

# IJBURG – AMSTERDAM, NETHERLANDS

- 1. INTRODUCTION
- 2. CHARACTER
- 3. BACKGROUND
- 4. ZONING ANALYSIS
- 5. APPENDIX

Otis Emslie

02/26/2024



CITY



DISTRICT



NEIGHBORHOOD





500m



## Legend

 plangebied	<b>Gebiedsaanduidingen</b>
<b>Enkelbestemmingen</b>	 geluidzone
 agrarisch	 luchtvaartverkeerzone
 agrarisch met waarden	 vrijwaringszone
 bedrijf	 milieuzone
 bedrijventerrein	 veiligheidszone
 bos	 wetgevingzone
 centrum	 reconstructiewetzone
 cultuur en ontspanning	 overige zone
 detailhandel	<b>Aanduidingen</b>
 dienstverlening	 bouwaanduiding
 gemengd	 functieaanduiding
 groen	 lettertekenaanduiding
 horeca	 maatvoering
 kantoor	<b>Figuren</b>
 maatschappelijk	 as van de weg
 natuur	 dwarsprofiel
 overig	 gevellijn
 recreatie	 hartlijn leiding
 sport	 relatie
 tuin	 figuur IMRO2006
 verkeer	<b>Gebiedsgerichte besluiten</b>
 water	 besluitgebied
 wonen	 besluitvlak
 woongebied	 besluitsubvlak



## Ijburg Study Area Zones

**Gemengd | Mixed Use:** Mixed-use areas create vibrant, diverse urban environments where people can live, work, and access services within close proximity. They allow for a mix of residential buildings, offices, shops, restaurants, entertainment venues, and other amenities, fostering a dynamic and walkable community.

**Groen | Green Space:** Established to preserve and enhance areas of natural beauty, biodiversity, and recreational value within the urban landscape. These areas may include parks, nature reserves, green belts, waterfronts, and other types of open spaces that provide environmental, social, and cultural benefits to residents and visitors.

**Maatschappelijk | Social:** A wide range of uses that serve the needs of the community, such as educational facilities, healthcare institutions, religious buildings, cultural centers, community centers, social service agencies, and other public amenities.

**Tuin | Garden:** Refers to areas primarily designated for gardens within the city's urban planning framework. In Dutch, "Tuin" translates to "garden," indicating that the land use in this zone is predominantly for outdoor spaces associated with residential properties.

**Wonen-1 | Residential:** This zone typically represents areas with **low-density residential development**, such as single-family homes, townhouses, and low-rise apartment buildings. The focus is on preserving a more spacious and suburban-like environment with ample greenery and open spaces.





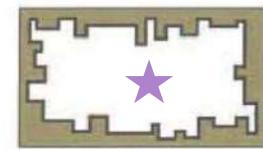
Visually compelling corridors that extend horizontally



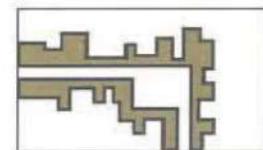
### Horizontal View Paths:

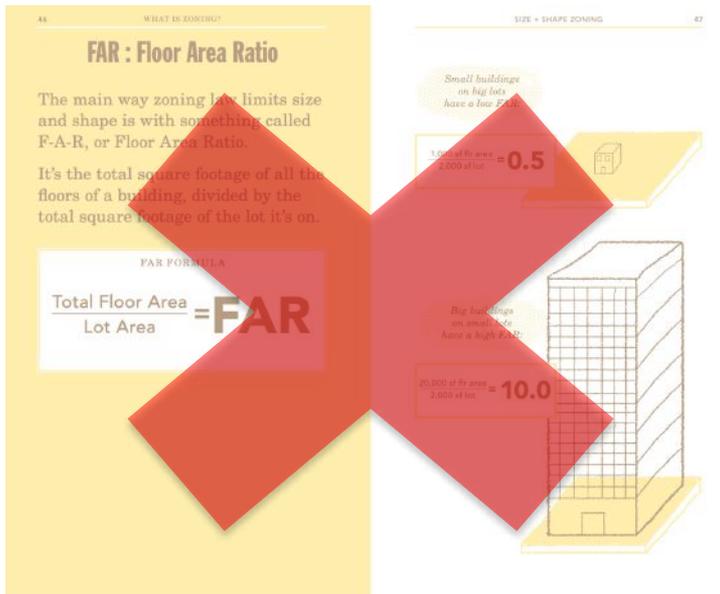
From a design standpoint, the horizontal alleyway views provided by the Tuin gardens offer several advantages. Firstly, they introduce a sense of rhythm and visual continuity along the streetscape, punctuating the built environment with pockets of greenery that break up the monotony of the urban grid. This creates a more dynamic and protected pedestrian realm, promoting walkability while enclosing inner garden space.

outer-perimeter



inner world





*No publicly viewable FAR information on Amsterdam zoning website*



*In IJburg, Floor Space Index, while not defined in public zoning documents, is often applied in maximum at the gross floor area, resulting in mostly square geometric buildings with no setback.*

### Building Envelope Regulations:

Amsterdam does not publicly list FAR standards on its zoning website, only publicly denoting the maximum building height allowable at each parcel. However, the city does require "FSI" or "Floor Space Index" which are commonly used in urban planning and zoning regulations to control the density and scale of development within the city. In Dutch, "Floor Space Index" is often translated as "Bruto Vloeroppervlakte" (BVO).

Despite the "Diemerparklaan" tram running through the main street, there is only one side of allowable mixed-use buildings

**A**

Extent of building specific regulation standards offered by Amsterdam Zoning agency



IJburg 1e fase  
gemeente Amsterdam  
bestemmingsplan  
onherroepelijk (2014-05-21)

PLEKINFO DOCUMENTEN KENMERKEN

128494.7, 485121.3

- Enkelbestemming  
Gemengd - 2
- Bouwvlak
- Functieaanduiding  
parkeergarage
- Maatvoering  
maximum bouwhoogte: 9 m



### Facts of IJburg

Total surface of new land: 1.125 acres

Homes: 18.000, of which 30% social housing,  
40% medium range and 30% high-end

Density: 30 homes/acre average

Parking: maximum 1 car/household

Commercial use: 100.000 m<sup>2</sup> office space and 30.000 m<sup>2</sup> retail space

Public facilities: 80.000 m<sup>2</sup>

2 marinas and 1.000 meters of new beach

## IJburg Conception

- Rising housing demand in 1980's as a result of increase in population as Dutch knowledge economy surged
  - Lack of options for growth: industrial/airport/conservation areas encircled city
  - Lake selected due to existing sea channel beach remnants
- Aimed for slow growth, phases in line with demand and not planned immediately
- Reversed ecological decline of IJmeer lake – made many investments in strengthen biodiversity as concurrent with development

RIETEILANDEN



HAVENEILAND



Housing typologies at different scales separated by isles.

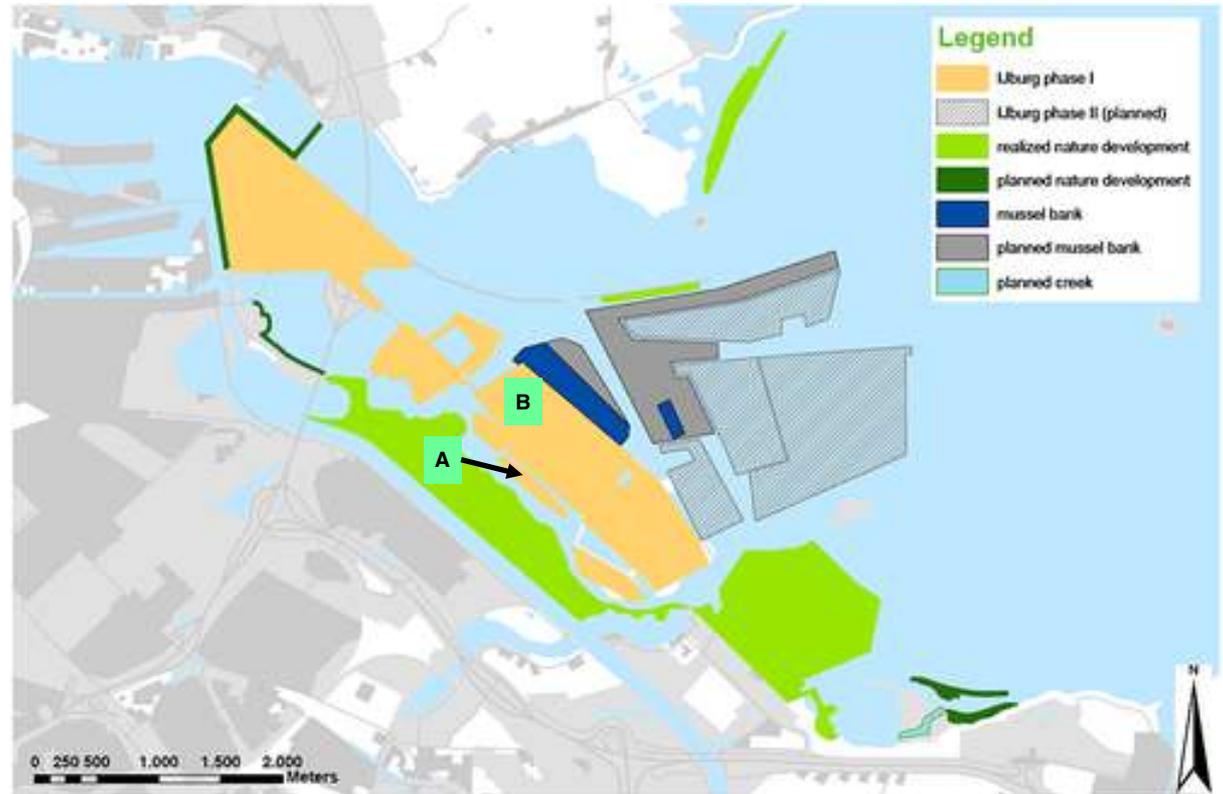
## IJburg Phases:

Phase I of IJburg constructed using the "pancake method"

*"Phase I of IJburg was constructed using the so-called 'pancake method'. Layers of sand were sprayed directly onto the very weak subsoil where centuries ago an old sea channel was located. In order to prevent this subsoil from shifting, sand was sprayed under water in layers of approximately 0.5–0.75 m. In-between spraying the layers of sand, periods of consolidation took place in order to create a stable platform for the next layer of sand. Gradually, the thickness of each new layer was increased to approximately 1 m. The spraying continued until the required surface level was reached."*

IJburg nearing completion of Phase I;  
Phase II subject to political decisions

- Challenges ahead in Phase II from an environmental perspective
- Upon completion, IJburg to accommodate 45,000 inhabitants and 12,000 jobs
- Planned amenities include shops, schools, restaurants, marina, recreational areas, and beach
- Demonstrates possibility of multiple land use in densely populated areas with cooperation and innovation.



*Different zones of IJburg have different uses. The low rise isle of "Reiteiland" is zoned under the same "Wonen-1" type as larger "Haveneiland"*



RIETEILANDEN



BEACH ISLAND (FUTURE)



## Legend

	plangebied		Gebiedsaanduidingen
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	bedrijventerrein		veiligheidszone
	bos		wetgevingzone
	centrum		reconstructiewetzone
	cultuur en ontspanning		overige zone
	detailhandel	<b>Aanduidingen</b>	
	dienstverlening		bouwaanduiding
	gemengd		functieaanduiding
	groen		lettertekenaanduiding
	horeca		maatvoering
	kantoor	<b>Figuren</b>	
	maatschappelijk		as van de weg
	natuur		dwarsprofiel
	overig		gevellijn
	recreatie		hartlijn leiding
	sport		relatie
	tuin		figuur IMRO2006
	verkeer	<b>Gebiedsgerichte besluiten</b>	
	water		besluitgebied
	wonen		besluitvlak
	woongebied		besluitsubvlak



## Ijburg Study Area Zones

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### Amsterdam Residential Zones | Wonen: “Residential”

**Wonen-1:** This zone typically represents areas with low-density residential development, such as single-family homes, townhouses, and low-rise apartment buildings. The focus is on preserving a more spacious and suburban-like environment with ample greenery and open spaces.

