



A VARÁZSLATOS KELET VÁROSAI

CSEH ZSOLT
2015. FEBRUÁR

1. Az Egyesült Arab Emirátusok – Dubai és Abu Dhabi

- Társadalom, kultúra, örökség
- Dubai – amiért szeretjük
- ... és amiért nem
- Abu Dhabi – a másság dicsérete
- Fenntarthatóság – ESTIDAMA

2. Irak – A korlátlan lehetőségek hazája

3. Katar – A gigantikus lábnyom



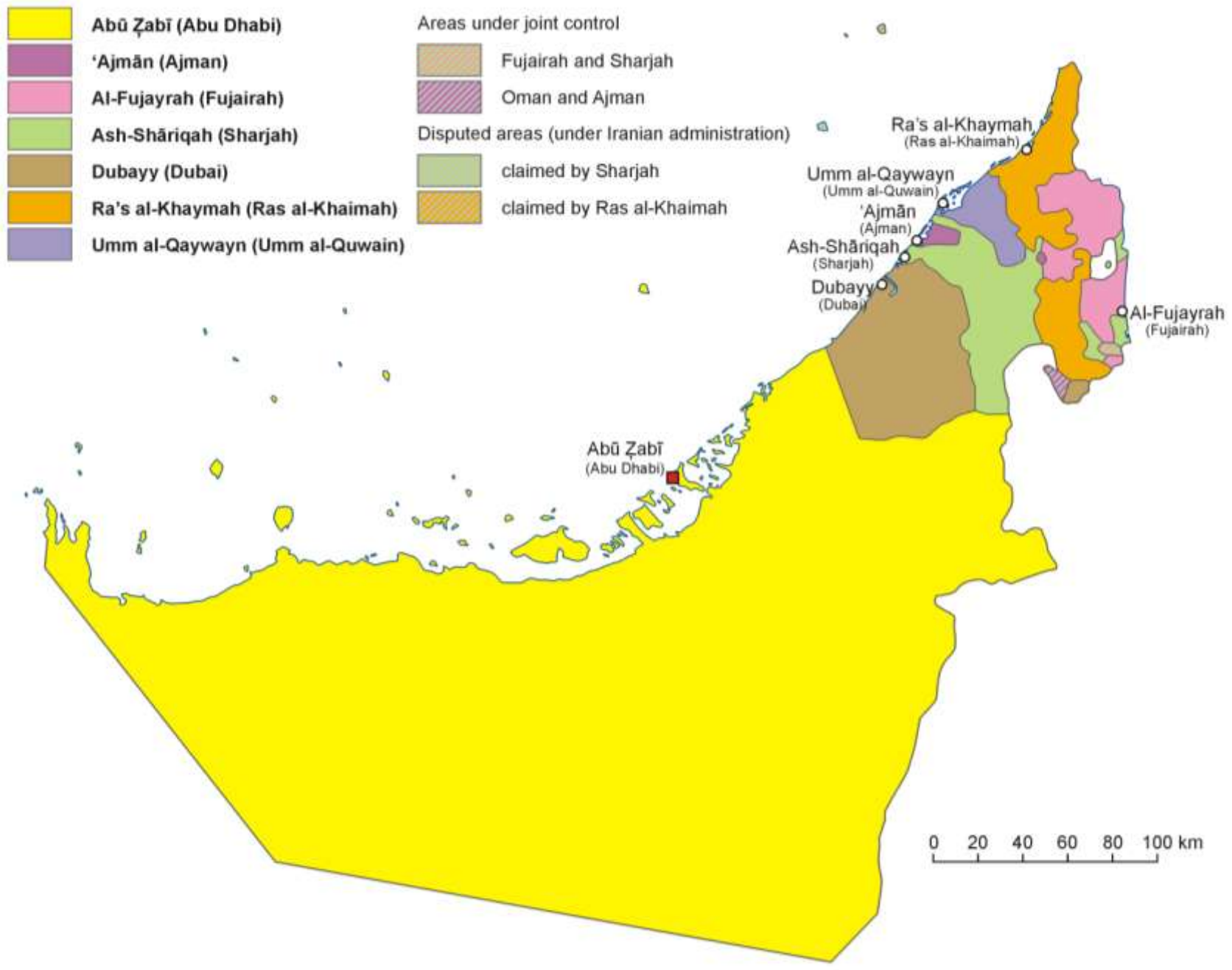


Egyesült Arab Emirátusok Shaikh Zayed Bin Sultan Al Nahyan





Egyesült Arab Emirátusok



Területe: 83.600 km²
Népessége: 9.350.000
Ebből Emirati: 1.400.000
Egy főre jutó GDP: 65.000 \$ - 7. legmagasabb a világon
Olaj export: 77% (Abu Dhabi: 85%)
1971 – 2011-ig a gazdaság több, mint 230-szorosára nőtt.







Egyesült Arab Emírátságok

Dubai 1970



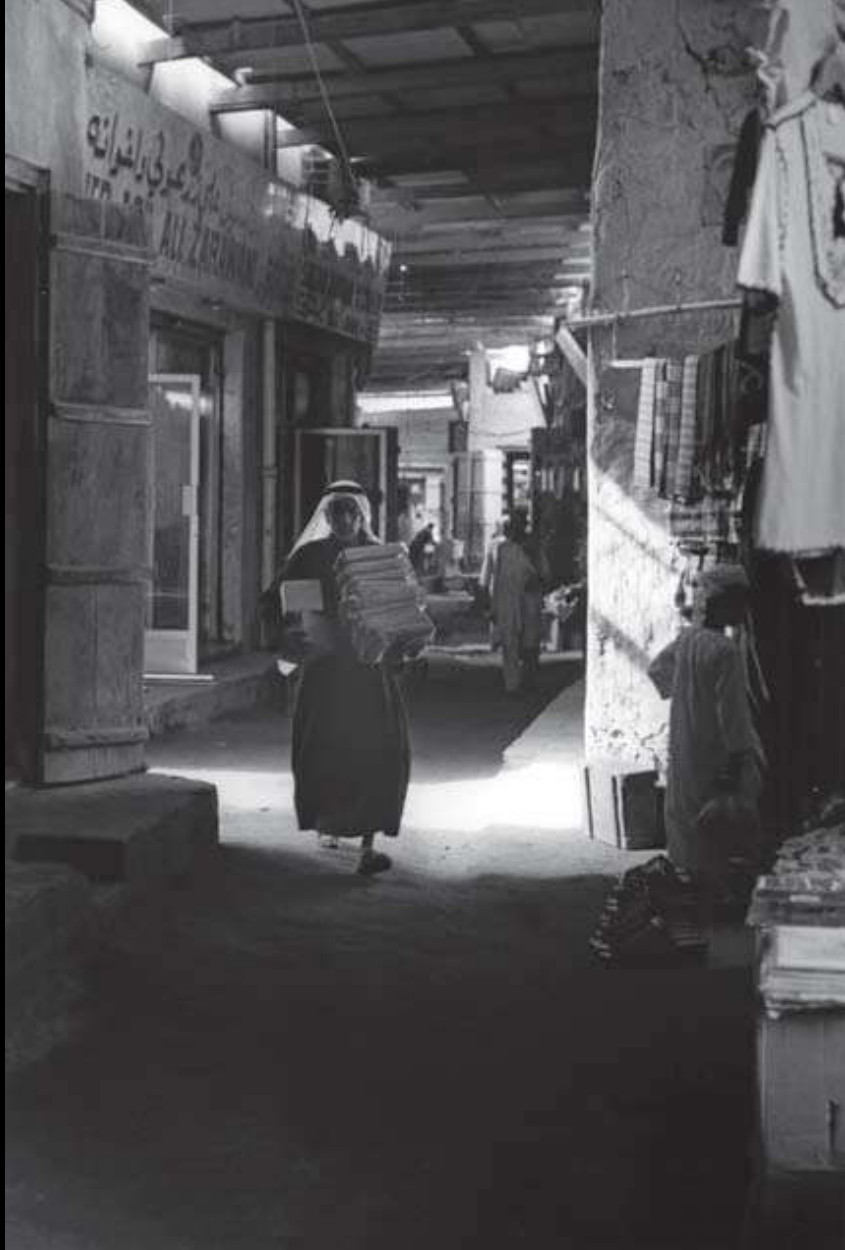






Egyesült Arab Emirátusok

Dubai 1950 – gyöngyhalászok



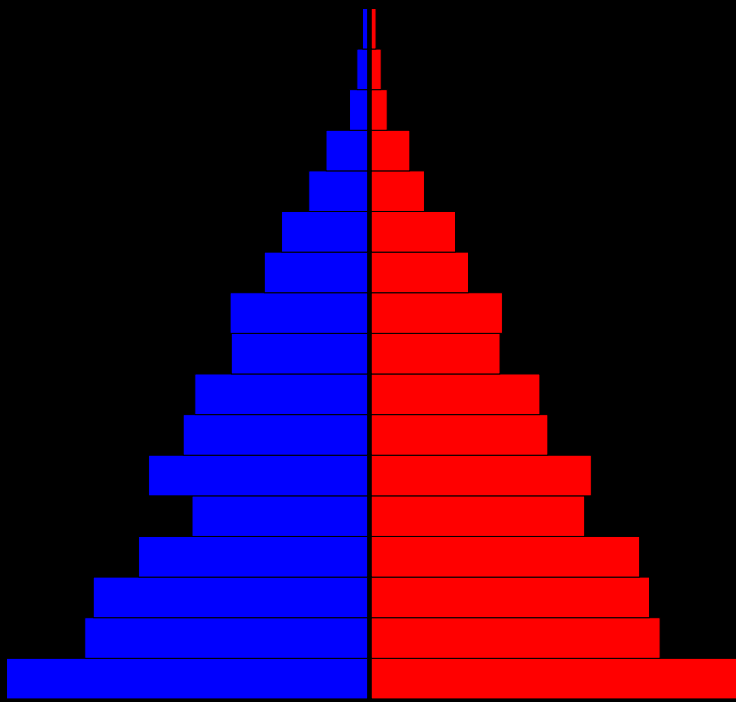
Dubai Souk 1977



Gyöngy mérés 1952

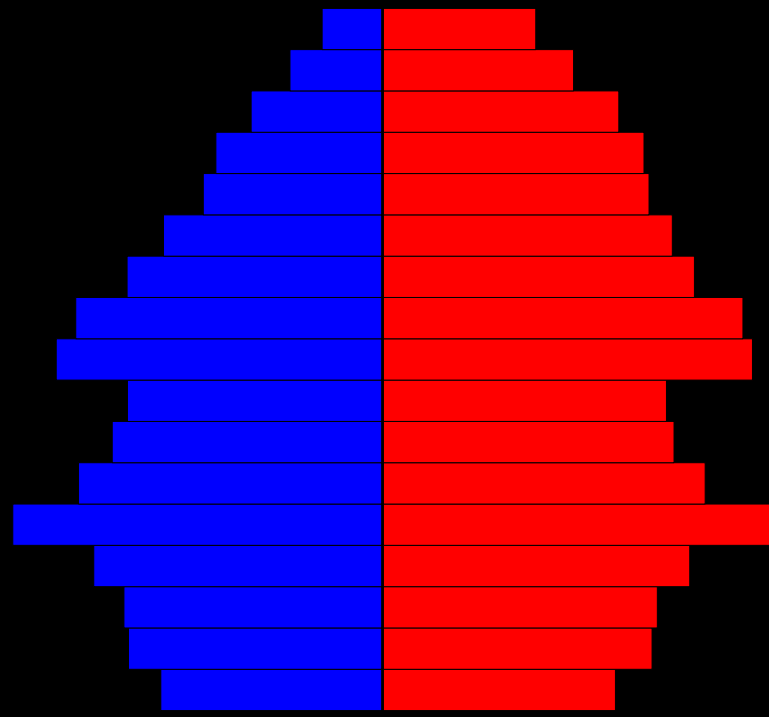






1869

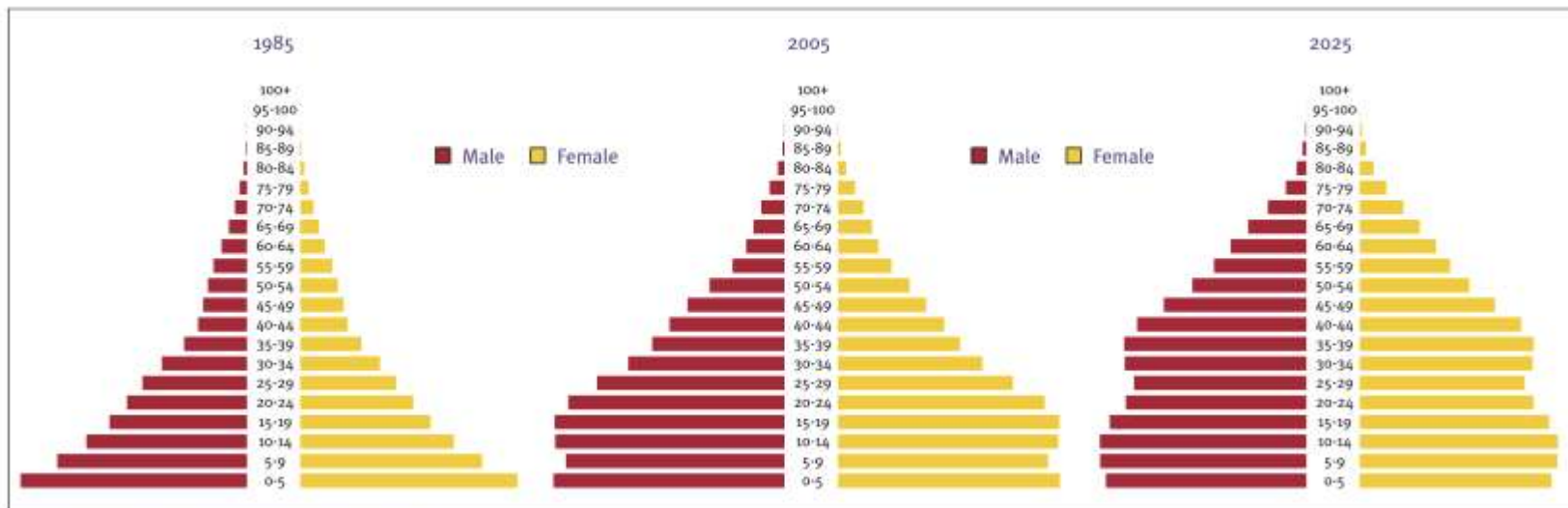
Magyarország korfája



1999

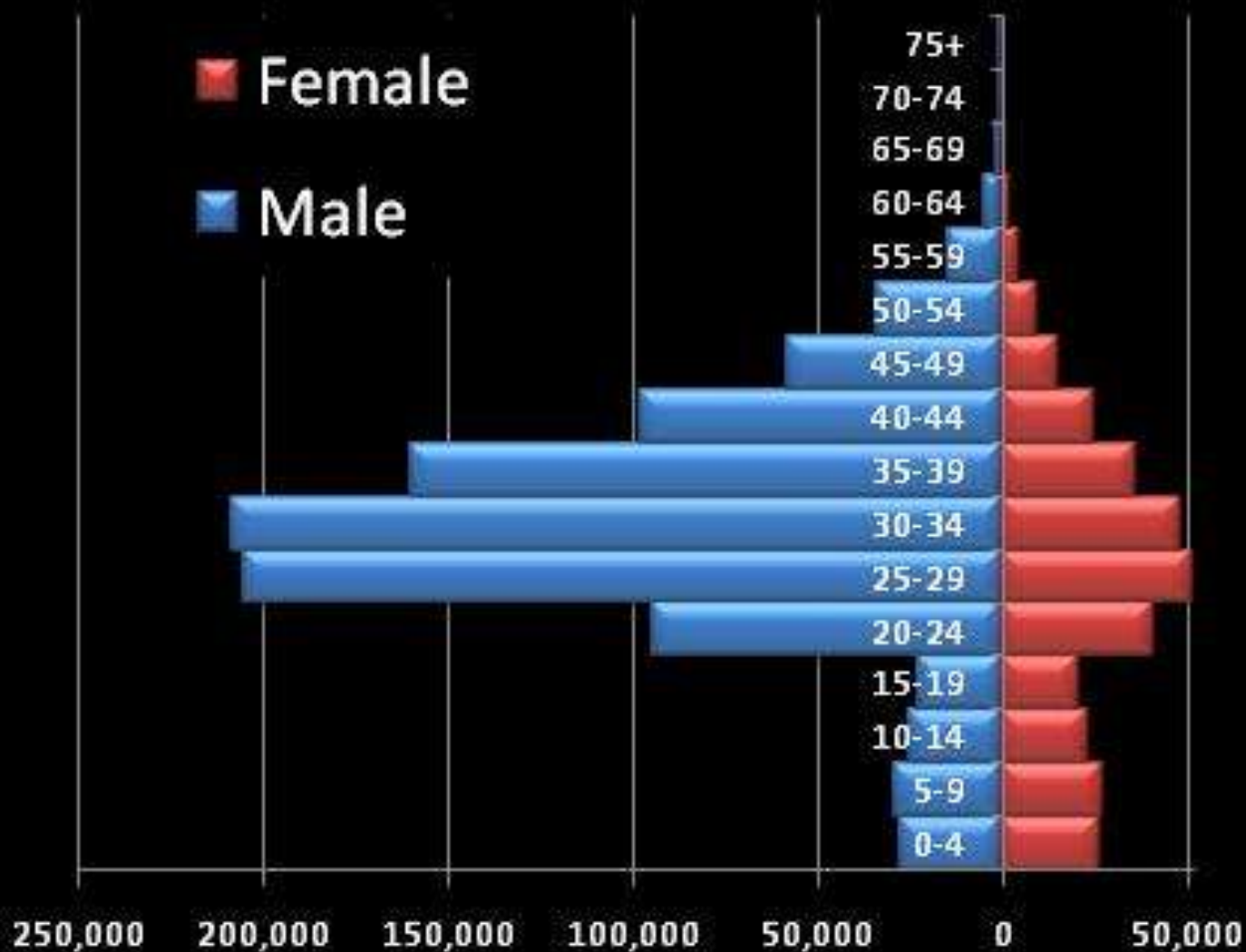
400000

FIGURE 1: MIDDLE EAST POPULATION PYRAMIDS – 1985, 2005, 2025



Source: UN Population Prospects, 2006 revision, medium variant.

