for example); the route that directs the viewer’s attention.

**Viewshed.** The area within view from a defined observation point. Area visible from a property (including everything in line-of-sight) or from which a property can be seen within a wider area of influence.

**Visual Impact Assessment (VIA).** Is the analysis of the potential visual impacts to the landscape and landscape views resulting from a proposed development or land management action. The document that contains a visual impact analysis is also often referred to as a visual impact assessment or VIA.

**Vacant.** Lands or buildings that are not actively used for any purpose.

**Walkable (Community).** Communities where goods (such as housing, offices, and retail) and services (such as transportation, schools, and libraries) that a community resident or employee needs on a regular basis are located within an easy and safe walk. Walkable communities facilitate pedestrian activity, expanding transportation options, and creating a streetscape that better serves a range of users -- pedestrians, bicyclists, transit riders, and automobiles. To foster walkability, communities typically mix land uses and build compactly, and ensure safe and inviting pedestrian corridors.

**Wadi.** A valley, ravine, or channel that is dry except in the rainy season.

**Wadi corridor.** Wadi Corridor is defined as the extent of the flood zone comprised of the 1 in 100-year flood event.

**Wadi development zone.** Area within a 100m offset from the Wadi Corridor boundaries or the first urban block, whatever larger.

**Wadi Edge.** Area adjacent to the wadi corridor boundaries, typically with a minimum width of 10-20m and publicly accessible.

**Zoning.** The division of a city or county by legislative regulations into areas, or zones, that specify allowable uses for real property and size restrictions for buildings within these areas; a program that implements policies of the general or local plan.

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