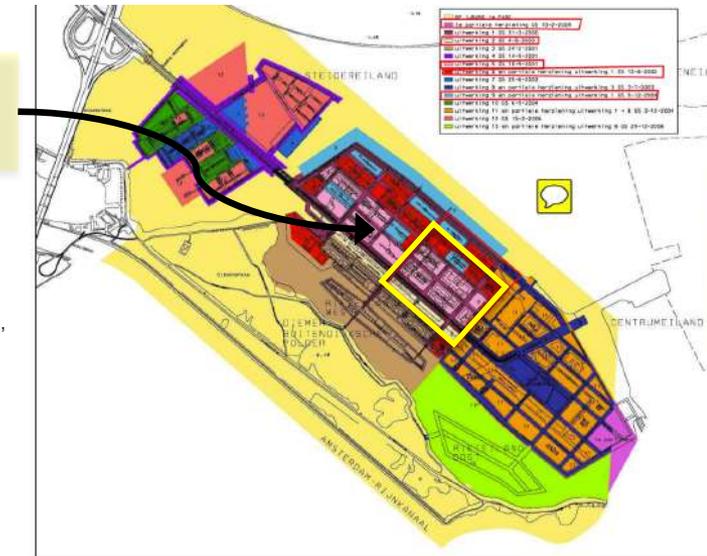
**Wonen-2:** Wonen-2 zones may have slightly higher residential densities compared to Wonen-1. This zone might include a mix of single-family homes, townhouses, and mid-rise apartment buildings. It could also feature some small-scale commercial or community amenities to serve residents.

**Wonen-3:** Wonen-3 zones tend to have moderate residential densities, with a mix of housing types including townhouses, mid-rise and possibly high-rise apartment buildings. These areas may also include local shops, schools, parks, and other community facilities to support residents' needs.

**Wonen-4:** In Wonen-4 zones, residential densities are typically higher, with a greater emphasis on medium to high-rise apartment buildings. These areas often feature a mix of residential, commercial, and recreational amenities, providing a more urban and cosmopolitan living environment.

**Wonen-5:** Wonen-5 zones represent areas with high residential densities, characterized by tall apartment buildings and a dense urban fabric. These zones are typically located in or near the city center and offer a wide range of amenities, including shopping, dining, entertainment, and cultural facilities.

**Wonen-6:** Wonen-6 zones are similar to Wonen-5 but may represent the densest and most urbanized areas within Amsterdam. These zones are often found in the city center and other strategic locations, featuring a mix of residential, commercial, and institutional uses. They are characterized by high-rise apartment buildings, mixed-use developments, and vibrant street life.



Abbeelding: overzicht uitwerkingsplannen en partiële herzieningen IJburg 1<sup>o</sup> fase

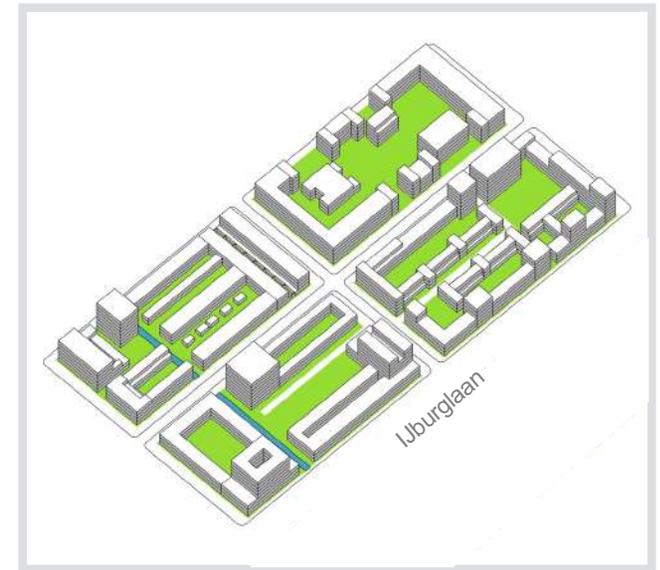
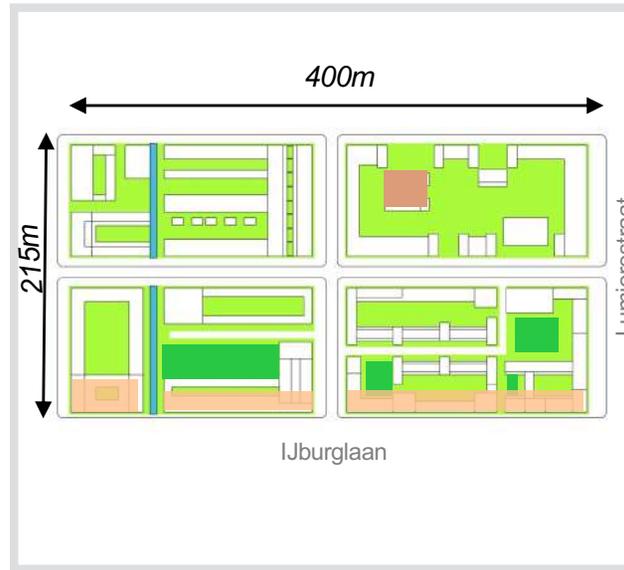
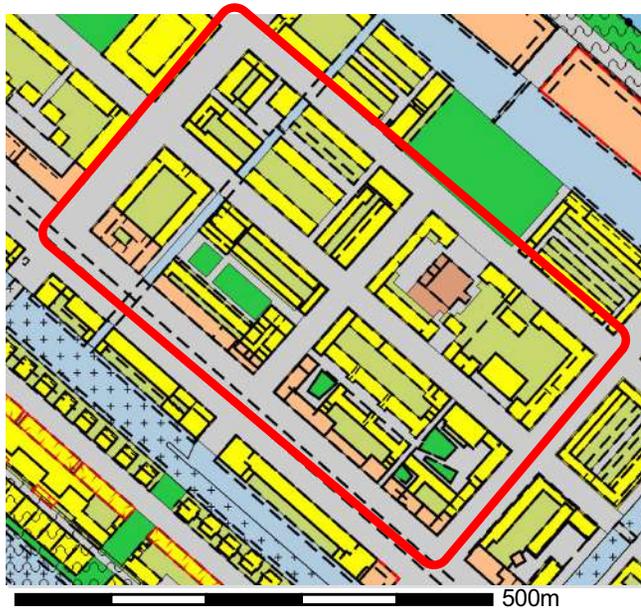


11m maximum height

Both buildings are part of the same zone (Wonen-1)



16m maximum height



SUMMARY OF ZONING REGULATIONS (See Appendix for supporting research)						NOTES:	
1	ZONING DISTRICTS	Wonen-1	Gemengd-2	Maatschappelijk	Tuin	Groen-1	Residential can overlap with mixed-use
2	LAND USE	Low Density Res.	Mod. Mixed Use	Community Space	Garden	Parks	
3	FAR	2.23	0.58	0.58	0.58	0.58	"Numbers come from arch. Plans of existing block"
4	SITE COVERAGE						
5	SETBACKS						
6	HEIGHT	Max 16m	Max 24m	12m	NA	NA	*Samples taken from existing buildings*
OTHER NOTABLE ZONING REGULATIONS							
7	"Bouwvlak"	Construction may occur at this area					
8	"Parkeergarage"	At the location of the 'parking garage' designation, a built or unbuilt parking space once created must be maintained.					
9	"Bouwaanduiding"	No buildings may be erected until the 2nd-5th floor to support and underpass					

Opposite sides of the same street



Both buildings are part of the same low rise residential zone (Wonen-1)



Function indication mixed

Function indication parking garage

Function indication specific form of housing - non-residential function of the second floor

Construction designation specific building designation - underpass 1

Sizing maximum building height: 18 m

### 22.1 Destination description

The land designated for ' **Residential - 1** ' is intended for:

- living;
- home-based professions and businesses;
- short stay;
- At the location of the 'mixed' designation, companies, consumer care and business services, creative functions, offices and social services are permitted in the first floor, the basement and the basement and where indicated with:
  - 'specific form of housing - non-residential function second floor' also in the second floor;
  - 'specific form of housing - non-residential function multiple floors' also in the second to fourth floors;

Single destination Living - 1

Construction area

Function indication parking garage

Sizing maximum building height: 9 m

### Block 30 Facts

Dwellings per ha. 107  
 Number of Units 159

Floor Space Index (FSI) 2,23  
 Ground Space Index (GSI) 0,42  
 Open Space Ratio (OSR) 0,58  
 Average number of Layers (L) 5,26

Parcel Size (m2) 14.447  
 Built Area (m2) 6.129  
 Open Space (m2) 8.318  
 Gross floor space (m2) 32.209

Parking 162  
 -indoor 104  
 -private

Social Rental Sector 55%  
 (% of total)

AMH 16%  
 (% of total)

Middle Sector 24%  
 (% of total)

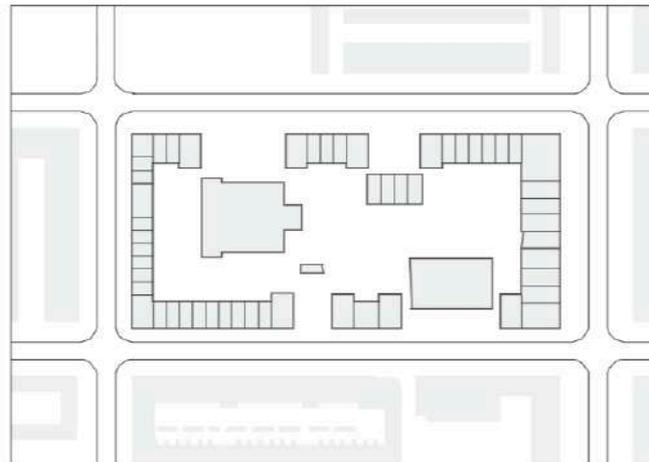
Free Sector 5%  
 (% of total)

Single Family 18%

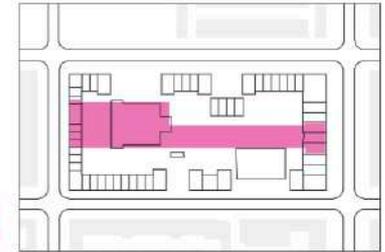
Multifamily 82%

Commercial 2.500

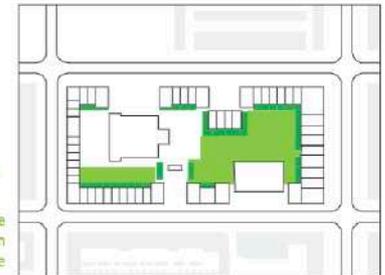
School 2.000



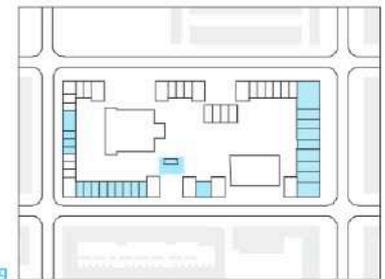
Scale : 1:1,250



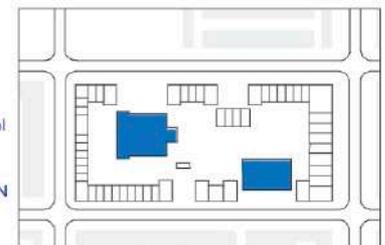
Underground Parking



Private Garden  
 Semi-private open and green space



Social Housing



School  
 KPN

Scale : 1:3,000

Source: Blodau-Konick, Esther. *Ijburg Density & Typology*. DRO, 2008.

### Wonen-1 Advantages

- **Privacy:** Lower density means more distance between properties, enhancing privacy for residents.
- **Reduced Traffic:** With fewer residents, there may be less vehicular traffic, leading to quieter streets and safer conditions for pedestrians and cyclists.
- **Individualized Housing:** Lower density allows for more individualized housing options particularly the single-family homes at Reitland Isle

### Gemengd-2 Advantages

- **Mixed-Use Development:** Combining residential with commercial or retail spaces fosters a vibrant and walkable community with easy access to amenities.
- **Economic Vitality:** Commercial spaces can attract businesses and investment, contributing to the economic vitality of the neighborhood.
- **Urban Character:** Mixed-use developments add diversity to the urban fabric, enhancing the character and identity of the area.

### Wonen-1 Disadvantages

- **Reliance on Cars:** With limited public transportation options and amenities, residents may be more reliant on cars for daily activities, contributing to traffic congestion and environmental pollution.
- **Potential Isolation:** Spacious layouts and lower population density could lead to a sense of isolation or lack of social connectivity among residents.

### Gemengd-2 Disadvantages

- **Noise and Pollution:** Increased commercial activity could result in higher levels of noise and pollution, impacting the quality of life for residents.
- **Parking Challenges:** Mixed-use developments may face challenges in providing adequate parking for residents, visitors, and customers, leading to parking shortages and conflicts.