A Közel-Kelet korfája – 1985, 2005, 2025



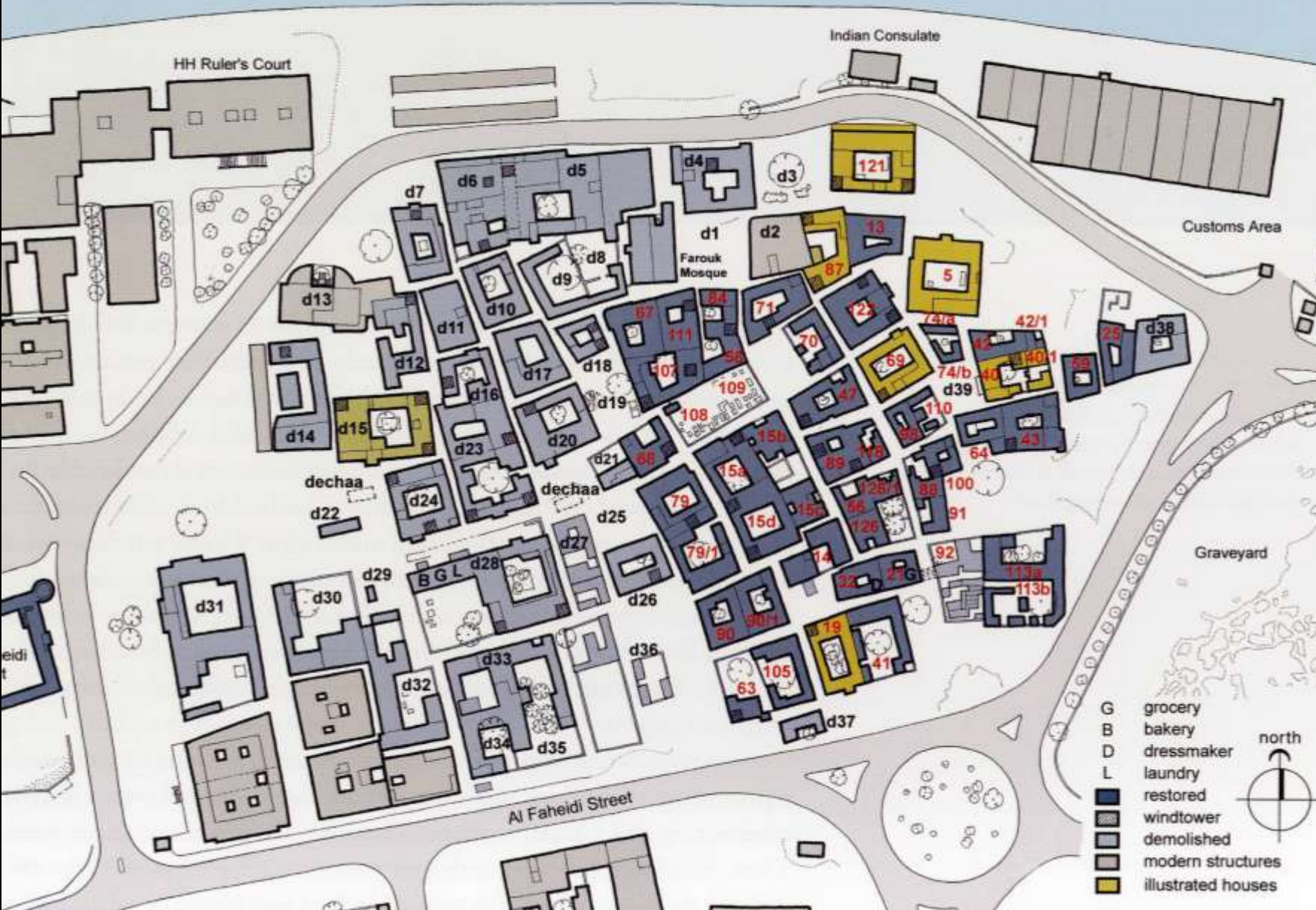
Korfa – UAE (teljes lakosság)

| | 1990 | 1995 | 2000 | 2005 | 2010 |
|---|-----------|-----------|-----------|-----------|-----------|
| Becsült teljes bevándorlás | 1,330,324 | 1,715,980 | 2,286,174 | 2,863,027 | 3,293,264 |
| Becsült bevándorlás (férfi) | 890,601 | 1,209,013 | 1,646,477 | 2,069,658 | 2,389,487 |
| Becsült bevándorlás (nő) | 439,723 | 506,967 | 639,697 | 793,369 | 903,777 |
| A menekültek becsült száma | 35 | 394 | 532 | 105 | 167 |
| A bevándorlók aránya a teljes népességben | 71.3 | 70.6 | 70.6 | 70.0 | 70.0 |
| A női bevándorlók aránya a teljes népességben | 33.1 | 29.5 | 28.0 | 27.7 | 27.4 |
| A menekültek aránya a bevándorlók között | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

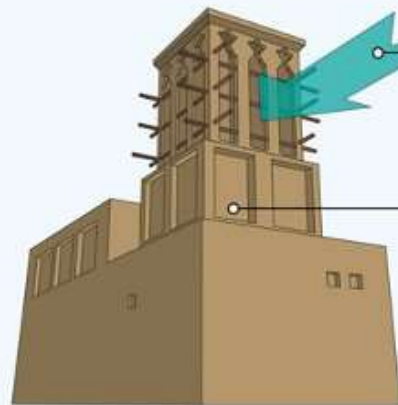




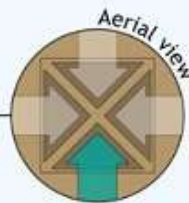
the creek







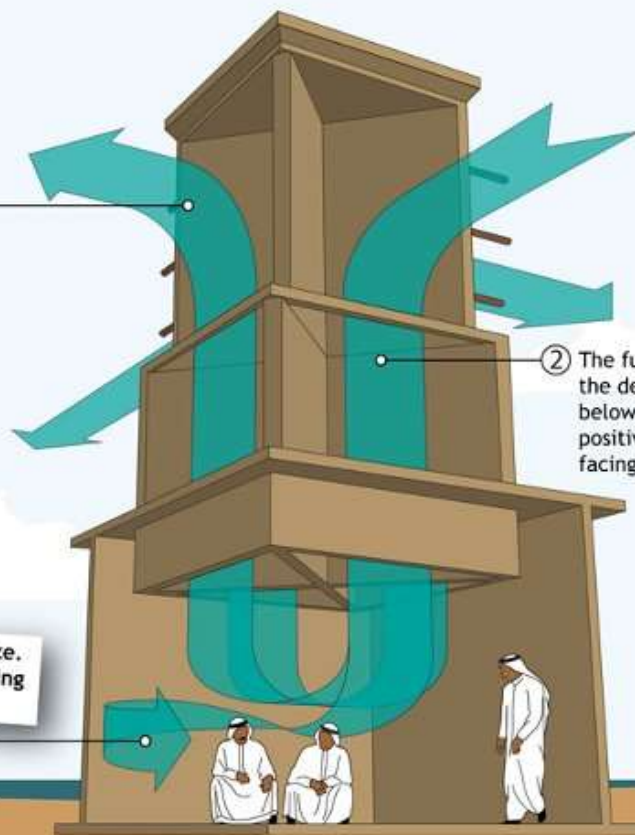
① Wind-towers often rise to over 15 metres above ground, where wind velocity is greatest and air cleaner and less laden with sand. Multidirectional wind-towers capture prevailing wind that may change seasonally or daily.



An X configuration of interior panels channel wind from the prevailing direction.

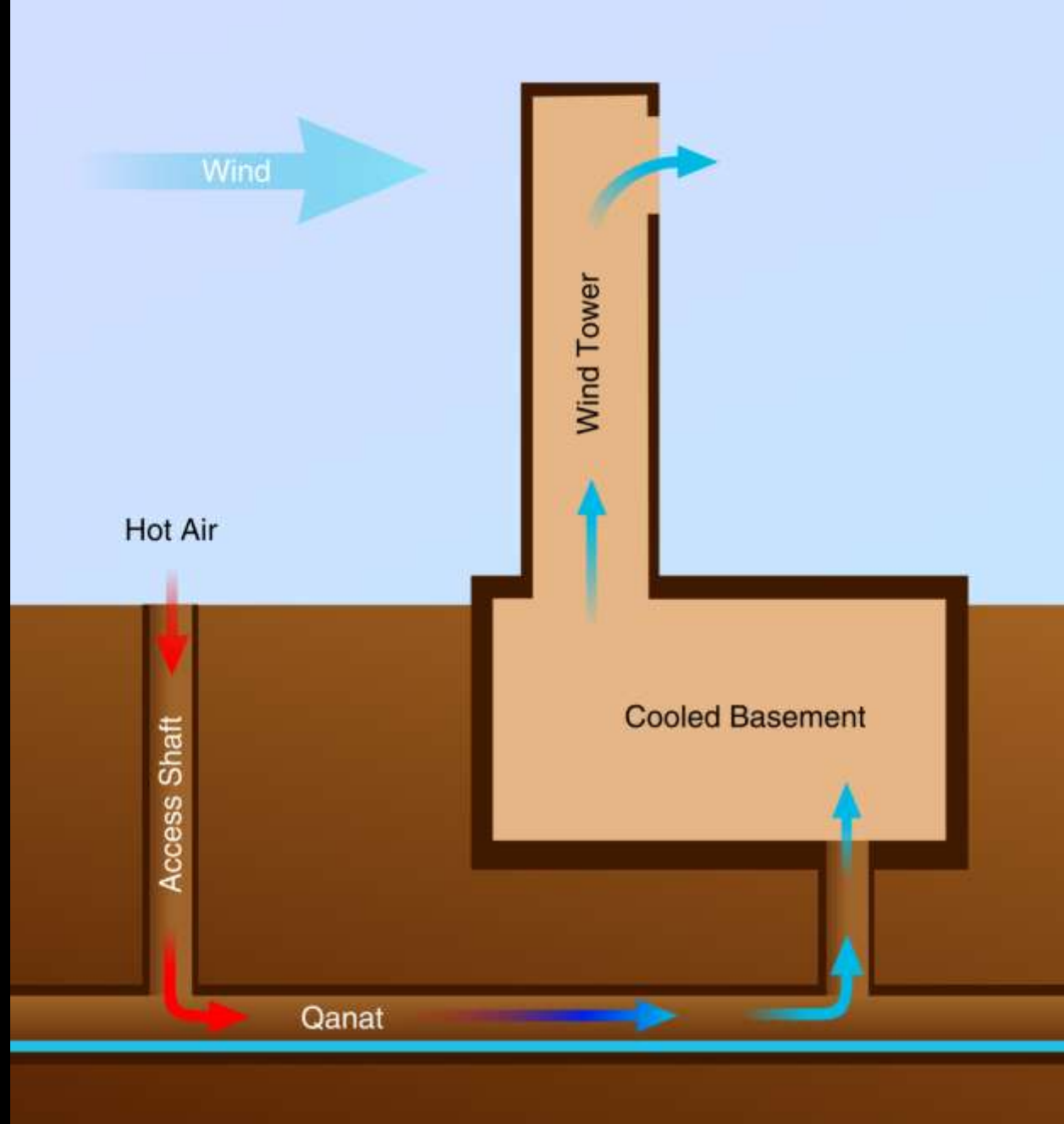
④ Strong updraught of air maintains the circulation.

An opposite effect is created on the other sides, causing air to be sucked through the building and out of the other vents.



② The funnel helps accelerate the descending air into a room below. Wind exerts a high positive pressure on walls facing its flow.

③ A circulation of air conveys a cooling breeze. The breeze helps cool the body by increasing moisture evaporation from the skin.





Egyesült Arab Emirátusok

Dubai - Bastakiya



Egyesült Arab Emírátságok









Egyesült Arab Emirátusok 'agyagépítészet' – Oman (Castle Fanjah)



Egyesült Arab Emirátusok

'agyagépítészet' – Sanaa



Egyesült Arab Emirátusok

'agyagépítészet' – Sanaa



Urbanization Parameters

Area-1 Offshore Islands

Sensitive environmental man-made islands for urban/ resorts development and tourism

Area-2 Metropolitan Area

Area 1 and 2 cover:

- Existing urban fabric
- on-going mega projects
- on-hold or deferred mega projects (recommended to be developed beyond 2020 where required).

Area-3

Non-Urban Area
desert land including landuses for:

- equestrian and camel traditional sport activities and related uses
- resorts
- conservation areas,
- utilities,
- non-urban settlements,
- special uses.

Area-4

Non-Urban Area
Desert land including landuses for:

- conservation areas
- resorts,
- gas extraction area,
- aquifer zone
- farming settlements,
- utilities
- special uses.