### Maatschappelijk Advantages

- **Community Services:** Access to schools, healthcare facilities, religious institutions, and other community services improves the quality of life for residents and contributes to social cohesion.
- **Cultural Amenities:** Cultural centers, libraries, and community spaces provide opportunities for education, recreation, and cultural enrichment.
- **Social Equity:** Concentrating social and community services in one area ensures equitable access for all residents, regardless of socioeconomic status.
- **Sense of Belonging:** Maatschappelijk zones foster a sense of belonging and identity, strengthening the bonds between residents and their neighborhood.

### Tuin/Groen - 1 Advantages

- **Natural Beauty:** Green spaces offer residents and visitors opportunities for recreation, relaxation, and connection with nature.
- **Biodiversity:** Maintaining green areas supports biodiversity and ecological resilience within the urban environment.
- **Cooling Effect:** Vegetation helps mitigate the urban heat island effect, making the neighborhood more comfortable during hot weather.
- **Private Outdoor Space:** Residents have access to private garden areas, allowing for gardening, outdoor recreation, and relaxation.
- **Community Gardens:** Allotment gardens or communal green spaces foster community engagement, social interaction, and a sense of

### Maatschappelijk Disadvantages

- **Growth Management:** Managing growth and expansion of community facilities while balancing the needs and preferences of residents can be challenging and may require careful planning and coordination.

### Tuin/Groen - 1 Disadvantages

- **Land Use Conflicts:** Balancing the need for green spaces with demands for development or other land uses can lead to conflicts and debates within the community.
- **Limited Accessibility:** Private gardens may not be accessible to all residents, particularly those in multi-unit buildings or rental properties.

# 5A] APPENDIX - BIBLIOGRAPHY

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## REFERENCES:

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Dent, Chris. "Amsterdam Is Embracing a Radical New Economic Theory to Help Save the Environment. Could It Also Replace Capitalism?" *TIME*, January 22, 2021.

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"Ruimtelijkeplannen.NL," n.d. <https://www.ruimtelijkeplannen.nl/view>.

"The Governance of Land Use in Netherlands: The Case of Amsterdam." OECD, 2017.

Steenbergen, J. J. M., and R. J. Van Bemmelen. "LAND. IF YOU DON'T HAVE IT, CREATE IT. THE CASE OF IJBURG, AMSTERDAM." *Irrigation and Drainage* 60, no. S1 (December 2011): 4–10. <https://doi.org/10.1002/ird.666>.

# ZUIDAS – AMSTERDAM, NETHERLANDS

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Valentine Kalei

02/18/2024



CITY

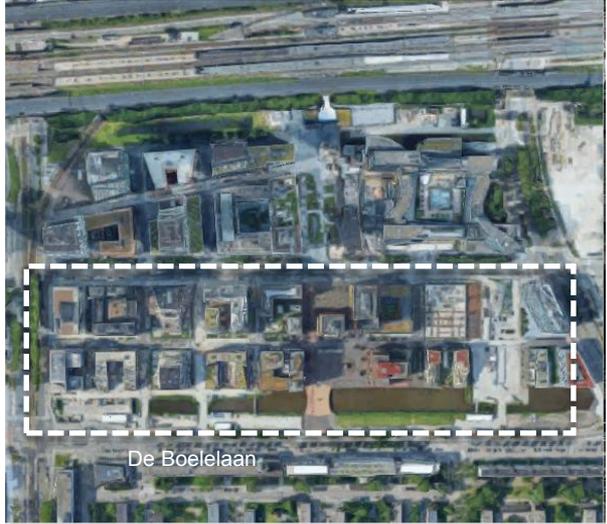


DISTRICT



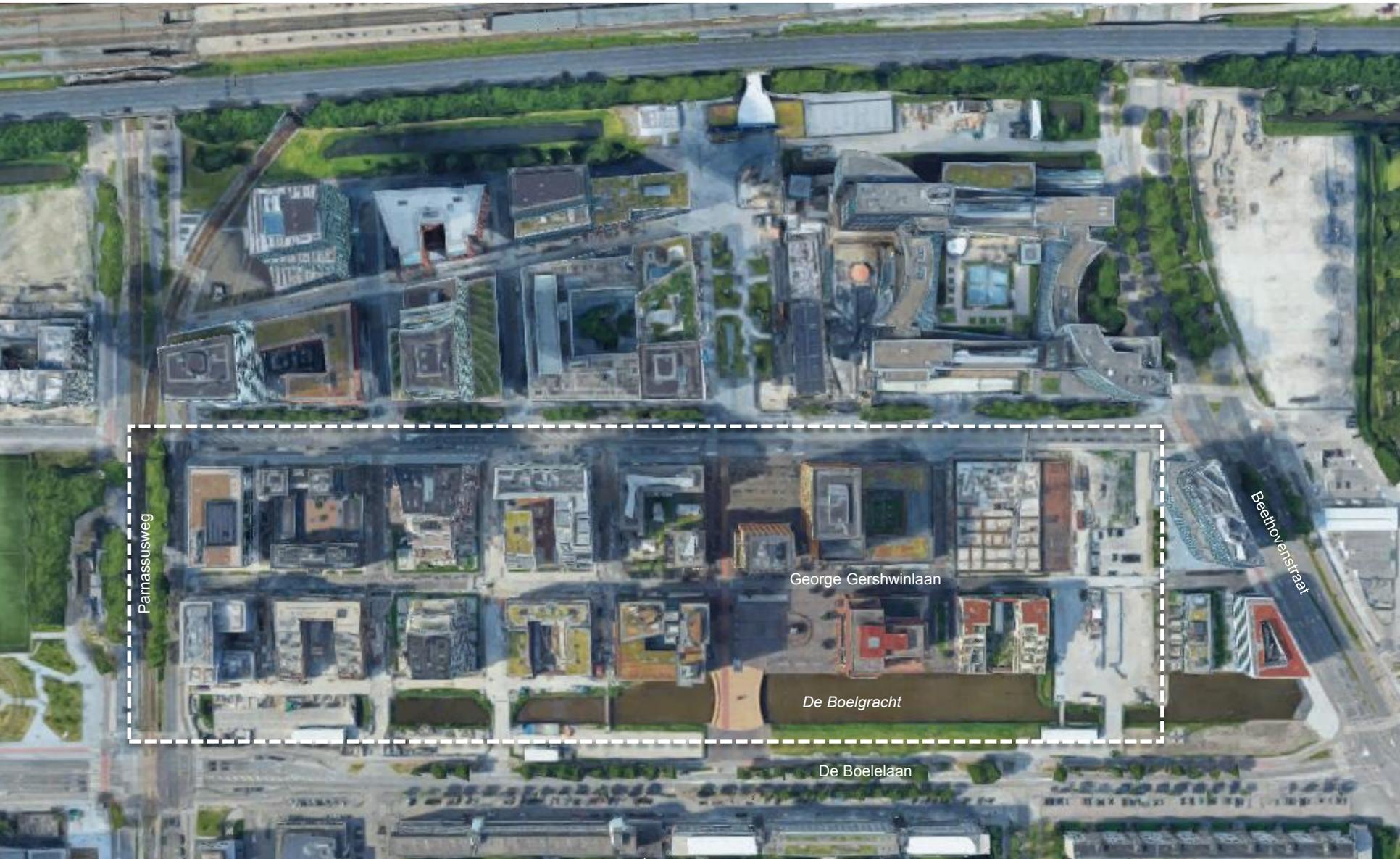
2000m

NEIGHBORHOOD



500m



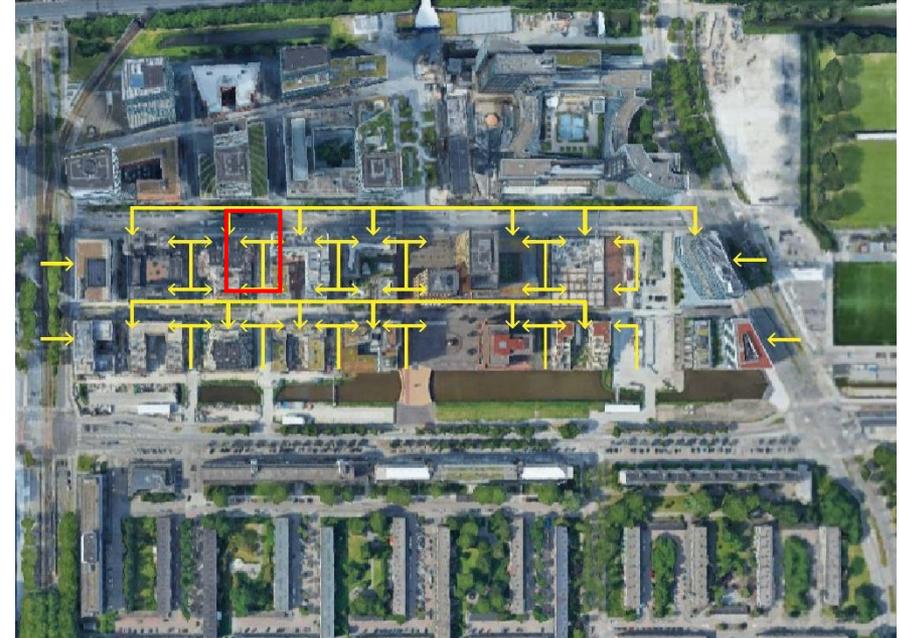
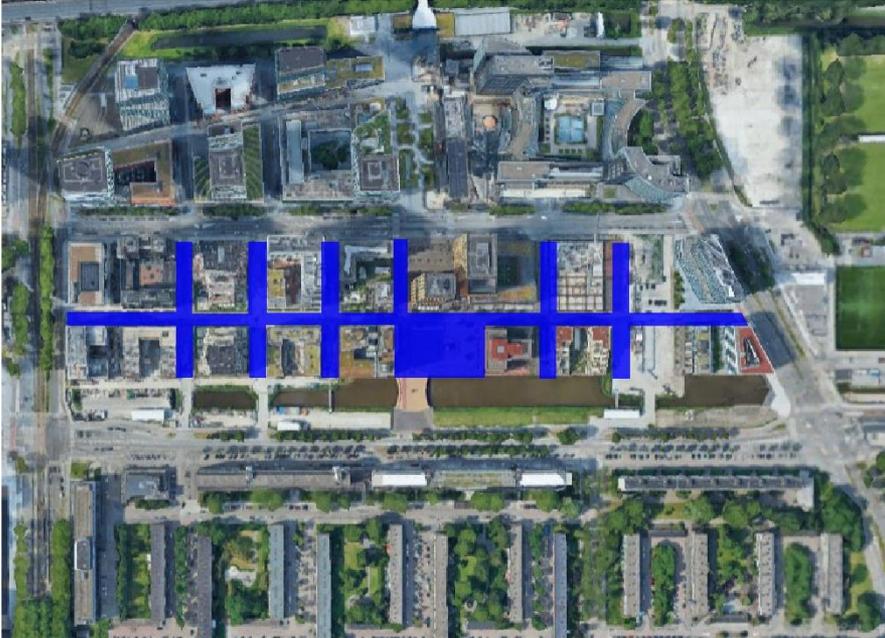


500m

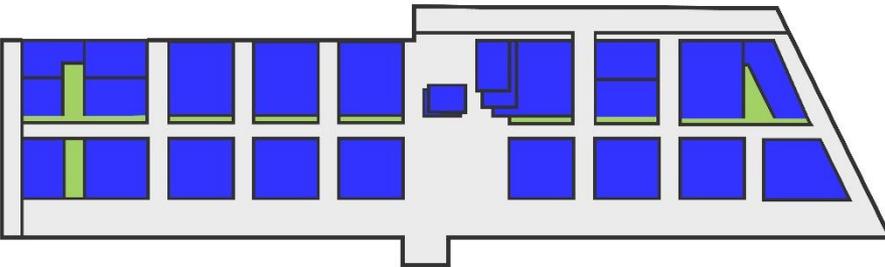


## SITE LAYOUT

The study area is composed of Mixed-use and Residential buildings arranged in a grid layout and defined by streets, some of which are lined with green spaces.



Each building has entry points accessible from at least two directions, with the only restriction on access being limited to the walkway adjacent to the canal.

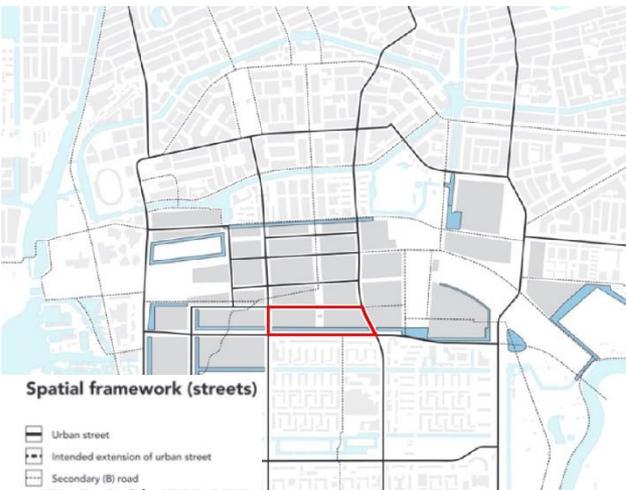


## A CLASSIC GRID

A rectangular grid of streets defines the architectural blocks. The street profiles provide a natural joint with the existing city districts that border the site.

Major arterials

Minor arterials



### ❖ Major arterials surrounding the site



- ✓ Two-Way Traffic
- ✓ Approximately 68 feet (20 m) wide with parking space, bike lanes, and pedestrian walkways on both sides.
- ✓ Buildings have been setback from the plot lines and the space utilized for outdoor seating in the case of mixed-use buildings with restaurants on the ground floor
- ✓ Buildings' entryways face the major arterials
- ✓ Presence of street furniture, amenities, and micro-mobility devices

### ❖ Minor arterials within the site



- ✓ One-Way Traffic
- ✓ Approximately 40 feet (12 meters) wide with Parking space for bikes and pedestrians - some sections allow for vehicle access for entry to the building's parking facilities.
- ✓ Buildings have been setback from the plot lines and the space utilized for pedestrian access or green spaces
- ✓ Buildings' entryways also face the minor arterials
- ✓ Presence of street amenities such as garbage bins



 Private Open space



The private open spaces consist of courtyards enclosed within the buildings or open areas adjacent to particular buildings.

 Public Plaza



Additionally, the site features a public plaza that provides access to the bridge facilitating passage over the canal.

 Parking / Empty Lot



The study area has a parking lot adjacent to one building and an empty lot where construction is either ongoing or stalled.



### BUILDING HEIGHT

Building height variations among the buildings differ notably along Gustav Mahlerlaan Street, resulting in a juxtaposition of high-rise and low-rise structures. Meanwhile, the buildings facing the canal maintain a consistent low-rise profile, with almost uniform heights across all structures.



### BUILDING SETBACK

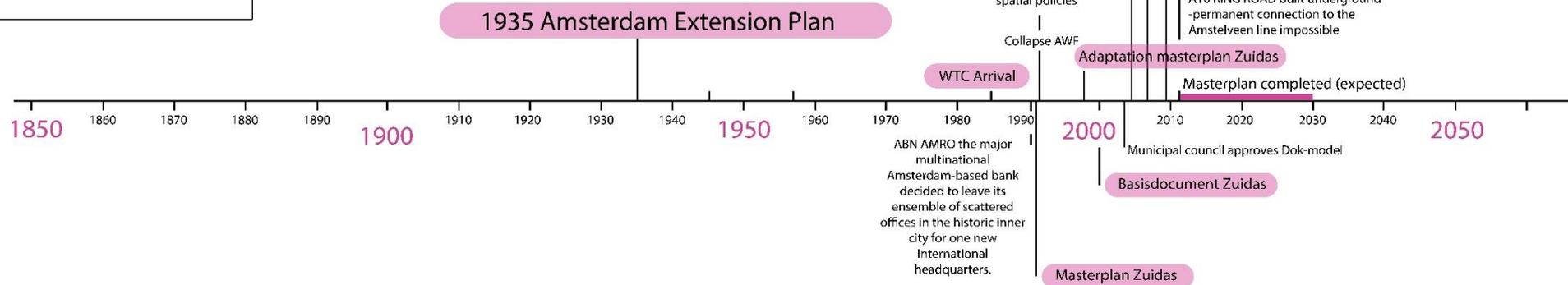
Buildings along the canal adhere to a typical style commonly seen in many structures, featuring a noticeable setback. However, along Gustav Mahlerlaan, there is a lack of visible setbacks from the buildings, likely attributed to the high-rise and low-rise height pattern established along that street.



### BUILDING CHARACTER

- ✓ A blend of mixed-use and Residential buildings
- ✓ Buildings have Opening on all sides of the façade
- ✓ The Façades have a combination of solid walls and transparent fenestrations
- ✓ Balconies are a common feature on almost all the buildings within the study area

SITUATION	OBJECTIVES	ASSETS	STRATEGY	ACTION	EFFECT
<p>After more than 15 years of economic development Amsterdam had a shortage of sites to fulfill the growing demand for business locations.</p> <p>The Netherlands was an attractive location for new businesses due to its international atmosphere and appealing tax regulations.</p> <p>The city of Amsterdam was searching for new areas of spatial expansion.</p>	<p>Create a new business district that enhances the position of the city and more precisely maintains the financial position of Amsterdam.</p> <p>The new business district aimed to attract companies with international allure and to improve infrastructure.</p> <p>Achieve a healthy balance between living, working and amenities.</p>	<p>Adoption of the masterplan in 1998</p> <p>The strategic location of the Zuidas, was crucial for its development as it was located between two residential areas the site was more accessible and easier to develop.</p> <p>The property was mainly empty because it was created as a reservation strip in the Amsterdam Extension Plan Form 1935.</p>	<p>ABN/ AMRO Bank need a new international headquarters</p> <p>The bank insisted on the Zuidas as its new location</p> <p>This is because the Zuidas could be linked to national infrastructure.</p> <p>Public money from the state could be transferred to the project.</p>	<p>In 1980, the municipality of Amsterdam approved the new headquarters of the ABO/AMRO Bank in Zuidas</p> <p>The arrival of the World Trade Center in 1985</p> <p>In 1998 the masterplan was adapted.</p>	<p>450 companies, 650,000m2 of office space</p> <p>8000-9000 housing units, over 600 apartments</p> <p>Attractive financial tax system</p>



1968



1980s



2011



2024

## SYSTEM OF POWERS OF THE NETHERLANDS

The administrative structure of the Netherlands is non-federal. As a decentralised unitary state, the central government in the Netherlands is supreme and delegates certain tasks to lower levels of government by law: to the 12 provinces and the 355 municipalities. Municipal and provincial authorities derive their tasks and powers from the constitution and the Municipalities Act and the Provinces Act.

## RESPONSIBILITIES FOR SPATIAL PLANNING

The central government decides on land use in general terms (e.g. main roads, railway lines, energy distribution networks, nationally and internationally important habitats). Provincial governments adapt/alter national plans into a regional context, focusing on issues such as landscape management, urbanization, and the preservation of green spaces. Municipalities transpose provincial plans into local policy and allocate land for specific purposes.