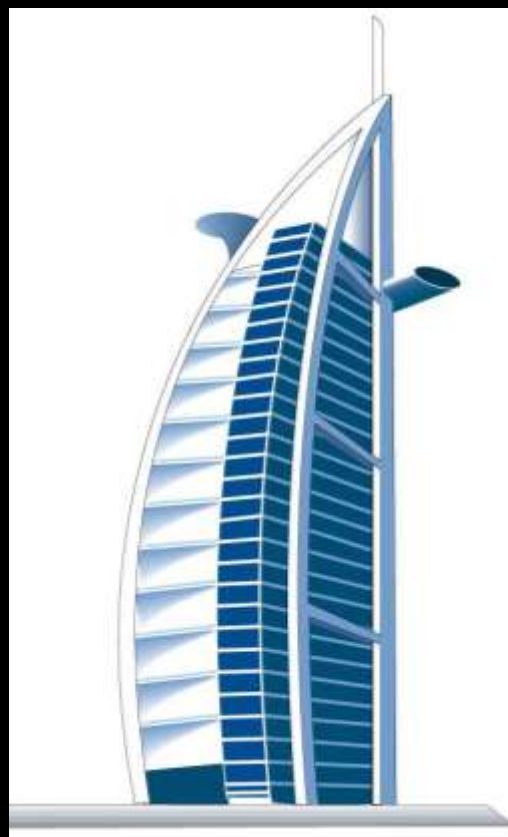














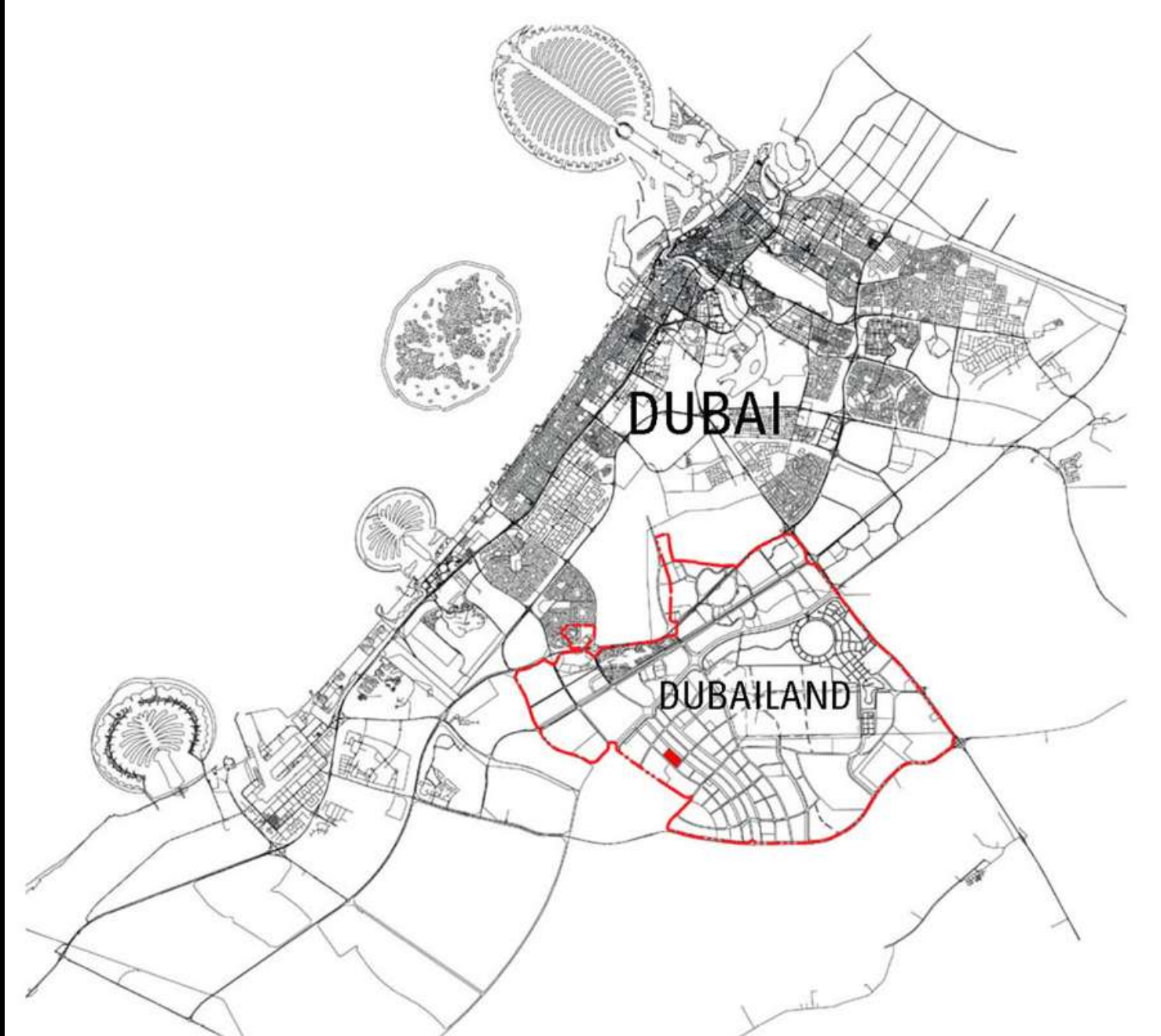




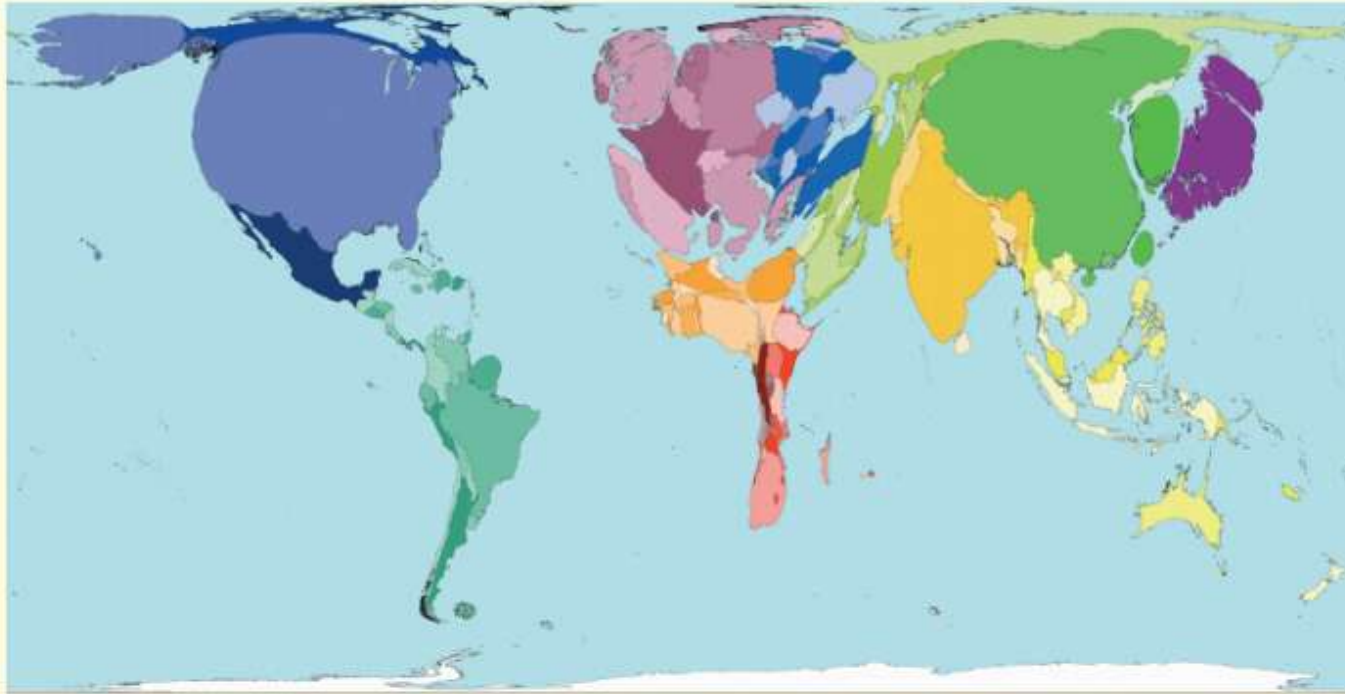








Ecological Footprint



The ecological footprint is a measure of the area needed to support a population's lifestyle. This includes the consumption of food, fuel, wood, and fibres. Pollution, such as carbon dioxide emissions, is also counted as part of the footprint.

The United States, China and India have the largest ecological footprints. Without knowing population size we cannot understand what this means about individuals' ecological demands. Large populations live in China and India. In both territories resource use is below the world average. The per person footprint in the United States is almost five times the world average, and almost ten times what would be sustainable.

Territory size shows the proportion of the worldwide ecological footprint which is made there.



Technical notes

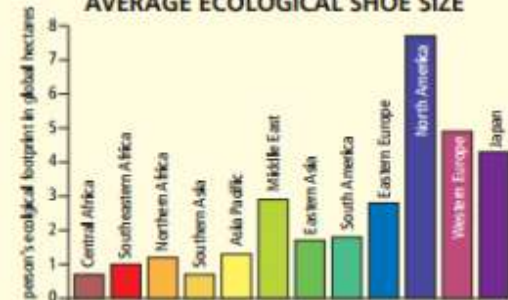
- Data are from the WWF (Worldwide Fund for Nature) International and Institute of Zoology.
- Ecological footprint is measured in global hectares.
- One global hectare is an area that has the world average biological productivity of one hectare.
- See website for further information.

LARGEST AND SMALLEST ECOLOGICAL SHOE SIZES

| Rank | Territory | Value | Rank | Territory | Value |
|------|----------------------|-------|------|------------------------------|-------|
| 1 | United Arab Emirates | 10.6 | 191 | Nepal | 0.61 |
| 2 | United States | 9.7 | 192 | Democratic Republic of Congo | 0.58 |
| 3 | Greenland | 7.7 | 193 | Zambia | 0.58 |
| 3 | Bahamas | 7.7 | 194 | Congo | 0.58 |
| 5 | Canada | 7.5 | 195 | Malawi | 0.57 |
| 6 | Kuwait | 7.4 | 196 | Haiti | 0.57 |
| 7 | Australia | 7.0 | 197 | Cambodia | 0.55 |
| 8 | Finland | 6.8 | 198 | Bangladesh | 0.47 |
| 9 | Estonia | 6.1 | 199 | Somalia | 0.23 |
| 10 | New Zealand | 6.1 | 200 | Afghanistan | 0.11 |

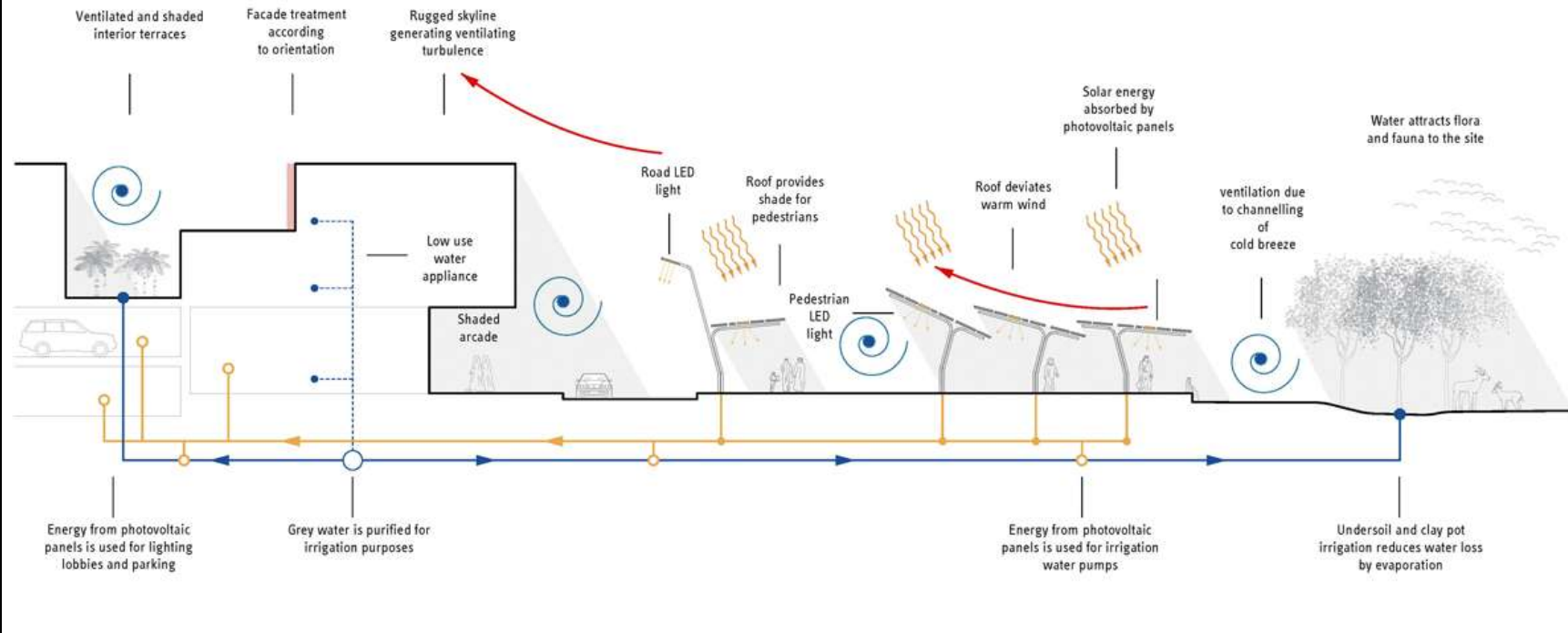
ecological footprint in global hectares per person, 2002*

AVERAGE ECOLOGICAL SHOE SIZE



“People consume resources and ecological services from all over the world, so their footprint is the sum of these areas, wherever they may be on the planet.”