State Government



12 Provinces



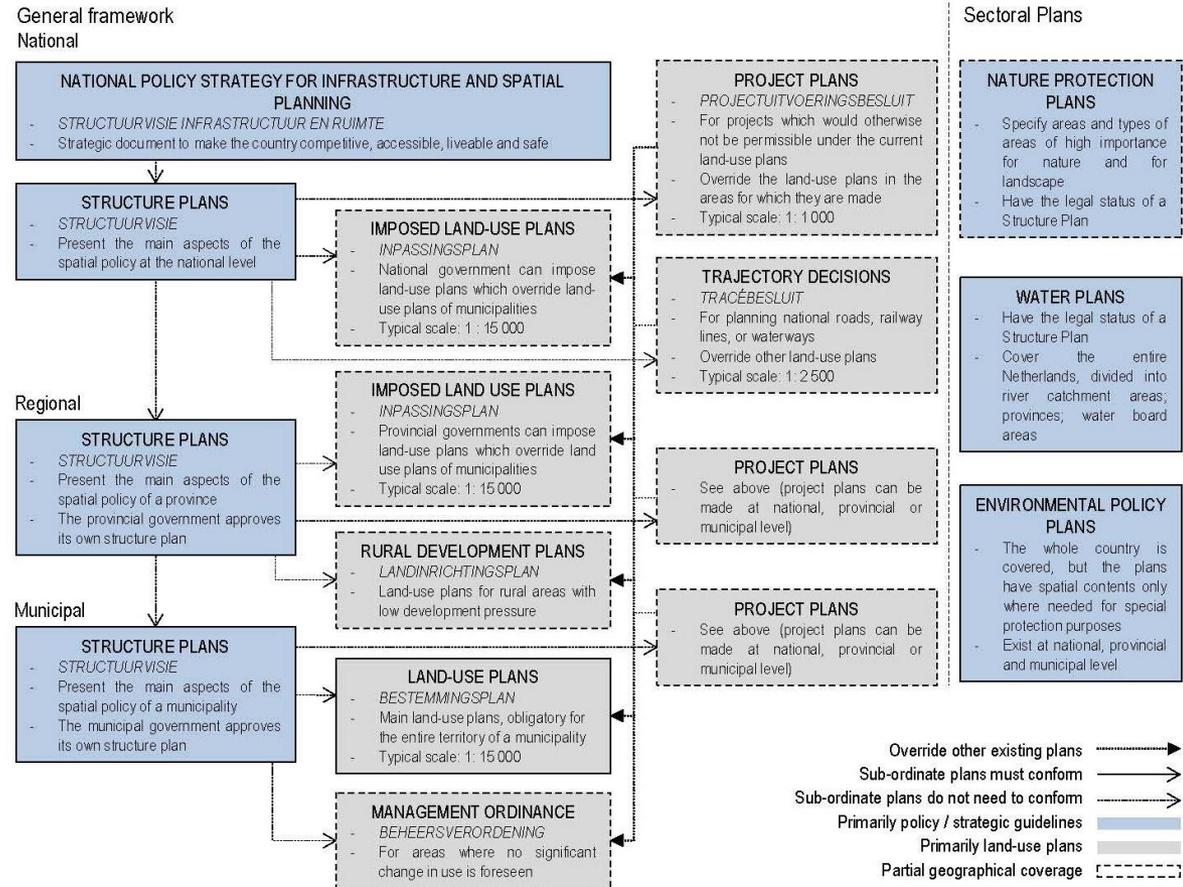
355 Municipalities

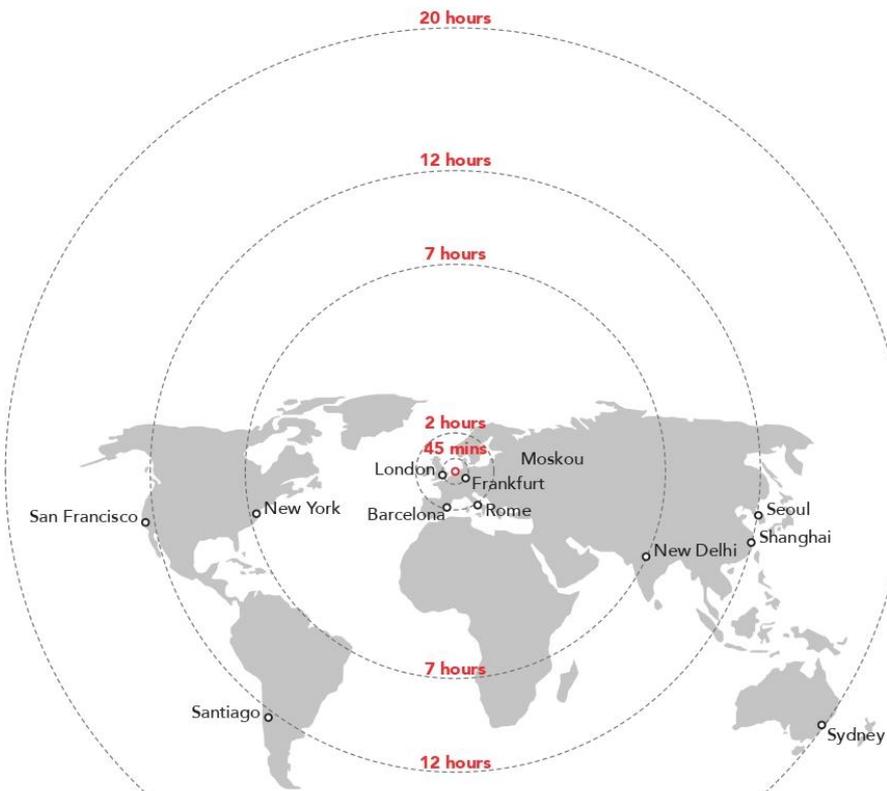


Planning level	Planning instrument	Content of plan	Legal basis	Policy maker	Legal impact	Scale
National	National structure plan ( <i>structuurvisie</i> )	Presents the main aspects of spatial policy at the national level	Spatial Planning Act, 2006 ( <i>Wet ruimtelijke ordening, Wro</i> )	State (government ministry)	Non-binding	State
National, provincial and municipal	Project plan ( <i>projectplan</i> )	Facilitates the approval of developments that contradict existing land use plans	Spatial Planning Act, 2006 ( <i>Wet ruimtelijke ordening, Wro</i> )	State, province or municipality	Binding; take precedence over land use plans (see below)	Dependent
Provincial	Provincial structure plan ( <i>structuurvisie</i> )	Presents the main aspects of spatial policy at the provincial level	Spatial Planning Act, 2006 ( <i>Wet ruimtelijke ordening, Wro</i> )	Province	Non-binding	Province
Provincial	Rural development plan ( <i>landinrichtingsplan</i> )	Land-use plan for rural areas with low development pressure	Spatial Planning Act, 2006 ( <i>Wet ruimtelijke ordening, Wro</i> )	Province	Non-binding	Rural area within a province
Municipal	Municipal structure plan ( <i>structuurvisie</i> )	Presents the main aspects of spatial policy at the provincial level	Spatial Planning Act, 2006 ( <i>Wet ruimtelijke ordening, Wro</i> )	Municipality	Non-binding	Municipality
Municipal	Local plan ( <i>bestemmingsplan</i> )	Sets out where development may take place, what may be built, size of development and what it may be used for	Spatial Planning Act, 2006 ( <i>Wet ruimtelijke ordening, Wro</i> )	Municipality	Binding	Municipality

STAKEHOLDERS	ADMINISTRATIVE AREA
MINISTRY OF THE INTERIOR AND KINGDOM RELATIONS	Drafts planning acts, policies, spatial visions and imposed land-use plans
MINISTRY OF INFRASTRUCTURE AND WATER MANAGEMENT	Develops policy in the areas of mobility, water management, aviation, maritime affairs and the environment (except climate)
DIRECTORATE-GENERAL FOR PUBLIC WORKS AND WATER MANAGEMENT	Responsible for the development and maintenance of the main road and waterway network
NETHERLANDS ENVIRONMENTAL ASSESSMENT AGENCY	Monitors public policy on environmental and regional planning issues and provides independent policy advice to government
PROVINCE	Prepares provincial spatial visions and imposed land-use plans
MUNICIPALITY	Prepares municipal spatial vision and local land-use plans
HOUSING ASSOCIATIONS	Have historically played a major role in constructing housing in the Netherlands

ORGANIZATION OF SPATIAL PLANNING IN THE NETHERLANDS





**MACRO-SCALE ANALYSIS**

Zuidas (literally ‘Southern Axis’) is a major new development zone in Amsterdam. It is said to be a top international location where people and commerce come together. Zuidas enjoys excellent accessibility from the surrounding city and far beyond. The district lies alongside a major national motorway, while the international station in the heart of the district brings Amsterdam Airport Schiphol within a few minutes by train.

▼ New York (7 hours by air)



▼ London (45 minutes by air)



▼ Antwerp (1 hour by HSL train)



▼ Rotterdam (45 minutes by road)





▼ Schiphol (7 minutes by train)



▼ Museumplein (10 minutes by tram)



▼ Amstelscheg (10 minutes by bicycle)



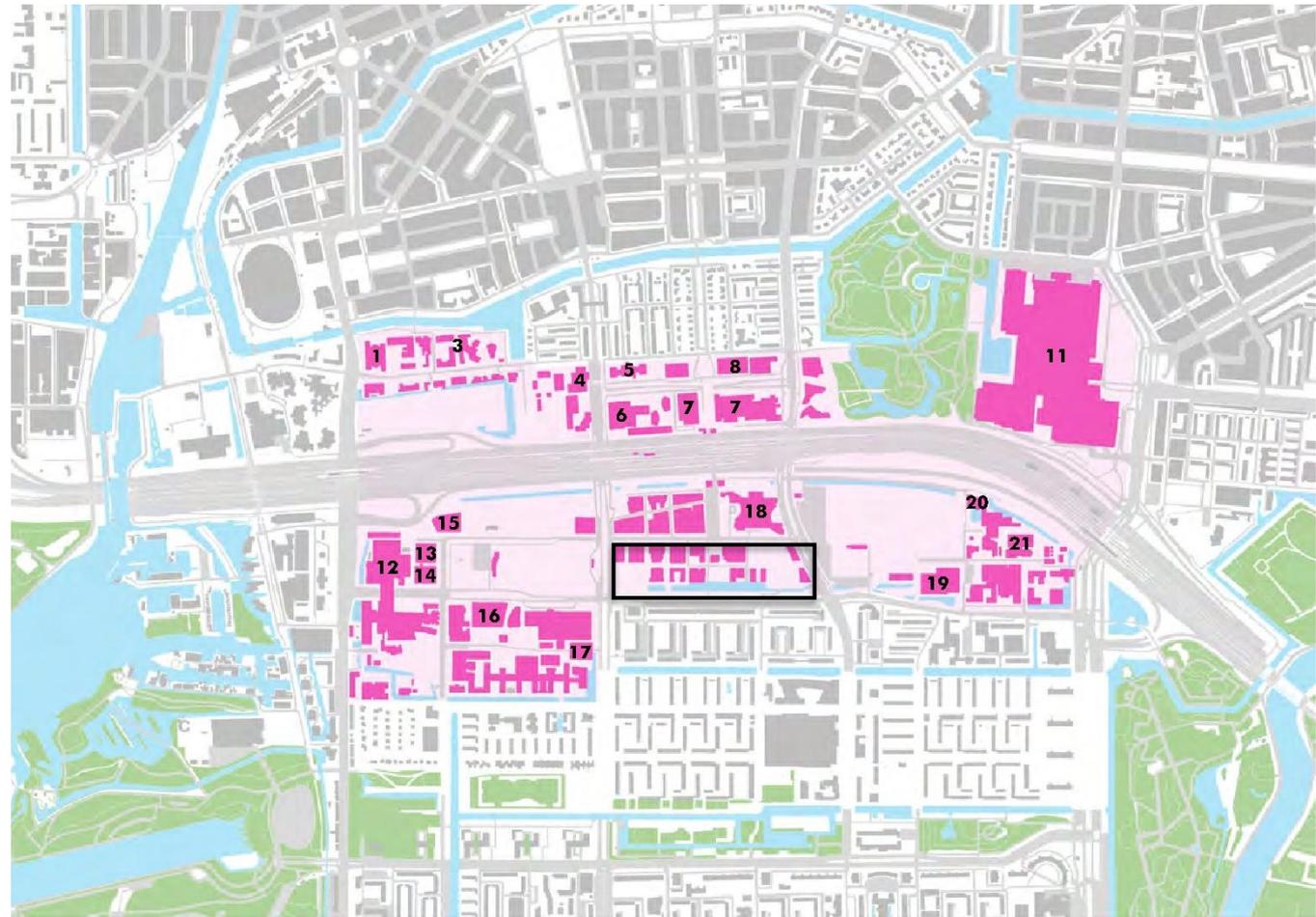
## MACRO-SCALE ANALYSIS

Zuidas covers an area of approximately 270 hectares, dissected by the A10 motorway (freeway) and railway lines. Approximately six million people live within a one-hour journey time by car, train, metro from Amsterdam's Central Station, trams from the city center and Museumplein, buses from throughout the region, by bicycle or on foot using the finely meshed urban road network. A marked advantage is Zuidas' position just a few minutes of Amsterdam Airport Schiphol, a major international hub which sees 25 million passenger movements each year.

## MICRO-SCALE ANALYSIS

The financial district of Zuidas in Amsterdam has developed into a successful business centre. There are around 800 Dutch and International companies currently based in and around Zuidas. These include, banks, FinTech businesses, consultancies and financial, legal and business services companies. Additional facilities for economic activities also located in Zuidas are the RAI Convention Centre and the World Trade Centre. The Vrije University, one of Amsterdam's two main universities is also located here. Another important function of Zuidas is of a medical and life sciences hub. This is made up of the University Hospital, Amsterdam UMC, the Academic Centre for Dentistry Amsterdam (ACTA) and the newly opened head office of the European Medicines Agency (EMA).

1. Loyens and Loeff *Lawyers Offices*
2. The British School of Amsterdam *Education*
3. Geert Groote College Amsterdam *Education*
4. Rechtbank Amsterdan *Bank*
5. International Community School *Education*
6. The Atrium Zuidas *Offices*
7. World Trade Center *Offices*
8. KB Notarissen *Public Notary*
9. Stibbe HQ *Lawyer's Offices*
10. AkzoNobel Centre *Manufacturer's Offices*
11. RAI *Conventional Centre*
12. Amsterdam UMC *Hospital*
13. ACTA Dental institute *Medicine*
14. Building for Human Life Sciences *Education*
15. Deloitte Consultant *Offices*
16. Hogeschool Inholland Amsterdam *Education*
17. Vrije University *Education*
18. ABN Amro HQ *Bank*
19. Ravel Residences *Residence*
20. EY Consultant *Offices*
21. XS4ALL *Data Centre*
22. Holiday Inn *Hotel*



## NETWORKS

### Public Transit

Zuidas is well served by public transport. A key strength of Zuidas is its strategic location within the national rail network and the urban metro system.

### The cycle network

Amsterdam has an extensive, finely meshed network of cycle routes with little hierarchy. The cyclist can access virtually every part of the city, with many dedicated cycle paths to maximize safety and convenience.

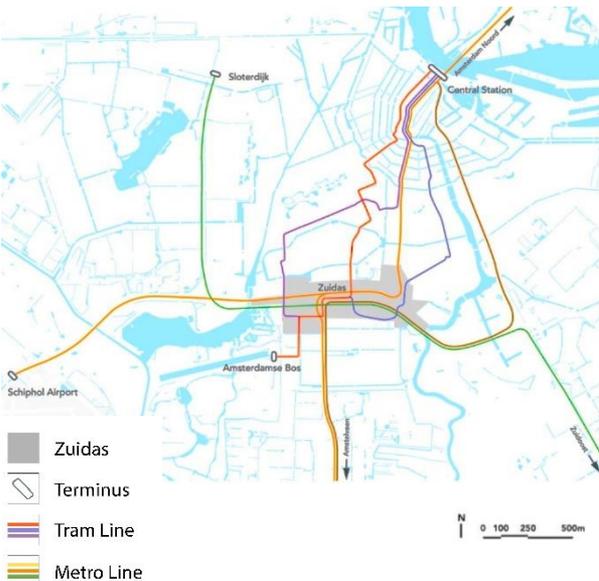
### Pedestrians

All areas must be inviting and safe for pedestrians. Pavements (sidewalks) are at least 3.50 metres wide.

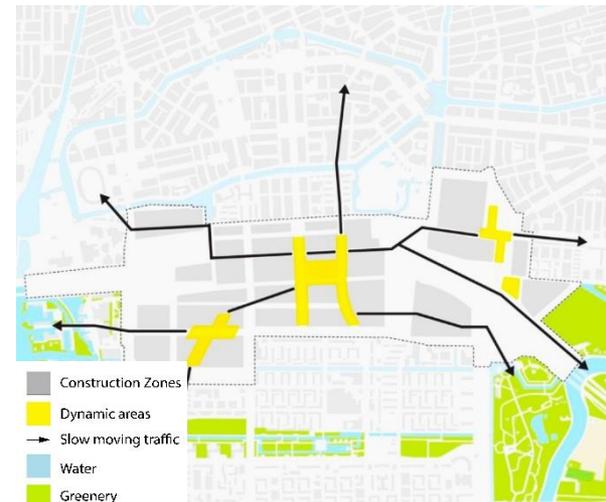
### Motor Traffic

Zuidas is a two-tiered hierarchy: the main road network and the other streets. The network of multifunctional streets offers several alternative routes.