The Living Planet Report, 2006



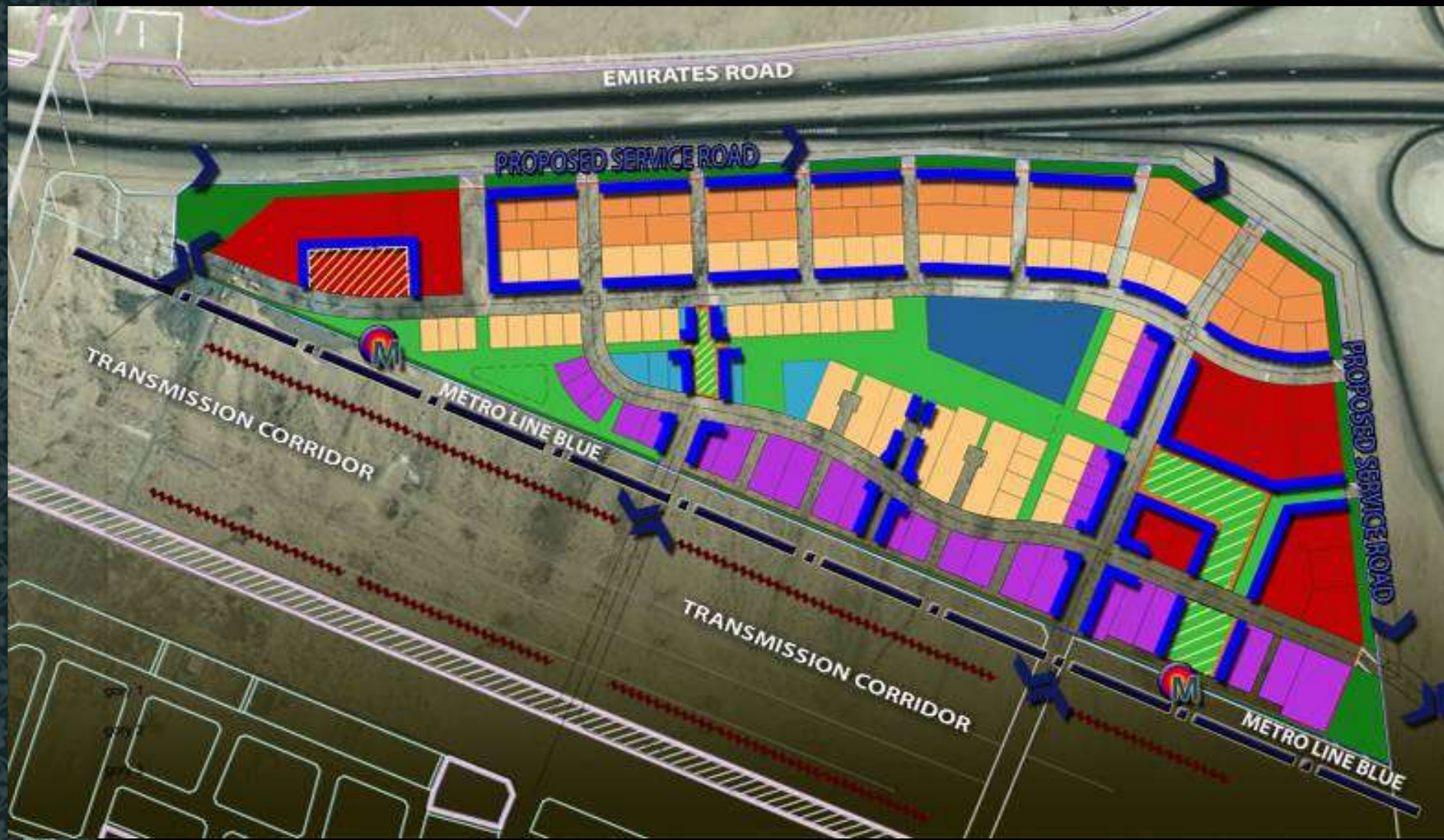


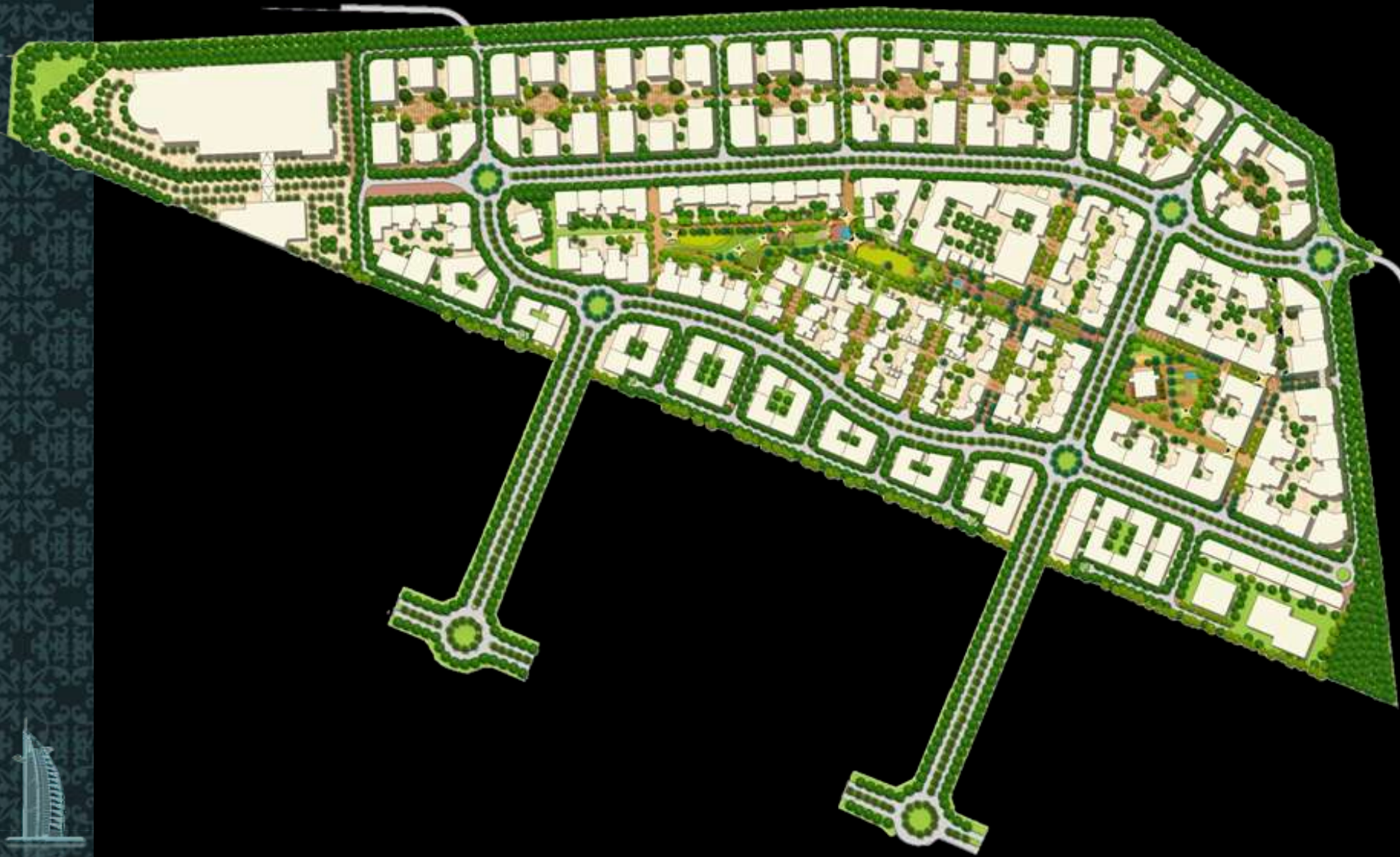


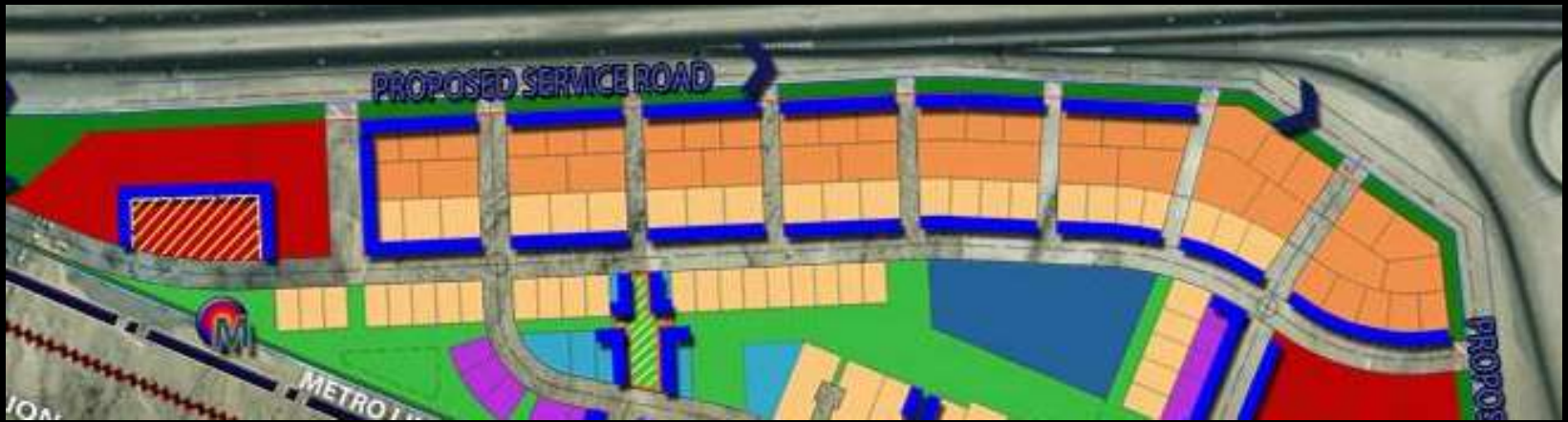


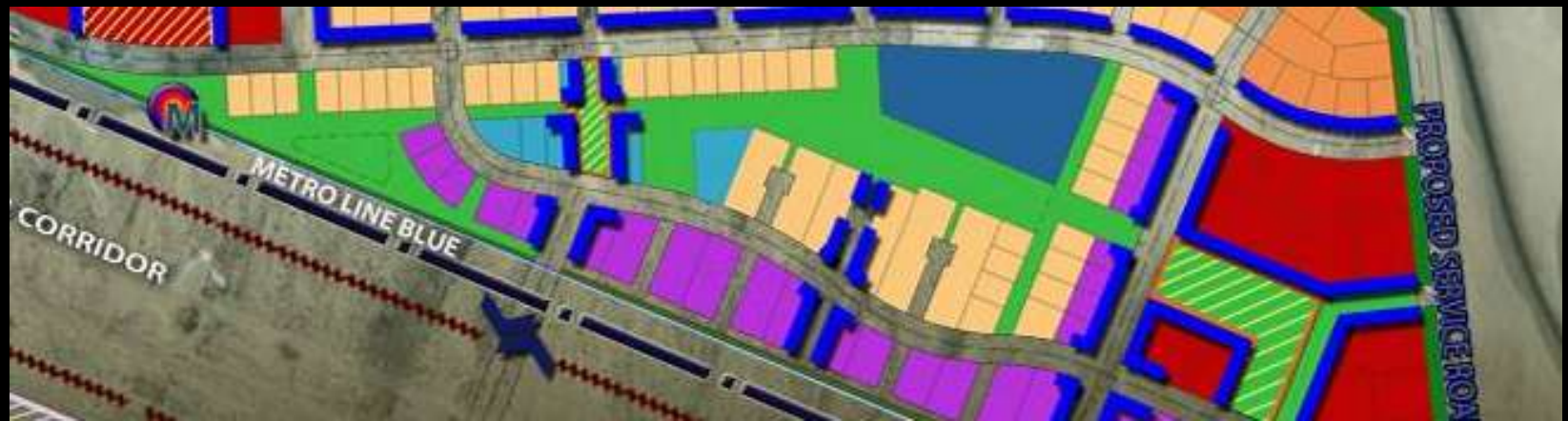












chapter 05 - open space strategy and pedestrian movement

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Pedestrian priority and home zones

Current Master Plan highlights pedestrian priority throughout the development area. There are roads and public spaces where vehicle access is to be provided but

- the public space is mainly for pedestrian use like the main urban square
- the primarily residential use environment needs more safety for pedestrians and less traffic.

The character of these public realms is determined by

- safe pedestrian movement;
- use of traffic calming measures;
- very strong connection between the public realm and the ground floor of adjacent buildings.
- that parking and landscape features which do not allow vehicles to drive too close to properties.
- schemes manage the use of signage, landscaping or street furniture so that these elements are visually integrated and attractive rather than creating visual clutter.
- Wherever possible, pedestrian priority zones include no distinction between a roadway and a pavement.
- Entrances to a pedestrian priority zone are clear and include a home zone sign so that drivers can readily interpret the difference between the home zone and more traditional streets.
- Within a pedestrian priority zone there are no lengths of carriageway which allow drivers to believe they have priority and subsequently achieve unacceptable speeds.
- Dimensions within the pedestrian priority zone are adequate to provide for slow moving through-traffic, parking and the servicing of buildings.
- Home zones are designed so that the whole environment offers the potential for informal play and related activities that do not disturb the peace of other residents.

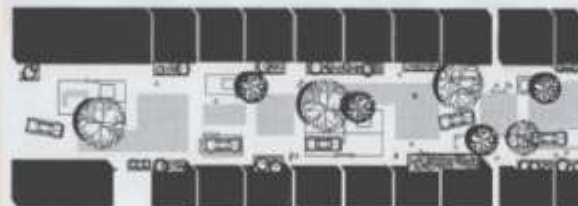


FIGURE 5.7 - SHARED SURFACE AREA



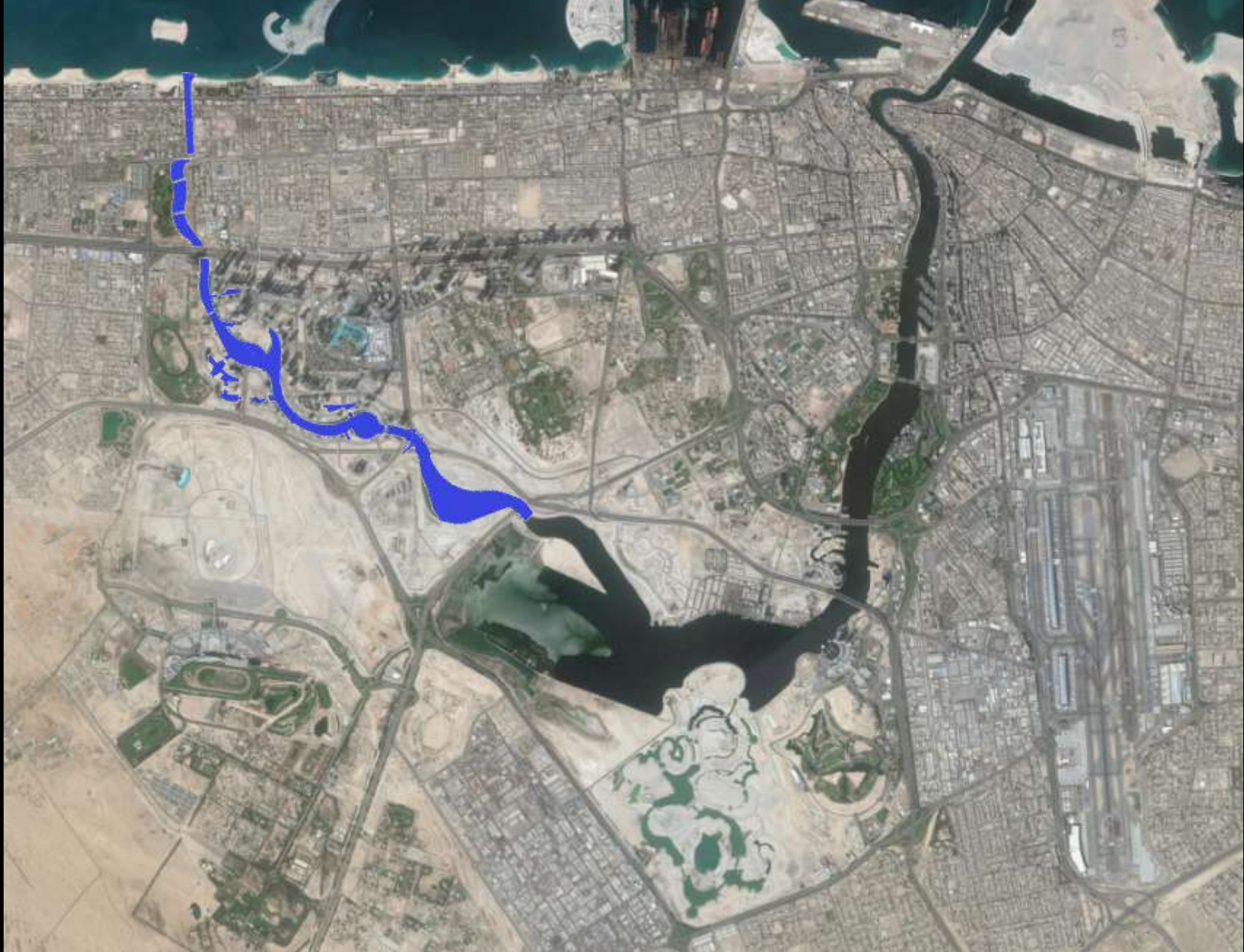
FIGURE 5.8 - IMAGE OF HOME ZONE

FIGURE 5.9 - IMAGE OF ACCESS COURTYARD



MASTER PLAN REPORT
JULY 2008

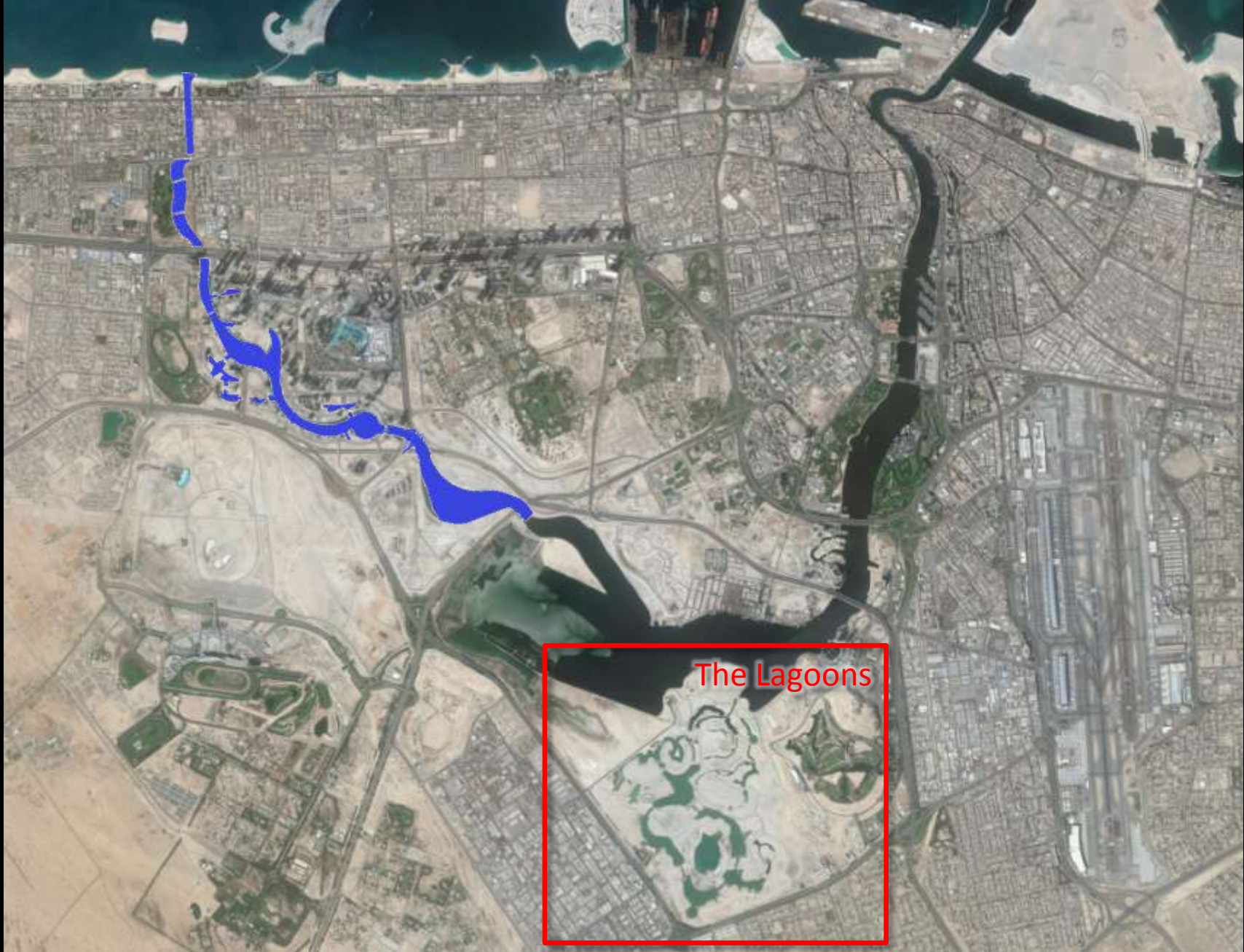
CANSULT MALINSELL | AECOM



Business Bay Canal project

- ❖ Legnagyobb infrastrukturális beruházás
- ❖ 3,0 km hosszú csatorna → 6,5 km új waterfront
- ❖ 80 – 100 m széles
- ❖ Hajózható egy 200 lábás jacht számára is
- ❖ 2 milliárd USD a teljes költségvetése (2014)
- ❖ 20 – 22 millió látogató a szállodákban, mall-okban, éttermekben (450 étterem)





The Lagoons













Egyesült Arab Emirátusok

Dubai – The Lagoons







| | Dubai Holding | Dubai World | ICD |
|--------------------|-----------------|-----------------|-----------------|
| 2010-Q1 | \$ 600 | \$ 1,199 | \$ 3,250 |
| 2010-Q2 | \$ 2,933 | \$ 3,140 | \$ 294 |
| 2010-Q3 | \$ 0 | \$ 0 | \$ 0 |
| 2010-Q4 | \$ 295 | \$ 140 | \$ 920 |
| 2011-H1 | \$ 0 | \$ 4,455 | \$ 1,544 |
| 2011-H2 | \$ 3,161 | \$ 2,192 | \$ 6,044 |
| 2012-H1 | \$ 500 | \$ 0 | \$ 3,702 |
| 2012-H2 | \$ 330 | \$ 4,592 | \$ 2,191 |
| 2013-H1 | \$ 260 | \$ 1,000 | \$ 1,222 |
| 2013-H2 | \$ 246 | \$ 550 | \$ 2,640 |
| 2014-H1 | \$ 1,511 | \$ 0 | \$ 154 |
| 2014-H2 | \$ 632 | \$ 350 | \$ 1,957 |
| Beyond 2014 | \$ 4,621 | \$ 4,534 | \$ 4,357 |