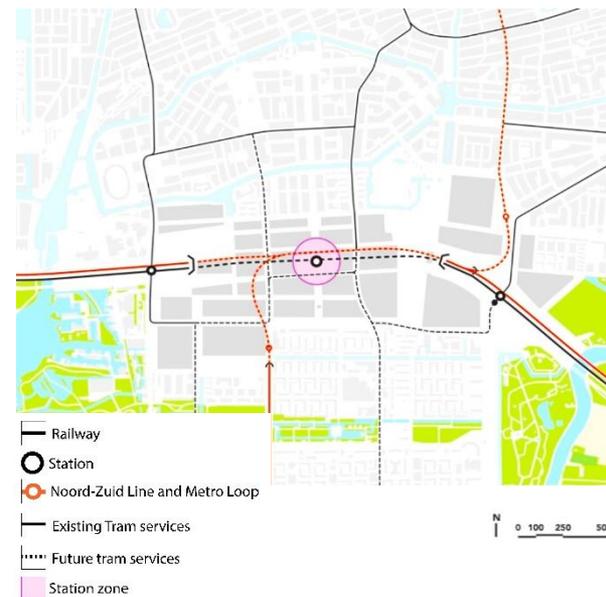
### Tram and metro connections



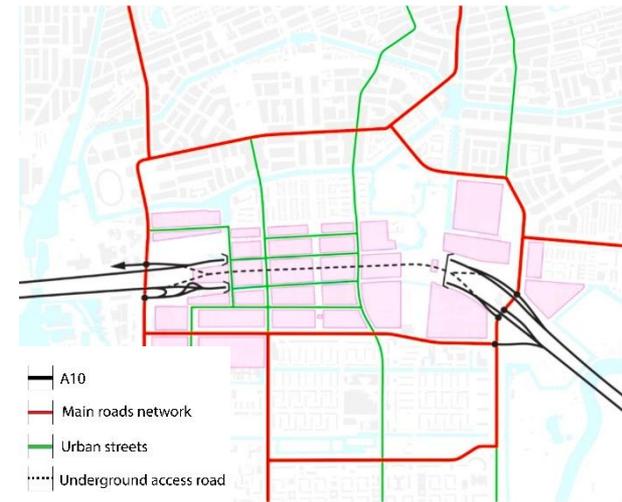
### Pedestrian Access



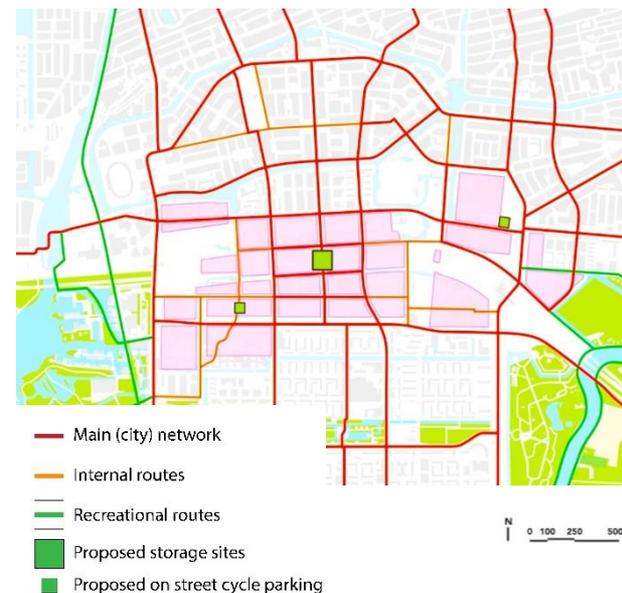
### Public transport network



### Motorized Traffic network



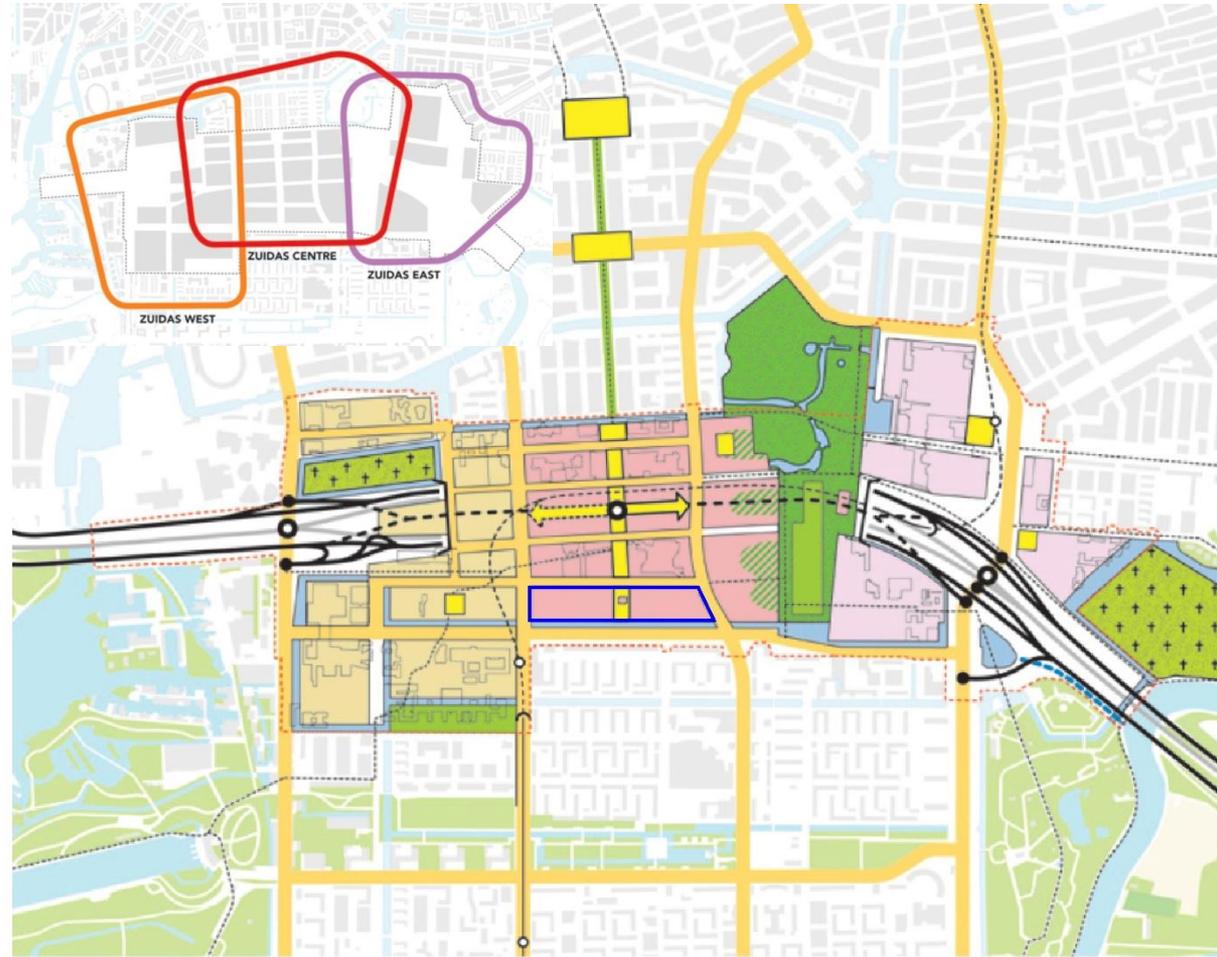
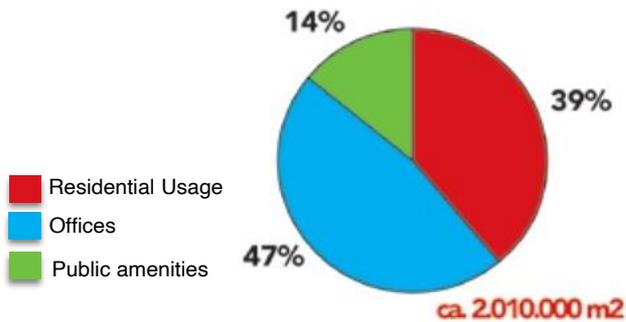
### Cycle network





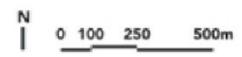
### ZUIDAS CENTRE

Zuidas Centre, the ‘downtown area’, is the most densely built-up district of Zuidas. Incorporating a relatively high proportion of residential usage opens up new opportunities to create a mixed-usage area with offices, homes, and public amenities, with a strong emphasis on high-end retail outlets. The focal point of this district is Station Zuid, which takes on growing significance for Amsterdam as a whole.



**Zuidas Vision**  
September 2009

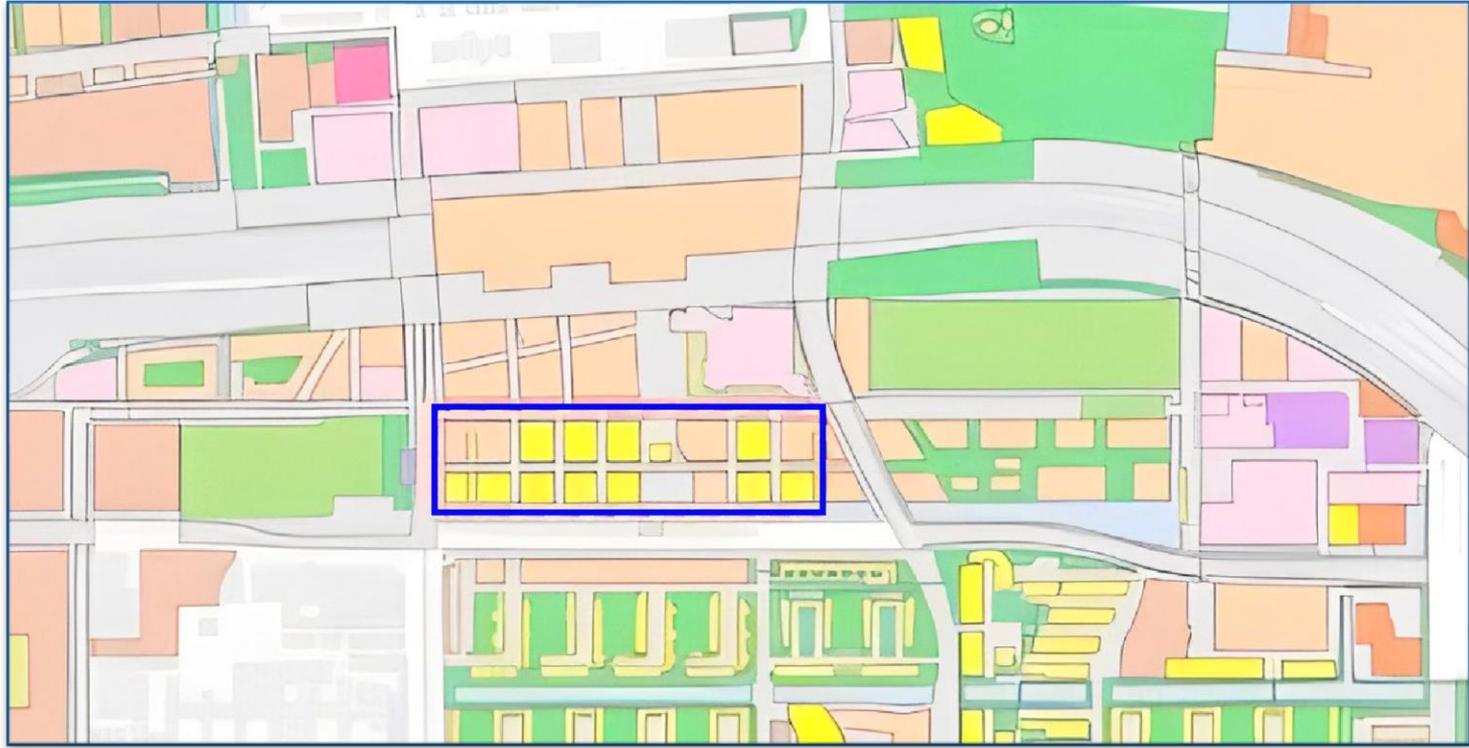
- |               |                      |                             |                                 |
|---------------|----------------------|-----------------------------|---------------------------------|
| Plan area     | City and park as one | Visual-spatial relationship | Rail and metro                  |
| Zuidas West   | Beatrixpark          | A10 motorway                | Station                         |
| Zuidas Centre | Cemetery             | Underground access route    | Noord-Zuid metro line with stop |
| Zuidas East   | Sports fields        | Urban street                | Connection with River Amstel    |
| Water         | Public space         | Secondary route             | Existing/planned construction   |



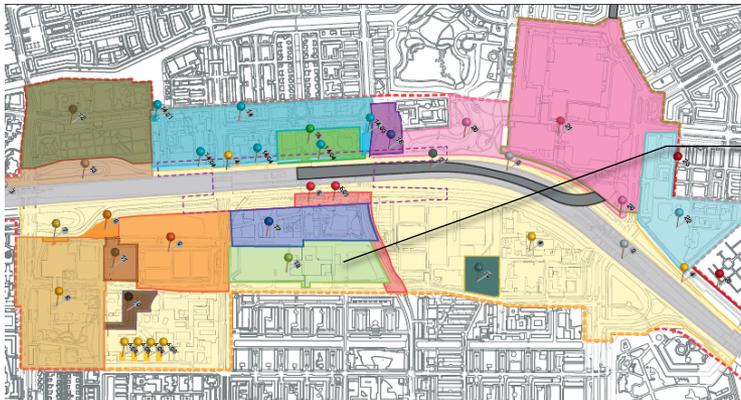
**ZONING**

The Gershwin zoning plan was adopted by the municipal council for the Gershwin project area on December 10, 2003, for the realization of a mixed residential and working area in a high-density. The Gershwin sub-project has now been largely completed.

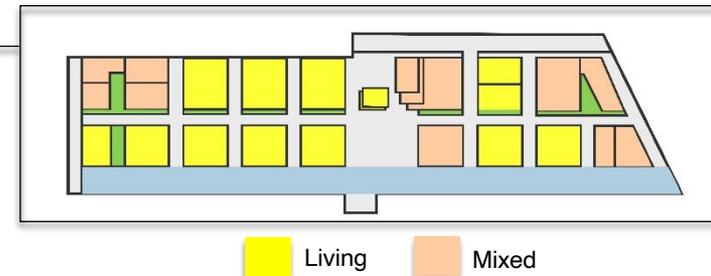
- Agricultural
- Agricultural with values
- Company
- Business park
- Bunch
- Centre
- Culture and relaxation and entertainment
- Retail
- Services
- Mixed
- Green
- Catering Industry
- Office
- Social
- Nature
- Recreation
- Sport
- Garden
- Traffic
- Water
- Living
- Residential area
- Other

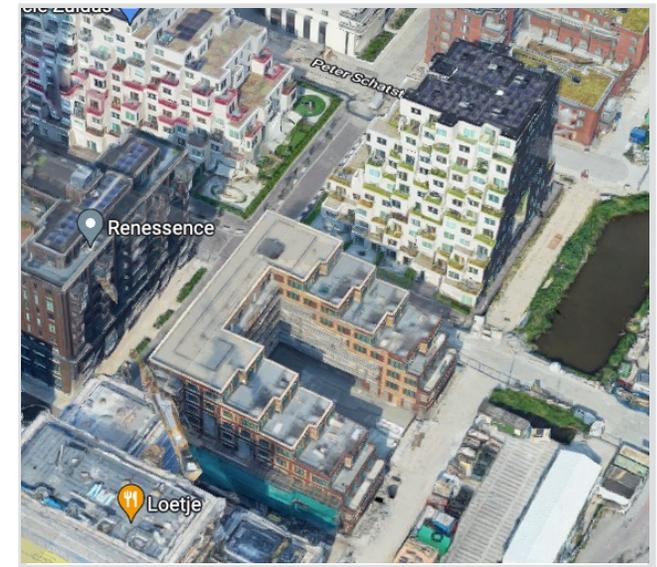
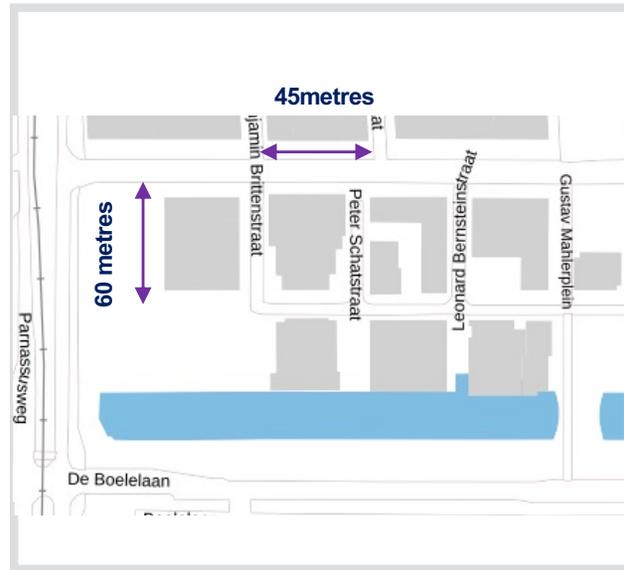
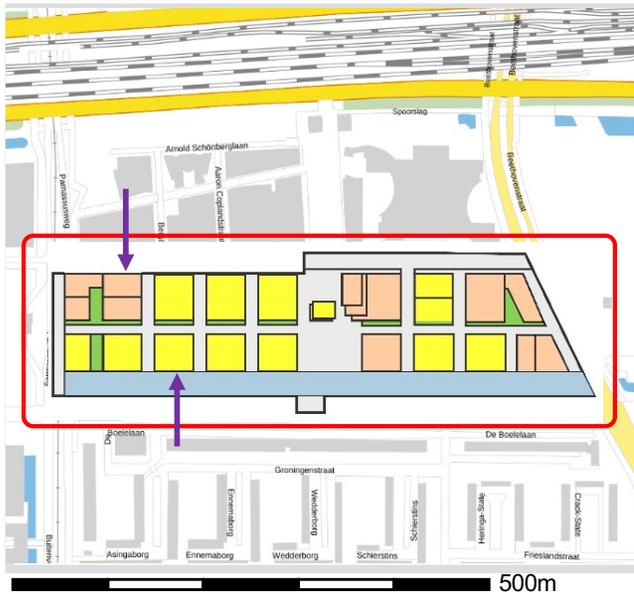


**Zuidas Zoning plans**



**Gershwin Zoning Plan**

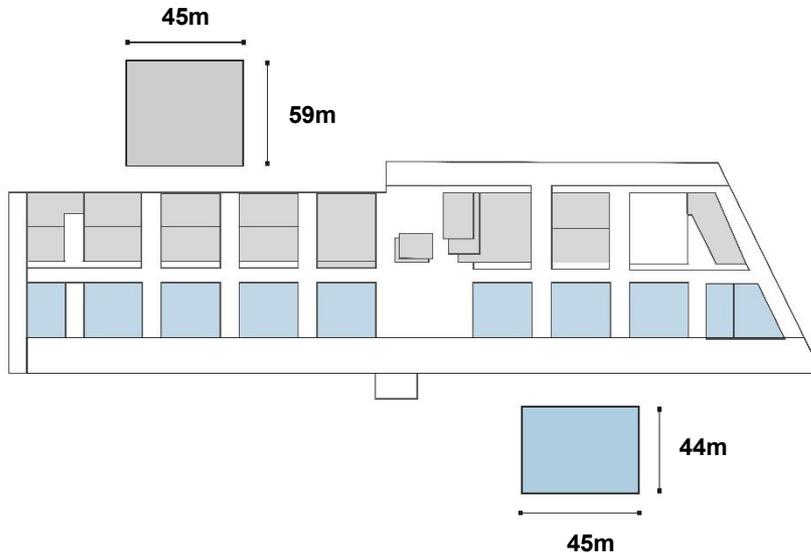




SUMMARY OF ZONING REGULATIONS (See Appendix for supporting research)			NOTES:
1	ZONING DISTRICTS	<span style="background-color: yellow;">R7</span> <span style="background-color: orange;">M1</span>	Gershwin has several zoned districts, Residential 1-11 and Mixed 1-4
2	LAND USE	Residential Mixed	The permitted land uses are Residential and mixed use
3	FAR	4 5.5	No specific FAR Listed, however, from the calculations e.g. (8600sqm gross floor area / 1980 plot area = 4.3 (rounded off to 4)
4	SITE COVERAGE	70%, 60%, 30% 95%, 75%, 25%, 12%	Site coverage is determined by building height; e.g. up to 12 metres=70%, up to 32metres= 40%, more than 32m=30%
5	SETBACKS	3 – 4.5 metres 3 – 4.5 metres	No specific Setback distance Listed, however, from the measurement, the setbacks range from 3 to 4.5 metres
6	HEIGHT	41 metres 77 metres	Maximum Building Height varies according to the zoning district
OTHER NOTABLE ZONING REGULATIONS			
7	NOISE REDUCTION	Homes must have a noise reduced side	Buildings must have a noise-sensitive or deaf façade or curtain wall on the relevant side.
8	OTHER STUCTURES / USES	Building Height Limitation	For structures other than buildings, a maximum building height of 3 metres applies; Functions of business are only permitted up to a height of 12m
9	PARKING	For offices = 1 per 250m2 GFA, For Homes = 1 per 100sqm GFA	The Zuidas principles for parking also apply to the Gershwin planning area

### GRID STRUCTURE AND ALLOTMENT STRUCTURE

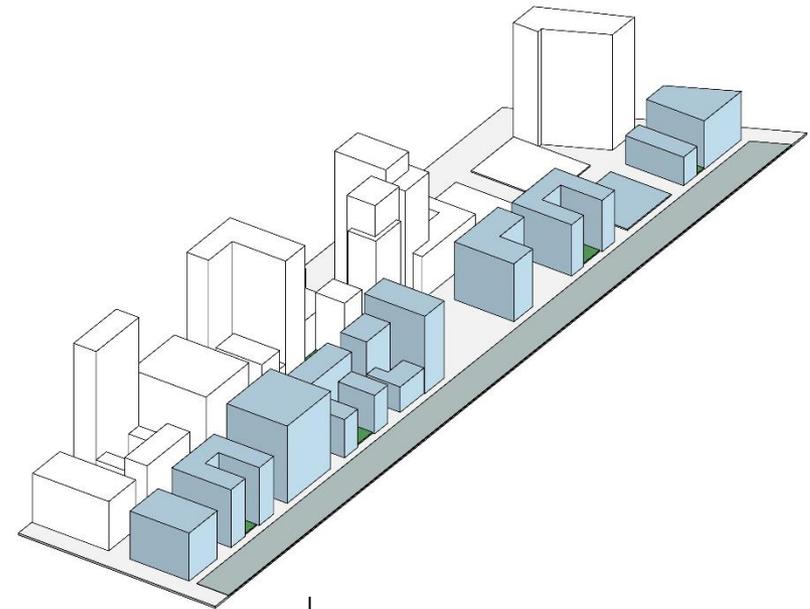
The dimensions of the grid are compact with plots of **45x59 meters on the north side** and **45x44 meters on the south side**. Most plots must leave a percentage undeveloped for collective greenery. This must adjoin public space on at least one side.



The plan for the Zuidas is based on the collective framework, the urban grid, in which the tower positions in a checkerboard pattern organize spatial coherence at a higher level. The grid structure guarantees great transparency in the north-south direction, allowing good visual and functional connections with the neighboring zones

### CITY AND WATER BLOCKS

There is a strong contrast between the north side, the Mahlerlaan with urban characteristics, and the south side, the De Boelelaan with a more relaxed profile on the watercourse. This distinction between both sides of the area is reason to characterize the **blocks on the north side as city blocks** and **the blocks to the south as water blocks**. There is a difference between the two zonings in plot sizes, building heights, and density, but also in the program.



**CITY BLOCKS - North**

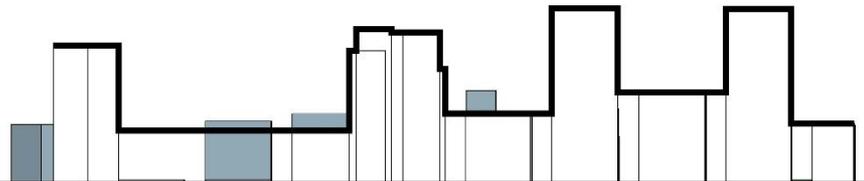
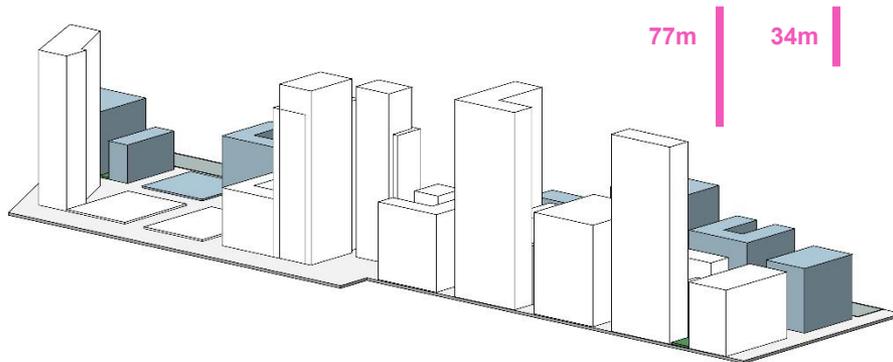
1. Blocks are more densely built
2. Emphasis is on mix of functions - such as combinations with work functions and public facilities.