Dubai 3 legnagyobb befektetési cégcsoportjának
fizetési kötelezettsége (millió \$)
2015-ben Dubai teljes költségvetésének harmada
menne törlesztésre





Egyesült Arab Emírátságok

Abu Dhabi





Egyesült Arab Emirátusok

Abu Dhabi - Corniche





Az ESTIDAMA víziója - Abu Dhabi Plan 2030

- ❖ Az épületek és a közösségi fejlesztések szabályozása fenntarthatóság szempontjából
- ❖ Hosszú távú előrelépés a fejlesztések minősége szempontjából a tervezés legkorábbi szakaszától kezdve
- ❖ Az életminőség és a környezet minőségének javítása
- ❖ A fenntarthatóságban úttörő szerep elsősorban az arab országok számára

Az ESTIDAMA követelményrendszere

- ❖ A fejlesztés fő célkitűzései a helyi és tágabb közösséget célozzák meg, semmint lokális és egyéni érdekeket
- ❖ A végrehajtás folyamatos monitoringja a kitűzött (és jóváhagyott) célok elérésének fényében
- ❖ Folyamatos kommunikáció a fejlesztés összes résztvevőjével (IDP – Integrative Design Process)

ESTIDAMA – A települési közösség fenntarthatósága

1. Fenntarthatóság a területfelhasználásban

- A településrészek és települési funkciók 'kommunikációja'
- A területfelhasználás hatékonysága, a hulladék-területek minimalizálása
- 'Urban sprawl' kontrolja

2. A közösségi intézmények fenntarthatósága

- Lefedettségg és elérhetőség
- Az intézményi területek kihasználtság - multifunkcionalitás

3. Fenntarthatóság a közlekedésben

- Járműközlekedés
- Tömegközlekedés
- Alternatív közlekedési módok
- A közlekedés biztonsága

4. A közösség működésének fenntarthatósága

- Infrastruktúra és hulladék kezelés

5. Társadalmi fenntarthatóság

- A település használata a társadalom összes tagja számára kortól és fizikai állapottól függetlenül

6. Gazdasági fenntarthatóság

تخطيط أبوظبي
رؤية 2030
Vision

مجلس أبوظبي للتخطيط العمراني
ABU DHABI URBAN PLANNING COUNCIL

Urban Street Design Manual

Release 01
October 2009

Plan Abu Dhabi 2030
Next Generation Planning

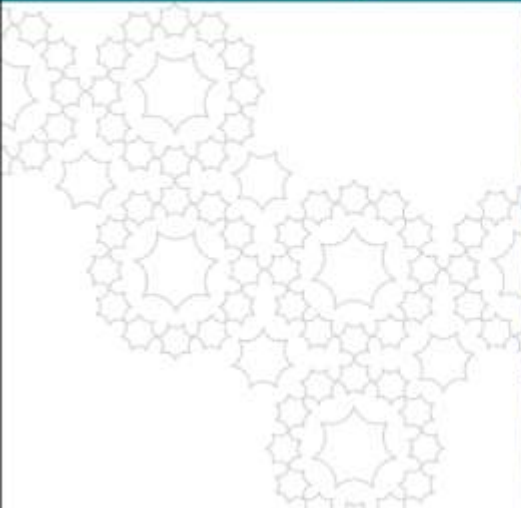




Figure 5.1 Street Design Elements Prioritization

high ground floor retail activity, for example, may require wider through zones to accommodate higher pedestrian volumes. In the traveled way, wider medians provide refuge for a larger volume of pedestrians at crossings. Active land uses that generate high levels of pedestrian activity may be determined, and the location of schools, restaurants, mosques, and other specialized uses should be considered. This level of detail informs the next steps of the street design process.

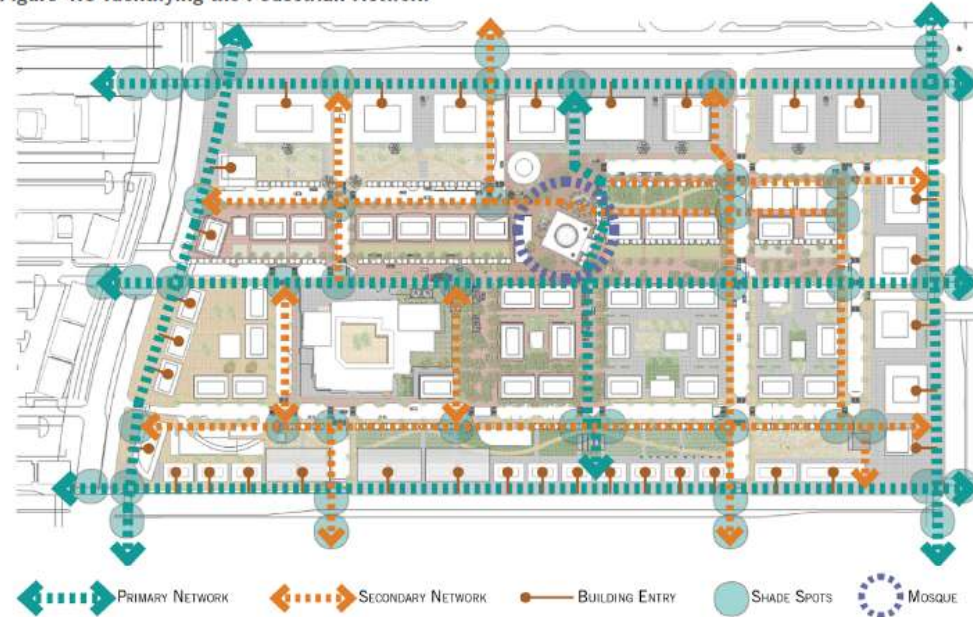
4.3.2 IDENTIFY PEDESTRIAN NETWORKS

The analysis of land uses and specialized activity areas provide information on pedestrian destination and flows. Consider which routes will require the greatest provision of shade at different times of the day. Ensure that median transit stops have safe pedestrian crossings at both ends of the platform and that pedestrian through zones accommodate the projected volumes of pedestrian flow. Using the pedestrian crossing guidelines in Chapter 5, lay out a preferred pedestrian network considering pedestrian volume, junction and mid-block crossings, refuge accommodation, and connections into adjacent blocks; see Figure 4.5.

4.3.3 IDENTIFY TRANSIT NETWORKS

It is important to determine the type, frequency, alignment, and expected routes for planned transit. This information should have been gathered in Phase I from the DOT (4.2.2 Transport Requirements). In Phase II of the design process, the type of facility required to accommodate the projected volumes of transit riders must be determined. The location for supporting facilities should also be identified. Special consideration must be given to junction design and stop location at this point.

Figure 4.5 Identifying the Pedestrian Network



4.3.4 IDENTIFY BICYCLE NETWORKS

During this phase of the street design process, the type of facility and expected volumes need to be estimated in accordance with the information gathered in Phase I from the DOT on the proposed bicycle network. Consider land uses and specialized activity areas, and provide bicycle parking where high volumes of bicycle stops are expected. Ensure that bicycles facilities are safe; do not use bicycle lanes and yield lanes on high priority traffic streets.

4.3.5 IDENTIFY VEHICLE NETWORKS

Use the information gathered in Phase I of the design process to determine the number of lanes necessary to accommodate projected vehicle volumes and allocate on-street parking where there is demand. Junction design should be given special consideration and expected turning movements should be identified to enhance the capacity of street networks.



Provide well designed public seating areas.



Provide a continuous pedestrian network and adequate accommodation to ensure pedestrian safety.



Provide uninterrupted pedestrian pathways.



تخطيط الأحياء السكنية
Neighbourhood Planning







Arterial - T Junction

Fig. 174 Option 1: Re-Configured Right Turn Slip Lane

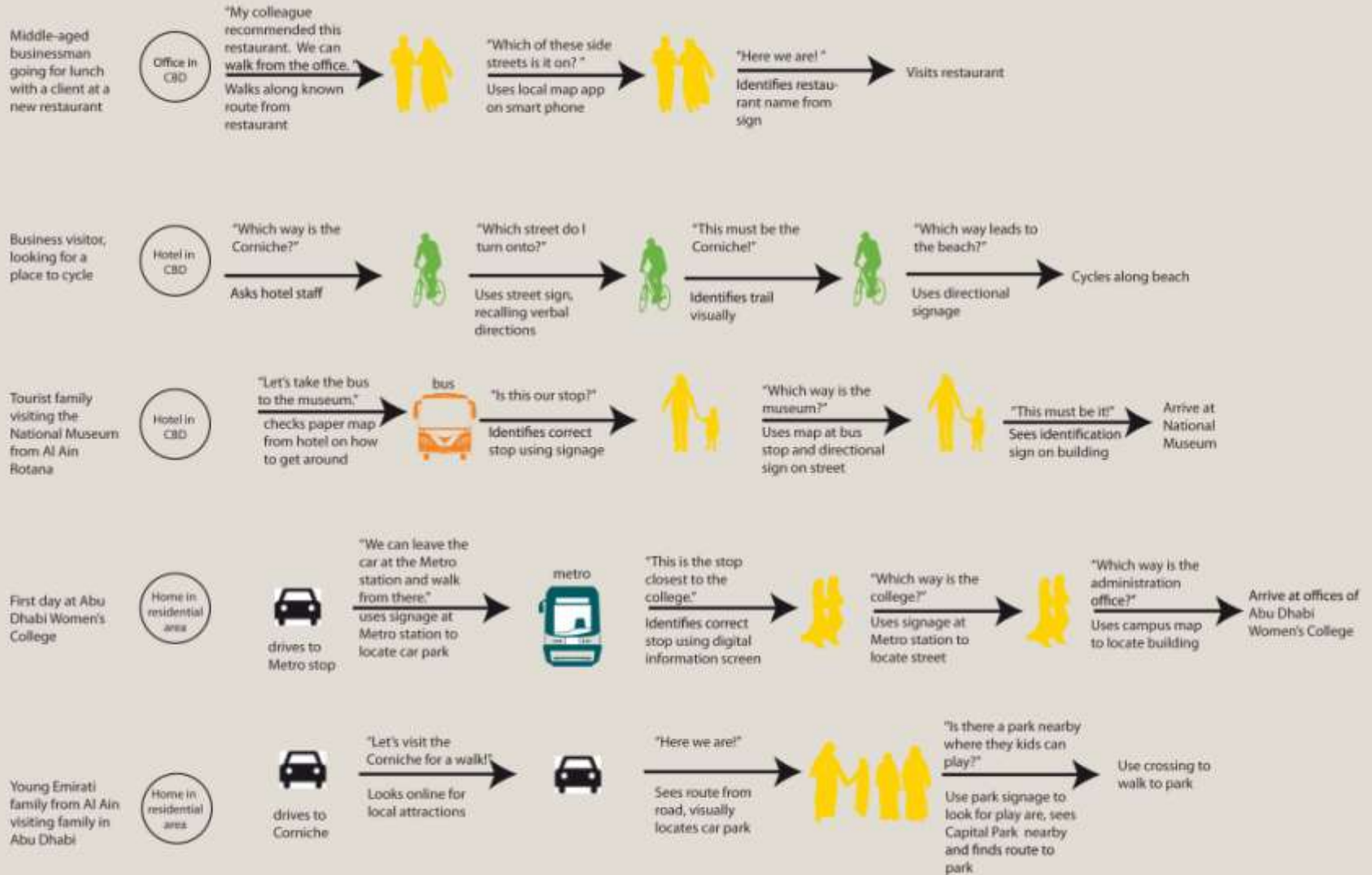
Fig. 175 Option 2: Dedicated Right Hand Lane

Key Principles

- High Motor Vehicle Priority
- 2+2 street (two lanes in each direction)
- Maximum speed: 60kmph
- 2 way cycle tracks off carriageway
- 2.8m wide access lanes with on street parking
- 6m wide median (mid block)
- 3m minimum width median at junctions
- Tree planting to pedestrian realm in accordance with shading strategy
- Minimum pedestrian realm width 5.6m
- Maximum spacing of midblock crossings 200m
- Shade structures within public realm



Walking & Cycling Master Plan













Professzori és hallgatói lakások







Egyesült Arab Emirátusok Abu Dhabi - Qasr al Sharab Resort





Egyesült Arab Emirátságok Abu Dhabi - Qasr al Sharab Resort



Egyesült Arab Emírátusok Abu Dhabi - Qasr al Sharab Resort



Egyesült Arab Emírátságok Abu Dhabi - Qasr al Sharab Resort

Lakáshiány az Öböl országokban – az elérhetetlen 'affordable housing'

- Szaud Arábia – 975,000 a következő 5 évben
- Bahrain – 86%-a a háztartásoknak 'low-income'
- Egyiptom
 - 1,5 millió lakás azonnal
 - 80% -a a családoknak 'low-income'
 - az átlagos lakás ára 18-szorosa az átlagbéreknek (US 2,8)
- Iraq – 1 millió lakás csak Bagdadban

Baghdad – German City

PROJECT BACKGROUND

Due to the tragic occurrences of the Second World War Germany has experience in rebuilding a country, homes, schools, mosques, local communities. Beyond the sad facts Baghdad and Berlin show several similarities in urban structure. In our proposal we would like to express symbolically these similarities by the tools of the urban planning and design.

- Both capitals have well defined, compact area;
- The rivers and lakes play vital role in the structure and life of the cities;
- In spite of the organic urban development, both Berlin and Baghdad have district with the unmistakable signs of urban planning and design;
- Prior the massive destruction of the wars Baghdad as well as Berlin had a significant leading position in their region in either economy or culture. The two cities had very developed urban life with outstanding urban services. (infrastructure, public transportation, etc.)

"Iraqi families have the right to appropriate living conditions."

(Mr. Mohammed Al-DarrajIraqi Housing Minister)



PROJECT VISION

The intent of the study is to present urban planning and design of a district for approximately 20,000 housing units. Looking at the density of similar residential areas in the region it is equivalent to as much as one hundred, one hundred and twenty thousand inhabitants. Due to the average density of the urban areas of the kind, project area may succeed 400 hectares (1,600 dunams).

Considering the high density and the number of inhabitants a central public open space plays vital role in the urban structure in both options.

In Option I the project area has been subdivided to 16 districts referring the 16 states of Germany.

In Option II the fictive site is similar to one of these river bends wherein we would like to simulate the importance of the Corniche.

In Both Option I and Option II were designed on fictive project site, however it is one of the basic design principles to integrate the new district into the surrounding urban fabric. In Baghdad just like in Berlin the City River takes several bends running through the built area creating exciting waterfront areas.

It is necessary to emphasize two aspects to be taken consideration during master planning; (i) sustainability and (ii) security. Dorsch has the intention to take both aspects to the top of the priority list during master planning.