**WATER BLOCKS - South**

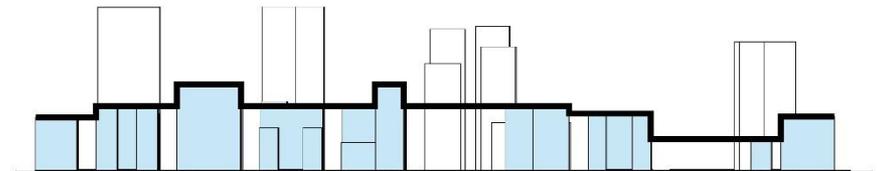
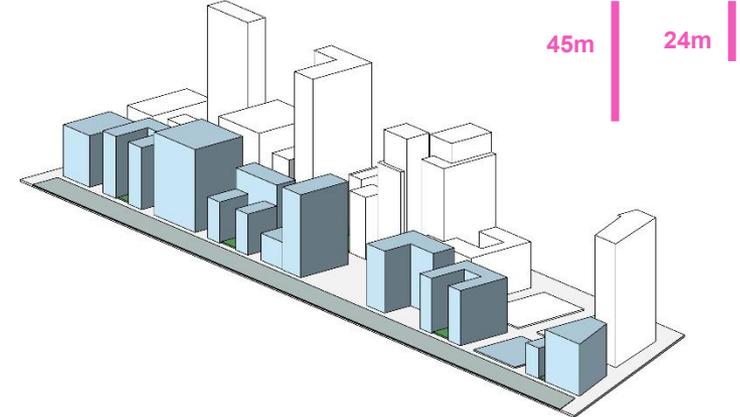
1. Blocks are lower and less densely built
2. Emphasis is on the residential program
3. Clear orientation towards sun and water.

### BUILDING HEIGHTS City Blocks - North



1. Blocks have an alternating pattern in building heights.
2. The low city blocks may be a maximum of **34 meters high**, while the high city blocks may be a maximum of **67-77 meters**.

### BUILDING HEIGHTS Water Blocks - South



1. Blocks have an alternating pattern in building heights.
2. The low water blocks may be a maximum of **24 meters high** and the high water blocks may be a maximum of **45 meters high**.

The Building height scheme is further refined because all blocks are constructed in layers as the Zuidas block type is constructed in principle, i.e.: the plinth layer up to 8-12 meters, the substructure up to 32 meters and the towers.

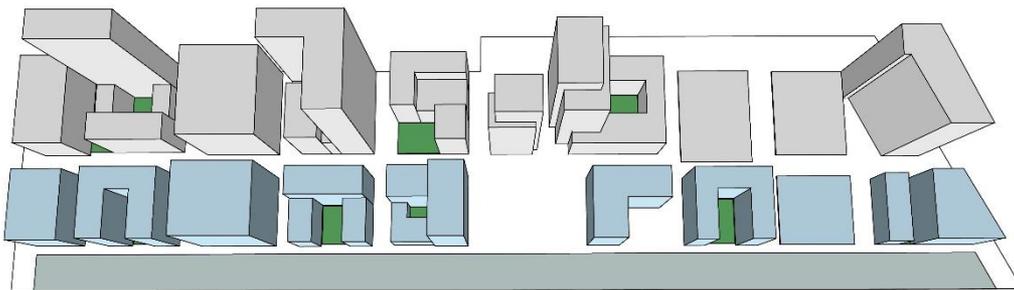
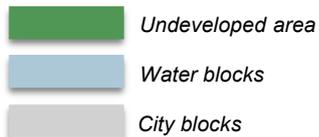
- **Plinth zone:** for the city blocks, the plinth layer, up to a maximum of 12 meters high, is mainly intended for the entrances, facilities, and the commercial program.
- **Middle zone:** The middle zone is located between 8 and 32 meters. Six floors are possible for the city blocks. This zone, together with the plinth zone, forms the street wall and is especially suitable for stacked apartments, which are combined with extra facilities in the high city blocks.
- **Top zone:** The third zone, the top zone, only occurs in the high city blocks, up to a maximum height of 67 and partly 77 meters. This zone is ideally suited for “tower villas” with living qualities that are determined by views and size. The top zone consists of a maximum of 14 floors. ,

## BUILT-UP / UNDEVELOPED AREA

For the low city blocks and all water blocks, it is indicated what percentage of the plot must remain undeveloped. This is usually around **25-30%**.

This undeveloped surface must be provided with a sufficient growth or soil layer.

These must border the public area and also be visible from the public area.



## SPATIAL FUNCTIONAL APSECTS

In the Zuidas Vision, the concept of the urban environment is formulated by indicating four future-proof values. These are: complementary to the city center, accessibility, longevity and a relaxed city.

The last two, the “**sustainable city**” idea and the “**relaxed**” city, relate directly to the layout of the Gershwin sub-area. The program for Gershwin is aimed at creating an urban environment that fits in well with the other buildings in the Zuidas core area.

Gershwin's program is partly aimed at achieving a **50-50 living-working ratio** throughout the Zuidas. The program for Gershwin roughly consists of the following components:

- Residential area** with a minimum gross floor area of 129,850 m<sup>2</sup>
- Maximum 63,770 m<sup>2</sup> gross floor area of **offices/businesses**
- Minimum 28,450 m<sup>2</sup> gross floor area **facilities**
- Approximately 2,400 **parking spaces**

# 5A] APPENDIX - BIBLIOGRAPHY

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### 3.] BACKGROUND

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12. Zoning plan. (2021). Business.Gov.Nl. <https://business.gov.nl/regulation/zoning-plan/>
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### 4.] ZONING

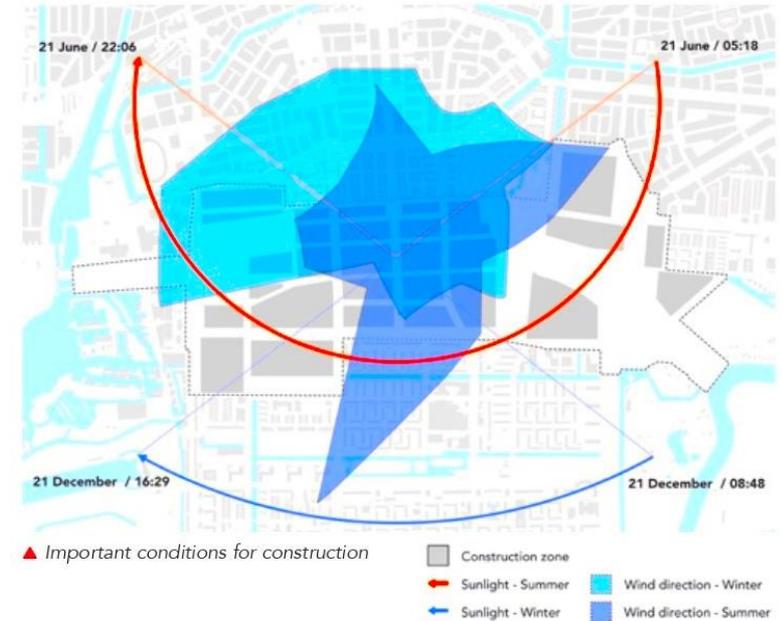
1. Ruimtelijkeplannen.nl. (n.d.). Retrieved January 29, 2024, from <https://www.ruimtelijkeplannen.nl/view>

## BUILDING HEIGHT

- ❑ The majority of buildings in Zuidas will comprise a substructure of 30 meters in height, surmounted by high-rise towers. This concept enables a high density to be achieved.
- ❑ Applying the maximum height of 30 metres ensures that inner courtyards will enjoy ample natural light. The maximum height of the towers is restricted by the fact that Zuidas is immediately below the flight path to and from Schiphol Airport.



Maximum building height according to guidelines for Schiphol

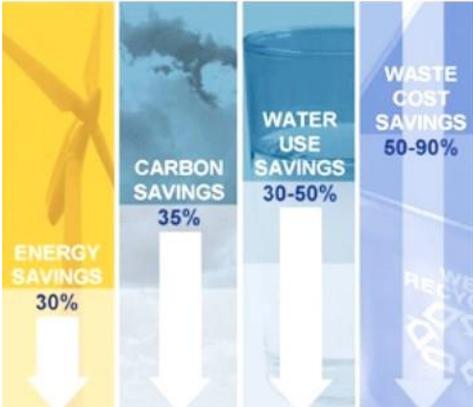


- ❑ However, because Schiphol's air traffic control relies on a sophisticated Instrumental Landing System (advanced radar), it is possible to make a limited number of exceptions, as shown on the map.
- ❑ The overall result is that Zuidas when seen from a distance will present a skyline of high-rise buildings. This will be an impressive feature of the city and surrounding region, serving to emphasize the dynamic of Zuidas itself.

# 5B] APPENDIX – SUPPORTING RESEARCH

## SUSTAINABILITY

Zuidas’s builders have made sustainability a top priority. There is enormous interest in energy-efficient buildings, circularity, green areas, and water in, on, and around buildings.



The bundle of heavy infrastructure is shifted underground over a distance of 1.4 kilometers. Releasing an enormous amount of space above the infrastructure. With approximately three million square meters of floor area, the Zuidas will be of a similar scale to La Défense in Paris and the Docklands in London.



**Bike sharing**



**Electric cars**



**Electric scooters**



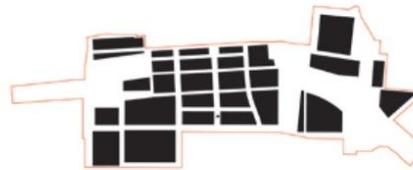
**Water-retardant green belt**



**Rooftop garden**

**ZUIDAS - AMSTERDAM, NETHERLANDS**

**COMPARATIVE ANALYSIS WITH OTHER INTERNATIONAL DEVELOPMENTS**

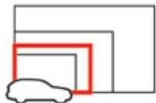


London Canary Wharf

Paris La Defense

Amsterdam Zuidas

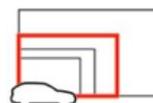
Amsterdam Centre



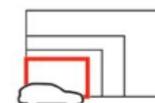
4 parking places per 1000m2



10 parking places per 1000m2



7 parking places per 1000m2



2 parking places per 1000m2



10m2 floorspace per employee



12m2 floorspace per employee



19m2 floorspace per employee



26m2 floorspace per employee



75m2 per residential unit



80m2 per residential unit



125m2 per residential unit



65m2 per residential unit

18

## COMPARATIVE ANALYSIS WITH OTHER INTERNATIONAL DEVELOPMENTS



London Canary Wharf

- **Currently:** 1.5 million m<sup>2</sup>, including offices, homes, 200 shops, hotels, bars and restaurants
- **Development:** a further 0.4 million m<sup>2</sup>, depending on market demand
- **Ambition:** construction of the highest quality in a tranquil and healthy environment for employees and visitors



Paris La Défense

- **Currently:** 3.3 million m<sup>2</sup> offices; 0.6 million m<sup>2</sup> residential usage; 0.2 million m<sup>2</sup> retail
- **Development:** a further 0.5 million m<sup>2</sup> (mixed programme)
- **Ambition:** a 'future-proof' new La Défense; only sustainable projects will be considered



Amsterdam Zuidas

- **Currently:** 1.5 million m<sup>2</sup> construction.
- **Development:** growth to 4.2 million m<sup>2</sup> (38% offices, 29% residential and 33% amenities).
- **Ambition:** successful and recognizable, compact and liveable, efficient and responsible.



Amsterdam Centre

- **Currently:** 0.5 million m<sup>2</sup> commercial/light industrial; 1.4 million m<sup>2</sup> offices; 3.5 million m<sup>2</sup> residential and 2.2 million m<sup>2</sup> amenities.
- **Development:** increasing demand for small business premises.
- **Ambition:** a good balance between residential and business usage; less motorized traffic with greater use of the bicycle and public transport.