PROJECT DATA

| | |
|------------------|---------------------------|
| Project Area: | 405 hectare (1,620 dunam) |
| Number of Units: | 322 hectare (1,288 dunam) |
| Number of Unit: | 21,228 |
| Population: | 119,250 |

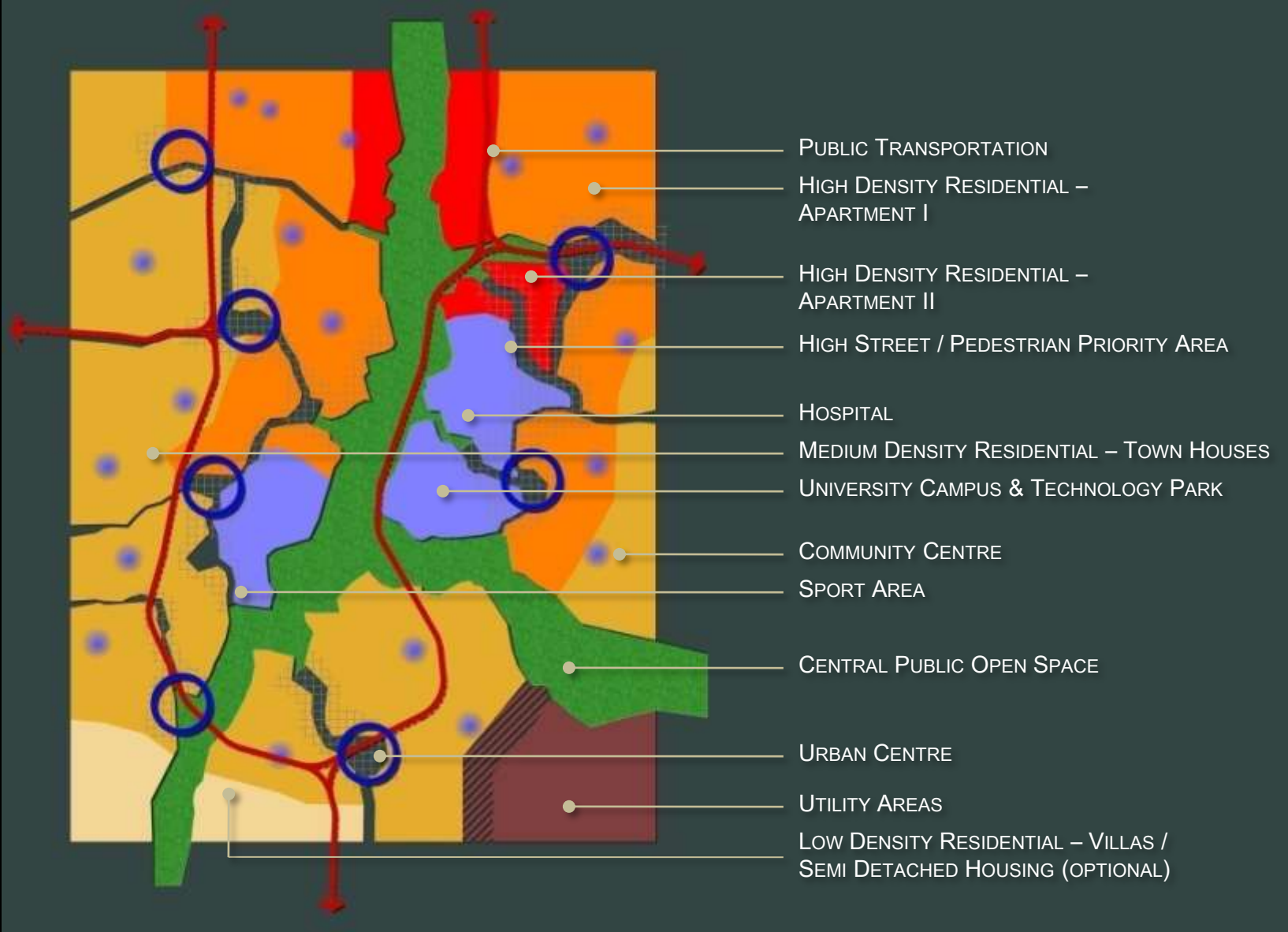
PROPOSED LAND USE

Residential
Commercial
Retail
Community Facilities
Health Care – Iraqi German Hospital (Vivantes International)
Education – University Campus and Technology Park
Sport Area (SoccaFive)
Open Space, Green Area
Service Area

PROPOSED PRODUCT MIX

Low Density Residential Area – Villas (only Option I)
Medium Density Residential Area – Townhouses
Medium Density Residential Area – Apartment Buildings (up to 4 floors)
High Density Residential Area – Apartment Buildings (up to 15 floors)
Mixed Use - Residential, Retail, Commercial
Commercial
Retail
Community Facilities – Health Care, School, Religious, Public Squares, Cultural Facilities
State Hospital - Iraqi German Hospital (Vivantes International)
University Campus Technology Park
Service Area – Main Electric Station, Sewage Treatment Plant, Recycling Plant, District Cooling Plants, etc.
Transportation Areas – Road & Parking Areas, Bus Terminals





DISTRICT 10

TYPICAL LAND USE: TOWNHOUSES, APARTMENT I & APARTMENT II
 AREA: 341,700 M²
 NUMBER OF UNITS: 4,011

DISTRICT 11

TYPICAL LAND USE: TOWNHOUSES
 AREA: 201,000 M²
 NUMBER OF UNITS: 498

DISTRICT 12

TYPICAL LAND USE: TOWNHOUSES & APARTMENT I
 AREA: 206,600 M²
 NUMBER OF UNITS: 2,254

DISTRICT 13

TYPICAL LAND USE: TOWNHOUSES & APARTMENT I
 AREA: 288,700 M²
 NUMBER OF UNITS: 1,589

DISTRICT 14

TYPICAL LAND USE: SPORT CENTRE & OUTDOOR SPORT FACILITIES & APARTMENT I
 AREA: 118,000 M²
 NUMBER OF UNIT: 284

DISTRICT 15

TYPICAL LAND USE: TOWNHOUSES
 AREA: 145,500 M²
 NUMBER OF UNITS: 361

DISTRICT 16

TYPICAL LAND USE: TOWNHOUSES & VILLAS
 AREA: 290,700 M²
 NUMBER OF UNITS: 1,533

DISTRICT 9

TYPICAL LAND USE: TOWNHOUSES & APARTMENT I (UP TO 4 FLOOR)
 AREA: 192,600 M²
 NUMBER OF UNITS: 345



DISTRICT 1

TYPICAL LAND USE: APARTMENT I & APARTMENT II
 AREA: 321,000 M²
 NUMBER OF UNITS: 5,062

DISTRICT 2

TYPICAL LAND USE: APARTMENT II
 AREA: 38,000 M²
 NUMBER OF UNITS: 848

DISTRICT 3

TYPICAL LAND USE: TOWNHOUSES & APARTMENT I
 AREA: 114,500 M²
 NUMBER OF UNITS: 1,300

DISTRICT 4

TYPICAL LAND USE: HOSPITAL & APARTMENT II
 AREA: 122,800 M²
 NUMBER OF UNITS: 402

DISTRICT 5

TYPICAL LAND USE: UNIVERSITY CAMPUS & TECHNOLOGY PARK
 AREA: 92,300 M²

DISTRICT 6

TYPICAL LAND USE: TOWNHOUSES & APARTMENT I
 AREA: 238,500
 NUMBER OF UNITS: 1,919

DISTRICT 7

TYPICAL LAND USE: UTILITY ZONE
 AREA: 172,500 M²

DISTRICT 8

TYPICAL LAND USE: TOWNHOUSES
 AREA: 331,300 M²
 NUMBER OF UNITS: 822

VILLAS

| | |
|--------------------------------|--------------------|
| TOTAL AREA OF VILLAS: | 16.0 HA |
| NUMBER OF UNITS: | 121 |
| AVERAGE SIZE OF UNIT: | 320 m ² |
| AVERAGE SIZE OF THE HOUSEHOLD: | 8 P |
| POPULATION: | 969 |

Low Density Housing Development – Villas & Semi-detached Housing
A residential development for approximately 1,000 local residents all with supporting service infrastructure, local retail, mosques and other community facilities described at the facility chapter.

The housing units are with either villas and semi-detached layout, with the approximately 750 m² plot size average. The average size of the units is as much as 320 m² estimated average 1.5 floor building height.

The estimations are based upon both the study prepared by World Bank (Iraq at a glance - 2001-07) and a survey of the Iraqi households (Iraq Household Socio-Economic Survey - IHSES-2007_Housing)

Targeted construction cost:

\$700 / m² (Without infrastructure)



TOWN HOUSES

| | |
|--------------------------------|--------------------|
| TOTAL AREA OF TOWNHOUSES: | 139.6 HA |
| NUMBER OF UNITS: | 3,461 |
| AVERAGE SIZE OF UNIT: | 160 m ² |
| AVERAGE SIZE OF THE HOUSEHOLD: | 7.5 P |
| POPULATION: | 25,958 |

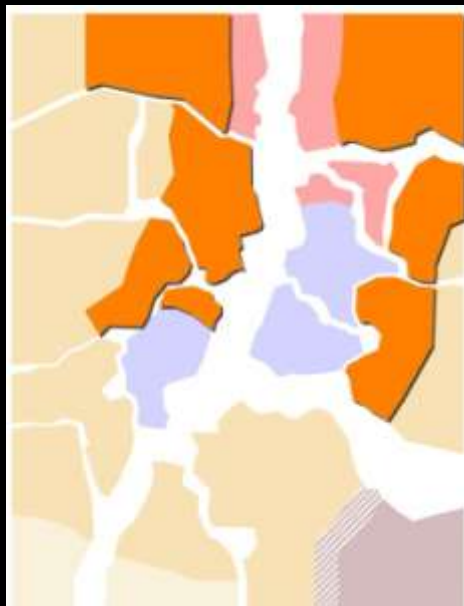
Low rise / medium density residential units are designed to be developed around a courtyard concept where the entrances from the main boulevard are in shape of the private driveway, possibly entering a common parking area (depending on the leasing/selling decision). These are landscaped, highly detailed urban driveways acting also as pedestrian links to the entrances of the buildings located around.

Targeted construction cost:
\$600 / m² (Without infrastructure)



APARTMENT I

| | |
|--------------------------------|--------------------|
| TOTAL AREA OF APARTMENT I: | 97.7 HA |
| NUMBER OF UNITS: | 12,922 |
| AVERAGE SIZE OF UNIT: | 120 m ² |
| AVERAGE SIZE OF THE HOUSEHOLD: | 5.5 P |
| POPULATION: | 71,073 |



Mid-rise Mixed Use plots are proposed to be some of the most flexible lands within the development. All connected to Urban Centres and to the large central park, these mid-rise mixed use plots are envisaged to cater to the more downtown, urban type of businesses on the lower floors and young professionals in the apartments above.

With their quite large frontage almost dictates the design of the development of the surrounding district, imposing the mixed use environment for their residents.

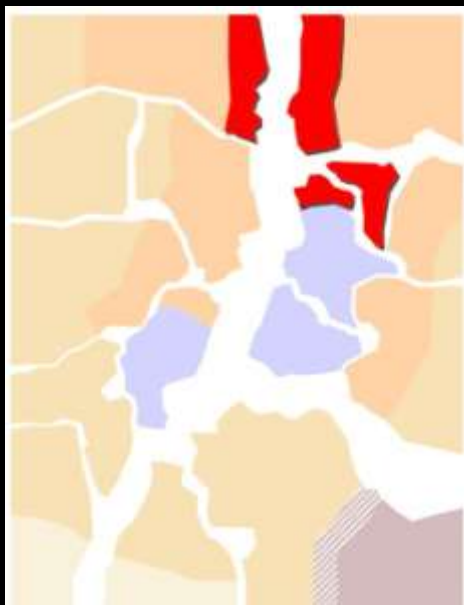
The average height of the area is G+3, while the maximum height should not exceed the G+5 level.

Targeted construction cost:
\$500 / m² (Without infrastructure)



APARTMENT II

| | |
|--------------------------------|-------------------|
| TOTAL AREA OF APARTMENT I: | 21.6 HA |
| NUMBER OF UNITS: | 4,723 |
| AVERAGE SIZE OF UNIT: | 90 M ² |
| AVERAGE SIZE OF THE HOUSEHOLD: | 4 P |
| POPULATION: | 21,253 |



High Density Residential Area - Apartment II

These high density, mixed use plots are the highest density plots in the proposed development. The cluster is prominently located near to urban hubs and community centres, public transport exchange point. The urban elements positioned as a landmark for the development.

With its landmark towers it also plays vital role in the cityscape of the large public park.

The high density development matching the vibrant open spaces creates attractive urban environment

The allowed height limit is 14 residential floor plus the maximum of three podium level.

Targeted construction cost:

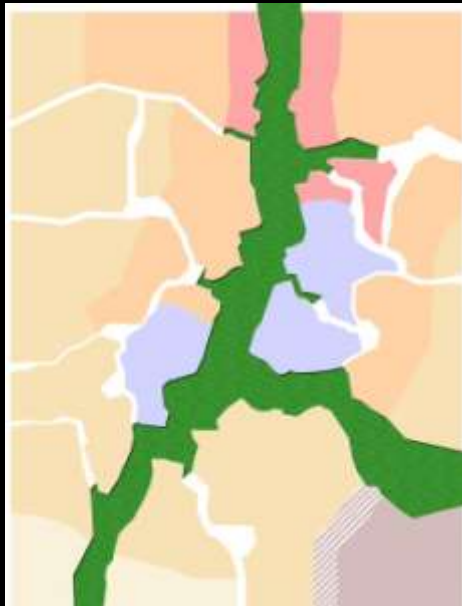
\$500 / m² (Without infrastructure)



CENTRAL PARK AND PUBLIC REALM NETWORK

AREA:

68.56 HA+



This key location requires high quality streets and public spaces.

It is the central spine of the public space network, providing lot of leisure, recreational facilities for the more than one hundred thousand residents of the area.

Design of Open Space - Urban and Landscape Design

The main idea is, that high quality design gives character to the place reinforcing people identity. It helps to keep the place safe and clean therefore even maintenance cost can be reduced. It should provide out-door facilities for each age and social groups, providing accessibility in open space / design for easy walking. The design of public spaces should take account of the micro-climate, consider local materials and spices in design.

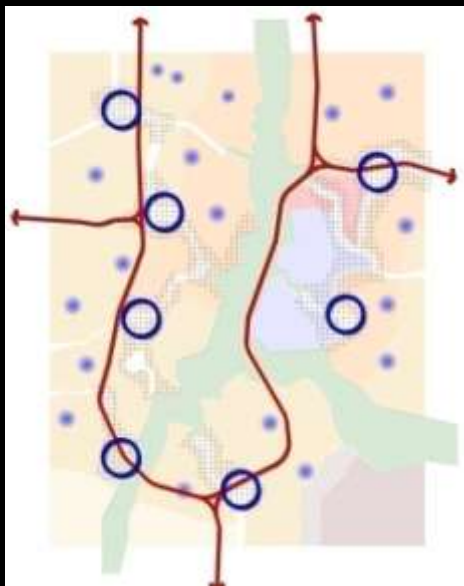


COMMUNITY CENTRES AND PEDESTRIAN HUBS

This key location requires high quality streets and public spaces. There are three key elements of public spaces: (i) the large Public Green, (ii) Urban Centres and (iii) High Street network.

Urban Centres are providing convenient shopping and entertaining facilities as well as meeting places. Street frontage will open out onto a public space, with new surfaces to calm traffic and make the crossing more pedestrian friendly.

The High-Street-like public realm around the urban hubs provides safe and convenient pedestrian life and movements. Sheltered and shaded space for events, activities and sitting areas will be the location for a major piece of public art, light sculpture, etc.





THE SUSTAINABLE MASTER PLANNING DESIGN



General aims are to reduce the usage of resources and to encourage to run sustainable lifestyle. The Sustainable Master Planning Design tools are on each level of urban planning and urban design.

Neighbourhood (toward Home Zones)

The neighbourhood form is identifiable area that encourage citizens to take responsibility for their maintenance and evolution. They should be (i) compact, (ii) pedestrian-friendly, and (iii) mixed-use. Corridors are regional connectors of neighbourhoods and districts; they range from boulevards and public transportation lines to rivers and park ways.

Concentrations of civic, institutional, and commercial activities should be embedded in neighbourhoods, not isolated in remote, single-use complexes. Community Facilities are used on daily bases (Schools, Nurseries, Groceries and Mosques) should be sized and located in walking distance.

Design of Open Space - Urban and Landscape Design

A primary task of urban and landscape design is the physical definition of streets and public spaces as places of shared use. The main idea is, that high quality design gives character to the place reinforcing people identity. It helps to keep the place safe and clean therefore maintenance cost can be reduced.

Well-defined open space structure provides out-door facilities for each age and social groups, providing accessibility in open space / design for easy walking. The design of public spaces should take account of the micro-climate, consider local materials and species in design.

Considering maintenance cost even in design phase (i.e. with designing 'dry-landscape' irrigation level can be reduced by 50%)

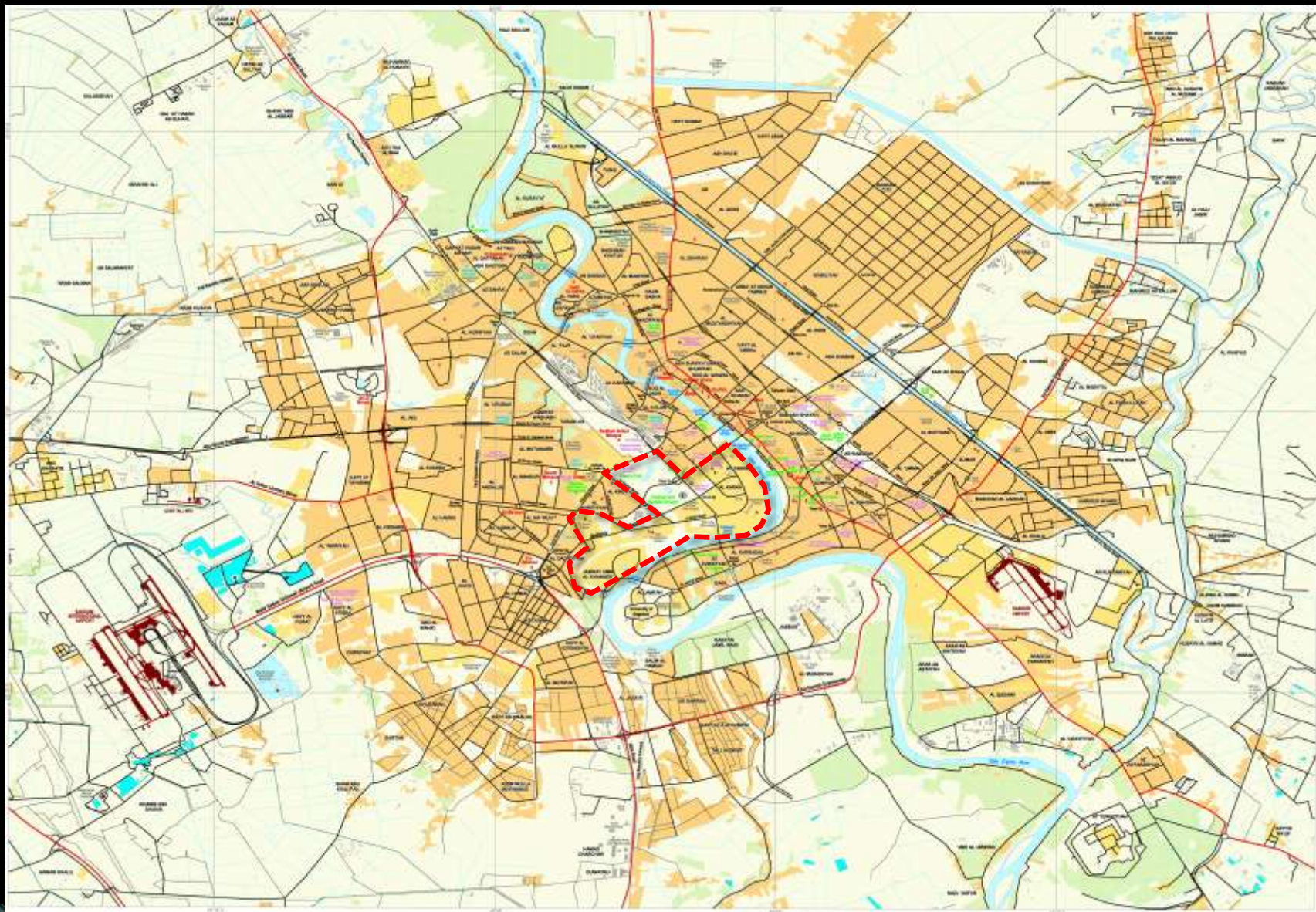
Transportation

Sustainable transportation design (i) encourages alternative way of traffic, (ii) comfortable and safe pedestrian movement and cycle tracks, (iii) create car free zones, (iv) carriage public transportation and (v) creates integrate pedestrian/parking/public transportation systems.

Integrated transport interchanges promotes the use of public transport and provide for seamless movement between all modes of travel.

Usage of Resources

It is fundamental requirement to optimise (and minimise) the use of energy and water. On the earliest phase of the project Dorsch has the intentions to involve the latest technologies and their providers to focus on the use of reusable energy and minimise the water usage.



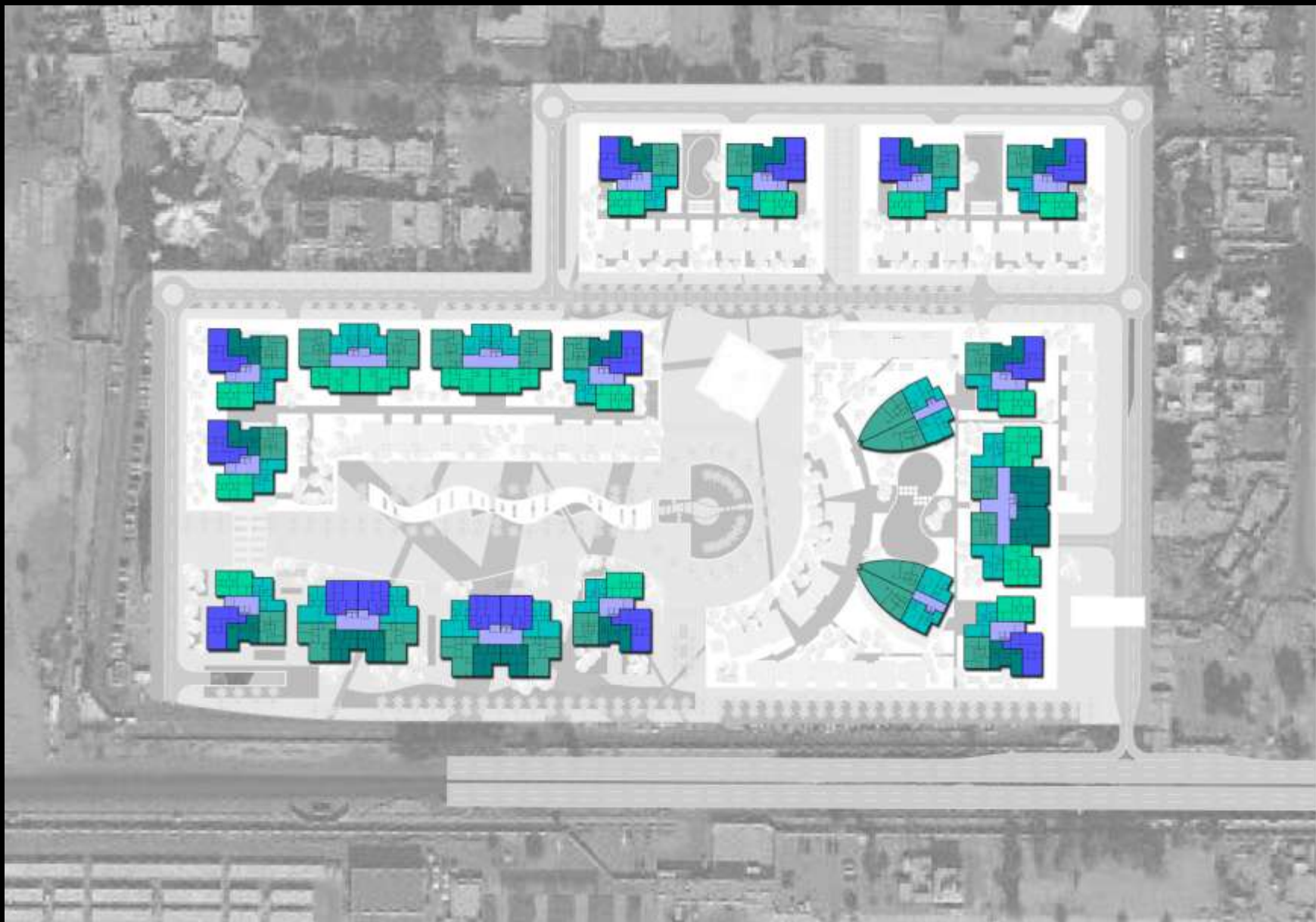
Irak, a korlátlan lehetőségek hazája





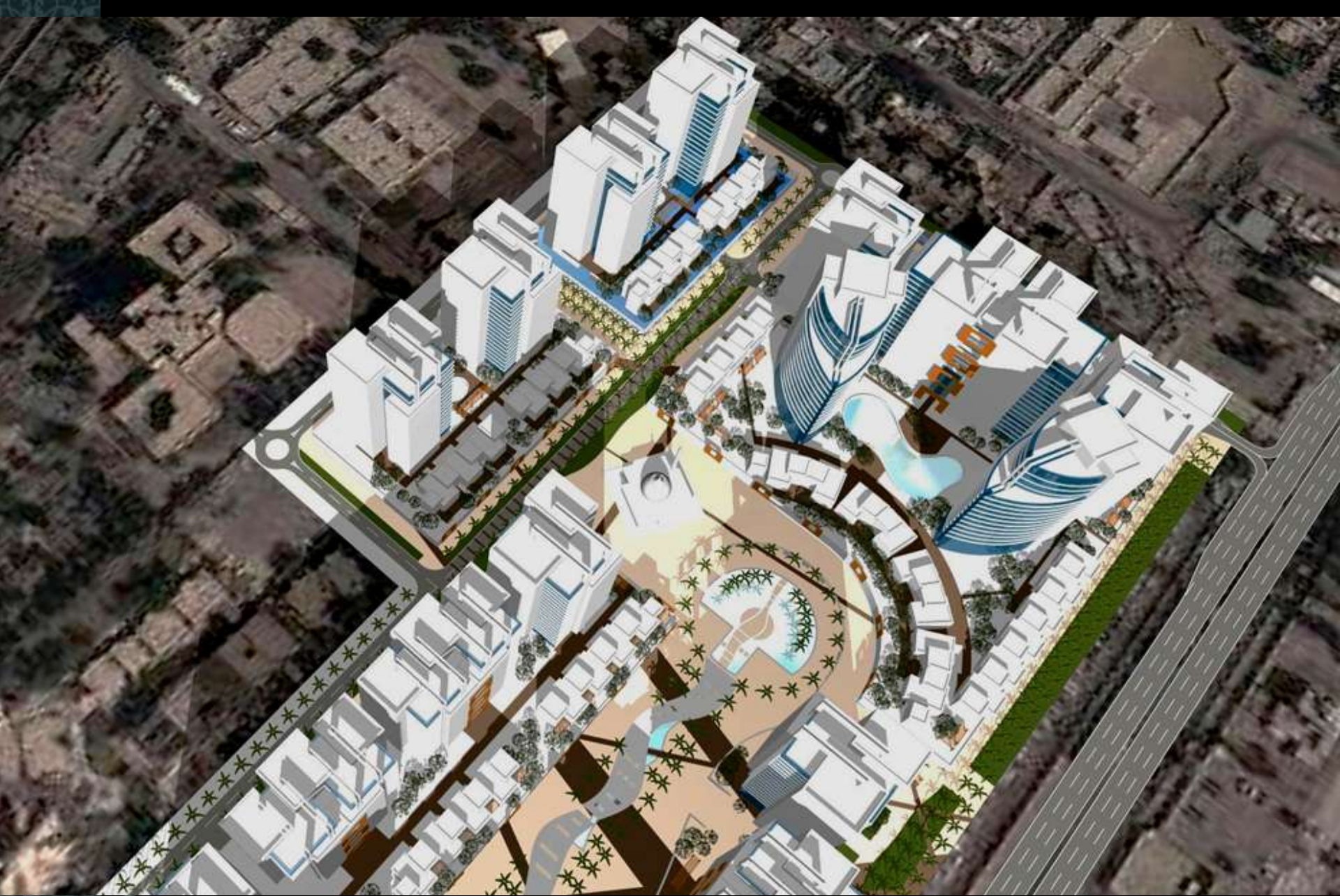
Irak, a korlátlan lehetőségek hazája

Bagdad – Zöld Zóna



Irak, a korlátlan lehetőségek hazája

Bagdad – Zöld Zóna



Irak, a korlátlan lehetőségek hazája

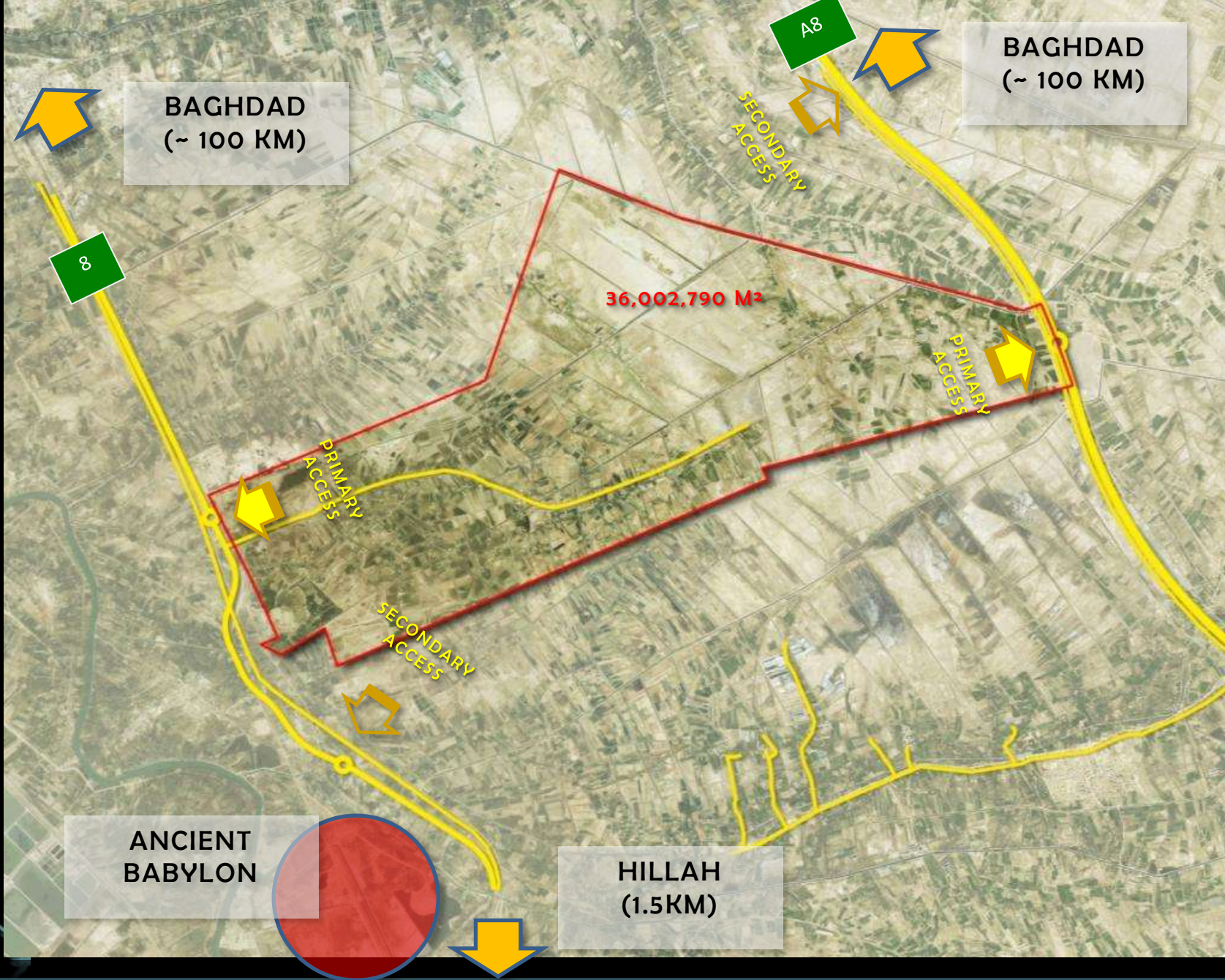
Bagdad – Zöld Zóna

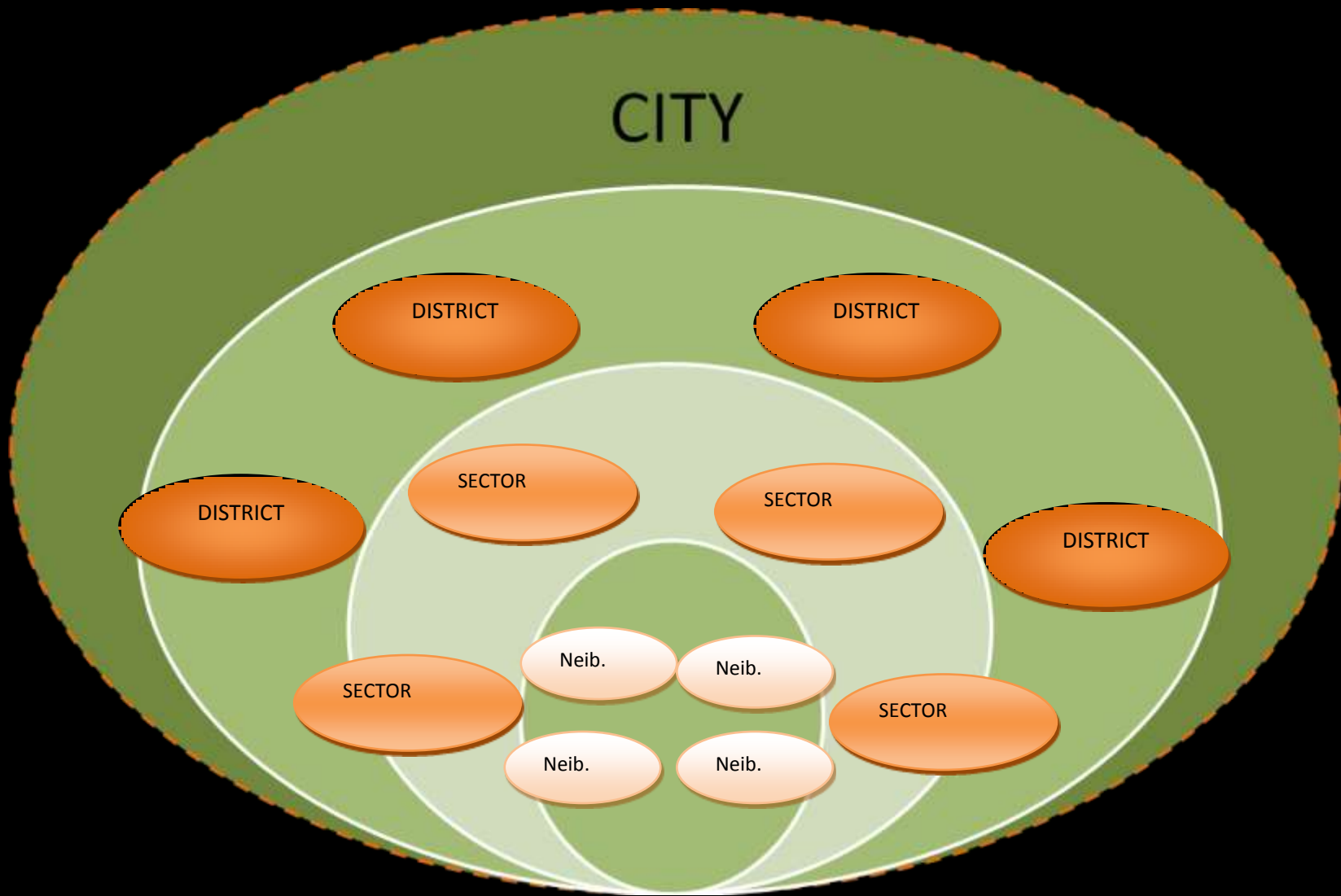


Irak, a korlátlan lehetőségek hazája B a b g a d g a d d a d - G z r o n h a n z C r i t a y



Irak, a korlátlan lehetőségek hazája





School & nursery

LOW HEIGHT;
112 UNITS

LOW HEIGHT;
116 UNITS

Mosque

290 m



LOW HEIGHT;
116 UNITS

Low HEIGHT;
110 UNITS

Retail,
Health care facilities on the
ground floor

Local market,
Administration building

550 m

Irak, a korlátlan lehetőségek hazája

Irak, Hillah City

Children
playground

Nursery &
kindergarten

Sector mall &
retail centre

Sport hall &
leisure centre

Public open green

Outdoor sport facilities
(basketball)



Public open green

Mosque

Main public
square

Cultural centre &
library,
post office

Outdoor sport facilities
(football pitch)

Mosque



Irak, a korlátlan lehetőségek hazája

Irak, Hillah City

Oman Irfan

Fejlesztési program

- 4.2 million sqm of build up area,
- 4,600 residential units,
- 350,000 sqm of commercial gross leasable area,
- 1,500 hotel rooms, and
- 200,000 sqm of retail gross leasable area

Munkahelyteremtés

- Completed in 30 years, it will have created around 32,000 permanent jobs of which 38% to Omanis (~12,400 jobs)
- By end of Phase 1 in 8 years, the project will have created ~24,000 jobs of which ~9,000 in construction and ~15,000 permanent jobs in operations
- By end of Phase 2 in 20 years, the project will have created ~30,200 jobs of which ~6,200 in construction and ~24,400 permanent jobs in operations

Katar Nemzeti Fejlesztési Stratégia 2011 – 2016

Négy alappillér (Katar Nemzeti Jövőkép 2030):

- ❖ **Human Development** lehetővé teszi mindenki Katari számára, hogy egy jól működő társadalom tagjai lehessenek
- ❖ **Social Development** létrehozni és működtetni egy gondoskodó társadalmat, amely a nagyon magas morális alapokon nyugszik és a nemzetközi együttműködésnek elismert tagja tud lenni
- ❖ **Economic Development** az élet minden területén versenyképes gazdaság elérése amely kielégíti a társadalmi szükségleteket, biztosítva a színvonalas lakókörülményeket az ország teljes lakossága számára
- ❖ **Environmental Development** a gazdasági növekedés, a társadalmi jólét és a környezet harmóniájának biztosítása



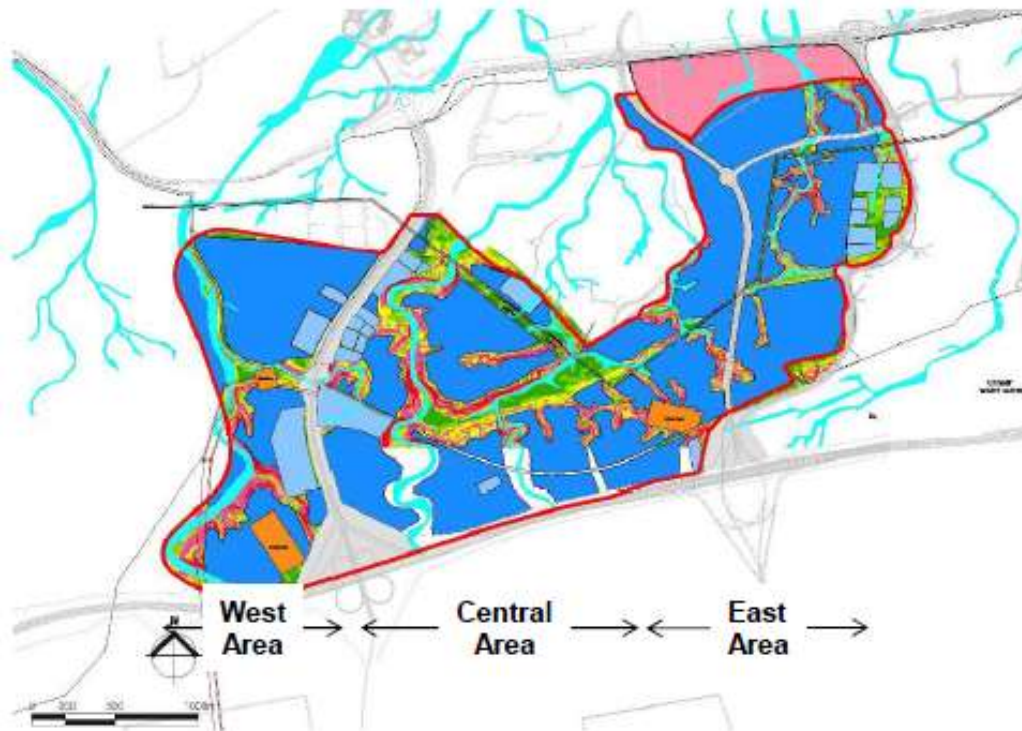


Katar, a gigantikus lábnyom









| | |
|---|------------------|
| Estimated Site Area: | 7.4 million sqm |
| Primary Wadi & Residual Spaces: | -2.2 million sqm |
| Government Land: | -0.4 million sqm |
| Existing and Committed Roads & Infrastructure: | -0.6 million sqm |

Developable Land: 4.2 million sqm
(Includes existing allocated plots¹⁾)

- | | |
|--|---------------------------------------|
| Government allocated land | Primary wadi |
| Existing and committed infrastructure | Residual spaces of primary wadi |
| Existing and committed roads | Residual spaces with slopes of 5-8% |
| Developable land allocated ¹⁾ | Residual spaces with slopes of 9-12% |
| Developable land not allocated | Residual spaces with slopes above 13% |

¹⁾ Developable land allocated to Omani individuals and companies (see slide 10)
source: Halcrow analysis



| Criteria | Scoring |
|--|---------|
| 1 Mixed Land Uses | ○ |
| 2 Enhanced Walkability | ◐ |
| 3 Strong Sense of Place | ● |
| 4 Preservation of Open Spaces | ● |
| 5 Strengthened Fit with Existing Communities | ● |
| 6 Connectivity/ Transportation | ◐ |
| 7 Anchored Neighborhoods & Access to Social Infrastructure | ● |

Limits ○ → ● Maximizes



| Criteria | Scoring |
|--|---------|
| 1 Mixed Land Uses | ● |
| 2 Enhanced Walkability | ● |
| 3 Strong Sense of Place | ● |
| 4 Preservation of Open Spaces | ● |
| 5 Strengthened Fit with Existing Communities | ● |
| 6 Connectivity/ Transportation | ● |
| 7 Anchored Neighborhoods & Access to Social Infrastructure | ● |

Limits ○ → ● Maximizes

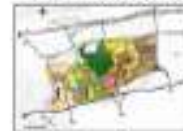
Land Use Assessment Results



Scenario 1
Land Use Led



Scenario 2
One Mixed Use



Scenario 3
Two Centre Mixed Use



Scenario 4
Integrated Mixed Use

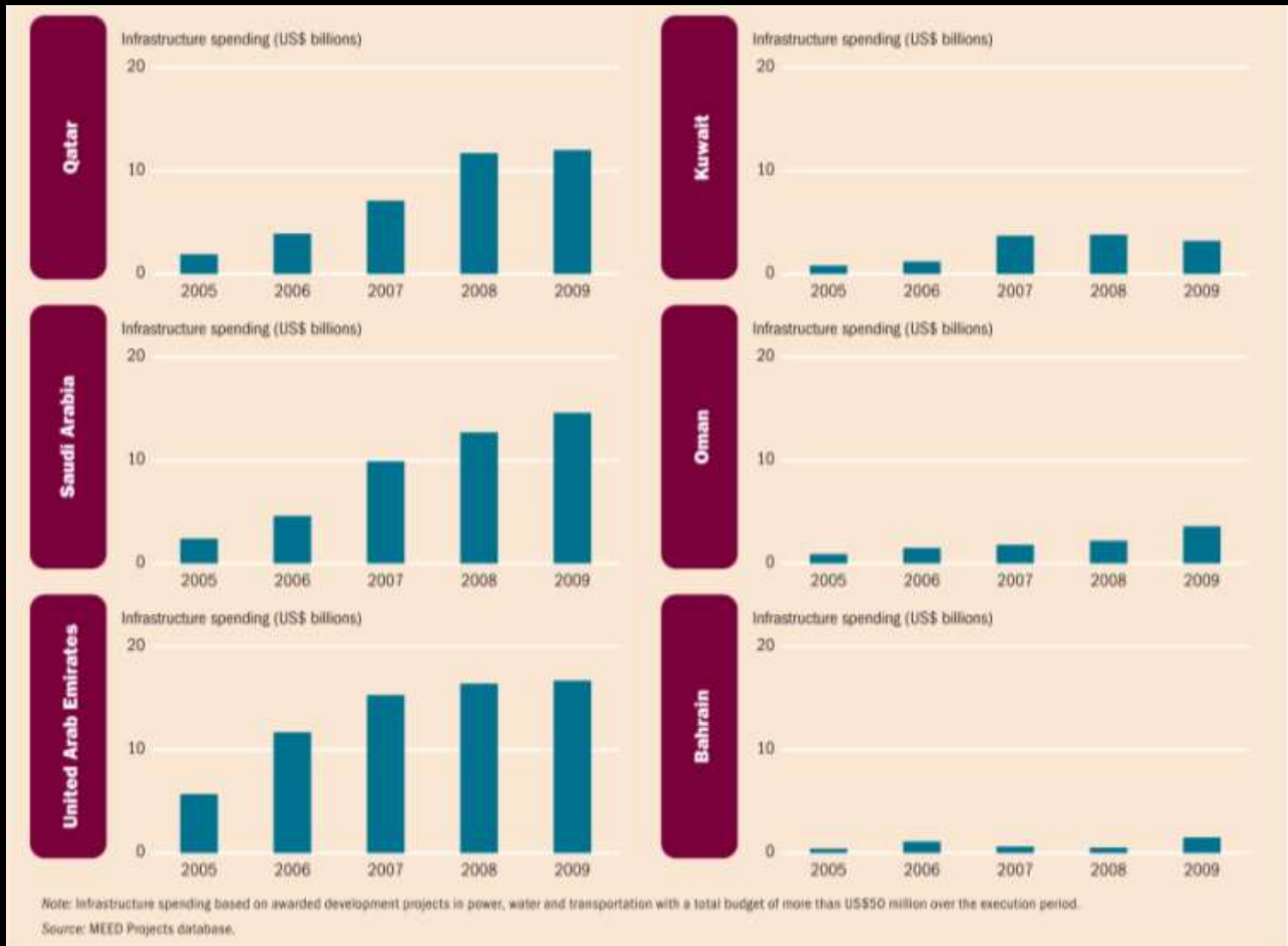


| | | | | | |
|----------|---|-----------|-----------|-----------|-----------|
| 1 | Mixed Land Uses | | | | |
| 2 | Enhanced Walkability | | | | |
| 3 | Strong Sense of Place | | | | |
| 4 | Preservation of Open Spaces | | | | |
| 5 | Strengthened Fit with Existing Communities | | | | |
| 6 | Connectivity/ Transportation | | | | |
| 7 | Anchored Neighborhoods & Access to Social Infrastructure | | | | |
| | Overall Score | 18 | 17 | 18 | 26 |

Limits → Maximizes



A GCC államok infrastrukturális beruházásainak értéke 2005 - 2009



A katarai futball vb költségvetése

Teljes költségvetés a közvetlen fejlesztésekkel – 138 Mrd £ (60-szorosa a Dél-afrikainak)

Közvetlen beruházások

- Stadionok és intézményei – 107 Mrd £
- Közlekedési infrastruktúra – 31 Mrd £

Közvetett beruházások

- Stadionok hűtési rendszerei – 30 Mrd £
- Gyakorló pályák, lakások – 48 Mrd £
- Lusail City – 28 Mrd £





Lusail New City

- ❖ 35 km²
- ❖ 260.000 lakos
- ❖ Projekt érték: 5,5 Mrd USD



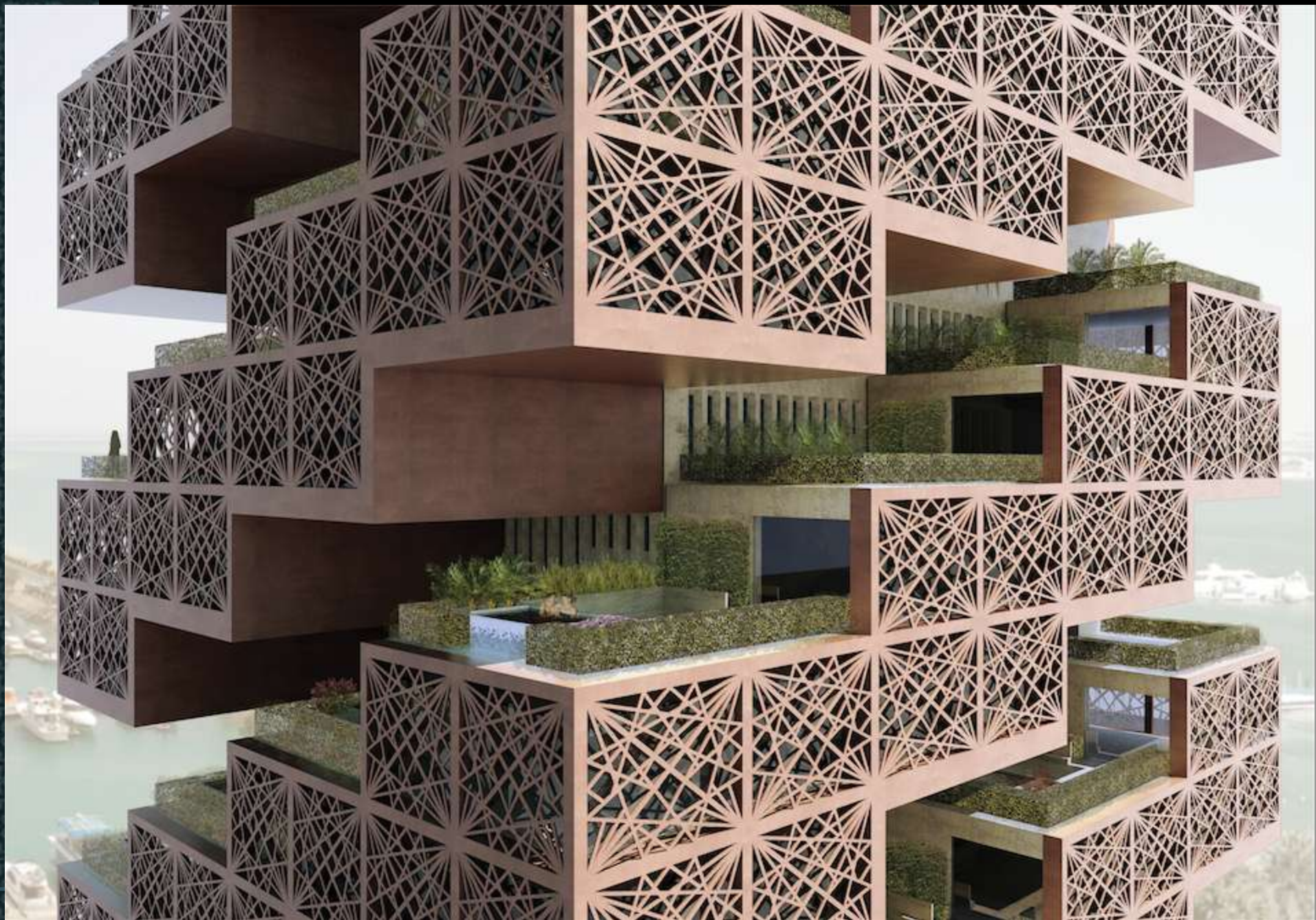
Katar, a gigantikus lányom

Lusail





Katar, a gigantikus lábnyom



Katar, a gigantikus labirintus



Katar, a gigantikus lányom



Katar, a gigantikus lábnyom





Katar, a gigantikus lábnyom Qatar, FIFA World Cup 2022





Katar, a gigantikus lábnyom Qatar, FIFA World Cup 2022





Katar, a gigantikus lányom

Lusail





Katar, a gigantikus lányom

Lusail